



CSULB

2012-2013 University Catalog





CALIFORNIA STATE UNIVERSITY, LONG BEACH

2012-2013 Undergraduate and Graduate Catalog

California State University, Long Beach Catalog
(USPS 702-100) May 2012, Volume 64
1250 Bellflower Boulevard, Long Beach, California 90840
Telephone, 562/985-4111

www.csulb.edu

The Undergraduate and Graduate Catalog is printed by Forty-Niner Shops, Inc.
at no expense to the State of California.

Postmaster: Send address changes to California State University, Long Beach Catalog,
1250 Bellflower Blvd. Long Beach, California 90840.

TABLE OF CONTENTS

CALIFORNIA STATE UNIVERSITY, LONG BEACH
www.csulb.edu

Welcome to the Beach

The California State University	4
A Message from the President	6

Degrees and Credentials Table7

Course Prefixes and Definitions15

Admission to CSULB

Admissions Procedures and Policies	17
Impacted Programs	17
Application Filing Periods	18
Freshman Applicants	19
Eligibility Index.....	19
Subject Requirements	19
Lower-Division Transfer Applicants	20
Upper-Division Transfer Applicants	21
International Student Applicants	21
Graduate and Postbaccalaureate Applicants	22
Application to Credential Programs	23
Auditors	23
Returning Students.....	23
Testing Requirements.....	24
Immigration Requirements for Licensure.....	26
Estimated Expenses.....	26
Housing	26

Fees, Financial Assistance

Fees.....	28
Payments.....	29
Refund of Fees.....	30
Determination of Residency	31
Financial Holds	33
Financial Assistance Information	34
Financial Aid Programs	35

Academic Services and Campus Life

Orientation and Advising.....	38
Advisement Centers on Campus.....	38
University Honors Program	39
Student Academic Support Services	39
Internship Programs	39
Learning Assistance Center.....	40
Study Abroad.....	40
Campus Services	41
Student Life and Resources	43
Student Government	43

Academic Information and Regulations

Frequently Asked Questions.....	45
Academic Calendar	45
Enrolling in Classes	45
Registration Holds	46
Cheating and Plagiarism	47
Student Unit Load.....	49
Course Numbers	51
Course Credit Units	51
Transfer Credit.....	52
Open University/Special Session	52
Advanced Placement Examination Credit Table.....	52
Credit for Noncollegiate Instruction	55
Grades and Grading Procedures.....	56
Assignment and Change of Grades	59
Repeating Courses.....	60
Grade Appeals.....	61
Scholastic Probation and Disqualification.....	65
Academic Appeals	67
Withdrawal Policy	67
Educational Leave	67

Baccalaureate Degree Information

Frequently Asked Questions.....	68
General Education.....	68
Majors.....	71
Additional Baccalaureate Degrees	72
Graduation Writing Assessment Requirement (GWAR).....	72
Graduation.....	73
Honors	74
CSULB Alumni Association.....	75

Graduate Degree Information

Degrees Offered	77
Admission	79
Graduation Writing Assessment Requirement (GWAR).....	79
Regulations.....	81
Advancement to Candidacy.....	82
Theses and Projects.....	83
Academic Probation and Disqualification	84
Academic Credit	84
Graduate Transfer Units by Extension.....	85
Graduate Studies 700.....	85
Honors	85

Colleges and Departments

Accountancy	86	Information Systems.....	521
Advanced Studies in Education and Counseling.....	89	International Business	524
Africana Studies	121	International Studies.....	526
American Indian Studies.....	126	Italian	529
American Studies	129	Japanese.....	532
Anthropology	131	Jewish Studies.....	537
Art	139	Journalism and Mass Communication.....	538
Arts, College of the.....	177	Kinesiology	542
Asian and Asian American Studies.....	178	Latin American Studies.....	563
Asian Languages.....	185	Legal Studies.....	564
Athletics	187	Liberal Arts, College of	565
Biological Sciences.....	188	Liberal Studies.....	569
Business Administration, College of	218	Linguistics	575
Chemical Engineering	230	Management and Human Resources Management.....	581
Chemistry and Biochemistry.....	236	Marketing.....	585
Chicano and Latino Studies.....	249	Mathematics and Statistics.....	588
Child Development and Family Studies.....	253	Mechanical and Aerospace Engineering	604
Chinese Studies	258	Medieval and Renaissance Studies	623
Civil Engineering		Military Science	625
and Construction Engineering Management	262	Music – The Bob Cole Conservatory of Music	627
Classics	275	Natural Sciences and Mathematics, College of	648
Communication Studies.....	280	Nursing, School of.....	653
Communicative Disorders	287	Nutrition and Dietetics	673
Comparative World Literature.....	293	Ocean Studies Institute	677
Computer Engineering and Computer Science	299	Peace Studies	679
Consumer Affairs	313	Philosophy.....	680
Continuing and Professional Education, College of	316	Physical Therapy	687
Criminal Justice	319	Physics and Astronomy	697
Dance	327	Political Science	706
Design	337	Psychology	714
Economics.....	344	Public Policy and Administration	725
Education, College of	351	Recreation and Leisure Studies	731
Electrical Engineering.....	360	Religious Studies.....	739
Emergency Management	373	Romance, German, Russian Languages and Literatures	744
Engineering, College of.....	376	Russian.....	747
Engineering Technology Programs.....	388	Science Education.....	749
English.....	400	Single Subject Teacher Education Program	753
Environmental Science and Policy	414	Social Work, School of	761
Family and Consumer Sciences.....	417	Sociology.....	773
Family and Consumer Sciences Education.....	424	Spanish.....	779
Fashion Merchandising and Design	427	Student Recreation and Leadership.....	785
Film and Electronic Arts.....	432	Teacher Education.....	786
Finance.....	440	Theatre Arts	807
Food Science.....	443	University Courses	820
French	446	University Honors Program	821
Geography.....	452	Women's, Gender, and Sexuality Studies	824
Geological Sciences.....	462		
German.....	472	General Policies and Regulations	
Gerontology	476	Catalog Rights.....	829
Global Logistics	480	Nondiscrimination Policy	832
Health and Human Services, College of.....	482	Campus Standards of Conduct	835
Health Care Administration.....	484	Policy on Sexual Assault	837
Health Science	490		
History	499	Faculty	847
Hospitality Management	514	Index	875
Human Development.....	518		

THE CALIFORNIA STATE UNIVERSITY

The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972, the system became the California State University and Colleges, and in 1982 the system became the California State University. Today the campuses of the CSU include comprehensive and polytechnic universities and, since July 1995, the California Maritime Academy, a specialized campus.

The oldest campus — San José State University — was founded in 1857 and became the first institution of public higher education in California. The newest — CSU Channel Islands — opened in fall 2002, with freshmen arriving in fall 2003.

Responsibility for the California State University is vested in the Board of Trustees, whose members are appointed by the Governor. The Trustees appoint the Chancellor, who is the chief executive officer of the system, and the Presidents, who are the chief executive officers of the respective campuses.

The Trustees, the Chancellor, and the Presidents develop systemwide policy, with implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of the California State University, made up of elected representatives of the faculty from each campus, recommends academic policy to the Board of Trustees through the Chancellor.

Academic excellence has been achieved by the California State University through a distinguished faculty whose primary responsibility is superior teaching. While each campus in the system has its own unique geographic and curricular character, all campuses, as multipurpose institutions, offer undergraduate and graduate instruction for professional and occupational goals as well as broad liberal education. All campuses require for graduation a basic program of "General Education Requirements" regardless of the type of bachelor's degree or major field selected by the student.

The CSU offers high-quality, affordable bachelor's and master's level degree programs. Many of these programs are offered so that students can complete all upper division and graduate requirements by part-time, late afternoon, and evening study. In addition, a variety of teaching and school service credential programs are available. A limited number of doctoral degrees are offered jointly with the University of California and with private institutions in California. In 2005, the CSU was authorized to independently offer educational doctorate (Ed.D.) programs.

Enrollment in fall 2010 totaled 412,000 students, who were taught by more than 21,000 faculty. The system awards about half of the bachelor's degrees and a third of the master's degrees granted in California. More than 2.6 million students have graduated from CSU campuses since 1961.

A recent economic report found that the CSU supports more than 150,000 jobs statewide, annually. The engine driving job creation is more than \$17 billion in economic activity that directly results from CSU-related spending that generates \$5.43 for every dollar the state invests. For more information, please see www.calstate.edu/impact.

Office of the Chancellor

Dr. Charles B. Reed..... Chancellor – CSU System
Dr. Benjamin F. Quillian.....Executive Vice Chancellor and Chief Financial Officer
Dr. Ephraim P. Smith.....Executive Vice Chancellor and Chief Academic Officer
Mr. Garrett P. Ashley.....Vice Chancellor, University Relations and Advancement
Ms. Gail E. Brooks..... Vice Chancellor, Human Resources
Ms. Christine Helwick..... General Counsel
Mr. Larry Mandel..... University Auditor

401 Golden Shore
Long Beach, California, 90802-4210
(562) 951-4000

Trustees of the California State University

Ex Officio Trustees

The Honorable Edmund G. Brown, Jr.,
Governor of California

The Honorable Gavin Newsom,
Lieutenant Governor of California

The Honorable John Pérez,
Speaker of the Assembly

The Honorable Tom Torlakson,
State Superintendent of Public Instruction

Dr. Charles B. Reed,
Chancellor of The California State University

Officers of the Trustees

The Honorable Edmund G. Brown, Jr. President
Bob Linscheid Vice Chair
Christine Helwick Secretary
Dr. Benjamin F. Quillian Treasurer

Appointed Trustees

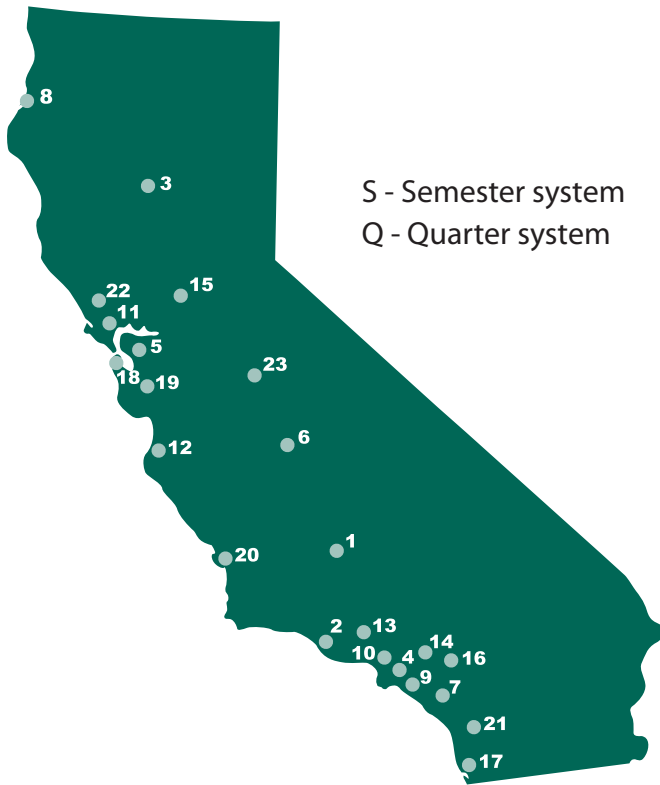
Appointments are for a term of eight years, except student, alumni, and faculty trustees whose terms are for two years. Terms expire in the year in parentheses. Names are listed alphabetically.

Roberta Achtenberg..... (2015)
Carol R. Chandler..... (2012)
Bernadette Cheyne (2013)
Steven Dixon (2012)
Debra S. Farar (2014)
Kenneth Fong (2013)
Margaret Fortune (2016)
Steven Glazer (2019)
Melinda Guzman (2012)
William Hauck (2017)
Linda A. Lang (2017)
Bob Linscheid (2012)
Peter Mehas (2015)
Henry Mendoza (2016)
Lou Monville (2014)
Jillian Ruddell (2013)
Glen Toney (2013)

Correspondence with Trustees should be sent to:
c/o Trustees Secretariat
The California State University
401 Golden Shore
Long Beach, California 90802-4210

A world of information is just a click away.

Check out the website for the entire **California State University**: www.csumentor.edu. You will find helpful hints, frequently-asked questions, campus tours, and general information about all 23 campuses. The phone number listed for each campus is for the Office of Admisison.



S - Semester system
Q - Quarter system

- 1 **California State University, Bakersfield** • Q
9001 Stockdale Highway, Bakersfield, CA 93311-1099
(661) 654-3036 • www.csub.edu
- 2 **California State University Channel Islands** • S
One University Drive, Camarillo, CA 93012
(805) 437-8500 • www.csuci.edu
- 3 **California State University, Chico** • S
400 W. First Street, Chico, CA 95929-0722
(530) 898-6321 • www.csuchico.edu
- 4 **California State University, Dominguez Hills** • S
1000 East Victoria Street, Carson, CA 90747
(310) 243-3645 • www.csudh.edu
- 5 **California State University, East Bay** • Q
25800 Carlos Bee Blvd., Hayward, CA 94542-3035
(510) 885-2556 • www.csueastbay.edu
- 6 **California State University, Fresno** • S
5150 North Maple Avenue, Fresno, CA 93740-0057
(559) 278-2261 • www.csufresno.edu
- 7 **California State University, Fullerton** • S
800 N. State College Blvd., Fullerton, CA 92834-9480
(657) 278-7601 • www.fullerton.edu
- 8 **Humboldt State University** • S
1 Harpst Street, Arcata, CA 95521-4957
(707) 826-4402 • (866) 850-9556 • www.humboldt.edu

- 9 **California State University, Long Beach** • S
1250 Bellflower Blvd., Long Beach, CA 90840-0106
(562) 985-5471 • www.csulb.edu
- 10 **California State University, Los Angeles** • Q
5151 State University Drive, Los Angeles, CA 90032-8530
(323) 343-3901 • www.calstatela.edu
- 11 **California Maritime Academy** • S
200 Maritime Academy Drive, Vallejo, CA 94590
(707) 654-1330 • www.csum.edu
- 12 **California State University, Monterey Bay** • S
100 Campus Center Drive, Seaside, CA 93955-8001
(831) 582-3738 • www.csumb.edu
- 13 **California State University, Northridge** • S
18111 Nordhoff Street, Northridge, CA 91330-8207
(818) 677-3700 • www.csun.edu
- 14 **California State Polytechnic University, Pomona** • Q
3801 West Temple Avenue, Pomona, CA 91768-4003
(909) 869-5299 • www.csupomona.edu
- 15 **California State University, Sacramento** • S
6000 J Street, Sacramento, CA 95819-6112
(916) 278-7766 • www.csus.edu
- 16 **California State University, San Bernardino** • Q
5500 University Parkway, San Bernardino, CA 92407-2397
(909) 537-5188 • www.csusb.edu
- 17 **San Diego State University** • S
5500 Campanile Drive, San Diego, CA 92182-7455
(619) 594-6336 • www.sdsu.edu
- 18 **San Francisco State University** • S
1600 Holloway Avenue, San Francisco, CA 94132-4001
(415) 338-1113 • www.sfsu.edu
- 19 **San José State University** • S
One Washington Square, San José, CA 95192-0009
(408) 283-7500 • www.sjsu.edu
- 20 **California Polytechnic State University, San Luis Obispo** • Q
San Luis Obispo, CA 93407
(805) 756-2311 • www.calpoly.edu
- 21 **California State University, San Marcos** • S
333 S. Twin Oaks Valley Road
San Marcos, CA 92096-0001
(760) 750-4848 • www.csusm.edu
- 22 **Sonoma State University** • S
1801 East Cotati Avenue, Rohnert Park, CA 94928
(707) 664-2778 • www.sonoma.edu
- 23 **California State University, Stanislaus** • S
One University Circle, Turlock, CA 95382
(209) 667-3070 • www.csustan.edu

Welcome to the Beach



CSULB is characterized by exceptional academic programs, dedicated faculty, outstanding support services, and a diverse student body...

Welcome to California State University, Long Beach, one of the nation's most vibrant and successful public universities.

Here you will benefit from an exciting, rigorous learning environment that promotes global engagement and prepares you for the challenges and opportunities of tomorrow. CSULB is characterized by exceptional academic programs, outstanding support services, dedicated faculty and a diverse student population. Our 322-acre campus provides an inviting collegiate atmosphere as well as state-of-the-art facilities such as the University Library and the recently completed Hall of Science and School of Nursing buildings.



I encourage you to make the most of your time at CSULB. With study abroad options in about 40 countries, a variety of community service learning programs, more than 300 student organizations, 30 intramural sports, 18 NCAA Division 1 athletic teams and art performances virtually every week, we offer something for everyone.

Take pride in knowing you are attending a university that is nationally recognized as one of the top public comprehensive universities in the United States, one of the top 10 universities for awarding bachelor's degrees to minority students, and among the best values in public higher education. We have also been ranked by Kiplinger's Personal Finance magazine as one of the nation's top universities for ensuring students graduate with the least amount of student loan debt.

I hope you will enjoy being part of this dynamic community that is "among the nation's best."

Go BEACH!

A handwritten signature in cursive script that reads "F. King Alexander".

F. King Alexander
President

Degrees, Options, Minors, Certificates, and Credentials

Program Title	Type of Program	Catalog Reference
3-D Media	Option, BFA in Art	Art
Accountancy	Option, BS in Business Administration	Accountancy
Acting	Option, MFA in Theatre Arts	Theatre Arts
Acute Care Clinical Nurse Specialist	Option, MS in Nursing	Nursing
Administration of Campus Recreation and Student Services Programs	Certificate	Recreation and Leisure Studies
Administration of Outdoor Recreation Resources	Certificate	Recreation and Leisure Studies
Administration of Travel and Tourism	Certificate	Recreation and Leisure Studies
Administrative Services	Credential (Preliminary and Professional)	Advanced Studies in Education and Counseling
Aerospace Engineering	BS/MS	Mechanical and Aerospace Engineering
Aerospace Manufacturing	Certificate	Mechanical and Aerospace Engineering
Africana Studies	BA/Minor/Certificate	Africana Studies
American Indian Studies	Minor/Certificate	American Indian Studies
American Studies	BA/Minor	American Studies
Anthropology	BA/Minor/MA	Anthropology
Anthropology, Applied	Option, MA in Anthropology	Anthropology
Art	BA/BFA/MA/MFA	Art
Art Education	Option, BA in Art	Art
Art History	Option, BA in Art	Art
Art Photography	Option, BFA in Art	Art
Asian American Studies	BA/Minor/Certificate	Asian American Studies
Asian Studies	BA/MA/Certificate	Asian American Studies
Athletic Training	BS	Kinesiology
Audio Engineering	Option, BS in Engineering	College of Engineering
Basic Nursing	Option, BS in Nursing	Nursing
Biochemistry	BS/MS	Chemistry and Biochemistry
Biology	BS/Minor/MS	Biological Sciences
Biology Education	Option, BS in Biology	Biological Sciences
Biomedical and Clinical Engineering	Option, BS in Engineering	Electrical Engineering
Biomedical Art	Certificate	Art
Biotechnology	Certificate	Biological Sciences
Botany	Option, BS in Biology	Biological Sciences
Business Administration	BS/MBA/MBA-MFA in Theatre Management	College of Business Administration
Business Economics	BA/Minor	Economics
Career Guidance Specialist	Graduate Certificate	Advanced Studies in Education and Counseling
Cell and Molecular Biology	Option, BS in Biology	Biological Sciences

Program Title	Type of Program	Catalog Reference
Ceramics	Option, BFA in Art	Art
Chemical Engineering	BS	Chemical Engineering
Chemistry	BA/BS/Minor/MS	Chemistry and Biochemistry
Chicano and Latino Studies	BA/Minor /Certificate	Chicano and Latino Studies
Child Development and Family Studies	Option, BA in Family and Consumer Sciences/ Minor	Child Development and Family Studies
Chinese Studies	BA	Chinese Studies
Choral-Voice Music	Option, BM	Music
Civil Engineering	BS/MS	Civil Engineering and Construction Engineering Management
Classical Studies	Minor	Classics
Classics	BA	Classics
Coaching and Student-Athlete Development	Option, MA in Kinesiology	Kinesiology
Communication, Culture, and Public Affairs	Option, BA in Communication Studies	Communication Studies
Communication Studies	BA/MA/Minor	Communication Studies
Communicative Disorders	BA/MA	Communicative Disorders
Community College	Graduate Certificate	Advanced Studies in Education and Counseling
Community College - Higher Education	Specialization, EdD Educational Leadership	College of Education
Community Health Education	Option, BS in Health Science/MPH	Health Science
Comparative World Literature	BA/Minor	Comparative World Literature
Composition	Option, BM	Music
Computer Engineering	BS/Option, MS in Computer Science	Computer Engineering and Computer Science
Computer Engineering Technology	BS	Engineering Technology
Computer Science	BS/Minor/Option, MS in Computer Science	Computer Engineering and Computer Science
Computer Science Applications	Minor	Computer Engineering and Computer Science
Construction Engineering Management	BS	Civil Engineering and Construction Engineering Management
Consumer Affairs	Option, BA in Family and Consumer Sciences/ Minor	Consumer Affairs
Counseling	MS	Advanced Studies in Education and Counseling
Creative Writing	Option, BA in English/Option, Minor/MFA	English
Criminal Justice	BS/Minor/MS	Criminal Justice
Curriculum and Instruction, Elementary Education	Option, MA in Education	Teacher Education
Curriculum and Instruction, Secondary Education	Option, MA in Education	Teacher Education
Dance	BA/BFA/Minor/MA/MFA	Dance
Dance Science	Option, BA in Dance	Dance
Design	BA	Design
Designated Subjects (Adult Education and Career Technical Education)	Credential	Teacher Education

Program Title	Type of Program	Catalog Reference
Dietetics and Food Administration	BS	Family and Consumer Sciences
Dramatic Writing	Option, MFA in Theatre Arts	Theatre Arts
Drawing and Painting	Option, BFA in Art	Art
Dual Language Development	Option, MA in Education	Teacher Education
Early Childhood Education	Option, MA in Education	Teacher Education
Earth Science	BS	Geological Sciences
Ecology	Option, BS in Biology	Biological Sciences
Economics	BA/Minor/MA	Economics
Education	MA	Advanced Studies in Education and Counseling
Education	MA	Teacher Education
Education Specialist: Mild Moderate and Moderate/Severe Disabilities	Credential (Preliminary and Professional)	Advanced Studies in Education and Counseling
Educational Administration	Option, MA in Education	Advanced Studies in Education and Counseling
Educational Leadership	EdD	College of Education
Educational Psychology	Option, MA in Education	Advanced Studies in Education and Counseling
Educational Technology and Media Leadership	Option, MA in Education	Advanced Studies in Education and Counseling
Electrical Engineering	BS/MS	Electrical Engineering
Electronics Engineering Technology	BS	Engineering Technology
Elementary Science Education	Option, MS in Science Education	Science Education
Emergency Services Administration	MS	Emergency Management
Energy Conversion and Power Systems Engineering	Certificate	Mechanical and Aerospace Engineering
Engineering	BS/MS	College of Engineering
Engineering and Industrial Applied Mathematics	PhD	College of Engineering
Engineering Systems	BA	College of Engineering
Engineering Technology	BS	Engineering Technology
English	BA/Minor/MA	English
English Education	Option, BA in English	English
Entrepreneurship	Minor	Management and Human Resource Management
Environmental Engineering	Minor	College of Engineering
Environmental Science and Policy	BA/BS/Minor	Environmental Science and Policy
Environmental Technology	Option, BS in Engineering Technology	Engineering Technology Programs
Event Planning and Management	Minor	Recreation and Leisure Studies
Exercise Physiology and Nutrition	Option, MS Kinesiology	Kinesiology
Exercise Science	Option, BS/MS in Kinesiology	Kinesiology
Facilities Operations	Certificate	Civil Engineering
Family and Consumer Sciences	BA/MA	Family and Consumer Sciences
Family and Consumer Sciences Education	Option, BA Family and Consumer Sciences	Family and Consumer Sciences Education

Program Title	Type of Program	Catalog Reference
Family Life Education	Option, BA in Family and Consumer Sciences	Child Development and Family Studies
Fashion Merchandising	Option, BA in Family and Consumer Sciences/ Minor	Fashion Merchandising and Design
Film and Electronic Arts	BA/Minor	Film and Electronic Arts
Finance	Option, BS in Business Administration/Minor	Finance
Fitness	Option, BS in Kinesiology	Kinesiology
Food Science	Option, BS in Dietetics and Food Administration/Minor	Food Science
Forensic Studies	Minor	Criminal Justice
French and Francophone Studies	BA/Minor/MA	French
(French), Interdisciplinary	Option	French
Geographic Information Science	Certificate	Geography
Geography	BA/Minor/MA	Geography
Geology	BS/Minor/MS	Geological Sciences
German	BA/Minor/MA	German
Gerontology	MS/Certificate	Gerontology
Global Logistics	MA	Global Logistics
Graphic Design	Option, BFA in Art	Art
Greek	Minor	Classics
Greek Civilization	Option, BA in Classics	Classics
Health Care	Option, BS in Health Science	Health Science
Health Care Administration	BS/MS/Graduate Certificate/ MS in Nursing-MS in HCA	Health Care Administration
Health Science	BS/Minor/MS	Health Science
Health Services (School Nurse)	Credential	Nursing
Heating Ventilating and Air Conditioning Engineering	Certificate	Mechanical and Aerospace Engineering
History	BA/Minor/MA	History
History and Literature	Option, BM	Music
Hospitality Management	BS/Minor	Hospitality Management
Human Development	BA/Minor	Human Development
Human Factors	Option, MS in Psychology	Psychology
Human Resources Management	Option, BS in Business Administration/Minor	Management and Human Resources Management
Illustration	Option, BFA in Art	Art
Individualized Studies	Option, MA in Kinesiology	Kinesiology
Industrial and Organizational Psychology	Option, MS in Psychology	Psychology
Industrial Design	BS	Design
Industrial Management Engineering	Option, BS in Engineering	Mechanical and Aerospace Engineering
Industrial Plastics Processing and Design	Certificate	Mechanical and Aerospace Engineering
Informal Science Education	Option, MS in Science Education	Science Education
Instrumental Music	Option, BM	Music
Interior Design	BFA	Design

Program Title	Type of Program	Catalog Reference
International Business	Option, BS in Business Administration/ Certificate	International Business
International Economics	Minor	Economics
International Studies	BA/Minor	International Studies
Interpersonal and Organizational Communication	Option, BA in Communication Studies	Communication Studies
Italian	BA/Minor	Italian
Japanese	BA/Certificate	Japanese
Jewish Studies	BA/Minor	Jewish Studies
Journalism	BA/Minor	Journalism and Mass Communication
K-12 Physical Education - Teacher Education	Option, BA in Kinesiology	Kinesiology
Kinesiology	BA/BS/MA/MS	Kinesiology
Kinesiotherapy	Option, BS in Kinesiology/Certificate	Kinesiology
Language and Culture	Option, MA in Linguistics	Linguistics
Latin	Minor	Classics
Latin American Studies	Minor/Certificate	Latin American Studies
Legal Studies	Certificate	Legal Studies
Leisure Counseling	Graduate Certificate	Recreation and Leisure Studies
Liberal Arts	BA	College of Liberal Arts
Liberal Studies	BA/Credential	Liberal Studies
Librarianship	Option, MA in Education	Advanced Studies in Education and Counseling
Linguistics	BA/Minor/MA	Linguistics
Literature	Option, BA in English/Option, Minor in English	English
Management	Option, BS in Business Administration	Management and Human Resources Management
Management Information Systems	Option, BS in Business Administration/Minor	Information Systems
Management of Nonprofit and Volunteer Services	Certificate	Recreation and Leisure Studies
Manufacturing Engineering Technology	BS	Mechanical and Aerospace Engineering
Marine Biology	BS	Biological Sciences
Marketing	Option, BS in Business Administration/Minor	Marketing
Marriage and Family Therapy	Option, MS in Counseling	Advanced Studies in Education and Counseling
Materials Engineering	Option, BS in Engineering	Mechanical and Aerospace Engineering
Mathematical Economics and Economic Theory	Option, BA Economics	Economics
Mathematics	BS/Minor/MS	Mathematics and Statistics
Mathematics Education	Option, BS/MS in Mathematics	Mathematics and Statistics
Mathematics Education	Option, MA in Education	Teacher Education
Mathematics, Applied	Option, BS/MS in Mathematics/Minor	Mathematics and Statistics
Mechanical Engineering	BS/MS	Mechanical and Aerospace Engineering
Medieval and Renaissance Studies	Minor/Certificate	Medieval and Renaissance Studies

Program Title	Type of Program	Catalog Reference
Microbiology	BS/Minor/MS	Biological Sciences
Middle Eastern Studies	Minor	History
Multiple Subject Credential	Credential	Teacher Education
Museum Studies	Graduate Certificate	Art
Music	BA/BM/Minor/MA/MM	Music
Music-Choral Voice, Composition, History and Literature, Instrumental, Performance	Options, BM in Music	Music
Narrative Production	Option, BA in Film and Electronic Arts	Film and Electronic Arts
Nurse Practitioner	Graduate Certificate	Nursing
Nursing	BS/MS/MS-MPH/MS-MS in Health Care Administration	Nursing
Nutrition and Dietetics	Option, BS in Dietetics and Food Administration	Nutrition and Dietetics
Nutritional Science	MS	Family and Consumer Sciences
Operations and Supply Chain Management	Option, BS in Business Administration	Management and Human Resources Management
P-12 Education	Specialization, EdD in Educational Leadership	College of Education
Peace and Social Justice Studies	Certificate	Peace Studies
Performance-Music	Option, BM in Music	Music
Performance-Theatre	Option, BA in Theatre Arts	Theatre Arts
Philosophy	BA/Minor/MA	Philosophy
Physical Education, Adapted	Option, BA/MA in Kinesiology/Credential	Kinesiology
Physical Therapy	MPT, DPT	Physical Therapy
Physics	BA/BS/Minor/MS	Physics and Astronomy
Physics, Applied	Option, MS Physics	Physics and Astronomy
Physiology	Option, BS in Biology/Minor	Biological Sciences
Political Science	BA/Minor/MA	Political Science
Printmaking	Option, BFA in Art	Art
Psychological Research	Option, MA Psychology	Psychology
Psychology	BA/Minor/MA/MS	Psychology
Public Administration	MPA	Public Policy and Administration
Public Administration in Political Science	Minor	Political Science
Public Health	MPH/MS in Nursing-MPH	Health Science
Public Management Analyst	Graduate Certificate	Public Policy and Administration
Public Policy	Minor	Political Science
Public Sector Employer-Employee Relations and Personnel Management	Graduate Certificate	Public Policy and Administration
Public Sector Financial Management	Graduate Certificate	Public Policy and Administration
Public Works Administration	Option, Master of Public Administration	Public Policy and Administration
Reading/Language Arts	Option, MA in Education/Graduate Certificate/Credential	Teacher Education
Recreation	BA/Minor/MS	Recreation and Leisure Studies
Registered Nurse	Option, BS in Nursing	Nursing

Program Title	Type of Program	Catalog Reference
Religious Studies	BA/Minor/MA/Certificate	Religious Studies
Rhetoric and Composition	Option, BA in English/Option, Minor in English	English
Roman Civilization	Option, BA in Classics	Classics
ROTC, Army	ROTC	Military Science
Russian	Minor	Russian
Russian and East European Studies	Certificate	Russian
Safety Operations	Certificate	Chemical Engineering
School Counseling	Option, MS in Counseling/ Credential, Pupil Personnel Services	Advanced Studies in Education and Counseling
School Health Education	Option, BS in Health Science	Health Science
School Nurse	Credential	Nursing
School Psychology	Credential, Pupil Personnel Services	Advanced Studies in Education and Counseling
School Social Work and Child Welfare and Attendance	Credential, Pupil Personnel Services	Social Work
Science Education	MS	Science Education
Sculpture	Option, BFA in Art	Art
Secondary Science Education	Option, MS in Science Education	Science Education
Service in Public Education Speech-Language Pathology Services	Credential	Communicative Disorders
Single Subject Credential	Credential	Single Subject Teacher Education
Social and Cultural Analysis of Education	Option, MA in Education	Advanced Studies in Education and Counseling
Social Work	BA/MSW	Social Work
Sociology	BA/Minor/MA	Sociology
Spanish	BA/Minor/MA	Spanish
Special Education	MS	Advanced Studies in Education and Counseling
Sport and Exercise Psychology	Option, MS in Kinesiology	Kinesiology
Sport Psychology and Leadership	Option, BS in Kinesiology	Kinesiology
Sports Medicine and Injury Studies	Option, MS in Kinesiology	Kinesiology
Statistics	Option, BS in Mathematics/Minor	Mathematics and Statistics
Statistics, Applied	MS	Mathematics and Statistics
Student Development in Higher Education	Option, MS in Counseling	Advanced Studies in Education and Counseling
Studio Art	Option, BA in Art	Art
Systems Engineering	Graduate Certificate	College of Engineering
Teacher Librarian Services	Credential	Advanced Studies in Education and Counseling
Teaching English to Speakers of Other Languages	Option, MA in Linguistics/Graduate Certificate	Linguistics
Technical and Professional Communication	Certificate	English
Technical Theatre	Options, BA/MFA in Theatre Arts	Theatre Arts
Technology and Engineering Education	Option, BS in Engineering Technology	Engineering Technology Programs
Textiles and Clothing	Option, BA in Family and Consumer Sciences/ Minor	Fashion Merchandising and Design

Program Title	Type of Program	Catalog Reference
Theatre Arts	BA/Minor/MFA	Theatre Arts
Theatre Management	Option, MFA in Theatre Arts/ MBA-MFA in Theatre Management	Theatre Arts
Theory and Practice of Cinema	Option, BA in Film and Electronic Arts	Film and Electronic Arts
Therapeutic Recreation	Certificate	Recreation and Leisure Studies
Transportation	Certificate	College of Business
Transportation Policy and Planning	Graduate Certificate	Public Policy and Administration
Urban Affairs	Option, Master of Public Administration	Public Policy and Administration
Urban Executive Management	Graduate Certificate	Public Policy and Administration
Urban Studies	Certificate	Geography
Waste Engineering and Management	Graduate Certificate	Civil Engineering
Web Technologies and Applications	Minor/Certificate	Computer Engineering and Computer Science
Wilderness Studies	Certificate	Kinesiology
Women's, Gender, and Sexuality Studies	BA/Minor	Women's, Gender, and Sexuality Studies
Zoology	Option, BS in Biology	Biological Sciences

Course Prefixes and Definitions

Course Prefix	Definition	Catalog Reference
ACCT	Accountancy	Accountancy
ADED	Adult Education	Teacher Education
AFRS	Africana Studies	Africana Studies
AH	Art History	Art
AIS	American Indian Studies	American Indian Studies
ALI	American Language Institute	English
ALP	American Language Program	English
AMST	American Studies	American Studies
ANTH	Anthropology	Anthropology
ARAB	Arabic	Romance, German, Russian Languages and Literatures
ART	Art	Art
ASAM	Asian American Studies	Asian and Asian American Studies
A/ST	Asian Studies	Asian and Asian American Studies
ASTR	Astronomy	Physics
ATEP	Athletic Training Education Program	Kinesiology
ATHL	Athletics	Athletics
BIOL	Biology	Biological Sciences
BLAW	Business Law	College of Business Administration
CAFF	Consumer Affairs	Consumer Affairs
CBA	College of Business Administration	College of Business Administration
C D	Communicative Disorders	Communicative Disorders
CDFS	Child Development and Family Studies	Child Development and Family Studies
C E	Civil Engineering	Civil Engineering and Construction Engineering Management
CECS	Computer Engineering and Computer Science	Computer Engineering and Computer Science
CEM	Construction Engineering Management	Civil Engineering
CH E	Chemical Engineering	Chemical Engineering
CHEM	Chemistry and Biochemistry	Chemistry and Biochemistry
CHIN	Chinese	Chinese Studies
CHLS	Chicano and Latino Studies	Chicano and Latino Studies
C/LA	College of Liberal Arts	College of Liberal Arts
CLSC	Classics	Classics
COMM	Communication Studies	Communication Studies
COTA	College of the Arts	College of the Arts
COUN	Counseling	Advanced Studies in Education and Counseling

Course Prefix	Definition	Catalog Reference
CRJU	Criminal Justice	Criminal Justice
CTED	Career Technical Education	Teacher Education
CWL	Comparative World Literature	Comparative World Literature
DANC	Dance	Dance
DESN	Design	Design
DPT	Doctor of Physical Therapy	Physical Therapy
ECON	Economics	Economics
EDAD	Education Administration	Advanced Studies in Education and Counseling
EDCI	Education - Curriculum and Instruction	Teacher Education
EDEC	Education - Early Childhood	Teacher Education
EDEL	Education - Elementary	Teacher Education
EDLD	Educational Leadership Doctorate	College of Education
EDME	Mathematics Education	Teacher Education
EDMS	Education Middle School	Teacher Education
ED P	Educational Psychology	Advanced Studies in Education and Counseling
EDRG	Education - Reading	Teacher Education
EDSE	Education - Secondary	Teacher Education
EDSP	Education Specialist	Advanced Studies in Education and Counseling
EDSS	Education - Single Subject	Single Subject Teacher Education
E E	Electrical Engineering	Electrical Engineering
ELIB	Educational Library	Advanced Studies in Education and Counseling
EMER	Emergency Management	Emergency Management
ENGL	English	English
ENGR	Engineering	Engineering
EOP	Educational Opportunity Program	University Courses
ES P	Environmental Science and Policy	Environmental Science and Policy
ESM	Early Start Mathematics	Mathematics and Statistics
ESW	Early Start Writing	English
E T	Engineering Technology	Engineering Technology
ETEC	Educational Technology	Advanced Studies in Education and Counseling
FCS	Family and Consumer Sciences	Family and Consumer Sciences
FCSE	Family and Consumer Sciences Education	Family and Consumer Sciences Education
FEA	Film and Electronic Arts	Film and Electronic Arts
FIN	Finance	Finance

Course Prefix	Definition	Catalog Reference
FMD	Fashion Merchandising and Design	Fashion Merchandising and Design
FREN	French	French
FSCI	Food Science	Food Science
GBA	Graduate Business Administration	College of Business Administration
GEOG	Geography	Geography
GEOL	Geology	Geology
GERM	German	German
GERN	Gerontology	Gerontology
GISC	Geographic Information Services	Geology
GK	Greek	Classics
GLG	Global Logistics	Global Logistics
G S	Graduate Studies	Graduate Degrees
HCA	Health Care Administration	Health Care Administration
HDEV	Human Development	Human Development
HEBW	Hebrew	Jewish Studies
HFHM	Hospitality Foodservice and Hotel Management	Hospitality Foodservice and Hotel Management
HHS	Health and Human Services	College of Health and Human Services
HIST	History	History
HRM	Human Resources Management	Management and Human Resources Management
H SC	Health Science	Health Science
INTL	International Education	University Courses
I S	Information Systems	Information Systems
I/ST	International Studies	International Studies
ITAL	Italian	Italian
JAPN	Japanese	Japanese
JOUR	Journalism	Journalism and Mass Communication
KHMR	Cambodian	Asian Languages
KIN	Kinesiology	Kinesiology
KOR	Korean	Asian Languages
LAS	Latin American Studies	Latin American Studies
LAT	Latin	Classics
LING	Linguistics	Linguistics
L/ST	Liberal Studies	Liberal Studies
MAE	Mechanical and Aerospace Engineering	Mechanical and Aerospace Engineering
MAPB	Mathematics Prebaccalaureate	Mathematics and Statistics
MATH	Mathematics and Statistics	Mathematics and Statistics
MGMT	Management	Management and Human Resources Management
MICR	Microbiology	Biological Sciences
MKTG	Marketing	Marketing
M S	Military Science	Military Science

Course Prefix	Definition	Catalog Reference
MSEM	MS Engineering Management	College of Engineering
MTEd	Mathematics Education	Mathematics and Statistics
MUS	Music	Music
NRSG	Nursing	Nursing
NSCI	Natural Sciences	College of Natural Sciences and Mathematics
NUTR	Nutrition and Dietetics	Nutrition and Dietetics
OSI	Ocean Studies Institute	Ocean Studies Institute
PHIL	Philosophy	Philosophy
PHSC	Physical Science	Physics and Astronomy
PHYS	Physics	Physics and Astronomy
PORT	Portuguese	Romance, German, Russian Languages and Literatures
POSC	Political Science	Political Science
PPA	Public Policy and Administration	Political Science
PSY	Psychology	Psychology
P T	Physical Therapy	Physical Therapy
REC	Recreation	Recreation and Leisure Studies
RGR	Romance German Russian Language	Romance, German, Russian Languages and Literatures
R/ST	Religious Studies	Religious Studies
RUSS	Russian	Russian
SCAE	Social and Cultural Analysis of Education	Advanced Studies in Education and Counseling
SCED	Science Education	Science Education
SCM	Supply Chain Management	Management and Human Resources Management
S/I	Supplemental Instruction	Academic Services and Campus Life
SOC	Sociology	Sociology
SPAN	Spanish	Spanish
SRL	Student Recreation and Leadership	Student Recreation and Leadership
STAT	Statistics	Mathematics and Statistics
S W	Social Work	Social Work
TGLG	Tagalog	Asian Languages
THEA	Theatre Arts	Theatre Arts
UHP	University Honors Program	University Honors Program
UNIV	University	University Courses
U/ST	Urban Studies	Geography
VIET	Vietnamese	Asian Languages
WGSS	Women's, Gender, and Sexuality Studies	Women's, Gender, and Sexuality Studies
WPE	Writing Proficiency Examination Preparation and Review	University Courses

ADMISSION TO CSULB

Choosing CSULB

CSULB's core academic mission is to graduate students with highly valued degrees. Faculty and staff are dedicated to fostering student success both inside and outside the classroom. Prospective students are encouraged to explore the campus to see if CSULB is the right choice for you.

The Office of University Outreach and School Relations (UOSR) is the university's primary student recruitment and guest relations office and is the primary contact point for prospective students who are seeking information about CSULB's admissions processes, financial aid opportunities, student support services and the university's prestigious President's Scholars Program.

UOSR offers guided campus tours and specialized campus visits for K-12 students, parents, counselors and others interested groups. It also administers pre-admission and application workshops for prospective students; the Young Scholars Program for qualified high school students; adult re-entry information; and educational awareness and academic enrichment services for elementary and middle school students. For further information, call (562) 985-5358, go to www.csulb.edu/outreach, or visit the Outreach Office at Brotman Hall, Room 289.

Admissions Procedures and Policies

Requirements for admission to California State University, Long Beach are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Code of Regulations. Complete information is available at www.csumentor.edu/planning/.

Electronic versions of the CSU undergraduate and graduate applications are accessible on the World Wide Web at www.csumentor.edu. The CSUMentor system allows students to browse through general information about the CSU's twenty-three campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid. Information on CSULB admission requirements and deadlines can be found at www.csulb.edu.

Applying online via www.csumentor.edu is expected unless electronic submission is impossible. An acknowledgement will be sent when online applications have been submitted. Application in "hard copy" form may be obtained online via www.csumentor.edu as a portable data format (PDF). Application forms (in PDF) may also be downloaded from www.calstate.edu/sas/publications. [Paper applications should be mailed to the campus admission office(s).]

Importance of Filing Complete, Accurate, and Authentic Application Documents

CSU, Long Beach advises prospective students that they must supply complete and accurate information on the application for admission, residency questionnaire, and financial aid forms. Further, applicants must, when requested, submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate, and authentic application documents may result

in denial of admission, cancellation of academic credit, suspension, or expulsion (Section 41301, Article 1.1, of Title 5, California Code of Regulations).

Undergraduate Application Procedures

Prospective students applying for part-time or full-time undergraduate programs of study in day or evening classes must file a complete undergraduate application. The \$55 nonrefundable application fee should be in the form of a check or money order payable to "The California State University" or by credit card and may not be transferred or used to apply to another term. An alternate major may be indicated on the application. The applications of persons denied admission to an impacted and/or closed campus may be re-routed to another campus at no cost, but only if the applicant is CSU eligible.

Readmission

Students who break attendance by not enrolling in classes each semester, and who have not filed for educational leave, must reapply for admission. Transcripts of work completed elsewhere during the absence must also be submitted. Students who left under academic disqualification must submit a "Reinstatement Petition" and an "Application for Reinstatement" with their completed application prior to JULY 1 for the Fall semester or December 1 for the Spring semester.

Impacted Programs

The CSU designates programs as impacted when more applications from CSU eligible students are received in the initial filing period (October and November for fall terms, August for spring terms) than can be accommodated. Some programs are impacted at every campus where they are offered; others are impacted only at a few campuses. Candidates for admission must meet supplementary criteria if applying to an impacted program.

The CSU will announce during the fall filing period those campuses or programs that are impacted. Detailed information on campus and programs impaction will be available at the following websites:

- www.csumentor.edu
- www.calstate.edu/impactioninfo.shtml
- www.calstate.edu/sas/impaction-campus-info.shtml

Campuses will communicate its supplementary admission criteria for all impacted programs to high schools and community colleges in their service area and will disseminate this information to the public through appropriate media. This information will also be published at the CSU campus individual website and made available online at www.calstate.edu.

Applicants must file applications for admission to an impacted program during the initial filing period. Applicants who wish to be considered for impacted programs at more than one campus must file an application at each campus for which they seek admission consideration.

Supplementary Admission Criteria

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include rank-ordering of freshman applicants based on the CSU eligibility index or rank-ordering of transfer applicants based on the overall transfer grade point average, completion of specified prerequisite courses, and a combination of campus-developed criteria. Applicants for freshman admission to impacted campuses or programs are required to submit scores on either the SAT or the ACT. For fall admission, applicants should take tests as early as possible and no later than November or December of the preceding year.

The supplementary admission criteria used by the individual campuses to screen applicants are made available by the campuses to applicants who seek admission to an impacted program. Details regarding the supplemental admissions criteria are also provided at www.calstate.edu/impactioninfo.shtml.

Application Filing Periods

<u>Terms in</u> <u>2012 - 2013</u>	<u>Applications</u> <u>First Accepted</u>	<u>Initial Filing</u> <u>Period</u>
Fall 2012	October 1, 2011	Oct 1 - Nov 30, 2011
Spring 2013	August 1, 2012	August 1-31, 2012

Filing Period Duration

Each non-impacted campus accepts applications until capacities are reached. Many campuses limit undergraduate admission in an enrollment category due to overall enrollment limits. Students applying after the initial filing period should consult the campus admissions office for current information. Similar information is conveniently available at www.csumentor.edu/filing_status/Default.asp.

Application Acknowledgment

On-time applicants may expect to receive an acknowledgment from their first-choice campus within two to four weeks after filing the application. The notice may also include a request that applicants submit additional records necessary to evaluate academic qualifications. Applicants may be assured of admission if the evaluation of relevant qualifications indicates that applicants meet CSU admission requirements, and in the case of admission impaction, campus requirements for admission to an impacted program. An offer of admission is not transferable to another term or to another campus.

Undergraduate Requirement Deadlines

Prior to matriculation (official registration as a CSULB-admitted student), students must complete, in a timely manner, admission requirements — including subject requirements, unit minimums, grade-point averages, final transcript and testing requirement. Refer to the Enrollment Services web site (www.csulb.edu/enrollment) for current requirements.

Intrasystem and Intersystem Enrollment Programs

Upper-division students enrolled at any CSU campus will have access to courses at other CSU campuses on a space available basis unless those campuses or programs are impacted or admission to the desired program or semester is closed. This access is offered without students

being required to be admitted formally to the host campus and sometimes without paying additional fees. Although courses taken on any CSU campus will transfer to the student's home CSU campus as elective credit, students, before enrolling at the host campus, should consult their home campus academic advisors to determine how such courses may apply to their specific degree programs.

There are two programs for enrollment within the CSU and one for enrollment between CSU and the University of California or California Community Colleges. Additional information about these programs is available from Office of Enrollment Services.

CSU Concurrent Enrollment – matriculated students in good standing may enroll on a space available basis at both their home CSU campus and a host CSU campus during the same term. Credit earned at the host campus is reported at the student's request to the home campus to be included on the student's transcript at the home campus.

CSU Visitor Enrollment – matriculated students in good standing enrolled at one CSU campus may enroll on a space available basis at another CSU campus for one term. Credit earned at the host campus is reported at the student's request to the home campus to be included on the student's transcript at the home campus.

Intersystem Cross Enrollment – matriculated CSU, UC, or community college students may enroll on a space available basis for one course per term at another CSU, UC, or community college and request that a transcript of record be sent to the home campus.

Concurrent Enrollment Within the CSU

All CSULB students wishing to enroll concurrently at CSULB and one of the other 23 California State University campuses must request permission to do so from the Office of Enrollment Services. Concurrent enrollment within the California State University system is limited to students who have completed a minimum of 12 units at CSULB, have a minimum 2.0 grade-point average, are in good academic standing and have paid fees at CSULB for 12 units or more regardless of the total number of units earned at both campuses. No additional fees may be collected after the last day to add classes. Concurrent Enrollment is subject to space availability and registration priority policies at the host campus.

No graduate student may register concurrently at this and any other collegiate institution without advance permission. Permission may be given for concurrent enrollment at CSULB and other institutions if recommended by the department graduate advisor and approved by the Dean of the appropriate college. Forms for concurrent enrollment may be obtained from the college office. When such permission is granted, the academic load at CSULB must be reduced accordingly.

Visitor Enrollment Within the CSU

Students enrolled in any CSU campus may apply to transfer temporarily to another CSU campus in Visitor status, if they have (1) completed 12 units at the home campus, (2) have earned at least a 2.0 cumulative GPA at the home campus, (3) are in good academic standing at the home campus, and (4) are eligible to register under continuing status at the home campus. Approval for visitor enrollment is valid for one term only and is subject to the host campus policies including application deadlines, space availability,

and registration priority. Details and Visitor Enrollment Applications are available at the Office of Enrollment Services. Students from other CSU campuses seeking visitor status at CSULB must also contact their home registration office for additional information.

Enrollment of Non-matriculated Students

Applicants not admissible at this time under any of the preceding categories could enroll in another institution, such as a community college, to prepare for admissibility at a future date. Non-matriculated students may be able to avail themselves of programs in the College of Continuing and Professional Education.

Open University (Concurrent Enrollment) — Through Open University, students who are NOT matriculated in CSULB may take regular university classes during spring or fall semesters for academic credit on a “space available” basis with permission of the department chair and the course instructor. Open University enrollment does NOT constitute admission to CSULB. For more information call the College of Continuing and Professional Education at (562) 985-5561.

Summer Sessions, May Intersession, and Winter Session Students

Summer, May, and Winter Session enrollment is open to all matriculated CSULB students and all non-matriculated students such as prospective students, students from other colleges and universities, and interested individuals from the community. No application or admissions process is required for summer and winter registration.

CSULB does not admit matriculated students to start in the winter, May, or summer session. Registration in winter, May, or summer as a non-matriculated student does not insure the privilege of enrolling in the fall or spring semester as a matriculated student. To register for winter, May, or summer session courses, students should contact the College of Continuing and Professional Education at (562) 985-5561.

Freshman Applicants

Preparation and Eligibility

California State University, Long Beach continues to be the University of Choice for a talented and diverse group of California's best and brightest students. Beginning with Fall 2002, CSULB has been receiving more first-time freshman applicants than can be accommodated. To maintain the academic quality of CSULB academic programs and services, supplemental admissions criteria, are applied to first-time freshman applicants. First-time freshmen must:

- Apply on time. Apply between October 1 and November 30.
- Take the SAT 1 or ACT preferably during October but no later than December and request scores be sent to CSULB.
- Complete the CSU required 15 unit course pattern prior to graduation.
- Perform well – earn the best grades possible (including the senior year).
- Pursue a back up plan should they not be offered admission to CSULB.

Students will qualify for regular admission when the university verifies that they have a CSULB qualifiable minimum eligibility index and will have completed the comprehensive pattern of college preparatory "a-g" subjects.

The university has no current plans to include the writing scores from either of the admissions tests in the computation of the CSU Eligibility Index.

Eligibility Index

The eligibility index is the combination of the high school grade-point average and scores on either the ACT or the SAT. Grade-point averages (GPA) are based on grades earned in courses taken during the final three years of high school. Included in calculation of GPA are grades earned in all college preparatory "a-g" subject requirements with bonus points for approved honors courses (excluding physical education and military science).

Up to eight semesters of honors courses taken in the last two years of high school, including up to two approved courses taken in the tenth grade, can be accepted. Each unit of "A" in an honors course will receive a total of 5 points; with 4 points for a "B;" and 3 points for a "C."

A CSU Eligibility Index (EI) can be calculated by multiplying a grade-point average by 800 and adding the total of *the mathematics and critical reading scores* of the SAT. Students who took the ACT, multiply the grade-point average by 200 and add ten times the ACT composite score (add 2 points to the ACT score received if taken prior to October, 1989). Persons who are California high school graduates (or residents of California for tuition purposes) need a minimum index of 2900 using the SAT I or 694 using the ACT to be considered for admission.

For admission to terms during the 2012-2013 college year, the university has no plans to include the writing scores from either of the admissions tests in the computation of the CSU Eligibility Index.

Persons who neither graduated from a California high school nor are residents of California for tuition purposes, need a minimum index of 3502 (SAT) or 842 ACT; (2 points are added to the ACT score if it was taken prior to October, 1989). Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section.

California State University, Long Beach requires all applicants for freshman admission to submit test scores from the SAT I or ACT, regardless of their high school grade-point average. No freshman applicants will be admitted who have not submitted the required test scores.

Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section.

Subject Requirements

The California State University requires that first-time freshman applicants complete, with grades of "C" or higher, a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school.

Social Science - 2 years to include 1 year of U.S. History and/or Government
English – 4 years
Mathematics – 3 years to include algebra, geometry, and intermediate algebra
Science – 2 years with laboratory to include 1 year of biological science and 1 year physical science
Foreign Language – 2 years in the same foreign language (subject to waiver for applicants demonstrating equivalent competence).
Visual and Performing Arts – 1 year-long course in which the second semester builds on the first from a single VPA area to include art, dance, drama/theater, or music
Electives – 1 year selected from the areas above.

Foreign Language Waiver

The foreign language subject requirement may be satisfied by applicants who demonstrate competence in a language other than English equivalent to or higher than that expected of students who complete two years of foreign language study. Students should consult with their school counselor or any CSU campus admission or relations with schools office for further information.

Special Admission Consideration for Students with Disabilities

California residents who may not meet the regular admission requirements due to a disability but are “otherwise qualified” may appeal for special admission consideration. A student wishing to be considered for special admission to CSULB must apply through the regular admission process and special admission concurrently, in accordance with all deadlines specified by Enrollment Services. Disabled Student Services (DSS) reviews each applicant on a case-by-case basis and provides recommendations to Enrollment Services for the final admission decision. For more information, call (562) 985-5401, visit www.csulb.edu/sbp or go to Brotman Hall, Room 270.

High School Students — Young Scholars Program

High school students may be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a given specific program and does not constitute a right to continued enrollment. More information is available from the Office of University Outreach and School Relations at (562) 985-5358 or www.csulb.edu/outreach.

Honors Courses

Grades, in up to eight semester courses designated as honors courses in approved subjects and taken in the last two years of high school, receive additional points in grade-point average calculations. Each unit of A in approved courses will receive a total of 5 points; B, 4 points; C, 3 points; D, 1 point; and none for F grades.

Transfer Policies of CSU Campuses

Authority for decisions regarding the transfer of undergraduate credits is delegated to each California State University (CSU) campus. Most commonly, college level credits earned from an institution of higher education

accredited by a regional accrediting agency recognized by the United States Department of Education are accepted for transfer to campuses of the CSU.

The CSU General Education-Breadth (GE-Breadth) program allows California community college transfer students to fulfill lower-division general education requirements for any CSU campus prior to transfer. Up to 39 of the 48 GE-Breadth units required can be transferred from and certified by a California college. “Certification” is the official notification from a California community college that a transfer student has completed courses fulfilling lower-division general education requirements. The CSU GE-Breadth certification course list for particular community colleges can be accessed at www.assist.org.

Campuses may enter into articulation agreements on either a course for course or program to program basis. Such articulations are common between CSU campuses and any or all of the California community colleges, but may exist between CSU campuses and other institutions. Established CSU/CCC articulations may be found on www.assist.org.

No more than 70 semester units may be transferred to a CSU campus from an institution which does not offer bachelor’s degrees or their equivalents, e.g., community colleges. Given the university’s 30-unit residency requirement, no more than 90 total units may be transferred into the university from all sources.

Provisional Admission

California State University, Long Beach may provisionally admit first-time freshman applicants based on their academic preparation through the junior year of high school and planned for the senior year. The campus will monitor the final two years of study to ensure that admitted students complete their secondary school studies satisfactorily, including the required college preparatory subjects, and graduation from high school. Students are required to submit an official transcript after graduation to certify that all course work has been satisfactorily completed. Official high school transcripts must be received prior to the deadline set by the university. In no case may documentation of high school graduation be received any later than the census date for a student’s first term of CSU enrollment. A campus may rescind admission decisions, cancel financial aid awards, withdraw housing contracts, and cancel any university registration for any student who is found not to be eligible after the final transcript has been evaluated.

Applicants will qualify for regular (non-provisional) admission when the university verifies that they have graduated and received a diploma from high school, have a qualifiable minimum eligibility index, have completed the comprehensive pattern of college preparatory “a-g” subjects, and, if applying to an impacted program or campus, have met all supplementary criteria.

Lower Division Transfer Requirements

Students who have completed college units after graduation from high school are considered transfer students. Students who have completed fewer than 60 transferable semester college units (fewer than 90 quarter units) by the established deadlines are considered lower-division transfer students. CSULB does not currently accept applicants for most majors at the lower-division level.

Upper Division Transfer Requirements

Students who have completed 60 or more transferable semester college units by the established deadlines are considered upper-division transfer students. (See Undergraduate Requirement Deadlines above.) Since CSULB continues to be a high-demand campus and expects to receive more applications than can be accommodated, competitive admission has been implemented for the transfer class in order to maintain the academic quality of campus programs and services. All upper division transfer applicants must apply to a specific major and meet all of the following minimum CSU standards by established deadlines:

1. Have completed a minimum of 60 transferable semester units with a GPA of at least 2.0 ("C" or better) in all transferable units attempted (non-residents must have a 2.4 GPA or better), and
2. be in good standing at the last college or university attended, and
3. have completed at least sixty (60) transferable semester units of college coursework with a grade point average of 2.0 or higher and a grade of C or better in each course used to meet the CSU general education requirements in written communication, oral communication, critical thinking and quantitative reasoning, e.g. mathematics. The 60 units must include at least 30 units of courses, which meet CSU general education requirements including all of the general education requirements in communication in the English language (both oral and written) and critical thinking and the requirement in mathematics/quantitative reasoning (usually 3 semester units) OR the Intersegmental General Education Transfer Curriculum (IGETC) requirements in English communication and mathematical concepts and quantitative reasoning.

Applicants to non-impacted majors who meet the minimum criteria as outlined above will be considered in the competitive round. Admission offers will be based on applicants' overall transfer grade point average and space availability. Applicants to non-impacted majors who are transferring directly from Long Beach City College, Orange Coast College, Golden West College or Coastline Community College and have completed at least 30 units at one of these institutions and will be held only to the minimum CSU criteria listed above.

In addition to the CSU minimum requirements outlined above, students seeking admission to impacted programs must satisfy additional, supplemental criteria. Students applying to impacted majors are encouraged to designate an alternate major in which they are seriously interested and committed to pursuing. If not admitted to an impacted program, students may be considered for admission to the alternate major or offered redirection to another CSU campus that is accepting applications. For more details, please check the campus website at www.csulb.edu/ enrollment.

Student Transfer Achievement Reform (STAR) Act (SB 1440)

The Student Transfer Achievement Reform (STAR) Act (SB 1440) establishes an Associate in Arts (AA-T)

or Associate in Science (AS-T) for transfer for California Community College student and is designed to provide a clear pathway to the CSU degree major.

California Community College students who earn a transfer associate (AA-T or AS-T) degree are guaranteed admission with junior standing to the CSU and given priority admission over other transfer students when applying to a local campus, or non-impacted program. AA-T or AS-T admission applicants are given priority consideration to impacted campus and/or program that has been deemed similar to the degree completed at the community college. Students who have completed an AA-T/AS-T in a program deemed similar to a CSU major are able to complete remaining requirements for graduation within 60 semester units.

International Student Applicants

The International Admissions component of the Center for International Education assists academically eligible international students to apply for admission to the University, and advises them of CSULB's financial, immigration and English language requirements. Throughout the students' attendance, the International Student Services staff is involved in their registration, evaluation of transfer credit, changes of majors, and graduation checks. Students are also counseled regarding their field of study requirements, which vary at both the undergraduate and graduate levels.

International (Foreign) Admission Requirements

CSULB encourages eligible international students to apply for undergraduate and graduate level studies. The CSU must assess the academic preparation of foreign students. For this purpose, international students include those who hold U.S. temporary visas as students, exchange visitors, or in other nonimmigrant classifications. Application requests and questions should be directed to International Admissions (cie-admission@csulb.edu), located in the Center for International Education (BH 201).

The CSU uses separate requirements and application filing dates in the admission of international students. Verification of English proficiency (see the section on the English Language Requirement for undergraduate applicants), financial resources, and academic performance are each important considerations for admission.

International students need to complete the International application on CSUMentor (www.csumentor.edu). The following documents are required:

1. International application form;
2. \$55.00 application processing fee;
3. Affidavit of support from financial sponsor;
4. Bank statement/letter from financial sponsor;
5. Proof of acceptable English proficiency;
6. Official academic documents and certified English translations;
7. ACT or SAT (required for student athletes and graduates of U.S. high schools);

Once all the documents are submitted to the International Admissions Office, eligibility for admission will be determined based on English proficiency and academic history, as well as other considerations. Graduate applications will also be

forwarded to the graduate departments for review. Once admitted, international students will receive pre-arrival, arrival, and orientation information, and the appropriate immigration form and instructions on how to legally enter and/or remain in the U.S.

The Department of Homeland Security (DHS) requires that international students be aware of and follow DHS regulations to remain legally in the U.S. for the duration of their academic status. International students on “F” and “J” visas must be enrolled as full time students. Courses taken through the College of Continuing and Professional Education at CSULB or courses taken concurrently at other colleges may only count toward full time status when approved in advance of course registration by the Center for International Education. Questions about DHS policies may be directed to the Center for International Education.

TOEFL Requirement

All undergraduate applicants whose native language is not English and who have not attended schools at the secondary level or above for at least three years full time where English is the principal language of instruction, must present a minimum score (Paper: 500, iBT: 61) unless the applicant:

1. has proof of at least three years attendance at a secondary level educational institution in a country where English was the principal language of instruction.* CSULB interprets “where English was the principal language of instruction” to mean that a school is located in a country where English is the native language (the daily medium of communication of the majority of residents is English), and that the students receive academic instruction in all subjects (except foreign language courses) at all levels of education in English, or
2. completed at least 60 transferable units from accredited U.S. community colleges and/or universities and earned a grade of A, B, or C in English 100 or its equivalent*, or
3. successfully completed Level 4 of CSULB’s American Language Institute’s Intensive English Language Program.*
4. presents a minimum score of 6.0 or higher on the International English Language Testing System (IELTS).
5. Presents a minimum score of 43 on the Pearson Test of English.

Undergraduate applicants who are U.S. Citizens or Permanent Residents of the U.S. and who are subject to the above TOEFL requirement may submit results from the English Language Proficiency Test (ELPT) in lieu of TOEFL. A score of 954 on the ELPT is required of such applicants.

EXCEPTION: Applicants applying for Film and Electronic Arts, which requires a 550 TOEFL score, and Journalism, which requires a 600 TOEFL score, will not be waived from the TOEFL requirement.

*For this exemption to remain valid, once having met the exemption, the student must not have left the U.S.A. for more than two years to reside or study in a country where English is not the predominant language of business, education and day-to-day societal functions.

Insurance Requirement

Effective August 1, 1995, as a condition of receiving an

I-20 or DS-2019 form, all F-1 and J-1 visa applicants must agree to obtain and maintain health insurance as a condition of registration and continued enrollment in the California State University. Such insurance must be in amounts as specified by the United States Department of State and NAFSA: Association of International Educators. The campus President or designee will determine which insurance policies meet these criteria. Further information may be obtained from the Center for International Education, Brotman Hall 201, (562) 985-4106.

Special Consideration

A very limited number of applicants who do not meet regular admission requirements may be considered by the University through an alternate screening process. As part of this review, admission may be offered based on institutional interests, special talents, or special circumstances. The authority to grant special admission is delegated to the Associate Vice President for Enrollment Services based on the recommendations of the appropriate campus committees.

Admission as a Candidate for a Second Baccalaureate Degree

CSULB accepts applicants for a second B.A./B.S. in science, math, engineering, and the Nursing. Candidates for a second baccalaureate degree should apply using the graduate application.

Graduate and Post-Baccalaureate Application Procedures

All graduate and post-baccalaureate applicants (e.g., Ed.D., joint Ph.D. applicants, master’s degree applicants, those seeking educational credentials or certificates, and where permitted, and holders of baccalaureate degrees interested in taking courses for personal or professional growth) must file a complete graduate application as described in the graduate and post-baccalaureate admission materials at www.csumentor.edu. Applicants seeking a second bachelor’s degree should submit the graduate application for admission unless specifically requested to do otherwise. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the \$55 nonrefundable application fee. Since applicants for post-baccalaureate programs may be limited to the choice of a single campus on each application, re-routing to alternate campuses or later changes of campus choice are not guaranteed. To be assured of initial consideration by more than one campus, it is necessary to submit separate applications (including fees) to each. Applications submitted by way of www.csumentor.edu are expected unless submission of an electronic application is impossible. An electronic version of the CSU graduate application is available on the World Wide Web at www.csumentor.edu.

Graduate and Post-Baccalaureate Admission Requirements

Graduate and post-baccalaureate applicants may apply for a degree objective, a credential or certificate objective, or where approved, may have no program objective. Depending on the objective, the CSU will consider an application for admission as follows:

- General Requirements — The minimum requirements for admission to graduate and post baccalaureate studies at

a California State University campus are in accordance with university regulations as well as Title 5, Chapter 1, Subchapter 3 of the California Code of Regulations.

- Specifically, a student shall at the time of enrollment: (1) have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or shall have completed equivalent academic preparation as determined by appropriate campus authorities; (2) be in good academic standing at the last college or university attended; (3) have earned a grade point average of at least 2.5 on the last degree completed by the candidate or have attained a grade point average of at least 2.5 (A=4.0) in the last 60 semester (90 quarter) units attempted; and (4) satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as appropriate campus authorities may prescribe. In unusual circumstances, a campus may make exceptions to these criteria.
- Students who meet the minimum requirements for graduate and post-baccalaureate studies may be considered for admission in one of the four following categories:
- Graduate Classified – To pursue a graduate degree, applicants are required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or
- Graduate Conditionally Classified – Applicants may be admitted to a graduate degree program in this category if, in the opinion of appropriate campus authority, deficiencies may be remedied by additional preparation; or
- Post-Baccalaureate Classified, e.g. admission to an education credential program – Persons wishing to enroll in a credential or certificate program, will be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or
- Post-Baccalaureate Unclassified – To enroll in undergraduate courses as preparation for advanced degree programs or to enroll in graduate courses for professional or personal growth, applicants must be admitted as post-baccalaureate unclassified students. By meeting the general requirements, applicants are eligible for admission as post-baccalaureate unclassified students. Admission in this status does not constitute admission to, or assurance of consideration for admission to, any graduate degree or credential program (Most CSU campuses do not offer admission to unclassified post-baccalaureate students).

These and other CSU admissions requirements are subject to change as policies are revised and laws are amended. The CSU website www.calstate.edu and the CSU admissions portal www.csumentor.edu are good sources of the most up-to-date information.

Graduate and Post-Baccalaureate English Language Requirement

All graduate and post-baccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive a minimum score, some

programs require a higher score, on the Test of English as a Foreign Language (Paper-Based Test: 550, Internet-Based Test: 80), unless the applicant:

1. Submits proof of having obtained a bachelor's degree from an accredited post-secondary institution where English was the principal language of instruction. CSULB interprets "where English is the principal language of instruction" to mean that a school is located in a country where English is the native language (the daily medium of communication of the majority of residents is English), and the applicant received academic instruction in all subjects (except foreign language courses) at all levels of education in English, or
2. Notification from CSULB's American Language Institute that the applicant has successfully completed level 6 of the American Language Institute Program.

NOTE: Several CSU campuses may use alternative methods for assessing fluency in English including Pearson Test of English Academic (PTE Academic), the International English Language Testing System (IELTS), and the International Test of English Proficiency (ITEP).

EXCEPTION: Applicants applying for Public Policy and Administration, which requires a 600 TOEFL, will not be waived from the TOEFL requirement. Also, for this exemption to remain valid for other students, once having met the exemption, the student must not have left the U.S.A. for more than two years to reside or study in a country where English is not the predominant language of business, education and day-to-day societal functions.

Application to Credential Programs

Students planning to enroll in credential programs must also file an application for admission to the University.

Information on application to credential programs is available from the appropriate department or program coordinator.

Note: Some programs have established application periods each year which are separate from the University application periods and process.

Auditors

Persons who have not been accepted by the University for the semester they wish to attend may request permission to audit courses through College of Continuing and Professional Education.

Students who have been accepted by the University may audit courses. See the regulation under "Grades and Administrative Symbols." The deadline to declare an "audit" grade option is the end of the third week of instruction. Follow the instructions in the *Schedule of Classes* for requesting a course as an "audit" grading option. At the end of the semester the instructor will assign an "audit" grade to the official grade sheet which will be forwarded to the Office of Enrollment Services for recording. Courses taken for audit may be repeated in subsequent terms for credit.

Courses successfully audited are listed on the student's academic record but carry no credit or grade points.

Returning and Transfer Students

Returning students must reapply to the university under the same conditions and deadlines as all other applicants.

Students who have not maintained continuous attendance status shall be subject to the General Education requirements in effect at the time of their reentry to the university, with the following exceptions.

Previous CSULB students who were under earlier General Education requirements and who before breaking continuous attendance needed no more than three additional courses to complete the entire General Education requirement shall be allowed to complete the General Education requirement in effect at the time of the previous attendance. However, all students must complete at least 9 units of upper division General Education courses, of which a minimum of 6 units must be Capstone courses.

Previous CSULB students who were under the earlier General Education requirements and who before breaking continuous attendance completed one or more upper-division GE courses shall be required to complete additional Capstone courses as needed to complete the total of 9 upper-division units. At least two of the courses in the overall program must be Capstone courses.

Transfer students who enter CSULB with full GE certification from a California Community College must complete both the Human Diversity in the U.S. and the Global Issues requirements if these requirements were not met through transfer, but these students need not complete any other GE courses except the Capstone, which cannot be met through transfer from a community college. Transfer students who enter CSULB without full GE certification from a California Community College must complete the CSULB General Education requirements.

Hardship Petitions

The campus has established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted. Petitioners should write the campus Admissions Office regarding specific policies governing hardship admission. (See Admissions Procedures and Policies at the beginning of this section.)

Early Start Program

Beginning with the class of 2012, entering resident freshmen who are not proficient in math or “at risk” in English will need to start the remediation process before their first term. By 2014, all new freshmen students who have not demonstrated college-readiness in mathematics and English will need to begin work on becoming ready for college-level English before the start of their first term.

The goals of Early Start Program are to:

- Better prepare students in math and English, before the fall semester of freshman year;
- Add an important and timely assessment tool in preparing students for college; and
- Improve students’ chances of successful completion of a college degree.

For 2012, resident students would be required to participate in the Early Start Program if their ELM score is less than 50 and/or their EPT score is less than 138. Newly admitted freshman students who are required to complete Early Start will be notified of the requirement and options for completing the program as part of campus communications to newly admitted students.

Adult Students

As an alternative to regular admission criteria, an applicant twenty-five years of age or older may be considered for undergraduate admission as an adult student who meets all the following conditions:

1. Possesses a high school diploma (or has established equivalence through either the General Educational Development or California High School Proficiency Examination).
2. Has not been enrolled in college as a full-time student for more than one term during the past five years.
3. If there has been any college attendance in the last five years, has earned a “C” average or better in all college work attempted.

Consideration will be based upon a judgment as to whether the applicant is as likely to succeed as a regularly admitted freshman or transfer student and will include an assessment of basic skills in the English language and mathematical computation.

Senior Citizen Education Program

The Senior Citizen Education Program enables eligible California residents 60 years of age or older to enroll as regular students at a cost of \$3.00 per semester. The program, which was founded at CSULB, has been in operation since 1975. Individuals are attending courses in a variety of subject areas and class levels from freshman through graduate standing.

Note: Regular admission standards apply. Requests to waive the application filing fee must accompany the application. Once admitted to the University, students will be sent registration information advising them of the procedures for fee payment and the dates that they may register. Courses are available to program participants approximately three weeks before the beginning of each semester on a “space available” basis. Due to high enrollment and impacted programs some courses may not be available for participation by Senior Citizens.

Participants in the Senior Citizen Education Program are required to maintain good academic standing and are subject to all university policies, procedures, late fee payments and deadlines.

Test Requirements

The office of Testing, Evaluation and Assessment administers local, state and national tests for placement and certification. Test programs currently offered include the SAT, ACT, EPT/ELM, WPE, and Chemistry 111A.

Freshman applicants must submit SAT I and/or ACT scores directly to CSULB. Students should take these tests no later than December of the prior year. Registration forms and dates for the SAT and/or ACT are available from high school or college counselors or from a CSU campus testing office. Students also may contact:

The College Board (SAT)	ACT Registration Unit
Registration Unit, Box 6200	P.O. Box 414
Princeton, NJ 08541-6200	Iowa City, Iowa 52240
www.collegeboard.org	www.act.org

The office of Testing, Evaluation and Assessment at CSULB is located in Brotman Hall 216. For information, phone (562) 985-4007, FAX (562) 985-2415, or visit the Testing Office website at www.csulb.edu/testing.

English Language Requirement

All undergraduate applicants whose native language is not English and who have not attended schools at the secondary level or above for at least three years full time where English is the principal language of instruction must present a score of 61 (iBT) or above on the Test of English as a Foreign Language (TOEFL). Some majors may require a score higher than 61. Applicants taking the Computer Based Test of English as a Foreign Language must present a score of 173 or above. Some majors and some campuses may require a higher score. A few campuses may also use alternative methods of assessing English fluency: Pearson Test of English Academic (PTE Academic), the International English Language Testing System (IELTS), and the International Test of English Proficiency (ITEP).

Each campus will post the tests it accepts on its website and will notify students after they apply about the tests it accepts and when to submit scores.

Systemwide Placement Test Requirements

The California State University requires that each entering undergraduate, except those who qualify for an exemption, take the CSU Entry Level Mathematics (ELM) examination and the CSU English Placement Test (EPT) prior to enrollment. These placement tests are not a condition for admission to the CSU, but they may be a condition of enrollment. These examinations are designed to identify entering students who may need additional support in acquiring college entry-level English and mathematics skills necessary to succeed in CSU baccalaureate-level courses. Undergraduate students who do not demonstrate college-level skills both in English and in mathematics will be placed in appropriate remedial programs and activities prior to the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Failure to complete remediation by the end of the first year may result in denial of enrollment for future terms.

For further information about test programs at CSULB, call (562) 985-4007, go to www.csulb.edu/testing or go to Brotman Hall, Room 216.

English Placement Test (EPT)

The English Placement Test (EPT) is designed to assess the level of reading and writing skills of students entering the California State University. The CSU EPT must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 147 or above on the EPT will be placed in college-level composition classes.

Exemptions from the EPT are granted to students who provide proof of one of the following:

- A score of 500 or above on the critical reading section of the College Board SAT Reasoning Test
- A score of 22 or above on the American College Testing (ACT) English Test
- A score of 3 or above on either the Language and Composition or Composition and Literature examination of the College Board Scholastic Advanced Placement Program
- Completion and transfer to CSU of the credits for

a college course that satisfies the CSU General Education requirement in English Composition, provided such a course was completed with a grade of C or better

- A score of "Exempt" or "Ready for college-level English courses" on the CSU Early Assessment Program (EAP) taken along with the English Language Arts California Standard Test in grade 11.

Entry-Level Mathematics (ELM) Examination

The Entry Level Mathematics (ELM) Examination is designed to assess and measure the level of mathematics skills acquired through three years of rigorous college preparatory mathematics coursework (Algebra I and II, and Geometry) of students entering the California State University (CSU). The CSU ELM must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 50 or above on the ELM will be placed in college-level mathematics classes.

Exemptions from the ELM are granted to students who provide proof of one of the following:

- A score of 550 or above on the mathematics section of the College Board SAT Reasoning Test
- A score of 550 or above on a College Board SAT Subject Test in Mathematics (level 1 or level 2)
- A score of 23 or above on the American College Testing (ACT) Mathematics Test
- A score of 3 or above on the College Board Advanced Placement Calculus AB or Calculus BC exam
- A score of 3 or above on the College Board Advanced Placement Statistics examination
- Completion and transfer to CSU of a college course that satisfies the requirement in Quantitative Reasoning, provided such a course was completed with a grade of C or better
- A score of "Exempt" or "Ready for college-level Mathematics courses" on the CSU Early Assessment Program (EAP), taken in grade 11 in conjunction with the CST in Summative High School Mathematics or Algebra II
- A score of "Conditionally ready for college-level Mathematics courses" or "Conditional" on the CSU Early Assessment Program (EAP) taken in grade 11 along with the California Standards Test in Summative High School Mathematics or Algebra II, provided successful completion of a CSU-approved 12th grade math course that require Algebra II as a prerequisite

Advanced Placement Credit

California State University, Long Beach grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement (AP) Program of the College Board. Students who present scores of three or better will be granted up to six semester units (nine quarter units) of college credit for each AP course. Refer to the Advanced Placement Examination Credit table in the Academic Information section of this Catalog.

More specific information is available from the Office of Enrollment Service at (562) 985-5471 or a student's major department.

International Baccalaureate Credit

Students with scores of 5 or higher (4 in certain subjects) in International Baccalaureate Higher Level courses will be awarded baccalaureate credit of 4 to 10 units, depending on course equivalency. Applicants to CSULB who wish to obtain lower-division course credit for completed International Baccalaureate Higher Level examinations must submit an official IB transcript. Course equivalency for Higher Level examinations completed with satisfactory scores is listed in the International Baccalaureate Examination Credit table in the Academic Information section of this *Catalog*.

For questions or information, please call the Office of Enrollment Service at (562) 985-5471 or consult the department.

Immigration Requirements for Licensure

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193), also known as the Welfare Reform Act, includes provisions to eliminate eligibility for federal and state public benefits for certain categories of lawful immigrants as well as benefits for all illegal immigrants.

Students who will require a professional or commercial license provided by a local, state, or federal government agency in order to engage in an occupation for which the CSU may be training them must meet the immigration requirements of the Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure. Information concerning these requirements is available from Academic Affairs, (562) 985-4128.

Immunization Requirements

Students enrolled in a California school for the seventh grade or higher on or after July 1, 1999 will have satisfied the requirements for Hepatitis B and for Measles and Rubella (German Measles). Entering CSULB students who have not satisfied these requirements must comply with the following requirements. These are not admission requirements, but students who do not satisfy them will not be permitted to enroll in the California State University. Failure to comply will result in a "hold" on future registration.

- Measles and Rubella (German Measles) Immunization: All new and readmitted students must provide proof of full immunization against measles and rubella prior to enrollment.
- Hepatitis B Immunization: All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis B before enrolling. Full immunization against Hepatitis B consists of three timed doses of vaccine over a minimum 4 to 6 months period. If you need further details or have special circumstances, please consult Student Health Services. Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that they have received information about meningococcal disease and the availability of the vaccine to prevent contracting the disease and indicating whether or not the student has chosen to receive the vaccination. These are not admission requirements, but are required of students as

conditions of enrollment in CSU.

- Meningococcal Disease Information: Each incoming freshman who will be residing in on-campus housing will be required to return a form to housing indicating that they have received information about meningococcal disease and the availability of the vaccine.

References: CSU Executive Order No. 803 Immunization Requirements / California Assembly Bill 1107.

Measles/Rubella and Hepatitis B clearance is obtained by presenting to Student Health Services 1) a medical immunization record showing dates of shots given, or 2) a record of blood tests showing immunity, or 3) receiving immunization(s), or 4) making a request for medical or personal religious exemption. Students may receive the immunizations from their health care provider, HMO, or Public Health Department at low cost. Immunizations may also be obtained at Student Health Services for a minimal charge for Measles and Rubella (German Measles) and vaccine Hepatitis B. Acceptable proof may be by records from high school, private health care providers, and local health departments.

For details on immunization requirements and where to obtain vaccines, call Student Health Services, go to www.csulb.edu/shs or go to the Student Health Center at the corner of Beach Drive and Merriam Way.

Student Selection and Denial

The University reserves the right to select its students and deny admission to the University or any of its programs as the University, in its sole discretion, determines the appropriate criteria based on an applicant's suitability and the best interests of the University.

Estimated Expenses

Students should be prepared to meet expenses for fees within 30 days of registration. Books should be purchased when classes begin. Other expenses are ongoing and must be anticipated monthly and included in the total cost of attendance. Expenses generally go up an average three to four percent per year. Actual costs depend upon where the student lives and if there are dependent children. Financial aid programs are designed to help students meet standard University-related expenses during the academic year. The following budgets will assist students in planning costs for average expenses: (Costs include University fees, books and supplies, room and board, personal miscellaneous and transportation based on 2010-2011 CSULB budgets.)

Undergraduate living at home with parents (nine month term)	\$14,336
Undergraduate living in a residence hall (nine month term)	\$20,780
Single undergraduate living off-campus (apartment, house nine month term, assumes shared housing)	\$20,770

Housing

Living on campus is the ultimate way for students to enhance their college experience. There are more than 2,500 bed spaces and three dining halls to accommodate both new and continuing students. The priority application period for new residents is typically March 1 - May 1 of each year.

All first-time freshmen are required to live in campus residence halls during their first year at CSULB unless they are 21 years or older or will be living at home with a parent(s) or legal guardian(s) during their entire freshman year. Exemptions will be considered if verification is presented for students who are veterans or currently active duty; students who are married, domestically partnered, and/or have legally dependent children; students who have been independent and not claimed by their parent(s) for two calendar years; students carrying five units or less per semester for the entire academic year; students with special circumstances, such as medical or disability circumstances.

For more information about on and off-campus housing, call (562) 985-4187, go to www.csulb.edu/housing or go to the Housing Office at the corner of Atherton Street and Earl Warren Drive.

Appeal of Admission Decision

Section 89030.7 of the California Education Code requires the California State University establishes specific requirements for appeal procedures for a denial of admission. Each CSU campus must publish appeal procedures for applicants denied admission to the University. The procedure is limited to addressing campus decisions to deny an applicant admission to the University.

Admissions appeal procedures must address the basis for appeals, provide 15 business days for an applicant to submit an appeal, stipulate a maximum of one appeal per academic term, provide specific contact information for the individual or office to which the appeal should be submitted and must also be published on the campus website.

FEES AND FINANCIAL AID

Schedule of Fees, 2011-2012

The CSU makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after initial fee payments are made, to increase or modify any listed fee, without notice, until the date when instruction for a particular semester or quarter has begun. All CSU listed fees should be regarded as **estimates** that are subject to change upon approval by The Board of Trustees.

Students who wish to drop units AND to simultaneously or subsequently add the same number of units to accomplish this exchange may do so without financial penalty in Tuition Fees, provided this exchange in units meets all other signature requirements. This activity may not occur later than 14 days from the first day of instruction.

All Students

Application Fee (nonrefundable), payable by check or money order at time application is made: \$55.00. These fees are subject to change. Check the current *Schedule of Classes* for fees each semester.

Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on fee waivers).

2011-12 Basic Tuition Fees

Undergraduate Tuition Fee (per semester)

6.1 units or more.....	\$2,736.00
0 units to 6.0 units	\$1,587.00

Other Mandatory Registration Fees (per semester)

Facilities Fee	\$3.00
Instructionally Related Activities Fee (IRA)	\$25.00
Associated Students Inc. Fee	\$44.00
University Student Union Fee	\$168.00
Student ID Card	\$5.00
Student Health Services Fee	\$45.00
Student Excellence Fund Fee	\$94.00

Total Resident Fees Per Semester

0.1 to 6.0 units.....	\$1,971.00
-----------------------	------------

Total Resident Fees Per Semester

6.1 or more units	\$3,120.00
-------------------------	------------

Credential Program Tuition Fee (per semester)

6.1 units or more.....	\$3,174.00
0 units to 6.0 units	\$1,842.00

Graduate/Post Baccalaureate Tuition Fee (per semester)

6.1 units or more.....	\$3,369.00
0 units to 6.0 units	\$1,953.00

Other Mandatory Registration Fees (per semester)

Facilities Fee	\$3.00
Instructionally Related Activities Fee (IRA)	\$25.00
Associated Students Inc. Fee	\$44.00
University Student Union Fee	\$168.00
Student ID Card	\$5.00

Student Health Services Fee	\$45.00
Student Excellence Fund Fee	\$94.00
Total Resident Fees Per Semester	
0.1 to 6.0 units.....	\$2,337.00
Total Resident Fees Per Semester	
6.1 or more units	\$3,753.00

2011-12 Doctoral Tuition Fee*

Education Doctorate	\$5,250.00
Doctor of Physical Therapy	\$8,074.00

* Applicable term fees apply for campuses with special terms, as determined by the campus. Total College Year fees cannot exceed the Academic Year plus Summer Term fees.

2011-12 Graduate Business Professional Fee

Effective January 2011

Charge Per Unit	\$231.00
The Graduate Business Professional Fee is paid on a per unit basis in addition to the SUF and campus fees for the following graduate business programs: Master of Business Administration (M.B.A.)	

Nonresident Students (U.S. and Foreign)

Nonresident Tuition (in addition to basic tuition fees and other systemwide fees charged all students) for all campuses:

Charge Per Unit	\$372.00
The total nonresident tuition paid per term will be determined by the number of units taken.	

Optional Fees (per semester)

The following represents rates for the Fall 2009 and Spring 2010 semesters and are subject to change.

Motorcycle and Moped Parking (per semester).....	\$30.00
Automobile Parking (per semester).....	\$123.00
Replacement Parking Permit.....	Full Price

Other Fees and Charges (non-refundable)

Late Registration	\$25.00
Application and Reapplication Fee	\$55.00
Diploma/Commencement Fee	\$45.00
Missed Deadline Fee.....	\$10.00
Dishonored Check and Echeck Charge	\$20.00
(If the Dishonored Check was for payment of registration fees, the Late Registration Fee may also apply)	
Disputed Credit Card Charge	\$10.00
Complete transcript of record	\$4.00
Replacement of Student ID Card.....	\$5.00
Late Payment Fee	\$10.00

Schedule of Fees, 2012-2013

The CSU makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after initial fee payments are made, to increase or modify any listed fee, without notice, until the date when instruction for a particular semester or quarter has begun. All CSU listed fees should be regarded as estimates that are subject

to change upon approval by The Board of Trustees.

The following reflects systemwide fees for both semester and quarter campuses that were approved for the 2012-13 academic year by the Board of Trustees at their November 2011 meeting. These rates are subject to change.

All Students

Application Fee (nonrefundable), payable by check or money order at time application is made: \$55.00. These fees are subject to change. Check the current *Schedule of Classes* for fees each semester.

Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on fee waivers).

2012-13 Basic Tuition Fees

Undergraduate Tuition Fee (per semester)

6.1 units or more.....	\$2,985.00
0 units to 6.0 units	\$1,731.00

Credential Program Tuition Fee (per semester)

6.1 units or more.....	\$3,465.00
0 units to 6.0 units	\$2,010.00

Graduate/Post Baccalaureate Tuition Fee (per semester)

6.1 units or more.....	\$3,678.00
0 units to 6.0 units	\$2,133.00

2012-13 Doctoral Tuition Fee*

Education Doctorate	\$5,559.00
Doctor of Physical Therapy	\$8,074.00

* Applicable term fees apply for campuses with special terms, as determined by the campus. Total College Year fees cannot exceed the Academic Year plus Summer Term fees.

2012-13 Graduate Business Professional Fee

Effective January 2012

Charge Per Unit	\$278.00
-----------------------	----------

The Graduate Business Professional Fee is paid on a per unit basis in addition to the SUF and campus fees for the following graduate business programs: Master of Business Administration (M.B.A.)

Nonresident Students (U.S. and Foreign)

Nonresident Tuition (in addition to basic tuition fees and other systemwide fees charged all students) for all campuses:

Charge Per Unit	\$372.00
-----------------------	----------

The total nonresident tuition paid per term will be determined by the number of units taken.

For up-to-date information on all campus related fees, please visit: http://www.csulb.edu/depts/enrollment/registration/fees_basics.html

Parking Fee

Parking at CSULB is limited. Parking permits are required 24 hours a day, Monday through Sunday, and the vehicle code is enforced at all times. For additional information please go to www.csulb.edu/parking or contact

the Parking Office at (562) 985-4146.

To request a partial or full refund, attach all parking documents, permits stickers, decals and gate cards to the refund application and return to Student Account Services, Brotman Hall 148. Refer to the *Schedule of Classes* for deadline information. If parking documents are not available or have not been received, students MUST contact the Parking Administration Office located on Merriam Way adjacent to the parking structure. If any of these parking documents are affixed to the vehicle, their removal by a campus security officer or under the officer's direction, shall constitute appropriate return. Attach all parking documents, permits stickers, decals and gate cards to the refund application and return to Student Account Services, BH 148. There shall be no refund if such amount is less than \$10.

There shall be no refund for:

1. Coin operated parking meters.
2. Daily permits for coin operated parking gates.
3. Special events.
4. Fees paid by monthly payroll deductions.

Auditors

Students enrolled as auditors, not for credit, are exempt from payment of the application fee, but must pay fees appropriate to the number of units taken.

Payments

Total fees include the State University Fee, Non-Resident Tuition, other campus mandatory fees as well as course fees. Payment of fees is required 30 calendar days after registration, or approximately 12 days prior to the first day of instruction, whichever is earlier. For payment deadlines, refer to the *Schedule of Classes*. Payment must be received by the due date or the student's registration request may be cancelled; postmarks are not accepted. Students who have not completed their registration before 12 days prior to the first day of instruction, must make payment within 24 hours of their registration.

Students are encouraged to make immediate payment to confirm their enrollment requests as classes fill quickly due to CSULB's high enrollment. They may also make a payment before registering (i.e. a deposit), if they choose.

Payment can be satisfied by cash, check, Echeck, credit card, Financial Aid deferments, actual Financial Aid awards, approved payment plans, other approved fee deferments, approved private scholarships, approved tuition waivers, or confirmed third party sponsors. Payments can be made in the following ways:

- Check
 - In person at the Cashiers Windows, Brotman Hall 148
 - Mailed to the Cashiers, Brotman Hall 148, CSULB, 1250 Bellflower Blvd., Long Beach, CA 90840-0103
- Cash
 - In person only at the Cashiers Window, Brotman Hall 148
- ECheck (self service over the web at <http://my.csulb.edu>)
- Credit Card

Payment of student fees can be made by credit card (Discover, American Express, or MASTERCARD - VISA not accepted - only) at:
– Self-Service/Smart Pay – over the web at <http://my.csulb.edu> (Smart Pay charges a 2.9% convenience fee)

- Self-Service over the web at <http://my.csulb.edu>
- Payment of fees CANNOT be made if disputed credit card charges exist on your account.
- Contact Student Account Services for further information.

Short Term Loans

A limited number of short term loans to assist in paying for registration fees, books, or authorized emergencies are available to qualified students on a first come, first served basis. Information about this program is available at Brotman Hall 148, Cashiering Windows. Recorded Information is available by calling (562) 985-8280.

Installment Payment Plan

The Installment Payment Plan is available to all eligible students except financial aid recipients who have sufficient funds to cover the State University Fee. A \$33 non-refundable charge is assessed to defer the administrative costs of the program. A 9% service charge is assessed to the deferred balance for non-resident tuition and international Visa students. An Installment Plan Contract must be obtained from Brotman Hall 148, Cashiering Windows before submitting payment.

Refund of Mandatory Fees, Including Nonresident Tuition

Regulations governing the refund of mandatory fees, including nonresident tuition, for students enrolling at the California State University are included in Section 41802 of Title 5, California Code of Regulations. For purposes of the refund policy, mandatory fees are defined as those systemwide and campus fees that are required to be paid in order to enroll in state-supported academic programs at the California State University. Refunds of fees and tuition charges for self-support, special session, and extended education programs or courses at the California State University are governed by a separate policy established by the University.

In order to receive a full refund of mandatory fees, including nonresident tuition, a student must cancel registration or drop all courses prior to the first day of instruction for the term. Information on procedures and deadlines for canceling registration and dropping classes is available in the *Schedule of Classes*.

For state-supported semesters, quarters, and non-standard terms or courses of four (4) weeks or more, a student who withdraws during the term in accordance with the university's established procedures will receive a refund of mandatory fees, including nonresident tuition, based on the portion of the term during which the student was enrolled. No student withdrawing after the 60 percent point in the term will be entitled to a refund of any mandatory fees or nonresident tuition.

For state-supported non-standard terms or courses of less than four (4) weeks, no refunds of mandatory fees and nonresident tuition will be made unless a student cancels registration or drops all classes prior to the first day in accordance with the university's established procedures and deadlines.

Students will also receive a refund of mandatory fees, including nonresident tuition, under the following circumstances:

- The fees were assessed or collected in error;
- The course for which the fees were assessed or collected was cancelled by the university;
- The university makes a delayed decision that the student was not eligible to enroll in the term for which mandatory fees were assessed and collected and the delayed decision was not due to incomplete or inaccurate information provided by the student; or
- The student was activated for compulsory military service.

Students who are not entitled to a refund as described above may petition the university for a refund demonstrating exceptional circumstances and the chief financial officer of the university or designee may authorize a refund if he or she determines that the fees and tuition were not earned by the university.

Information concerning any aspect of the refund of fees may be obtained from the Student Account Services Office.

Refunds of Registration and Tuition Fees

Details regarding Registration and Tuition Fee Refunds may be found in the on-line *Schedule of Classes*. As this information may differ from one semester to another, students are advised to refer to the *Schedule of Classes* for that particular semester. Students must complete the class drop or withdrawal process prior to becoming eligible for any credit of fees. The amount to be refunded is determined by the effective withdrawal or drop date. In addition, any other outstanding financial obligations that the student may have incurred will be deducted from any credits due to the student before a refund is processed. Refund deadlines are reflected in the *Schedule of Classes*. A \$10.00 processing fee will be withheld from the refunds.

Details regarding refunds due to Medical Withdrawals can be found in the *Schedule of Classes*.

Further details regarding fees that may be refunded and the circumstances under which they may be refunded may be obtained by consulting the California Code of Regulations, Title V, in the following sections:

- Registration and Tuition Fees – Section 41802
- Parking Fees – Section 42201
- Housing Fees – Section 42019

The following fees are non-refundable: Late Fees, Application Fees, Disputed Credit Card Fees, Dishonored Check Fees, Student I.D. Card Replacement Fees, Late Payment Fees.

Special Circumstances Refunds

There are two levels of financial appeals. They are as follows:

1. Request for Refunds After Published Deadlines:

Students who withdraw or drop in units after the deadlines detailed in the *Schedule of Classes* have passed, may appeal for a Special Circumstances Refund (<http://daf.csulb.edu/forms/financial/bursar/sas/SpecialCircumstancesRefund.php>) based on the following:

- A. Campus Variation
- B. Compulsory Military Service
- C. Death of Student
- D. Fees Collected in Error

Further information regarding Special Circumstances Refunds by calling the Student Account Services Office at (562) 985-4167.

2. Financial Appeals Independent Review Committee (F.A.I.R.)

If a student wishes to petition the decision made at the first appeal level, a written request must be submitted to the F.A.I.R. Committee (BH 155) for review.

This Committee has been approved by the President as the final financial appeal level. It consists of representatives from various University Offices. F.A.I.R. will only review appeals for the current academic year.

Determination of Residency for Tuition Purposes

University requirements for establishing residency for tuition purposes are independent from those of other types of residency, such as for tax purposes, or other state or institutional residency. These regulations were promulgated not to determine whether a student is a resident or nonresident of California, but rather to determine whether a student should pay tuition on an in-state or out-of-state basis. A resident for tuition purposes is someone who meets the requirements set forth in the Uniform Student Residency Requirements. These laws governing residency for tuition purposes at the California State University (CSU) are California Education Code sections 68000-68090, 68120-68134, and 89705-89707.5, and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41900-41916. This material can be viewed on the Internet by accessing the CSU's website at www.calstate.edu/GC/resources.shtml.

Each campus's Admissions Office is responsible for determining the residency status of all new and returning students based on the Application for Admission, Residency Questionnaire, Reclassification Request Form, and, as necessary, other evidence furnished by the student. A student who fails to submit adequate information to establish eligibility for resident classification will be classified as a nonresident.

Generally, establishing California residency for tuition purposes requires a combination of physical presence and intent to remain indefinitely. An adult who, at least one full year prior to the residence determination date for the term in which enrollment is contemplated, can demonstrate both physical presence in the state combined with evidence of intent to remain in California indefinitely may establish California residency for tuition purposes. A minor normally derives residency from the parent(s) they reside with or most recently resided with.

Evidence demonstrating intent may vary from case to case but will include, and is not limited to, the absence of residential ties to any other state, California voter registration and voting in California elections, maintaining California vehicle registration and driver's license, maintaining active California bank accounts, filing California income tax returns and listing a California address on federal tax returns, owning residential property or occupying or renting an apartment where permanent belongings are kept, maintaining active memberships in California professional or social organizations, and maintaining

a permanent military address and home of record in California.

Nonresident students seeking reclassification are required to complete a supplemental questionnaire that includes questions concerning their financial dependence on parents or others who do not meet University requirements for classification as residents for tuition purposes. Financial independence is required, along with physical presence and intent, to be eligible for reclassification.

Non-citizens establish residency in the same manner as citizens, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States.

Exceptions to the general residency requirements are contained in California Education Code sections 68070-68084 and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41906-41906.5, and include, but are not limited to, members of the military and their dependents, certain credentialed employees of school districts and most students who have attended three years of high school in California and graduated or attained the equivalent. Whether an exception applies to a particular student cannot be determined before the submission of an application for admission and, as necessary, additional supporting documentation. Because neither campus nor Chancellor's Office staff may give advice on the application of these laws, applicants are strongly urged to review the material for themselves and consult with a legal advisor.

The campus Office of Enrollment Services is responsible for determining the residence status of all new and returning students for nonresident tuition purposes. Responses to the Application for Admission, Residency Questionnaire, and Reclassification Request Form, and, as necessary, other evidence furnished by the student are used in making this determination. A student who fails to submit adequate information to establish eligibility for resident classification will be classified as a nonresident.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residency for tuition purposes at the California State University is found in California Education Code, sections 68000-68090, 68120-68134, and 89705-89707.5, and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41900-41916. This material can be viewed on the Internet by accessing the California State University's website at www.calstate.edu/GC/resources.shtml.

Legal residency may be established by an adult who is physically present in the state and who, at the same time, intends to make California his or her permanent home. Steps must be taken at least one year prior to the residence determination date to show an intent to make California the permanent home with concurrent relinquishment of the prior legal residency. The steps necessary to show California residency intent will vary from case to case. Included among the steps may be registering to vote and voting in elections in California; filing resident California state income tax forms on total income; ownership of residential property or continuous occupancy or renting of an apartment on a lease basis where one's permanent belongings

are kept; maintaining active residency memberships in California professional or social organizations; maintaining California vehicle plates and operator's license; maintaining active savings and checking accounts in California banks; maintaining permanent military address and home of record in California if one is in the military service.

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of the student's stay in California.

In general, an unmarried minor (a person under 18 years of age) derives legal residence from the parent with whom the minor maintains or last maintained his or her place of abode. The residence of an unmarried minor who has a parent living cannot be changed by the minor's own act, by the appointment of a legal guardian or by the relinquishment of a parent's right of control.

A married person may establish his or her residence independent of his or her spouse.

An alien may establish his or her residence, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. An unmarried minor alien derives his or her residence from the parent with whom the minor maintains or last maintained his or her place of abode.

Nonresident students seeking reclassification are required to complete a supplemental questionnaire including questions concerning their financial dependence on parents who cannot satisfy University requirements for classification as residents for tuition purposes, which will be considered along with physical presence and intent in determining reclassification.

The general rule is that a student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes. A residence determination date is set for each academic term and is the date from which residence is determined for that term. Residence determination dates are: Fall – September 20; Spring – January 25; Summer – June 1.

There are exceptions from nonresident tuition including:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues until the student has resided in the state the minimum time necessary to become a resident;
2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time. The exception continues until the student has resided in the state the minimum time necessary to become a resident;
3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult or adults, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year. The exception continues until the student has resided in the state the minimum time necessary to become a resident;
4. Dependent children and spouse of persons in active military service stationed in California on the residence determination date. Graduate students are eligible for this exception for one academic year of continuous enrollment, the length of time necessary to establish California residency. There is no time limitation on this exception unless the military person transfers out of California or retires from military service. If either of those events happen, the student's eligibility for this exception continues until he or she resides in the state the minimum time necessary to become a resident;
5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception is available to the graduate student military member for no more than one academic year of continuous enrollment, the length of time necessary to establish California residency. The undergraduate student military member is eligible for this exception for as long as he or she is stationed in California as an active member of the military.
6. Military personnel in active service in California for more than one year immediately prior to being discharged from the military. Eligibility for this exception runs from the date the student is discharged from the military until the student has resided in state the minimum time necessary to become a resident.
7. Dependent children of a parent who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous residence is maintained at an institution.
8. Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.
9. Certain credentialed, full-time employees of California school districts;
10. Full-time State University employees and their children and spouses; State employees assigned to work outside the State and their children and spouses. This exception continues until the student has resided in the state the minimum time necessary to become a California resident;
11. Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties;
12. Certain amateur student athletes in training at the United States Olympic Training Center in Chula Vista, California. This exception continues until the student has resided in the state the minimum time necessary to become a resident;
13. Federal civil service employees and their natural or adopted dependent children if the employee has moved to California as a result of a military mission realignment action that involves the relocation of least 100 employees. This exception continues until the student has resided in the state the minimum time necessary to become a resident;
14. State government legislative or executive fellowship program enrollees. The student ceases to be eligible for this exception when he or she is no longer enrolled in the qualifying fellowship.

15. Persons who have attended a California high school for at least three years and have graduated from a California high school or equivalent. Please Note: Those who hold non-immigrant visas (i.e. F, J, B, H, etc.) are not eligible for this exception. Those seeking this exception must fill out the Student Affidavit for Exemption of Nonresident Tuition form, which is available at www.csulb.edu/enrollment. Once this exception is approved, it is not necessary to reapply each semester. This is the only exception for which this is true.

Students classified as non-residents may appeal a final campus decision within 120 days of notification by the campus. A campus residence classification appeal must be in writing and submitted to: The California State University, Office of General Counsel, 401 Golden Shore, 4th Floor, Long Beach, California 90802-4210. The Office of General Counsel can either decide the appeal or send the matter back to the campus for further review.

Students incorrectly classified as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is also subject to discipline pursuant to Section 41301 of Title 5 of the California Code of Regulations. Resident students who become nonresidents, or who no longer meet the criteria for an exception, and nonresident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions Office. Applications for a change in classification with respect to a previous term are not accepted.

The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. The student should also note that changes may have been made in the rate of nonresident tuition, in the statutes, and in the regulations between the time this catalog is published and the relevant residence determination date.

Changes in residency for tuition purposes are not automatic. Students wishing to apply for residence reclassification must submit a Residence Reclassification Request Form and supporting documentation. The filing period for a spring term is from October 1 through November 1; the filing period for a fall or summer term is from March 1 through April 1. A ten-dollar late filing fee must accompany requests filed after the last date of the filing period. Under no circumstances will a reclassification request be accepted for a term that has ended.

Exceptions from nonresident tuition are valid for one semester only. Students must reapply for an exemption each semester. Forms are located at the Office of Enrollment Services, BH 101.

Financial Obligations and Holds

University offices, including but not limited to the Library, may request that a student reimburse the University for an item that was not returned, returned late or damaged; or they may impose other charges. The requesting office may ask the Student Account Services Office to post this charge to the student's account. Once posted it becomes an obligation to the student. Student Account Services will be able to provide general information concerning obligations. The student will be directed to the appropriate department in which to inquire about the obligation. Until all obligations are paid, or

a written release from the originating office is received by the Student Account Services Office, a financial hold will be placed on academic records and the student is restricted from receiving University services, including but not limited to registration, grades, and transcripts. If the obligation continues to appear on the University reports, the student's name will be submitted to the Franchise Tax Board. In this case, the student or former student, permanently loses the privilege of submitting checks as payment for fees or services. (Acceptable methods of payment are cash, cashiers' check or money order). The State then has the authority to withhold amounts owed to the University from any tax refund to which the student may be entitled.

To pay your balance due – Cashier's Office, BH 148.
For information regarding the amount due – Student Account Services, BH 148 or call Student Account Services at (562) 985-4167.

Dishonored Checks / EChecks

Students paying fees by personal check or Echeck are hereby given notice that if the unpaid check is returned dishonored to the University FOR ANY REASON, a \$20.00 fee is charged to the student's account. The University has no control whether the bank sends checks through a second time for clearing. The check should be honored upon first presentation to the bank.

In compliance with California Code of Regulations, Title V, Section 42381, students with dishonored checks may be disenrolled from classes and may be required to reapply for admission to the University. Also, future services including, but not limited to, transcripts, grades, and future registration may be withheld.

Dishonored checks are monitored in the student's record. Any student with a record of two (2) dishonored checks or Echecks will lose check writing privileges with the University and future payments by personal check will not be accepted.

Disputed Credit Card Charge

Students are strongly encouraged to contact the Student Account Services (BH 148) or call Student Account Services at (562) 985-4167, before disputing a credit card charge through the bank. Upon receipt of a disputed credit card charge, the amount of the credit card charge plus a \$10.00 fee becomes the STUDENT'S financial obligation to the University. Payment of Registration fees with a credit card charge which has later been disputed may result in disenrollment and in withholding of future University services including, but not limited to, transcripts, grades, and future registration (California Code of Regulations, Title V, Section 42381). Students who are disenrolled may be required to reapply for admission to the University.

Fees and Debts Owed to the Institution

Should a student or former student fail to pay a fee or a debt owed to the institution, the institution may withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise, or any combination of the above from any person owing a debt until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381).

Prospective students who register for courses offered by the university are obligated for the payment of fees

associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student fees including any tuition for the reservation of space in the course. Fees are pro-rated based on the date of drop or withdrawal. Refer to the current *Schedule of Classes* for more information.

The institution may withhold permission to register or to receive official transcripts of grades or other services offered by the institution from anyone owing fees or another debt to the institution. The institution may also report the debt to a credit bureau, offset the amount due against any future state tax refunds due the student, refer the debt to an outside collection agency and/or charge the student actual and reasonable collection costs, including reasonable attorney fees if litigation is necessary, in collecting any amount not paid when due.

If a person believes he or she does not owe all or part of an asserted unpaid obligation, that person may contact Enrollment Services, (562) 985-5471, on campus at BH-101 or online at <http://www.csulb.edu/depts/enrollment/>. Enrollment Services, or another office on campus to which the business office may refer the person, will review all pertinent information provided by the person and available to the campus and will advise the person of its conclusions.

Financial Assistance Information

There are a variety of financial aid programs to assist students and families with meeting expenses. The following information concerning student financial assistance may be obtained from Financial Aid, BH 101, (562) 985-8403 or by visiting the website at www.csulb.edu/enrollment/:

1. A description of the federal, state, institutional, local, and private student financial assistance programs available to students who enroll at CSULB;
2. For each aid program, a description of procedures and forms by which students apply for assistance, student eligibility requirements, criteria for selecting recipients from the group of eligible applicants, and criteria for determining the amount of a student's award;
3. A description of the rights and responsibilities of students receiving financial assistance, including federal Title IV student assistance programs, and the criteria for continued student eligibility under each program;
4. The satisfactory academic progress standards that students must maintain for the purpose of receiving financial assistance and criteria by which a student who has failed to maintain satisfactory progress may reestablish eligibility for financial assistance;
5. The method by which financial assistance disbursements will be made to students and the frequency of those disbursements;
6. The terms of any loan received as part of the student's financial aid package, a sample loan repayment schedule, and the necessity for repaying loans;
7. The general conditions and terms applicable to any employment provided as part of the student's financial aid package;
8. The responsibility of CSULB for providing and collecting exit counseling information for all student borrowers under the federal student loan programs; and

9. The terms and conditions for deferral of loan payments for qualifying service under the Peace Corps Act, the Domestic Volunteer Service Act of 1973, or comparable volunteer community service.

Information concerning the cost of attending California State University, Long Beach is available from the Office of Financial Aid, BH 101, (562) 985-8403, and includes tuition and fees; the estimated costs of books and supplies; estimates of typical student room, board, and transportation costs; and, if requested, additional costs for specific programs.

Information concerning the refund policies of California State University, Long Beach for the return of unearned tuition and fees or other refundable portions of institutional charges is available from the Controller, BH 365.

Information concerning policies regarding the return of federal Title IV student assistance funds as required by regulations is available from the Office of Financial Aid, BH 101, (562) 985-8403.

Information concerning athletic opportunities available to male and female students and the financial resources and personnel that CSULB dedicates to its men's and women's teams may be obtained from Cindy Masner, Sports Athletics and Recreation, 562-985-8527.

Information concerning teacher preparation programs at CSULB, including the pass rate on teacher certification examinations, may be obtained from either Elementary/ Special Education Admission Advising, ED1 54, (562) 985-9259, Elementary Education: www.csulb.edu/cedinfo, Special Education: www.csulb.edu/colleges/colled/special-education, or Single Subject Office, ED 1 53, (562) 985-7623, www.csulb.edu/depts/singlesubj.

The Office of Financial Aid at CSULB provides both financial and advisory assistance to enable students to pursue a quality education despite increasing costs. It administers funds made available by the federal and state governments, CSU and by private sources that are awarded to students who demonstrate a need to cover educational expenses.

Due to limited funding, deadlines are critical. Students financial aid files must be complete before financial need can be determined. Students must file a Free Application for Federal Student Aid (FAFSA) between January 1 and March 2 for priority status.

Financial Aid Application

To apply for financial aid from CSULB, students must file the Free Application for Federal Student Aid (FAFSA). The FAFSA is a multi-purpose form that is also required to apply for California Grants from the California Student Aid Commission (CSAC) and for Pell Grant funds from the federal government. The FAFSA should be completed online at www.fafsa.ed.gov. Students unable to complete the FAFSA on the Web may call 800-4FED-AID and request a paper application or may download a copy at http://fsa.ed.gov/fafsa/fafsa_options.html. To ensure CSULB receives the FAFSA data, list CSULB and the Title IV School Code 001139 on the college release section. New applicants for Cal Grants (including entering freshman) must submit a GPA Verification Form in addition to the FAFSA by the March 2 deadline. GPA Verification Forms are available from high school counselors or any California College Financial Aid Office

Detailed information about CSULB financial aid programs is available in the Office of Financial Aid, BH 101, (562) 985-8403. The submission of various supporting documents may be required. These may include the following: (1) verification of all taxable and nontaxable income reported on the FAFSA; and (2) other clarifying information requested by the Office of Financial Aid. Upon receipt of all documentation, the applicant's file is evaluated to determine eligibility for financial aid. A student is automatically considered for all programs for which he/she qualifies at the University by submitting the FAFSA, and appropriate supporting documents. All loan, grant and workstudy programs are available for the academic year. Students expecting to receive a financial aid refund are required to provide bank account information to CSULB in order to facilitate electronic refunds to students (eRefund).

Financial Aid Eligibility

To determine financial aid eligibility, a standard needs analysis system is used. This system allows the Office of Financial Aid to analyze family financial strength and ability to contribute toward the cost of attending CSULB. Subtracted from the student's educational expenses to arrive at financial need are: the parental contribution, the applicant's (and spouse's) contribution from employment, savings, a portion of assets and other resources. As long as program funds permit, a "package" consisting of various types of funds (grants, loans, work-study) is awarded to meet full need.

Although enrollment is assumed to be full-time, part-time students are eligible to receive aid if they carry a minimum of six undergraduate units, or 5 graduate level units.

Notification of Awards

Upon determination of eligibility, new students are sent notice of a financial aid offer. Students are also notified if determined to be ineligible.

It is the goal of CSULB to package aid that fully meets the need of all qualified aid applicants. However, in the event that funds are insufficient, priority will be given to students whose financial aid files meet the first priority deadlines and who demonstrate the highest need.

Academic Responsibilities

Aid recipients must meet the following Satisfactory Academic Progress (SAP) requirements:

1. The GPA Standard
2. The Pace Standard
3. The Maximum Time Frame Standard

Aid eligibility is governed by the number of units attempted and successfully completed with a passing grade ("D" or better). Students who do not satisfactorily complete enough of their attempted units, or who fail to meet the GPA standard, may be placed on financial aid warning or disqualified from receiving aid.

Most aid recipients enroll in a full-time program of study carrying 12 undergraduate units or 9 graduate level units (500-level courses or higher) per semester. To be considered an eligible financial aid applicant,

students cannot have attempted more academic units than an established "unit limit." At CSULB, the established unit limit is 150% of the published length of an academic program measured in units.

For complete information on CSULB's Satisfactory Academic Progress Policy, please visit http://www.csulb.edu/depts/enrollment/financial_aid/sap_policy.html.

Financial Responsibilities

If you are determined ineligible for financial aid, you are responsible for the payment of any University obligations you may have, including fees.

Students who are receiving financial aid funds and completely withdraw from all of their classes, may have to repay all or part of the award they received. Students should check with the financial aid office to find out if they will owe a repayment, before withdrawing from all of their classes.

Campus Financial Aid Programs

Federal Perkins Loans

The Federal Perkins Loan is a federal program providing long-term, low interest loans to both graduate and undergraduate students. Repayment of loan principal and interest begins nine months after you cease to be enrolled at last half-time.

Federal Supplemental Educational Opportunity Grant (SEOG)

The SEOG is a federally funded grant program for undergraduate students with exceptional financial need.

Federal Work-Study (FWS)

The work-study program is a federally funded employment program to expand part-time job opportunities for students with financial need. Students apply for jobs according to their skills, career and academic goals. Positions are available on campus or with organizations off campus.

Educational Opportunity Program Grants

EOP grants are provided by the State of California for undergraduate students who are admitted to a CSU campus through the Educational Opportunity Program and demonstrate the same need criteria as federal financial aid. For further information, contact the EOP Admissions Office at (562) 985-7646 or www.csulb.edu, or at the EOP Office at LA3-200.

State University Grant

The State University Grant is funded by the State of California to assist students whose ability to attend postsecondary institutions is jeopardized by increases in student fees. Students must be residents of California, demonstrate financial need, and be assessed state tuition fees to be eligible for this award.

Graduate Research Fellowships

The Graduate Research Fellowship is funded by the California State University to graduate students who have experienced educational or economic disadvantages or hardships. Applicants must be California residents, demonstrate financial need and be accepted into or continuing in a full-time graduate program. Limited awards are made through a competitive process.

Scholarship Information

Scholarships at CSULB are administered by several offices, including the Office of Financial Aid, the Center for Scholarship Information, and some academic departments. Scholarships may be awarded to qualified students based upon academic achievement, leadership, financial need or a specific area of study and/or ability. Students may access a database of on- and off-campus scholarships and receive guidance on the entire scholarship process, including support on applications, personal statements and essays, at the Center for Scholarship Information. For more information, call (562) 985-2549, go to www.csulb.edu/scholarships or visit the Center at the University Student Union, Room 238.

President's Scholars' Program

The CSULB President's Scholars' Program provides California high school seniors who are qualifying valedictorians from accredited high schools or national scholars (National Merit Finalists and Semifinalists, National Achievement and National Hispanic Recognition scholars) an opportunity to compete for an exceptional four-year scholarship package that includes registration fees, housing and book allowances. Applications are available from high school counselors. For further information, call (562) 985-5358, go to www.csulb.edu/presidents-scholars or visit the Outreach Office at Brotman Hall, Room 289.

Outside Student Aid Programs

The following programs are administered by other agencies and coordinated by the Office of Financial Aid:

Cal Grant A

Cal Grant A is awarded by the California Student Aid Commission to entering and continuing undergraduate students who are California residents. Cal Grant A awards are based on academic achievement financial need, and the enrollment status (full-time, three-quarter time, or half-time). Grants are used to offset state tuition fees.

Cal Grant B

Cal Grant B is awarded by the California Student Aid Commission to entering undergraduate students who have not completed more than one semester of college. Applicants must be California residents, and must demonstrate substantial financial need. Grants vary depending on educational costs. Fees, in addition to the basic award, are normally provided in the second, third, and fourth years. The grant may be renewable for up to four years.

Federal Pell Grant Program

The Pell Grant Program is a federal aid program designed to provide financial assistance to undergraduate students who demonstrate financial need under the guidelines of the program. Teacher credential students in an eligible program may also qualify. Once a student is determined eligible for the Pell Grant, the amount of the award is based on the cost of education at the school attended and enrollment on a half-time, three-quarter-time, or full-time basis. Eligibility is limited to U.S. citizens and eligible non-citizens.

Federal Stafford Loan

The Stafford Loan Program enables eligible students to obtain loans from the federal government. During the time the student is enrolled at least half-time, the federal government pays the interest on the cumulative amount borrowed if the loan is based on financial need (subsidized). An unsubsidized Federal Stafford Loan is not based on financial need. Once funds are disbursed, the student is responsible for interest due on the loan while in school. Federal regulations allow any student to apply for the Federal Stafford Loan provided the student: 1) is enrolled and in good standing or has been accepted for enrollment at an eligible school; 2) is enrolled as at least a half-time student; 3) is a citizen of the United States or an eligible non-citizen; 4) is registered with Selective Service (if required); 5) is working toward a degree or certificate; 6) is making satisfactory academic progress; and 7) does not owe a refund on a federal grant and is not in default on a federal education loan.

Federal PLUS Loan

The Federal PLUS loan program provides government-insured loans to graduate/doctoral level students and parents of dependent undergraduate students. The PLUS loan is a non-need based unsubsidized loan meaning interest begins accruing on the amount disbursed from the date of disbursement. Eligibility for the PLUS loan is based upon the credit history of the borrower.

The Teacher Education Assistance for College and Higher Education (TEACH) Grant

The TEACH Grant is designed for students who intend to teach full time in a high-need field at a public or private elementary or secondary school that the U.S. Department of Education has designated as having a high concentration of students from low-income families. In exchange for the TEACH grant, recipients agree to teach for at least four years within eight years of finishing their teacher preparation program. Grant recipients who are unable to complete any of the service requirements of the TEACH Grant Program will have their grants converted to a Federal Unsubsidized Stafford Loan.

Information, brochures, advising, and application forms are available from BH 101, or phone (562) 985-8403.

Fee Waivers

The California Education Code includes provisions for the waiver of mandatory systemwide fees as follows:
Section 66025.3 – Qualifying children, spouses/registered domestic partners, or unmarried surviving spouses/ registered domestic partners of a war period veteran of the U.S. military who is totally service-connected disabled or who died as a result of service-related causes; children of any veteran of the U.S. military who has a service-connected disability, was killed in action, or died of a service-connected disability and meets specified income provisions; any dependents or surviving spouse/ registered domestic partner who has not remarried of a member of the California National Guard who in the line of duty and in active service of the state was killed or became permanently disabled or died of a disability as a result of an event while in active service of the state; and

undergraduate students who are the recipient of or the child of a recipient of a Congressional Medal of Honor and meet certain age and income restrictions;

Section 68120 – Qualifying children and surviving spouses/registered domestic partners of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of active law enforcement or fire suppression duties (referred to as Alan Pattee Scholarships); and

Section 68121 – Qualifying students enrolled in an undergraduate program who are the surviving dependent of any individual killed in the September 11, 2001 terrorist attacks on the World Trade Center in New York City, the Pentagon building in Washington, D.C., or the crash of United Airlines Flight 93 in southwestern Pennsylvania, if the student meets the financial need requirements set forth in Section 69432.7 for the Cal Grant A Program and either the surviving dependent or the individual killed in the attacks was a resident of California on September 11, 2001. Students who may qualify for these benefits should contact the Admissions/Registrar's Office for further information and/or an eligibility determination.

Section 38130.5 – Qualifying non-resident students exempt from paying nonresident tuition, such as, nonresident student with: high school attendance in California for three or more years; graduation from a California high school or attainment of equivalent; registration as an entering student at, or current enrollment at, and accredited institution of higher education in California not earlier than the fall semester or quarter of the 2001-02 academic year; in the case of a person without lawful immigration status, the filing of an affidavit with the institution of higher education stating that the student has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

Students who may qualify for these benefits should contact the Admissions/Registrar's Office for further information and/or an eligibility determination.

Bureau of Indian Affairs (BIA) Grants

Students who are at least one-fourth American Indian, Eskimo, or Aleut may apply for a BIA grant. The amount of the grant depends upon financial need and availability of funds. Students must complete an application for financial aid and then contact their tribe or tribal agency for an application.

Federal/State Regulations

The information contained in this publication accurately reflects regulations and policies at the time of printing. Be aware that Federal and State regulations governing financial aid processing and eligibility are subject to change at any time.

Other Types of Financial Assistance

Internship Program

The Internship Program assists students with locating paid career and volunteer positions with corporations, businesses, nonprofit agencies and institutions. For more information, contact the Internship Program Office at (562)

985-8463 or http://careers.csulb.edu/job_search/internships/index.htm, or go to Brotman Hall, Room 250.

Student Part-Time Employment

Listings are available and assistance is offered in the Career Development Center to students interested in part-time employment. On-campus Federal work-study and off-campus positions are available. Students can access these listings on BeachLink, CSULB's online job posting board at <http://careers.csulb.edu>.

Teaching Associateships and Graduate Assistantships

Many CSULB departments have Teaching Associate (TA) and/or Graduate Assistant (GA) positions available for qualified graduate students. Students should check in department offices or on the campus web site for more information.

ACADEMIC SERVICES AND CAMPUS LIFE

Orientation and Advising

Student Orientation, Advising and Registration

SOAR is the comprehensive orientation workshop to help newly admitted students transition – both academically and socially – to CSULB. All new undergraduate students are required to attend SOAR before registering for classes. Students must be formally admitted to CSULB and have paid the CSULB Enrollment Deposit in order to sign up and attend SOAR.

For information about SOAR workshops and other programs, call (562) 985-5515, email soar@csulb.edu or visit www.csulb.edu/soar.

SOAR Freshman Workshops

Newly admitted freshmen must participate in either a one-day SOAR workshop or a two-day overnight program. One-day freshman workshops include a campus tour, academic advising, and assistance with class selection and registration. One-day workshops are offered in the summer and winter. The two-day, overnight SOAR program, which is only offered in the summer, provides academic advising, class selection and assistance with the registration process, introduces freshmen to college life/issues, and enables students to experience an overnight stay in the campus residence. For information about SOAR workshops and other programs, call (562) 985-5515, email soar@csulb.edu or visit www.csulb.edu/soar.

SOAR Transfer Workshops

Each of the University's seven colleges collaborates with SOAR to sponsor college-specific transfer workshops. Transfer students should participate in a college-specific workshop where they meet with faculty advisors and receive assistance with class selection specific to their declared major. For information about SOAR workshops and other programs, call (562) 985-5515, email soar@csulb.edu or visit www.csulb.edu/soar.

Student Transition and Retention Services

The STARS program facilitates the transition and retention of CSULB's diverse student population by providing student-centered programs and services that foster student advancement toward graduation. STARS directs its major effort toward the advising, registration and orientation of new students. It also offers ongoing, retention programs and leadership development opportunities, such as Lifeguard Stations, Student Services Festival, Majors Fair, and Operation: Return to the Beach. For information, call (562) 985-5515, visit www.csulb.edu/soar or go to the Foundation Building, Room 150.

Parent Orientation Program

The POP program, a collaborative program between Academic Affairs and Student Services, enables parents to support their CSULB student by providing information about CSULB's degree process and supporting student services. For information, call (562) 985-5458.

Advisement Centers on Campus

CSULB is committed to student success. University undergraduate academic advising services and academic departments are responsible for providing academic direction for new and continuing students. While advising offices mainly provide information and advise about general education, academic departments advise students about their major requirements and other important academic issues. Students are advised to check with advisors for current and relevant information.

University Center for Undergraduate Advising

This Center provides services to the general University undergraduate student population. The Center is located in the Horn Center, Room 103. For hours and appointments, call (562) 985-4837. Visit <http://www.csulb.edu/advising/> for information.

Bickerstaff Academic Center for Student-Athlete Services

The Bickerstaff Academic Center (BAC) serves as an academic resource for CSULB's NCAA I student-athletes. The BAC's mission is to promote student success for our student-athlete population, including helping them maintain the academic standards necessary for NCAA eligibility, persist to graduation, and achieve their overall educational goals. While advising is the core service provided by the BAC, it also has developed additional academic support programs to help student-athletes succeed. These programs include the Freshmen Transitions Program, which assists incoming students acclimatize to university life, Supervised Study Hall, Tutorial Program, Mentoring Program, and Freshmen Academic Skills Workshops.

In addition, the BAC staff closely coordinates with other essential academic support services throughout the University including: The Learning Assistance Center, the Writer's Resource Lab, the Career Developmental Center, Department-based tutorial services, Counseling and Psychological Services, and Student Orientation Advising and Registration. For more information, call (562) 985-4777 or go to KIN-67.

Prebaccalaureate Advising Support Services

PASS provides advising, placement, intervention, and support to admitted students who are required to complete Prebaccalaureate Writing Skills and Mathematics courses as mandated by the CSU policy. For information, call (562) 985-7895, visit www.csulb.edu/pass or go to LA5-361.

The Engineering Student Success Center (ESSC)

Interim Coordinator of Academic Advising
Jason Deutschman (562) 985-2729
Director of Leadership & Diversity
Emmitt Clark (562) 985-1719
Director of Outreach and Recruitment
Saba Yohannes-Reda (562) 985-1463
Engineering Education Research Associate
Lily Gossage (562) 985-2489

The Engineering Student Success Center provides key services to students in an inclusive environment that fosters collaboration, community building and academic success skills. The center provides outreach and recruitment activities, first-year experience programs for freshmen and incoming transfer students, mandatory academic advising by professional and peer advisors, tutoring resources, professional development and practice services, and career and graduate school guidance. As a one-stop shop, the center encourages students to visit for help from professional advising staff. The center focuses its full efforts on informing, engaging and encouraging students to be self-directed in their educational planning process and overall academic success.

College of Health and Human Services Academic Advising and Resource Center

The CHHS Academic Advising and Resource Center (AARC) provides comprehensive advising for all CHHS discipline majors. For information and appointments, call (562) 985-2691, visit www.csulb.edu/colleges/chhs, email chhsaarc@csulb.edu, or go to Engineering Technology (ET) Room 237.

Student Access to Sciences and Mathematics Center

This center encourages and supports undergraduate and graduate students as they prepare for careers in the sciences and/or mathematics. There are many programs that combine to make up SAS. Two programs in particular which relate to academic advising are Science Safari to Success and EONS (Enrollment Orientation to the Natural Sciences and Mathematics). Science Safari and EONS are orientation programs for all incoming freshmen and transfer students. For information, visit www.sascenter.org, call (562) 985-4682, or go to Faculty Office 5, Room 109 (FO5-109).

University Honors Program

The University Honors Program offers small discussion classes with students who share similar interests and abilities; personalized academic advisement and guidance each semester; opportunities for a distinguished undergraduate record as one of fewer than 450 honors students on campus; and the opportunity to do an undergraduate thesis project in the area of the student's major. Students with strong SAT scores and a high school or college GPA of 3.5 or above are eligible. For more information, go to the Library, Room 214, or visit www.csulb.edu/uhp.

Student Academic Support Services

CSULB provides a broad range of educational and student support services to assist students. The following programs compliment and support classroom instruction.

Career Development Center

This center provides resources and strategies for choosing a college major, developing career plans, finding internships, developing job search techniques and exploring other facets of the job search process. Services and programs at the center include the one-on-one career counseling, a Career Resource Library, the on-campus interview program, numerous job and internship fairs and numerous job/career skills workshops. For information, call (562) 985-4151, visit <http://careers.csulb.edu>, or go to Brotman Hall, Room 250.

Employment Opportunities

The Career Development Center receives thousands of job listings every year for full-time and part-time jobs on and off campus, internships and on-campus interview opportunities. Students can access these listings on BeachLink, CSULB's online job and internship posting board at <http://careers.csulb.edu>.

Internship Program

The Career Development Center Internship Program serves as a resource for students seeking general internship information and advising. The Program provides students with internship listings and information regarding academic credit for internships. For information, call (562) 985-8463, email internships@careers.csulb.edu or visit <http://careers.csulb.edu>.

Careers and Disabilities

This is a Career Development Center program designed to help students with disabilities meet the challenges of career planning and job placement. A student with a visual, hearing or speech impairment, a learning disability or limited mobility can learn strategies in this program that will help build bridges to meaningful employment. For information about Careers and Disabilities, call (562) 985-8468.

Disabled Student Services

Disabled Student Services (DSS) provides services for students including registration assistance, academic advising, exam accommodations, and parking assistance. DSS programs include the High Tech Center, which provides computer support services and alternative media requests; Hearing Impaired Support Services, which provides sign language interpreting and real time captioning; and the Stephen Benson Learning Disabilities Program, which provides psychoeducational assessment and disability management counseling. DSS consults with Department of Rehabilitation clients through the WorkAbility IV Program. Other services include writing support and special admission assistance. For more information, call (562) 985-5401, visit www.csulb.edu/dss or go to Brotman Hall, Room 270.

College Assistance Migrant Program (CAMP)

This program is designed to serve students who themselves or whose immediate family are migrant or seasonal farm workers. The goal of CAMP is to provide outreach and recruitment services to eligible students by assisting them in completing their admissions and financial aid applications providing them with the necessary support services to help them transition easily during the first year in college. For information, call 985-2006, visit www.csulb.edu/camp or go to Liberal Arts 3, Room 202.

Educational Opportunity Center

The Educational Opportunity Center (EOC) is a federally funded program designed to identify and assist low income, first-generation adults who want to enter, re-enter or continue in a program of postsecondary education. Adults enrolled or interested in enrolling in a high school diploma or GED program are encouraged to seek services. For information, call (562) 570-3713, visit www.csulb.edu/eoc, or go to 3477 Atlantic Avenue 2nd Floor, Long Beach (cross streets Atlantic Avenue and East Wardlow Road.)

Educational Talent Search

This federally funded program identifies, selects, and assists low-income, first-generation individuals between the ages of 12 to 27 to continue in and graduate from secondary school and enroll in a postsecondary educational program. For information, call (562) 985-8730 or visit www.csulb.edu/ets.

McNair Scholars Program

This program provides academic support services, research opportunities and involvement in scholarly activities for 30 low-income, first-generation college students to increase their likelihood of enrollment and success in doctoral programs. The program provides support for a summer research project; academic support and assistance in seeking admission to graduate programs; and assistance in obtaining graduate financial aid. For information, call (562) 985-4886, visit www.csulb.edu/mcnair or go to Liberal Arts 3, Room 100.

Student Support Services Program

SSSP is a federally funded program that provides academic development opportunities to first-generation, low-income students and motivates them toward successful completion of their postsecondary education. SSSP strives to increase the college retention and graduation rates of its participants by providing academic tutoring and advising, financial and economic literacy counseling and assistance with applying to graduate and professional programs. For information, call (562) 985-2185 or go to Liberal Arts 1, Room 134.

Upward Bound Program

This program is a federally funded college preparatory program designed to assist first generation, low-income high school students who have the potential to pursue postsecondary education. Program assists participants in their efforts to complete high school successfully and obtain a college education. It services summer and weekend academic instruction, tutoring, academic, personal and career counseling, cultural activities and college application and admissions assistance. For information, call (562) 985-5520 or visit www.csulb.edu/upwardbound.

Upward Bound Math Science Program

This program is a federally funded program designed to assist high school students recognize and develop their potential to excel in math and science and to encourage them to pursue postsecondary degrees and careers in math and science. Services include a summer program with intensive math and science training and year-round counseling and support. For information, call (562) 985-2185 or go to Liberal Arts 1, Room 134.

Educational Opportunity Program (EOP)

EOP is a state funded program that provides access/admissions support, academic support and retention services to low-income, first-generation college students overcome the obstacles that may prevent them from furthering their education and reaching their potential. For information, call (562) 985-5637, visit www.csulb.edu/eop, or go to Liberal Arts 1, Room 119.

Summer Bridge Program

This program provides an intensive-six week residential summer experience for selected first-time freshmen EOP students. It provides English and mathematics instruction, tutoring, orientation to the campus, study skills workshops and enrichment activities to prepare students for the challenges of college. For information, call (562) 985-5637, visit www.csulb.edu/summerbridge or go to Liberal Arts 1, Room 119.

Educational Equity Services

The Office of Educational Equity Services (EES) assists in the admission and retention of low-income, first generation college students, migrant students and academically and economically disadvantaged students, some of whom might not otherwise be enrolled in the University. For information, call (562) 985-4618 or go to Liberal Arts 3, Room 100.

Partners for Success

Partners is a mentoring program that provides students with an experienced faculty mentor for guidance and individual advising relating to college transitions, academics and major selection.

Center for Community Engagement

The center supports community-based scholarship and learning such as service-learning, community-based participatory research and other types of campus-community engagement. Our purpose is to enrich the educational experience of students by serving as a facilitative partner and resource for students, faculty, staff and community members in strengthening community capacity; promoting shared community-based participatory research and planning; and building social and political capital through the coordination of community and civic engagement, effective service learning and reciprocal community collaboration. The Center is located in the Academic Services Building Room 127. For information call (562) 985-7131 or visit www.csulb.edu/cce.

Writer's Resource Lab

The Writer's Resource Lab provides individualized instruction to help CSULB students develop their writing abilities. For specific information or to make a tutoring appointment, please stop by the Writer's Resource Lab in LAB-206 or call (562) 985-4329.

Learning Assistance Center

The Center offers a variety of services to help students succeed in any course, at any academic level. Tutoring is provided for most university courses and for learners of English and a second language. Learning Specialists guide students in studying effectively for their unique class schedules. Supplemental Instruction accompanies many of the most difficult courses to equip students for success in those challenges. For information or for appointments, call 985-5350, visit www.csulb.edu/lac or Horn Center, Suite 104.

Study Abroad Programs

This program assists CSULB students and faculty to select and prepare for an educational experience in another country. Study abroad options include short-term programs (summer and winter), semester programs, and year-long programs. International internships, volunteer, and work experiences are also available. Students may be eligible for financial

aid, loans, or scholarships to assist them with a study abroad experience. The office is located in the Center for International Education in Brotman Hall, Room 201.

International Student Services

International Student Services serves some 1,300 non-immigrant students, representing over 90 countries, by assisting them with their academic, personal, and cultural growth and development during their years at CSULB. This is accomplished through professional counseling and advising; assistance with Department of Homeland Security (DHS) regulations, paperwork processing, and documentation; student orientation activities; and assistance with registration. The ISS staff also serves as the University liaison with consulates, embassies, businesses, foundations, and community organizations concerning international students at CSULB. ISS is located in the Center for International Education in Brotman Hall, Room 201.

CSU International Programs (IP) System-wide

Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, CSU International Programs has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year. More than 20,000 CSU students have taken advantage of this unique study option.

Participants earn resident academic credit at their CSU campuses while pursuing full-time study at a host university or special study center abroad. International Programs serves the needs of students in over 100 designated academic majors. The program is affiliated with more than 50 recognized universities and institutions of higher education in 18 countries and offers a wide selection of study locales and learning environments.

Affiliated Institutions:

Australia..... Griffith University, Macquarie University,
 Queensland University of Technology,
 University of Queensland,
 University of Western Sydney, Victoria University
 Canada..... Concordia University (Montréal)
 Chile Pontificia Universidad Católica de Chile (Santiago)
 China Peking University (Beijing),
 Shanghai Jiao Tong University (Shanghai)
 Denmark..... Danish Institute for Study Abroad
 (international education affiliate of the
 University of Copenhagen)
 France Institut Catholique de Paris,
 Université de Provence (Aix-en-Provence),
 Universités de Paris I, III, IV, VI, VII, VIII, X, XI, XII, XIII,
 Université Paris-Est Marne-la-Vallée,
 Université d'Evry Val d'Essonne, and
 Université de Versailles Saint-Quentin-en-Yvelines
 Germany..... University of Tübingen and
 a number of institutions of higher education
 in the Federal state of Baden-Württemberg
 Ghana..... University of Ghana, Legon
 Israel..... Tel Aviv University,
 The Hebrew University of Jerusalem,
 University of Haifa

Italy..... CSU Study Center (Florence),
 Università degli Studi di Firenze,
 Accademia di Belle Arti Firenze
 Japan..... Waseda University (Tokyo)
 University of Tsukuba
 Korea..... Yonsei University (Seoul)
 Mexico..... Instituto Tecnológico y de Estudios
 Superiores de Monterrey,
 Campus
 Querétaro
 South Africa Nelson Mandela Metropolitan University,
 Port Elizabeth
 Spain Universidad Complutense de Madrid,
 Universidad de Granada
 Sweden..... Uppsala University
 Taiwan National Taiwan University (Taipei),
 National Tsing Hua University (Hsinchu)
 United Kingdom..... Bradford University, Bristol University,
 Hull University, Kingston University,
 Swansea University

Information on academic course offerings available at these locations is in the International Programs Catalog which may be obtained from the Study Abroad Office in the Center for International Education (BH 201) or by writing to The California State University International Programs, 401 Golden Shore, Long Beach, CA 90802-4210 (562) 951-4790.

International Programs pays all tuition and administrative costs for participating California resident students to a similar extent that such funds would be expended to support similar costs in California. Participants are responsible for all tuition and program fees, personal costs, such as transportation, room and board, and living expenses. Financial aid, with the exception of Federal Work-Study, is available to qualified students.

To qualify for admission to the International Programs, in most programs students must have upper division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in the intensive language acquisition programs in Canada, China, France, Germany, Korea, Mexico, Sweden and Taiwan. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information and application materials may be obtained from the CSULB Center for International Education by calling (562) 985-8429 or by writing to The California State University International Programs, 401 Golden Shore, Sixth Floor, Long Beach, California 90802-4210. Visit us on the World Wide Web at: www.gateway.calstate.edu/csuienet/.

Applications for the 2009-2010 academic year overseas must be submitted by February 1, 2009 (May 1 for Australia and New Zealand).

Campus Services

Center for Scholarship Information

This center serves as a campus resource on the complete scholarship process. The center maintains a database of scholarships on- and off-campus and advises students on how

to search and/or apply for scholarships. For information, call (562) 985-2549, go to www.csulb.edu/scholarships or visit the center in the University Student Union, Room 238.

Child Development Center, Isabel Patterson

The IPCDC offers early care and education programs for children from six months through second grade to enable student parents to attend classes. The center also provides student employment, academic resources and community involvement opportunities. It has a positive reputation for program quality and commitment to student parents and their children. The center is dedicated to ensuring that no student parent is denied access to higher education because of a lack of affordable campus childcare. For information, call (562) 985-5333, visit www.csulb.edu/cdc or visit the center at 5700 Atherton Street.

Partners for Success Faculty Mentoring Students Program

Partners for Success is a mentoring program that provides first-generation students and freshmen with an experienced faculty mentor for guidance and individual advising relating to college transitions, academics and major selection. Faculty mentors also provide support and campus resources such as tutoring, counseling and involvement opportunities to ensure students success to graduation. For information and a student application, visit www.csulb.edu/partners, email partners@csulb.edu or call (562) 985-7562.

Counseling and Psychological Services

This service provides students with short-term counseling, group counseling, psycho-educational workshops and crisis intervention services. The Center also helps students meet personal challenges associated with identifying and achieving academic, career, and life goals. For information, call (562) 985-4001, visit www.csulb.edu/caps or go to Brotman Hall, Room 226.

Student Health Services (SHS)

This service provides medical services, preventive health and health education program. All regularly enrolled CSULB students who have registered for the current semester and have paid the \$45.00 mandatory health fee are eligible for services. Services also are available for students taking classes through College of Continuing and Professional Education for \$15.00 per visit (while classes are in session), and for students on educational leave for a non-refundable \$45 fee. Most medical services are covered under the basic service fee, with the exception of pharmacy, external labs and x-ray copies.

An array of health education services, alcohol and drug abuse prevention workshops, nutrition counseling, HIV testing/counseling and sexual health awareness workshops are offered at SHS. For information, call (562) 985-4771, visit www.csulb.edu/shs or go to the Student Health Center on the corner of Beach Drive and Merriam Way. Note: A medical emergency arising on campus should be directed to University Police by dialing 9-1-1.

• Immunization Requirement Clearance

Entering CSU students are required to present proof

of MMR (Measles, Mumps and Rubella) and Hepatitis B before the beginning of their first term. (Refer to Admission to the University, Immunization Requirements section of this catalog.) Clearance is obtained at Student Health Services by showing proof of immunity using medical records or by receiving immunizations (available at SHS). Medical and religious exemptions are available. For information and hours of operation, call the SHS Immunization Hotline at (562) 985-5411 or go to www.csulb.edu/shs.

• Medical Insurance

Medical insurance is strongly recommended. A low-cost individual health insurance plan is available to CSULB students through the Associated Students, Inc. For details about the plan, contact the ASI Business Office at (562) 985-4994 or go to www.csulb.edu/divisions/students/asi/administration/businessoffice.html.

U.S. Passport Application Acceptance Office

This office is designated by the U.S. Department of State to accept passport applications. A passport photo service is available (fee based). Passport processing is completed by the U.S. Department of State. For information, call (562) 985-7790, visit <http://passport.csulb.edu>, or go to Brotman Hall, Room 250.

Veterans Affairs Services

The Veterans Affairs Services office is the primary support center at CSULB for military veterans, service members and their dependents. A primary role of the office is to certify student eligibility for education benefits offered by the U.S. and California Departments of Veterans Affairs. Other services include outreach to prospective student veterans and advocacy for veterans and their dependents. For information, call (562) 985-5115, go to the Foundation Building, Room 265, or visit www.csulb.edu/veterans.

University Ombuds

This office is an independent, neutral resource for informal problem-solving serving the entire campus community. The office answers inquiries about the university, provides a safe place for discussing sensitive issues and identifying options, facilitates conversations and engages in conflict resolution, including mediation. The office maintains confidentiality in accordance with the Code of Ethics of the International Ombudsman Association, the limits of the law, and our organizational context. Appointments are suggested; walk-in cases are usually accommodated depending on availability. Foundation, Suite 140; (562) 985-5983; www.csulb.edu/president/ombuds.

University Library

The library provides information resources that support teaching and learning and provides enrichment and recreation for members of the campus community, as well as other scholars and community members. Library staff are committed to helpful, efficient customer service. Home to the Spidell Center, the largest student computing facility on campus, the library is a leader in the delivery of digital content and in marshalling technology to facilitate scholarly inquiry. For more information, visit www.csulb.edu/library.

Student Life and Resources

There are many options for students to get involved and create positive experiences and relationships at CSULB. Students are encouraged to make social connections and make a positive difference and to make the most of their time at "The Beach."

Student Life and Development (SLD)

The Office of Student Life and Development provides extensive developmental, leadership, service and involvement activities for students. SLD services include orientation for student leaders; and organizational advising and program approvals for more than 300 recognized student organizations, including fraternities and sororities, cultural clubs and religious groups. SLD also oversees the Lois J. Swanson Leadership Resource Center, Leadership Academy, Student Cultural Resource Centers, American Indian Student Services Program, and Student Academic Travel Grants. Contact SLD at (562) 985-4181 or www.csulb.edu/sld or go to the University Student Union, Room 215.

College Organizations

Many academic departments have academically-related student organizations and discipline based honorary societies. Students from each academic organization departmental association work together on a college student council for each of the seven colleges. These groups promote interaction between faculty and students, and sponsor speakers, seminars, social gatherings and other activities. Staff from Student Life and Development play a key role in coordinating major events sponsored by these groups.

Leadership Resource Center, Lois J. Swanson

This center prepares CSULB students to be the world's best leaders and maximize leadership potential with a commitment to serve others through the LRC services and programs. The LRC also offers two personal development programs for students: Financial Fitness and Conflict Resolution. The LRC provides a leadership library and offers consultations for classroom facilitation, conferences and customized workshops and seminars. For information, call (562) 985-1936 or go to University Student Union, Room 314.

Leadership Academy

The academy is a three-part extracurricular, certificate-bearing program composed of workshops, community service and practical application. The purpose of the Academy is to help students increase their understanding of leadership skills and improve their leadership potential. The Advanced Leadership Challenge, open only to Leadership Academy graduates, builds the theories and foundation skills students gain in the Leadership Academy and involves a practical application of those skills and theories. For information, call (562) 985-1936 or go to the University Student Union, Room 314.

Multicultural Center

The Center's mission is to contribute to the creation of a campus environment which respects and supports cultural, ethnic, racial and religious diversity. The Center has an educational Resource Library which serves students, faculty and staff. The Multicultural Center offers, S.T.A.R. (Students Talk About Race), a professional diversity workshop that is free to students. For information, go to Faculty Office building 3 (F03), Room 03, call (562) 985-8510 or visit www.csulb.edu/mcc.

Student Resource Centers

There are five student-run resource centers on campus. These venues are for affiliated student organizations to conduct program planning, peer mentoring, officer meetings, and post information about scholarships, service and internship opportunities.

- African Student Resource Center, FO4-274
- American Indian Student Study Center, FO4-282
- Asian Pacific Student Resource Center, FO4-277
- Lesbian/Gay/Bisexual/Transgender Student Resource Center, FO4-165
- Raza Student Resource Center, FO4-262

Student Government

The Associated Students Government provides for student participation in the shared governance of the university, student advocacy in dealings with university and legislative officials, and student self-governance of the Associated Students, Incorporated (ASI). ASI offers student programs and activities that develop leadership abilities and complement the academic curriculum of the university. The ASI also provides financial grants and other resources for student clubs and organizations. For information, call (562) 985-5241 or visit www.csulb.edu/asi.

Student Recreation and Wellness Center

The SRWC is a 125,000+ square foot facility with fitness programs, instructional classes and workshops, a rock climbing wall, multi-purpose courts, pool, sand volleyball, 20,000+ square feet of weight room and cardio space, and more. The SRWC serves as a place for students, faculty, staff and alumni to exercise, study and hang out and provides opportunities for student employment and internships.

University Interfaith Center

This center is an association of 12 faith traditions serving the educational community of CSULB. The Center strives to enhance the educational experience by encouraging students, faculty and staff in their pursuit of spiritual growth, community building, faith development and personal values. For information, call (562) 985-7595 or go to Brotman Hall, Room 178.

University Student Union

Located in the center of campus, the 180,000 sq. ft. University Student Union offers weekly entertainment activities and numerous recreation and leisure activities. A "home away from home," USU amenities include bowling lanes with a cosmic bowling feature, billiards, video gaming, various lounge spaces, outdoor swimming pool, food court and retail vendors as well as facilities for meetings, luncheons and films.

Women's Resource Center

This center supports and facilitates the educational, professional and personal success of campus women through educational programs, campus and community resource connections, and peer support assistance. The center also coordinates Project Safe, a program to reduce the incidence of sexual assault, relationship violence and stalking. For information, call (562) 985-8576, go to www.csulb.edu/wrc or visit Liberal Arts 3, Room 105.

ACADEMIC INFORMATION AND REGULATIONS

Frequently Asked Questions

Students ask many of the following questions about the processes and rules of CSULB. Successful students know the answers to these frequently asked questions. Please read them carefully. Knowing these answers can help you avoid pitfalls during your first semesters on campus. For further information, see this section of the *Catalog* or contact the University Center for Undergraduate Advising at (562) 985-4837.

- 1. Why is it critical that I check e-mail from CSULB?** It is important to check your e-mail regularly since this is the primary means by which you will receive important information from the university (e.g., deadlines for adding and dropping classes, your enrollment appointment date).
- 2. How do I tell the university about a change in my e-mail address or mailing address?** You can use MyCSULB to change your e-mail address, indicate the e-mail address that you prefer to use, or change your mailing address. Click on "Personal Information" to view your current information and to make changes.
- 3. Why should I check my official class schedule at the beginning of each semester and again after two or three weeks?** It is important to make sure that you are officially enrolled in every class you are attending and not enrolled in any class you are not attending. Remember that an instructor can give you permission to add a class, but only you can officially enroll yourself in a class.
- 4. Why is it important that I personally drop classes that I have registered for but am no longer attending?** Instructors do not have the responsibility to drop students. Students must drop classes they no longer want or never attended (using MyCSULB) up to and during the first two (2) weeks of the semester.

Beginning the third week, students must use the official withdrawal petition to change their schedule. (See the section on Withdrawals for the rules that apply to withdrawal after the third week of classes.)

Official withdrawal is indicated on the transcript with the symbol "W." This designation does not affect grade point average (GPA). Undergraduates may withdraw from a career-maximum of 18 units per Executive Order 1037.

Students who fail to withdraw officially within the established deadline receive a "WU" symbol (unauthorized withdrawal). In the calculation of the GPA, a "WU" is counted as an "F" grade.

- 5. Can freshmen/sophomore students take upper-division (300-499) classes?** University policy prohibits students with under 30 units from taking upper-division courses without permission of the instructor.
- 6. What can I do if I get a "D" or "F" or "WU" in a course?** The University has a policy which allows undergraduates to repeat a course in which they earned

a "D", "F," or "WU". If the second grade is a "C" or better and taken at CSULB, the second grade will be used to calculate your GPA. Both grades remain on the transcript, but the first one is "forgiven" from the GPA calculation. This can only be done once per course at CSULB. If you don't earn a "C" or better on the second try, all grades will be counted. Undergraduate students may repeat 28 units of which 16 can be for grade forgiveness, per Executive Order 1037. For further details, refer to the "Repetition of Courses for Credit" in this section of the *Catalog*.

Academic Calendar

California State University, Long Beach operates on a semester system, which is supplemented by a fee-supported summer term and a fee-supported winter session. Normally, fall semester classes begin in late August or early September. The last day of instruction usually comes midway in December; this allows for a week of final examinations prior to the winter recess, which begins about December 20. The spring semester usually begins in the last week of January and ends in mid-May, in time for a week of final examinations and the week of commencement exercises just before or after Memorial Day. The summer term begins in June and through July and into late August.

Enrolling in Classes

Registration dates and detailed instructions can be found on the Enrollment Services website for each semester. Continuing students, returning undergraduates and newly admitted graduate students are sent a registration appointment date. Undergraduate students who are new to CSULB register when they attend the Student Orientation, Advising and Registration program (SOAR).

Students may enroll in classes via "MyCSULB" starting on the enrollment appointment day assigned by the University through the first two weeks of the fall and spring semesters. During the third week of the semester written permission on a Late Registration Request form is required from the instructor and a stamp of approval is required from the department. Late registration requests will be considered during the fourth week of instruction with the payment of a missed deadline fee.

Students receiving instructor or department "permission" to add classes via MyCSULB or who have been added to an instructor's wait list or roster must still complete the add procedures by the dates listed each semester. No request to add classes will be considered after the fourth week of the semester unless there is an approved technical error.

Students are not permitted to attend any class for which they have not officially registered.

Note: Students must complete the procedures for official enrollment in classes. Instructors, advisors and departments cannot add students into classes.

Registration Holds

Students may be prevented from registering because they have not met a university obligation. Students can view their own information (HOLDS) on MyCSULB.

Financial Holds

Students are personally responsible for making sure that registration fees and any other fees or charges are paid on time to CSULB, regardless of who funds the student's education.

These charges can include payment for items damaged, returned late, or not returned, and can include course fees for some courses or activities.

Students can review their account balance at MyCSULB. Payment can be made on MyCSULB or at the Cashier's Office, BH-148.

Students who have an unpaid balance will have a financial hold placed on their academic records until the balance is paid or a written release from the originating office is received by the Student Account Services Office. The hold restricts the student from receiving University services, including but not limited to registration, grades, and transcripts.

If the obligation continues to appear on the University reports, the student's name will be submitted to the Franchise Tax Board. In this case, the student or former student, permanently loses the privilege of submitting checks as payment for fees or services. (Acceptable methods of payment are cash, cashiers' check or money order). The State then has the authority to withhold amounts owed to the University from any tax refund to which the student may be entitled.

Other Holds

The following types of holds may appear. Students should contact the office listed for information about how to clear the hold.

- Failure to take a required test - Testing and Evaluation Services (562) 985-4006
- Remediation hold - Pre-baccalaureate Advising and Support Services AS 14, (562) 985-7895
- Perkins Loans – Business Office, BH 155, (562) 985-5348
- Measles/Rubella – Student Health Services, (562) 985-4771
- CIE hold (Foreign Clearance) – Center for International Education, BH 201, (562) 985-4106
- No Major Hold – Enrollment Services, BH 101, (562) 985-5471
- Timely Graduation Hold – Enrollment Services, BH 101, (562) 985-5471
- Advising Hold - Advisor for Major

Advising for Freshmen

CSULB is committed to offering our students the best possible first-year experience; therefore, we have established procedures which will ensure that all students receive accurate and timely academic advising. Advising is an opportunity for students to connect to their college or department advisor, faculty and staff to discuss future educational plans. Through this connection, students will be able to discuss future educational goals, review program options, and receive advice on course selection.

This connection is one of the most important steps to your future success at the Beach! We feel so strongly about ensuring that you have advising as you prepare for your sophomore year, that we require all freshmen to participate in the program prior to registering.

In addition, CSULB advisors can assist in a variety of different ways by working with students to broaden interests; develop academic and career goals; identify major areas of academic interest; create realistic plans of study; increase decision-making skills; take responsibility for academic direction.

All entering freshmen have "advising holds" placed on their records for their first year and will not be able to change their schedules without consultation with an advisor. Mid-way through the semester, freshmen will receive information about the Mandatory Advising Program, a comprehensive advising session to prepare for the next semester course selections. The advising hold will be removed after the student attends the advising session.

Class Attendance

Students are expected to attend classes regularly. Classroom attendance is often one of the most necessary and important means of learning and, in many classes, is essential to the educational objectives of the course.

Faculty members must include their guidelines for assigning grades in the syllabus. The syllabus must make clear whether any portion of the grade is based on attendance and/or participation. It is the students' responsibility to make themselves aware of each faculty member's guidelines by carefully reading the syllabus.
(PS 04-05)

Faculty members may drop students who fail to attend class during the first week of the semester. However, students should not presume that they will be dropped by the faculty member. Students who have registered for a class, but never attended, should verify whether or not they are officially enrolled. It is the student's responsibility to withdraw officially from the class.

Students may have a valid reason to miss a class. When any of the following reasons directly conflict with class meeting times, students are responsible for informing faculty members of the reason for the absence and for arranging to make up missed assignments, tests, quizzes, and class work insofar as this is possible. Excused absences include, but are not limited to:

1. Illness or injury to the student
2. Death, injury, or serious illness of an immediate family member or the like
3. Religious reasons (California Education Code section 89320)
4. Jury duty or government obligation
5. University sanctioned or approved activities (examples include: artistic performances, forensics presentations, participation in research conferences, intercollegiate athletic activities, student government, required class field trips, etc.)

Faculty members are not obligated to consider other absences as excused. Faculty members may require students to provide documentation for excused absences.

There are numerous classes offered on campus where attendance is crucial since student participation is essential.

Absence from these courses may impact the work and participation of other students. Students who anticipate extended or multiple absences during a particular semester should consult with their advisor and the faculty member before enrolling in any class to determine whether it will be possible to complete the requirements for the course. Students who realize after enrollment that they will have extended or multiple absences should consult with the faculty member to see whether it will be possible to complete the course requirements.

The earliest possible notification is preferred. In some circumstances, it may be possible for the student to notify the faculty member of anticipated absences (e.g. for religious reasons or for scheduled athletic events) during the first week of enrollment. Advance notification (minimally one week in advance) is required for the following absences:

1. Jury duty and other government obligation
2. Religious reasons
3. University sanctioned or approved activities

The California Education Code (section 89320) requires "each state university, in administering any test or examination, to permit any student who is eligible to undergo the test or examination to do so, without penalty, at a time when that activity would not violate the student's religious creed. This requirement shall not apply in the event that administering the test or examination at an alternate time would impose an undue hardship which could not reasonably have been avoided. In any court proceeding in which the existence of an undue hardship which could not reasonably have been avoided is an issue, the burden of proof shall be upon the institution."

It is the responsibility of the student to make advance notification, contact the faculty member to make arrangements to make up any academic work that may be missed, submit assignments on time, and to make arrangements regarding activities, tests, quizzes, or exams that may be scheduled during the absences.

If a student does not notify the faculty member one week in advance of the date of absences for these reasons (jury duty, governmental service, religious observances, or University sanctioned activities), the instructor is not required to adjust the class schedule or to allow for make up activities, tests, or exams. Students shall not, however, be penalized for excused absences when circumstances make it impossible to provide advance notice (e.g. student is engaged in a University sanctioned event such as a performance, tournament, or playoff which cannot be anticipated).

A student who expects to be absent from the University for any valid reason, and who has found it difficult to inform the instructor, should notify the academic department office. The department office shall notify the student's instructors of the nature and duration of the absence. It remains the responsibility of the student to arrange with instructors to make up any academic work missed.

In circumstances where an actual assignment, some specific class work, an activity, a quiz, or an exam cannot reasonably be made up, it is the instructor's option to assign alternative work. (PS 01-01)

Visitors to Classes

Only students registered for the class either as regular

students or as auditors and invited guests of the instructor may attend classes at CSULB. Persons wishing to become guests of the instructor should seek the instructor's permission prior to the scheduled beginning of the class session.

Faculty Office Hours

The purpose of office hours is to provide opportunities for student-faculty interaction outside the classroom. Each instructional faculty member will hold one office hour per week for every class taught, up to a maximum of four hours. Faculty may account for up to one hour of this expectation through alternative forms of access such as availability by appointment or through e-mail. The faculty member's office hours, phone number, and email contact will be posted by the door and announced in the syllabus. (PS 02-10)

Cheating and Plagiarism

It is the policy of the faculty and administration to deal effectively with the student who practices cheating or plagiarism. These acts are fundamentally destructive of the process of education and the confident evaluation of a student's mastery over a subject. A University maintains respect and functions successfully within the larger community when its reputation is built on honesty. By the same token, each student benefits in helping to maintain the integrity of the University. This policy, therefore, provides for a variety of faculty actions including those which may lead to the assignment of a failing grade for a course and for administrative actions which may lead to dismissal from the University. This document is written with the intent to support the traditional values that students are on their honor to perform their academic duties in an ethical manner.

General

The following definitions of cheating and plagiarism shall apply to all work submitted by a student. Any change or refinement in the following definitions or applications of the definitions, necessitated by the nature of the work involved, shall be made by the faculty member or departments desiring the change. Any change shall be announced, in writing, in the relevant classes before the work is assigned and a copy of the changes will be filed in the department office and in the Office of Judicial Affairs.

Definition of Plagiarism

Plagiarism is defined as the act of using the ideas or work of another person or persons as if they were one's own, without giving credit to the source. Such an act is not plagiarism if it is ascertained that the ideas were arrived at through independent reasoning or logic or where the thought or idea is common knowledge. Acknowledge an original author or source must be made through appropriate references, i.e., quotation marks, footnotes, or commentary. Examples of plagiarism include, but are not limited to, the following: the submission of a work, either in part or in whole, completed by another; failure to give credit for ideas, statements, facts or conclusions which rightfully belong to another; in written work, failure to use quotation marks when quoting directly from another, whether it be a paragraph, a sentence, or even a part thereof; or close and lengthy paraphrasing of another's writing or programming. A student

who is in doubt about the extent of acceptable paraphrasing should consult the instructor. Students are cautioned that, in conducting their research, they should prepare their notes by (a) either quoting material exactly (using quotation marks) at the time they take notes from a source; or (b) departing completely from the language used in the source, putting the material into their own words. In this way, when the material is used in the paper or project, the student can avoid plagiarism resulting from verbatim use of notes. Both quoted and paraphrased materials must be given proper citations.

Definition of Cheating

Cheating is defined as the act of obtaining or attempting to obtain or aiding another to obtain academic credit for work by the use of any dishonest, deceptive or fraudulent means. Examples of cheating during an examination would include, but not be limited to the following: copying, either in part or in whole, from another test or examination; discussion of answers or ideas relating to the answers on an examination or test unless such discussion is specifically authorized by the instructor; giving or receiving copies of an exam without the permission of the instructor; using or displaying notes; "cheat sheets," or other information or devices inappropriate to the prescribed test conditions, as when the test of competence includes a test of unassisted recall of information, skill, or procedure; allowing someone other than the officially enrolled student to represent the same. Also included are plagiarism as defined and altering or interfering with the grading procedures. It is often appropriate for students to study together or to work in teams on projects. However, such students should be careful to avoid use of unauthorized assistance, and to avoid any implication of cheating, by such means as sitting apart from one another in examinations, presenting the work in a manner which clearly indicates the effort of each individual, or such other method as is appropriate to the particular course.

Faculty Responsibilities in Allegations of Cheating or Plagiarism

Before a faculty member charges a student with cheating or plagiarism, the faculty member should have reasonable evidence with respect thereto. Reasonable evidence includes documentary or other physical evidence, personal observation, or testimony. Prior cheating or plagiarism is not reasonable evidence. In order to establish facts of the student's knowledge or skill, the faculty member may ask the student to provide such additional demonstration of competency as the faculty member deems necessary to evaluate scholarship and academic performance. The faculty member must advise the student that a decision to provide an opportunity for such an additional demonstration of competency is entirely at the faculty member's option and that the student may comply with the request of the faculty member at the student's option. Neither compliance nor non-compliance shall be considered an admission of cheating or plagiarism.

In cases where a student is suspected of cheating or plagiarism, the faculty member should arrange for an informal office conference with the student as soon as possible. The purpose of the informal conference is

to bring the persons involved together to discuss the issues informally and to discuss courses of action. At the conference the student shall be notified by the faculty member of the charge and supporting evidence. For an incident which occurs during or as a part of a final examination consult the section just below.

In cases where there is more than one individual suspected of cheating or plagiarism, the faculty member may decide to call the students to confer jointly as a group, or as individuals, or both. If the faculty member should decide to confer with the students as a group, the students shall have the option to also confer with the instructor separately as individuals.

The faculty member shall inform the student(s) that both students and faculty have the right to submit a request to the Academic Integrity Committee (discussed below) for a written opinion on whether the accusation is supported by the evidence. All notes and discussions between the student and the faculty member are confidential, except as may be relevant to the Academic Integrity Committee or in subsequent campus disciplinary proceedings. Neither the faculty member nor the student should discuss a specific charge of cheating or plagiarism or any violations with reference to individuals in the classroom before other members of the class.

When the student cannot be contacted and therefore the informal conference cannot be held, as is sometimes the case after final examinations, a grade of "I" (Incomplete) may be assigned, but only if the instructor wishes an additional test of competence (see section just above). The instructor shall have the agreement form for assigning an "Incomplete" sent to the last known address of the student. The agreement form shall state the following:

Under the provisions of the CSULB Policy Statement on Cheating and Plagiarism, an additional test of competency related to the syllabus name of suspect demonstration (e.g., Final Examination) is requested. You may decline to do so. Please contact the instructor, the department office, or the office of Judicial Affairs for information regarding the University policy on Cheating and Plagiarism. The instructor must indicate on the agreement form the grade which will be assigned, normally 120 calendar days following mailing of the Incomplete Agreement, if the student does not respond or, responding, the student does not agree to an additional test of competence.

Charges of cheating or plagiarism cannot be brought against a student more than 120 calendar days after discovery that the work in question may have been plagiarized or that cheating may have taken place.

Notes and evidence shall be kept by the department chair or program director for a minimum of five years after the case is settled.

In implementation of the Executive Order from the Chancellor's Office that requires documentation of faculty action regarding cheating and plagiarism, the Academic Senate revised the Cheating and Plagiarism Policy to include the following language: After action has been taken by the faculty member, the faculty member shall complete a form that identifies the student who was found responsible, the general nature of the offense, the action taken, and a recommendation as to whether or not additional action

should be considered by the Office of Judicial Affairs. The complete form should be sent by the faculty member to both the provost and the vice president for student affairs whenever cases of academic dishonesty are handled by the faculty member.

Academic Integrity Committee

The Chair of the Academic Senate and the Provost and Senior Vice President for Academic Affairs shall jointly appoint an Academic Integrity Committee for the University. This Committee shall consist of one member from the student body, chosen by the Associated Students Government for a one year term of office; three members of the full-time, tenured or tenure-track faculty, each with a term of office of two years, terms of office expiring in alternate years; and one member of the Office of Academic Affairs, who shall be Chair, voting only in case of ties.

The primary charge of the Committee is to receive the requests of students accused of cheating or plagiarism or the requests of faculty accusing specified student(s) of cheating or plagiarism. Following its review of the evidence, the Committee shall report its opinion to the student(s) and to the faculty member involved on whether the accusation is supported by the evidence. This opinion may not be appealed. However, when new evidence appears to so warrant, a faculty member or student may ask, in writing, the Provost or the Chair of the Academic Senate to request the Committee to reconsider a case. The Academic Integrity Committee shall make readily available the rules and procedures governing its operations.

In all cases, a Report of the Committee is advisory to the student, with whom rests the presumption of innocence, and the faculty member, to whom the decision on the evidence and academic action is reserved.

A faculty member or student who requests a review of the evidence in a case of alleged cheating or plagiarism must make such a request to the Academic Integrity Committee in writing no later than 14 calendar days following the date of first notification of the student by the faculty member of the allegation. Except under extenuating circumstances, the student and faculty member will have no more than 14 additional calendar days to provide evidence to the Committee.

To preserve the rights of privacy, the Committee meetings shall be closed. The Committee may request additional information as may be appropriate to the development of its Reports. The Committee is to provide a final Report within 21 calendar days of the submission of a request to it. Should additional time be required, the reasons should be communicated to the Provost and Senior Vice President for Academic Affairs and the Chair of the Academic Senate as well as the student(s) and faculty members involved.

The Committee is to report on its actions annually to the Vice President for Academic Affairs and the Chair of the Academic Senate.

Academic Action

One or more of the following academic actions are available to the faculty member who finds a student has been cheating or plagiarizing. These options may be taken by the faculty member to the extent that the faculty member

considers the cheating or plagiarism to manifest the student's lack of scholarship or to reflect on the student's lack of academic performance in the course. These actions may be taken without a request for or before the receipt of a Report from the Academic Integrity Committee.

- A. Review – no action.
- B. An oral reprimand with emphasis on counseling toward prevention of further occurrences;
- C. A requirement that the work be repeated;
- D. Assignment of a score of zero (0) for the specific demonstration of competence, resulting in the proportional reduction of final course grade;
- E. Assignment of a failing final grade;
- F. Referral to the Office of Judicial Affairs for possible probation, suspension, or expulsion.

Academic dishonesty cases that occur in the classroom shall be handled by faculty members. After a faculty member takes action, the faculty member shall complete a "Student Academic Dishonesty Report" form that identifies the student who was found responsible, the general nature of the offense, the action taken, and a recommendation as to whether or not additional action should be considered by the campus Judicial Affairs Office. The faculty member shall send a completed "Student Academic Dishonesty Report" form to the Vice President for Student Affairs and Provost whenever academic dishonesty cases are handled by the faculty member.

A student may appeal a final course grade the computation of which included an examination or other test of competence in which a score of zero was assigned for cheating or plagiarism, but only on the grounds permitted in the University Grade Appeal Policy Statement. An appeal of the final grade may include as written testimony the Report of the Academic Integrity Committee.

Disciplinary Sanctions – Administrative Action

Procedures and sanctions of the Office of Judicial Affairs are under the administration of the Vice President for Student Services and are conducted pursuant to the authority provided in Section 41301 of Title 5 of the California Administrative Code. Copies of Section 41301 of Title 5 may be found in the University Bulletin and the Campus Regulations available in the Office of Judicial Affairs. Copies of Chancellor's Executive Order 148, "Student Disciplinary Procedures for the California State University" are also available upon request.

Opportunities for appeal regarding the sanctions applied by Vice President for Student Services are provided for students involved in the proceedings as outlined by Executive Order 148.

A summary of the charges concerning cheating and plagiarism report to the Vice President for Student Services. (PS 08-02)

Student Unit Load

Recommended Student Load

The faculty recognizes that it is frequently necessary for students to hold part-time jobs while attending the University. It advises that students enrolling under these conditions use good judgment in planning their programs. Students whose outside employment could be expected to interfere with the normal unit load should reduce their academic program accordingly.

The official unit limit per fall or spring semester is 18 units. Students seeking to exceed the 18-unit limit must complete an Extra Unit Petition form available on the Enrollment Services website.

Students are expected to spend, on the average, two hours of preparation and study for each hour of class time. Thus, a three-unit lecture or discussion course normally demands a commitment of nine hours per week averaged over the semester, with the class meeting for three hours a week. This may be considered sufficient time to enable a student to do satisfactory work. Students who desire to achieve "A" or "B" grades may wish to spend proportionately more time in their studies.

A student's employment and college time combined should not exceed 60 hours weekly. Students who make no allowances for their employment and outside obligations in planning their college programs will bear full responsibility for the resulting level of scholarship.

Minimum Unit Requirements for Students in Special Classifications

Veterans

In consideration of the Veterans Affairs Services requirement to equitably certify student veteran benefits in accordance with Title 38 of the United States Code, a post-baccalaureate student veteran in a credit-limited program is considered full-time as long as he or she is enrolled in those courses that are required by the educational program being pursued. Full-time status is awarded to all post-baccalaureate and graduate students who have less than nine (9) units when no other units are offered in their program. This status must be approved and coordinated with the Office of Veterans Affairs Services, located in the Foundation building, Suite 265. For information, call (562) 985-5115 or (562) 985-4279.

Graduate Students

For information about graduate student load, see regulations governing Master's Degrees in this *Catalog*.

International Students

Undergraduate international students on non-immigrant visas must carry and complete a minimum of 12 units per semester unless a reduced load is authorized by the student's advisor and the Center for International Education. Reduced unit loads may be granted for substantial academic reasons or compelling personal reasons beyond the control of the student. Failure to secure such authorization results in violation of student status under Immigration and Naturalization Service (INS) and State Department regulations, warranting discontinuance of enrollment.

Students with Disabilities

It is recommended that students with disabilities attempt to modify their schedules, as necessary, to lessen the impact of a disability. Students with disabilities may request to enroll in a unit load which is commensurate with their ability. Reduced unit load is defined as less than 12 units for undergraduates and less than 9 units for graduates. Such requests must be made to Disabled Student Services prior to each semester affected. If approved, the student will be

entitled to all benefits, services, and activities governed by the University which are accorded to full-time students. Eligibility for benefits, services, and activities outside the University's control will be governed by each separate external agency based upon actual unit load.

Student Load Regulations

I. Maximum Student Load during Fall and Spring Semesters

An undergraduate student carrying twelve (12) or more units during the fall or spring semester is classified as a full-time student. A graduate or post-baccalaureate student carrying nine (9) or more units during the fall or spring semester is also classified as a full-time student. An undergraduate student carrying fewer than twelve (12) units or a graduate or post-baccalaureate student carrying fewer than nine (9) units is classified as a part-time student. These definitions derive from federal financial aid regulations and have no bearing on the definitions used by California to determine a student's liability for the state university fee.

The maximum number of units a student may take during the fall or spring semester is normally eighteen (18) for undergraduate, graduate, or post-baccalaureate students.

II. Maximum Student Load during the Summer Session

The maximum number of units a student may take during the summer term is one unit per week, plus one additional unit. Thus, the maximum number of units is normally seven (7) for one 6-week session, ten (10) for two overlapping sessions, and thirteen (13) for an entire summer.

III. Maximum Student Load during the Winter Session

The maximum number of units a student may take during the winter session is one (1) unit per week, plus one (1) additional unit. Thus, the maximum number of units is normally four (4).

IV. Criteria for Exceptions

For most courses exceptions to this limit will be made only on the basis of all of the following criteria:

1. Proven academic ability, i.e., a grade point average of 3.0 or higher;
2. Feasibility of completing the proposed schedule, e.g., no repeat/delete classes, no history of "W" classes;
3. Evidence that the overload is necessary to complete the degree in a timely manner (e.g., the student will complete the program within one additional academic year and all courses will count toward the student's degree); and
4. Permission obtained from Academic Affairs or designee on or before Census.

Up to two (2) units above the maximum load comprised of university supplemental instruction, kinesiology activity, theatre arts activity, or dance performance and production units only requires permission from Academic Affairs or designee on or before Census.

Course Listings

Courses are listed in this *Catalog* by department, the departments and programs being arranged alphabetically. Each listing gives the course number, title, semester units in parentheses, and the course description, which includes prerequisites and other restrictions.

Course Numbers

Courses with a number of less than 100 do not count toward any degree program. For purposes of qualifying for financial aid, however, the unit value assigned to those courses will count for the semester in which those courses were taken. Lower-division courses are numbered from 100 through 299. These courses are designed primarily for Freshmen and Sophomores. They provide breadth of understanding and the foundation for the more specialized work in upper-division, advanced courses. Approved General Education courses are listed online and are offered at both the lower-division and upper-division levels; no upper-division General Education course may be used in a graduate degree program. Lower-division courses are open to Junior, Senior, and Graduate students; however, lower-division courses may not be applied to any graduate degree program.

Upper-division courses are numbered from 300 through 499. These courses are open to students who have completed the prerequisites to the course, if any, stated in the course description and other departmental regulations given in this *Catalog*. A "Prerequisite" is a completed course or other measure of academic preparation which provides a foundation for the more advanced course.

Freshmen (fewer than 30 units) are not allowed to enroll in upper-division courses without permission of the instructor. Sophomores wishing to enroll in upper-division courses which indicate no prerequisites should consult with the course instructor or other knowledgeable advisor prior to enrollment. These courses are presented to meet the expectations of academically advanced students.

Certain 400-level courses are double-numbered with 500-level courses. In these courses the expectations of graduate students, who must enroll in the 500-level course, are greater than the expectations of undergraduates. Grading scales are different for the 500-level course and additional work is required of graduate students. A student may not earn credit for both the 400- and 500-level versions of a course.

Graduate-level courses are numbered from 500 to 799. Courses numbered 500-599 may be opened to senior students upon favorable petition. Courses numbered from 600 to 799 are open only to graduate students.

Included with some of the course numbers is a supplementary letter, or suffix, such as L for "laboratory" or A and B for a year-long sequence. "A-B" means that the courses must be taken in alphabetical sequence; "A,B" designates related courses which need not be taken in sequence. The student is given degree credit for each part of the sequence satisfactorily completed, whether or not the remaining part of the sequence is completed. Funding, student demand, and instructor availability may require that a course be offered in a different semester or session or be postponed until a later academic year. F indicates Fall Semester, S indicates Spring Semester, W indicates Winter

Session, and SS indicates Summer Session. The online class schedule appropriate to the semester or session in question should be consulted for actual course scheduling information. Some of the courses offered during the fall and spring semesters are also offered during the summer session.

The University reserves the right to make changes in course offerings without notice.

Course Credit Units and Modes of Instruction

Course Credit Units

Each course has a specific credit unit value which is indicated in parentheses following the course titles in this *Catalog*.

In accordance with national standards, each semester unit corresponds to approximately 45 hours of work per semester, counting both class meeting time and outside preparation and study. For a traditional lecture or discussion course, this means that the class will meet one hour a week for every unit in a fall or spring semester (15 weeks of class meetings). For a laboratory or activity course, the class may meet two or three hours per week for every unit.

The instructional "hour" is fifty minutes long, allowing for transit between classes and rest breaks within multi-hour classes.

Classes scheduled in the six-week summer session, or in a three-week summer or winter session, are scheduled for additional class hours per week so the total meeting time is the same as in a fall or spring semester. Classes taught by other modes of instruction are expected to require the same time commitment as traditionally-scheduled classes.

Hybrid Classes and Distance Education Classes

Some classes use academic technology to replace part or all of the face-to-face class meetings. In a hybrid class, one-third to two-thirds of the student/faculty and student/student contact time uses academic technology to structure remote activities. The remaining communication is face-to-face, similar to traditional classes. A Local Online Class is a course offering in which the majority of the instruction occurs when the student and instructor are not in the same place, but it may require up to two hours of face-to-face meetings per unit on the California State University, Long Beach campus within the given semester. A Distance Education Class is a course offering in which communication between faculty and student occurs primarily via academic technology, but it may also include off-site meetings. The mode of instruction is indicated in the online class schedule for each term. (PS 03-11)

Student Rights Relative to Course Instructional Mode

1. Student access to the faculty shall not be reduced by the instructional mode of a class.
2. The University shall make every effort to inform students of the mode of instruction and technological requirements of a course offering before the student enrolls in the class.
3. Matriculated students enrolled in non-traditional classes shall have access to the on-site academic advising services at California State University, Long Beach.
4. All students have equal access to the University library and other on-site learning resources offered at California State University, Long Beach.

5. Students in non-traditional classes shall have reasonable support services. These include:
 - A. Phone-based and online technology help to handle student questions and to refer students to appropriate available services for hybrid and local online or distance education courses;
 - B. Online and phone-based access to university administrative services;
 - C. Online dissemination of information describing the resources available for obtaining the technical competence needed to succeed in a specific course offering;
 - D. Online access to the library research databases and other research-related resources.
6. The University shall provide adequate technical support for academic technology.

Credit for Independent Study Courses

Each student enrolled in a supervised independent study, research, or reading course (excludes thesis courses) must have an agreement on file in the department office where the course is offered. The agreement is to be made between the student and the instructor at the beginning of the course and must include the following: a description of the work to be accomplished, specific information on the tasks required, the nature of the final report, and the basis for determining the final grade. The agreement must be signed by both the instructor and the student.

If a department wishes to use a written agreement different from the standard university form, it must be approved by the dean of the appropriate college prior to its use.

No independent study credit shall be awarded for classroom instruction, assisting in classroom instruction, or for other instructionally related activities, such as grading.

Credit for Cross-Listed Courses

Certain courses are listed in this *Catalog* under more than one department. For purposes of awarding credit, all such listings are considered to be the same course, and a student may receive credit for only one of the listings. Normally, students will receive credit for such a cross-listed course in the department under which they register for it.

Transfer Credit

Students who were in good standing at another accredited institution may, within maximums, transfer credit for baccalaureate or graduate degree course work. Course equivalency for major requirements must be determined. Students are cautioned that the University is under no obligation to accept transferred courses for subject credit in addition to unit credit for admission. Normally, however, there is a probability that courses in the accepted core of a discipline will be exchangeable between universities. Policy regarding transfer of courses from California community colleges differs in some respects.

Transfer of Undergraduate Credit From Accredited Community Colleges

A maximum of 70 semester units earned in a community college may be applied toward the baccalaureate degree, with the following limitations and stipulations:

1. No upper-division credit may be allowed for courses taken in a community college;
2. No more than six semester units in education courses taken in a community college may be applied toward the baccalaureate degree or the professional preparation

- requirements of a teacher education basic credential program;
3. Individual program regulations may include specific transfer limitations.
4. Students who transfer general education certification are still required to complete at least 9 units of upper-division courses at the campus conferring the degree.
5. Any course taken at community colleges can substitute for general education breadth requirements and lower-division requirements, if the course is approved as equivalent to the appropriate CSULB course. Students with more than 70 transferable units from community colleges will get subject matter credit for all such courses, but no more than 70 units will count toward graduation.
6. All transferable units taken at community colleges will count toward computation of the overall grade-point average. All transferable units in the major taken at community colleges will count toward computation of the overall major grade-point average.

Courses Taken by Non-Matriculated Students in Any Term

No more than 24 units total taken during any term while in non-matriculated status may be used to fulfill any undergraduate degree requirements. All students who have not been formally admitted to CSULB and who take courses here are non-matriculated students. Courses taken by incoming freshmen during the summer prior to their first fall are considered non-matriculated units.

Open University

Open University (Concurrent Enrollment) — Through Open University, students who are NOT matriculated in CSULB may take regular university classes during spring or fall semesters for academic credit on a "space available" basis with permission of the department chair and the course instructor. Open University enrollment does NOT constitute admission to CSULB. For more information call the College of Continuing and Professional Education at (562) 985-5561.

Self Support Courses

There is no limit on CCPE Self Support course credits, including Winter session, applicable to the degree if taken while in matriculated status in the degree program.

Baccalaureate Credit Based on Alternative Means of Assessment

The University grants credit toward the baccalaureate degree based on several types of assessment other than formal university courses. Students should consult the Chair or undergraduate advisor of the concerned department about applicability to individual courses or degree requirements.

Advanced Placement Credit

California State University, Long Beach grants credit toward its undergraduate degrees for successful completion of Advanced Placement (AP) examinations of the College Board. Students who present scores of three or better will be granted up to six semester units (nine quarter units) of college credit for each AP course. Refer to the Advanced Placement Examination Credit table that follows for transfer credit awarded.

For the most up-to-date AP credit information, click the "Admission" icon on the CSULB Enrollment Services Web page, and follow the links under "Freshmen" or "Transfer".

ADVANCED PLACEMENT EXAMINATIONS CREDIT			
AP Exam	AP Score	GE Designation	Credit
Art History	3-5	C.1 Fine Arts	ART - 6 units electives
Art Studio: 2D Design	3-5	No GE Credit	ART - 3 units electives
3D Design	3-5	No GE Credit	ART - 3 units electives
Drawing Portfolio	3-5	No GE Credit	ART - 6 units electives
Biology	3 4 5	B.1a Life Science w/lab B.1a Life Science w/lab B.1a Life Science w/lab	BIOL 200 - 4 units & 2 units BIOL electives BIOL 200 - 4 units & 2 units BIOL elective BIOL 211 - 3 units & BIOL 212 (not GE) 3 units
Chemistry	3 4-5	B.1b Physical Science w/lab B.1b Physical Science w/lab	CHEM 100 - 4 units & 2 units CHEM electives CHEM 111A - 5 units & 1 unit CHEM elective
Chinese Language and Culture	3 4-5	C.2c Foreign Language C.2c Foreign Language	CHIN 201 - 4 units, & 2 units CHIN electives CHIN 202 - 4 units & CHIN 490 - 2 units
Computer Science A Computer Science AB	3-5 3-5	No GE credit No GE credit	3 units elective 6 units elective
Economics: Macro	3-5	D.2 Social & Behavioral Science	ECON 100 - 3 units
Micro	3-5	D.2 Social & Behavioral Science	ECON 101 - 3 units
English: Language & Composition	3-5	A.1	ENGL 100 - 3 units & 3 units ENGL electives
Literature & Composition	3-5	A.1 & C.2a	ENGL 100 - 3 units & ENGL 180 - 3 units
Environmental Science	3,4,5	B.1b Physical Science w/lab	4 units elective
French: Language	3 4,5	C.2c Foreign Language C.2c Foreign Language	FREN 201A - 4 units & FREN 101B - 2 units FREN 201B, 4 units & FREN 201A - 2 units
Literature*	3-5	C.2c Foreign Language	FREN 490 - 3 units & 3 units elective
German: Language	3-5	C.2c Foreign Language	GERM 301 - 3 units & 3 units GERM electives
Geography: Human Geography	3-5	D.2	GEOG 160 - 3 units & 3 units GEOG electives
History: United States	3-5	D.1a (HIST 172) & D.2 (HIST 173)	HIST 172 - 3 units & HIST 173 - 3 units
European	3-5	D.2 (HIST 131) & D.2 (HIST 132)	HIST 131 - 3 units & HIST 132 - 3 units
World History	3-5	D.2 Global	HIST 212 - 3 units & 3 units electives

Italian	3 4-5	C.2c Foreign Language C.2c Foreign Language	ITAL 201A - 4 units & 2 units ITAL electives ITAL 201B - 4 units & 2 units ITAL electives
Japanese Language and Culture	3 4 5	C.2c Foreign Language C.2c Foreign Language C.2c Foreign Language	JAPN 102 - 4 units, & JAPN 101 - 2 units JAPN 201 - 4 units, & JAPN 102 - 2 units JAPN 202 - 4 units, & JAPN 201 - 2 units
Latin: Vergil	3	C.2c Foreign Language	LAT 101B - 2 units & LAT 301 - 2 units & LAT 401 2 units
Literature*	4-5 3 4-5	C.2c Foreign Language C.2c Foreign Language C.2c Foreign Language	LAT 301 - 3 units & LAT 401 - 3 units LAT 101B - 2 units & LAT 301 - 2 units & LAT 403 - 2 units LAT 301 - 3 units & LAT 403 - 2 units & 1 unit upper division LAT electives
Mathematics: Calculus AB**	3-5	B.2	MATH 113 - 2 units & MATH 122 - 4 units
Calculus BC	3-5	B.2	MATH 122 - 2 units & MATH 123 - 4 units
Music: Theory*	3-5	C.1 Fine Arts	MUS - 6 units electives
Physics: Physics B	3-5	B.1b Physical Science w/lab	PHYS 100A - 3 units & PHYS 100B - 3 units
Physics C (Mechanics)	3-5	B.1b Physical Science w/lab	PHYS 151 - 4 units
Physics C (Electricity & Magnetism)	3-5	B.1b Physical Science w/lab	PHYS 152 - 4 units
Political Science: United States Government & Politics (1 semester)	3-5	D.1b (Must take POSC 199 or 326)	POSC 100 - 3 units (does not include California State and local government)
Comparative Government & Politics (1 semester)	3-5	D.2 Global	POSC 215 - 3 units
Psychology (1 semester)	3-5	D.2	PSY 100 - 3 units
Spanish: Language	3, 4 5	C.2c Foreign Language C.2c Foreign Language	SPAN 101B - 2 units & SPAN 201A - 4 units SPAN 201A - 2 units & SPAN 201B - 4 units
Literature	3 4, 5	C.2c Foreign Language C.2c Foreign Language	SPAN electives - 6 units SPAN 310 - 3 units & 3 units SPAN electives
Statistics (1 semester)	3-5	B.2 effective Spring 2006	STAT 108 - 3 units
<p>Notes for Advanced placement: * This exam is no longer available beginning 2009-10 academic year. ** Credit is awarded for a 3-5 on the AB exam score or the AB subscore on the BC exam. A maximum of 6 units will be granted for each exam. If the number of units per course equivalency exceeds 6, credit for 6 units will be awarded and the course waived. Credit can only be awarded once per course. Example: if a student takes Calculus AB & BC, only nine units can be awarded.</p>			

International Baccalaureate Credit

Students with scores of 5 or higher (4 in certain subjects) in International Baccalaureate Higher Level courses will be awarded baccalaureate credit of 4 to 10 units, depending on course equivalency. Applicants to CSULB who wish to obtain lower-division course credit for completed International Baccalaureate Higher Level examinations must submit an official IB transcript. Course equivalency for Higher Level examinations completed with satisfactory scores is listed in the International Baccalaureate Examination Credit table that follows.

For the most up-to-date IB credit information, click the "Admission" icon on the CSULB Enrollment Services Web page, and follow the links under "Freshmen" and "Transfer."

INTERNATIONAL BACCALAUREATE HIGHER LEVEL EXAMINATIONS CREDIT		
IB Exam	IB Score	Credit
Arts, Visual	5, 6, or 7	ART electives - 4 units
Arts, Visual Option A	5, 6, or 7	ART electives - 4 units
Arabic A1	4, 5, 6, or 7	ARAB 101A - 4 units & 2 units ARAB electives
Arabic A2	4, 5, 6, or 7	ARAB 101A - 4 units & 2 units ARAB electives
Arabic B	4, 5, 6, or 7	ARAB 201B - 4 units & 2 units ARAB electives
Biology	5	BIOL 200 - 4 units & 2 units BIOL electives
	6	BIOL 200 - 4 units & 2 units BIOL electives
	7	BIOL 211 - 3 units & BIOL 212 - 3 units
Business & Management	5, 6, or 7	CBA electives - 4 units
Chemistry	5, 6, or 7	CHEM 111A - 5 units & 1 unit CHEM elective
Chinese A1	4, 5, 6, or 7	3 units GE C.2c & 3 units CHIN electives
Chinese A2	4, 5, 6, or 7	3 units GE C.2c & 3 units CHIN electives
Chinese B	4, 5, 6, or 7	CHIN electives - 6 units
Classical Greek	4, 5, 6, or 7	GK 101A - 4 units & GK 101B - 4 units
Computing Studies	5, 6, or 7	CECS electives - 4 units
Economics	5, 6, or 7	ECON 100 - 3 units & ECON 101 - 3 units
English A1	4, 5, 6, or 7	ENGL 100 - 3 units & ENGL 180 - 3 units
English A2	4, 5, 6, or 7	ENGL 100 - 3 units & ENGL 180 - 3 units
English B	4, 5, 6, or 7	ENGL 100 - 3 units & ENGL 180 - 3 units
Film in English	5, 6, or 7	ENGL electives - 4 units

French A2	4, 5, 6, or 7	FREN 312A - 3 units & FREN 312B - 3 units & FREN 411 - 3 units
French B	4, 5, 6, or 7	FREN 312A - 3 units & FREN 312B - 3 units & FREN 314 - 3 units
Geography	5, 6, or 7	GEOG 100 - 3 units & 3 units GEOG elective
German A1	4, 5, 6, or 7	GERM 301 - 3 units & GERM 302 - 3 units
German A2	4, 5, 6, or 7	GERM 301 - 3 units & GERM 302 - 3 units
German B	4, 5, 6, or 7	GERM 201A - 4 units & GERM 201B - 4 units
History of Africa	5, 6, or 7	3 units GE D2 & 3 units HIST electives
History of the Americas	5, 6, or 7	3 units GE D2 & 3 units HIST electives
History of Asia: East & Southeast Asia & Oceania	5, 6, or 7	3 units GE D2 & 3 units HIST electives
South Asia and the Middle East	5, 6, or 7	3 units GE D2 & 3 units HIST electives
History of Europe	5, 6, or 7	HIST 132 - 3 units & 3 units HIST electives
History and Culture Islamic World	5, 6, or 7	3 units GE D2 & 3 units HIST electives
Information Technology in a Global Society	5, 6, or 7	4 units of electives
Italian A1	4, 5, 6, or 7	3 units GE C.2c & 3 units ITAL electives
Italian A2	4, 5, 6, or 7	ITAL 312A - 3 units & ITAL 312B - 3 units & ITAL 411 - 3 units
Italian B	4, 5, 6, or 7	ITAL 312A - 3 units & ITAL 312B - 3 units & ITAL 314 - 3 units
Japanese A1	4, 5, 6, or 7	JAPN 302 - 3 units & JAPN 371 - 3 units & JAPN 421 - 3 units
Japanese A2	4, 5, 6, or 7	JAPN 421 - 3 units & JAPN 302 - 3 units & JAPN 301 - 3 units
Japanese B	4, 5, 6, or 7	JAPN 201 - 4 units & JAPN 202 - 4 units
Korean A1	4, 5, 6, or 7	KOR 102 - 4 units & 2 units KOR electives
Korean B	4, 5, 6, or 7	KOR 102 - 4 units & 2 units KOR electives
Latin	4, 5, 6, or 7	LAT 301 - 4 units & 2 units of upper division Latin electives
Math - Higher Level	4, 5, 6, or 7	MATH 114 - 3 units & MATH 122 - 4 units
Music	5, 6, or 7	MUS 160 - 3 units & MUS 490 - 3 units
Philosophy	5, 6, or 7	PHIL 100 - 3 units & 1 unit PHIL elective
Physics	5, 6, or 7	PHYS 100A - 4 units & PHYS 100B - 4 units

Portuguese A1	4, 5, 6, or 7	PORT 101A - 4 units & 2 units PORT electives
Portuguese A2	4, 5, 6, or 7	3 units GE C.2c & 3 units PORT electives
Portuguese B	4, 5, 6, or 7	PORT 201B - 4 units & 2 units PORT electives
Psychology	5, 6, or 7	PSY 100 - 3 units & 1 unit PSY elective
Russian A1	4, 5, 6, or 7	3 units GE C.2c & 3 units RUSS electives
Russian A2	4, 5, 6, or 7	RUSS 312 - 3 units & RUSS 314 - 3 units & 3 units upper division RUSS electives
Russian B	4, 5, 6, or 7	RUSS 201A - 4 units & RUSS 201B - 4 units
Social and Cultural Anthropology	5, 6, or 7	4 units ANTH electives
Spanish A1	4, 5, 6, or 7	3 units GE C.2c, & 3 units SPAN electives
Spanish A2	4, 5, 6, or 7	SPAN 300 - 6 units & SPAN 314 - 3 units
Spanish B	4, 5, 6, or 7	SPAN 300 - 6 units
Theatre Arts	4, 5, 6, or 7	THEA 122 - 3 units & 3 units THEA electives

Credit for Other External Examinations

In addition to the Advanced Placement and International Baccalaureate Examinations, California State University, Long Beach grants unit credit to those students who pass the following examinations that have been approved for credit by the CSU system: the College Level Examination Program (CLEP) examinations in certain subjects; and the American Chemical Society Cooperative Examination. (PS 87-04)

Refer to the College Level Examination Program Credit table that follows, for transfer credit awarded.

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP) CREDIT		
CLEP Exam	CLEP Score	Credit
Accounting, Principles of	50	3 units of elective credit
American Literature	50	3 units GE C2a Humanities and the Arts
Analyzing & Interpreting Literature	50	3 units of GE C2a Humanities and the Arts
Biology	50	BIOL 200 - 4 units
Business Law, Intro	50	3 units BLAW elective credit
Chemistry	50	3 units GE B.3
Economics: Macro	50	ECON 100 - 3 units
Micro	50	ECON 101 - 3 units
Educational Psychology, Introduction to	50	3 units elective credit
English Literature	50	3 units GE C2a Humanities and the Arts

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP) CREDIT

CLEP Exam	CLEP Score	Credit
Financial Accounting	50	3 units elective credit
French: Language, Level 1	50-58	FREN 101A - 4 units & FREN 101B - 4 units
Language, Level 2	59-100	FREN 201A - 4 units & FREN 201B - 4 units
German: Language, Level 1	50-59	GERM 101A - 4 units & GERM 101B - 4 units
Language, Level 2	60-100	GERM 201A - 4 units & GERM 201B - 4 units
History, United States I	50	3 units GE D1a Social and Behavioral Sciences and Their Historical Background
History, United States II	50	3 units GE D1a Social and Behavioral Sciences and Their Historical Background
Human Growth and Development	50	3 units GE area E Self-Integration
Humanities	50	3 units GE C3 Humanities and the Arts
Information Systems & Computer Applications	50	3 units elective credit
Management, Principles	50	3 units elective credit
Marketing, Principles of	50	3 units elective credit
Mathematics: College Mathematics	50	MATH 103 - 3 units
College Algebra	50	MATH 113 - 3 units
Precalculus	50	MATH 117 - 4 units
Calculus	50	MATH 122 - 4 units
Natural Sciences	50	3 units of GE B3 Physical Universe
Political Science: American Government	50	POSC 100 - 3 units (does not include California State and local government)
Psychology, Introductory	50	PSY 100 - 3 units
Sociology, Introductory	50	SOC 100 - 3 units
Spanish: Language, Level I	50-62	SPAN 101B - 4 units & 2 units SPAN electives
Language, Level 2	63-100	SPAN 201A - 4 units & SPAN 201B - 4 units
Western Civilization I	50	3 units GE D2 Social and Behavioral Sciences and Their Historical Backgrounds
Western Civilization II	50	3 units GE D2 Social and Behavioral Sciences and Their Historical Backgrounds

Unit Credit by Examination

Students may also challenge some courses by taking examinations developed at the campus. Credit will be awarded to those who pass them successfully. Credits earned in this manner will be recorded as test credit on the student's transcript and will be counted toward the total number of units required for the degree although they will not be included in calculation of the grade-point average. Credit by examination may not be used to fulfill the minimum residence requirement.

Students must be enrolled in the University and in the course for which they wish to receive credit by examination.

Enrollment is by permission of the department and is only available during the academic semester in which the course is being offered. Students must secure a signed and dated approval form from the department PRIOR to enrolling in the course. Students must provide the instructor with a copy of the signed and dated approval form at the first class meeting. The instructor will ensure that the examination is conducted, scored, and the results reported prior to the end of the third week of classes. Students who pass the examination will receive academic credit for the course work. Students who do not pass the examination have two options:

1. continue in the course as a regular student; or
2. withdraw from the course.

The University sets no maximum on the number of credits a student may receive by examination. Not all courses, however, are available for credit by examination. Information about courses for which credit by examination is not permitted is available in the Department Office, in the College Office, and the Office of Enrollment Services. A student may NOT receive credit by examination:

1. for an activity course,
2. for any course which is a prerequisite to one for which credit has been received, (see department for possibility of course waiver),
3. to remove a grade of "F," "WU," "NC,"
4. to satisfy the courses required for a major in a master's degree.
5. for any course in which the content or methodology is such that an examination does not appropriately measure competence.

Application forms to apply for credit by examination are available online and in the Office of Enrollment Services. Procedures and criteria for requesting unit credit by examination in a given course are available in the appropriate department office. (PS 87-04)

Substitution of Courses

Students who believe that a course they have taken (or intend to take) may be appropriate to their program and that this course could substitute for a specified course requirement may request that the department submit an official authorization for substitution. Course substitutions are normally limited to cases where the required course cannot be offered or where the student has taken a similar but not identical course elsewhere. (PS 87-04)

Waiver of Course Requirement

In addition, students who believe that previous training has sufficiently prepared them in a certain area may request a waiver of a specific course requirement (subject credit only). The student will be required to justify the request in a way acceptable to the department. A waiver of specific course requirements does not reduce the total number of credits required for the major or the degree. (PS 87-04)

International Program Credit

Course credits earned in universities abroad may be accepted for degree credit at CSULB subject to evaluation by the cognizant department or program upon admission of the student to the University. CSULB students who desire, subsequent to admission, to take courses at a foreign university for degree credit must have each such course approved in advance in writing by the Chair of the appropriate department or program.

The Center for International Education administers many international education and exchange programs. Students fully accepted into one of these programs may, in most cases, continue CSULB residency while studying in the approved foreign institution. Some courses taken through these programs do not have to be approved in advance.

Credit for Noncollegiate Instruction

The California State University, Long Beach grants undergraduate degree credit for successful completion of noncollegiate instruction, either military or civilian, appropriate to the baccalaureate degree, that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. The number of units allowed are those recommended in the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs.

Final Course Grades, Grading Procedures, and Final Assessments

Part One: Definitions

The following definitions apply to final course grades assigned in all undergraduate and graduate courses:

"A" - Performance of the student has been at the highest level, showing sustained excellence in meeting all course requirements and exhibiting an unusual degree of intellectual initiative.

"B" - Performance of the student has been at a high level, showing consistent and effective achievement in meeting course requirements.

"C" - Performance of the student has been at an adequate level, meeting the basic requirements of the course.

"D" - Performance of the student has been less than adequate, meeting only the minimum course requirements.

"F" - Performance of the student has been such that minimal course requirements have not been met.

"CR/NC" - In some courses, the university permits students to select evaluation on a "Credit" or "No Credit" basis. Special regulations and procedures governing the "CR/NC" grading system are described below in Part Two. These grades are defined as follows:

"CR" is usually equivalent to an "A," "B," or "C;" and "NC" is equivalent to a "D," "F," or "WU" (defined below). In two circumstances a final course grade of "CR" reflects work at the level of "B" or better, and a final course grade of "NC" reflects work at the level of "C," "D," "F," or "WU." Those two circumstances are:

- 1) in certain professional preparation courses, providing that the students are notified of such a policy both in class materials and in the catalog course description; and
- 2) for graduate students in all courses at the 300, 400, 500, and 600 levels.

The following definitions apply to administrative grading symbols assigned in all undergraduate and graduate courses:

"AU" - "Audit." Enrollment as an auditor is subject to permission of the instructor, provided that enrollment in a course as an auditor shall be permitted only after students otherwise eligible to enroll on a credit basis have had an opportunity to do so. Auditors are subject to the same fee structure as credit students and regular class attendance

is expected. It is the responsibility of the student to request from the instructor what is meant by regular class attendance. The symbol "AU" is posted to the student's permanent academic record unless the student fails to attend a sufficient number of class meetings. In these cases, the instructor will request that the student be administratively withdrawn from the course. Once enrolled as an auditor, a student may not change to credit status unless such a change is requested prior to the last day to add classes. A student who is enrolled for credit may not change to "Audit" after the last day to add classes.

"I" - "Incomplete". The symbol "I" indicates that a portion of required course work (normally not more than one-third) has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons and that there is still a possibility of earning credit. No instructor may assign an Incomplete if the student must attend a major portion of the class when it is next offered. No student may re-enroll in any course in which he/she has received an "I" until that "I" has been converted to a grade other than "I," i. e., "A," "B," "C," "D," "F," "CR," or "NC." In such cases, the instructor must assign a grade of "A," "B," "C," "D," "F," "CR," or "NC" based on the available assessments of that student's performance. It is the responsibility of the student with an "I" to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements that must be satisfied to remove the "Incomplete." A final course grade is assigned when that work has been completed and evaluated.

An "I" must normally be made up within one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not the student maintains continuous enrollment. Failure to complete the assigned work will result in an "I" being converted to an "F," except as noted in item 3 below. An extension of time may be granted for contingencies such as military service or documented, serious health or personal problems.

The conditions for removal of the "Incomplete" shall be documented by the instructor on an "Assignment of Incomplete Grade" form. This form shall include a statement of:

1. all work completed in the course, the grades assigned for that work, and the percentages of the final course grade accounted for by each item;
2. the work not completed and the percentage that each uncompleted assignment will count toward the final course grade; and
3. the final course grade the instructor will assign if the course requirements are not completed within one calendar year, or a shorter period as specified on the form, immediately following the term in which the "I" was assigned, without respect to continuous enrollment of the student during this period.

If clear percentages for assignments cannot be delineated, instructors shall explain any special conditions for determining final course grades for work wholly or partially made up.

A copy of the form is to be given to the student and a copy is to be filed with Enrollment Services within 30

calendar days after final course grades are submitted. When the work agreed upon has been completed and evaluated, a final course grade will be assigned by the instructor. If Enrollment Services does not receive an acceptable "Assignment of Incomplete Form" by 90 calendar days after the end of the semester, they will assign a grade of "WU" to the student instead of an "I." The "Assignment of Incomplete Grade" form will not be accepted if

1. more than one-third of the work remains to be completed, and no justification has been provided;
2. the work required to complete the course has not been specified;
3. the faculty member failed to sign the form; or
4. the percentage fields have not been filled in, and no justification for their absence has been provided.

"RD" - "Report Delayed". This symbol is used exclusively by Enrollment Services to permit processing of all final course grades when the final course grades for an entire course section have not been reported by the instructor. The symbol does not imply any academic evaluation. Individual instructors may not assign "RD." Students who remain on rolls but for whom the instructor has no assessments must receive a "WU."

"RP" - "Report in Progress". The "RP" symbol is used in connection with courses requiring multiple enrollment, i.e., that extend beyond one academic term. It indicates that work is in progress but that assignment of a final course grade must await completion of additional work. Re-enrollment is permitted prior to assignment of a final course grade provided the cumulative units attempted do not exceed the total number applicable to the student's educational objective. Work is to be completed within one calendar year immediately following the end of the term during which it was assigned except for graduate degree theses. If the "RP" symbol is not replaced by a final course grade within the specified time period or prior to the student's declared graduation date, it will be changed to a "W." An "RP" symbol cannot be replaced by an "I" (Incomplete) symbol; an "I" is not a final course grade.

"W" - "Withdrawal". The symbol "W" indicates that the student was permitted to drop a course after the second week of instruction with the approval of the instructor and appropriate campus official. It carries no connotation of quality of student performance and is not used in calculating grade point average.

Students are held responsible for completion of every course in which they register or for withdrawing during the first two weeks of a regular semester (13% of non-standard session) of classes from courses that they do not intend to complete. Application for withdrawal from CSULB or from a class must be officially filed by the student with Enrollment Services whether the student has ever attended the class or not; otherwise, the student will receive a grade of "WU" (unauthorized withdrawal) in the course.

Regulations governing the refund of student fees in the California State University system are prescribed by the CSU Board of Trustees; see California Code of Regulations, Title 5, Education, Section 41802.

1. Withdrawal during the first two weeks of instruction: Students may withdraw during this period and the

course will not appear on their permanent records.

2. Withdrawal after the second week of instruction and prior to the final three weeks of the regular semester (20% of a non-standard session) of instruction:

Withdrawals during this period are permissible only for serious and compelling reasons. The approval signatures of the instructor and department chair are required. The request and approvals shall state the reasons for the withdrawal. Students should be aware that the definition of "serious and compelling reasons" as applied by faculty and administrators may become narrower as the semester progresses. Copies of such approvals are kept on file by Enrollment Services.

3. Withdrawal during final three weeks of instruction:

Withdrawal during the final three weeks of instruction are not permitted except in cases such as accident or serious illness where the circumstances causing the withdrawal are clearly beyond the student's control and the assignment of an Incomplete is not practical. Ordinarily, withdrawal in this category will involve total withdrawal from the campus except that a Credit/No Credit grade or an Incomplete may be assigned for other courses in which sufficient work has been completed to permit an evaluation to be made. Request for permission to withdraw under these circumstances must be made in writing on forms available from Enrollment Services. The requests and approvals shall state the reasons for the withdrawal. These requests must be approved by the instructor of record, department chair (or designee), college dean (or designee), and the academic administrator appointed by the president to act in such matters. Copies of such approvals are kept on file by Enrollment Services.

4. Limits on Withdrawal

No undergraduate student may withdraw from more than a total of 18 units. This restriction extends throughout the entire undergraduate enrollment of a student at CSULB for a single graduation, including special sessions, enrollment by extension, and re-enrolling after separation from the university for any reason. The following exceptions apply:

- a. withdrawals prior to the end of the second week of a semester (13%) of instruction at CSULB,
- b. withdrawals in terms prior to fall 2009 at CSULB,
- c. withdrawals at institutions other than CSULB, and
- d. withdrawals at CSULB for exceptional circumstances such as serious illness or accident (the permanent academic record will show these as a WE to indicate the basis for withdrawal).

5. Medical Withdrawal:

CSULB may allow a student to withdraw without academic penalty from classes if the following criteria are met:

- a. A completed Medical Withdrawal Form, including any required documentation, is submitted to Enrollment Services before the end of the semester, and
- b. The student presents evidence to demonstrate that a severe medical or debilitating psychological condition prevented the student from attending and/or doing the required work of the courses to the extent that it was impossible to complete the courses.

Although students will normally withdraw from all courses, those with serious and compelling reasons may withdraw from only some of their courses; such instances will require additional justification.

The academic administrator appointed by the president to act in such matters will review the evidence presented and, in consultation with appropriate medical or psychological professionals as needed, determine whether the request for a medical withdrawal should be granted. Once granted, all such medical withdrawals will show on the permanent record as a WE to indicate the basis for withdrawal and will not count toward the limit described in 4 above.

Repeat Complete Medical Withdrawal:

If the student has received a complete medical withdrawal in the immediately preceding term, then an additional complete medical withdrawal request must consider the question of whether or not the student can complete appropriate educational objectives and must be reviewed on a case-by-case basis. After a repeat medical withdrawal is granted, the student may be required to obtain a clearance from an appropriate medical or psychological professional that states the student is well enough to return to classes with the full expectation that the student will be able to complete the semester and intended educational objectives.

6. Instructor Withdrawal:

An instructor may withdraw a student who has never attended a class, if done before the end of the second week of classes. Because instructors are not required to do this, students should not rely on them and should officially withdraw from classes themselves to avoid assignment of a "WU" in the course.

An instructor may also withdraw a student during the first two weeks of classes who has enrolled in a course requiring "permission of the instructor", completion of prerequisites, or concurrent enrollment in co-requisites if the student has not properly secured this permission, satisfactorily completed the prerequisites before enrolling, or enrolled in the required co-requisites.

"WE" – "Withdrawal for Extenuating Circumstances". The symbol "WE" indicates the student withdrew for reasons, usually medical or psychological but not restricted to those, clearly beyond the student's control. Such cases will normally involve the withdrawal from all courses that semester. Withdrawals for extenuating circumstances will not count toward the limits on withdrawal. The symbol "WE" is not a grade and does not alter a student's grade point averages.

"WU" - "Unauthorized Withdrawal". The symbol "WU" indicates that an enrolled student did not complete course requirements but did not withdraw from the course. It is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible (letter grades "A," "B," "C," "D," "F", or an "I"). Instructors of record must report the last known date of attendance for all students who receive a "WU." A student who receives a "WU" may not complete additional work and have the "WU" changed to a letter grade. In courses that are graded "Credit/No Credit" or in cases where the student has elected

“Credit/No Credit” evaluation, use of the symbol “WU” is inappropriate and “NC” must be used instead. For purposes of grade point averages a “WU” is equivalent to an “F.”

Part Two: Course Grading Option

The faculty determines in advance which courses may be taken for “A,” “B,” “C,” “D,” or “F” grade only, “CR/NC” only, or either. When a course is designated for “CR/NC” grading only or for “A,” “B,” “C,” “D,” or “F” grading only, mention of this fact shall be incorporated in the catalog course description. Any undergraduate course may be designated for or closed to the option of “CR/NC” grading whether or not the course is a requirement for an undergraduate degree major, minor, certificate, credential, or concentration.

No course in which a final course grade of “CR” has been assigned may be used to fulfill the requirements for a master’s degree, except that the final course grade of “CR” may be permitted for master’s theses or projects (to a maximum of six units) when the individual department has specifically designated “CR/NC” grading for the thesis/project course in the department, and for fieldwork, practicum, research, or internship courses (also to a maximum of six units). The option of “CR/NC” grading for graduate students in undergraduate courses is subject to specific regulations of the individual departments regarding their graduate students and regarding the authorization for this option intrinsic to the approved course. Otherwise, no limitation exists as to the number of courses taken by graduate students under this policy. An undergraduate student may elect “CR/NC” grading in no more than a total of 24 units, of which no more than twelve may be upper division units. No more than eight units per semester may be taken for “CR/NC” grades. Exemptions from these limitations are

1. courses graded “CR/NC” taken at another institution,
2. course credit earned by examination, and
3. courses in which “CR/NC” grading is the only form of grading.

The decision to elect the “CR/NC” grading option for a course must be made by the last day to add classes. To elect “CR/NC” grading, the student must obtain the signature of the student’s major advisor and a stamp from the department/program in which the course is offered on the appropriate form. The student must then file the signed form with Enrollment Services. The decision to register for a course on a “CR/NC” basis remains in effect unless a change is requested prior to or on the last day to add classes.

The only exception to this rule is for students who declare new majors after the last day to add classes. If the newly declared major requires letter grading for the course in question and the student has elected “CR/NC” grading, then the student may request that “A,” “B,” “C,” “D,” or “F” grading be used. Such a change must be requested no later than the last day of instruction. The grading option may not be changed after the end of the semester.

Part Three: Final Assessments

1. Every course shall have a final assessment appropriate to the course that shall cover a significant proportion of the course.
2. Every course except Distance Learning Courses shall meet and have an educational experience at the date and time listed in the Final Examination Schedule.

3. All instructors shall administer the final assessment (e.g., an exam or presentation) or have it due (e.g., a paper or project) at a specified time that falls within the date and time listed in the Final Examination Schedule, as part or all of an educational experience.
4. The college dean must approve any exception to these requirements.

Part Four: Assignment of Final Course Grades

1. The instructor of record in a course section (i.e., the faculty member officially assigned to teach that section) has the exclusive responsibility and authority to assign final course grades to all students in that section, subject only to the following exceptions:
 - A. should the instructor of record be unable or unwilling to complete this task because of death, disability, separation of employment, or prolonged absence from campus during a regular academic term, the department chair or program director, following notification of the instructor of record where appropriate and with the approval of the college dean, may appoint another instructor with the most appropriate qualifications in the discipline to complete the assignment of final course grades; or
 - B. in the event of a successful grade appeal (detailed below in Part Five: Change of Final Course Grades).
2. Final course grades shall be based on at least three, and preferably more, demonstrations of competence by the student. Exceptions require the college dean’s approval.
3. In no case shall the grade on any single demonstration of competence count for more than one-third of the final course grade. Exceptions require the college dean’s approval. This provision does not abridge a faculty member’s right to assign a course grade of “F” for a single act of cheating.
4. At the start of the course and in keeping with PS 04-05 (Course Syllabi), instructors shall provide to their students in writing the grading policies and practices to be employed in the class and the rules that will apply to withdrawals.
5. Instructors shall keep a record of students’ scores on each of the demonstrations of competence on which the final course grade is based.
6. Instructors shall provide students with an opportunity for demonstration of competence, relevant to the determination of their final course grade in the course, as early as is reasonable and no later than the midpoint of the term.
7. Students have a right to be informed promptly of their scores and to review each of their demonstrations of competence with their instructors.
8. If materials submitted for a demonstration of competence are not returned, these materials must be retained for at least two subsequent semesters by the instructor. The materials shall be accessible to the department office. In the absence of the original instructor, an instructor with appropriate qualifications may be appointed by the chair to review the demonstration of competence with the student.
9. Grades reported to Enrollment Services are considered to be official and final course grades.

Part Five: Change of Final Course Grades

1. Changes of final course grades or grading symbols can be made only on the basis of an error, a successful grade appeal (detailed in the separate policy statement on grade appeals), or resolution of an "Incomplete" ("I"). A final course grade or grading symbol shall not be changed on the basis of additional work submitted, except where an "I" was recorded.
2. Original final course grades are replaced only when the change is due to an error, the grade change is the result of a grade appeal, or Enrollment Services receives a late report of final course grades for which the symbol "RD" was substituted pending receipt. Original final course grades or grading symbols are not replaced when the change of grade is the result of the resolution of an "Incomplete" or the repetition of a course. Final course grades or administrative grading symbols must be recorded for all enrollments beyond the census date.
3. Except for changes of final course grades resulting from grade appeals, all changes of final course grades must be filed within one year from the date of the filing of the first final course grade, without respect to continuous enrollment of the student. Only as the result of a successful grade appeal or the correction of an error will a final course grade be changed after the award of a degree or credential or certificate.
4. All requests for change of a final course grade shall carry the recommendation of the instructor (except as provided for in the grade appeals procedures) and the department chair and the approval of the college dean. (PS 09-07)

Final Course Grades

Final course grades will be available via "MyCSULB" approximately two weeks after the end of each semester or session.

Student Grade Record

A record is kept and grade or administrative symbol notations are indicated for all enrollments beyond the second week of instruction.

Repetition of Courses

Most courses at CSULB may be completed only once for credit. Certain other courses (see below) may be repeated for additional unit credit. Within limits (see below), any course at CSULB may be repeated for grade forgiveness or grades averaged but without additional unit credit.

Repetition of Courses with Grade Forgiveness or Grades Averaged

Undergraduate students (students who have not yet earned a baccalaureate degree) may repeat, for the purpose of excluding the grade from grade point determination (i.e., grade forgiveness), courses taken at California State University, Long Beach in which a grade of D, F, or WU was received subject to the limits established below. Undergraduate students may repeat courses in which a grade of NC was received for grades averaged only subject to the limits established below. Students pursuing second baccalaureates, credentials, certificates, or master's or doctoral degrees may not repeat courses for grade forgiveness, although they may repeat courses for grades averaged without limits.

Courses Taken First at CSULB

Eligible students may repeat a course once for the purpose of grade forgiveness if the course was repeated only at CSULB. The adjustment is automatically calculated at the end of the semester in which the course was repeated. Although the first grade will remain on the student's permanent record, only the grade and grade points of the repeated course on the second attempt will count toward the grade point averages and units earned, provided the second grade was A, B, C, or CR. If the second grade was D, F, or WU, then both grades will count toward the relevant grade point averages (i.e., grades averaged), and the attempt will count toward the limits for grades averaged detailed below. Students with extenuating circumstances may file a Petition for Exception to Academic Policy with Enrollment Services to repeat a course more than once if they fail to achieve a A, B,C, or CR. In such cases, the additional repeat will not result in the forgiveness of a prior grade (i.e. grades averaged only).

Although there is no time limit for repeating a course, no student's permanent record may be altered after a degree has been granted based on attempts to successfully repeat a course in which a grade of D, F, or WU was obtained.

Undergraduate students may repeat up to 28 units they attempted first at CSULB in order to achieve a C, B, A, or CR in the course. These students may repeat up to 16 of the 28 units for forgiveness of a prior grade in the calculations of grade point averages, subject to the provisions above. Only courses attempted at CSULB count toward the unit limits. The unit value of a course counts only once toward the unit limits regardless of the number of times the student repeats the course at CSULB. Once a student reaches the 16 unit limit, the student may not repeat any additional courses at CSULB for grade forgiveness. Students may repeat up to an additional 12 units at CSULB for grades averaged (i.e., not for grade forgiveness), after which they may not repeat any additional courses at CSULB for grade forgiveness or grades averaged. No courses repeated prior to the fall semester 2009 count toward the 28 unit limit. No courses for which a W was awarded count toward the 28 unit limit. Undergraduate students may appeal these limits for such reasons as immediately impending graduation.

Grade forgiveness shall not be applicable to courses for which the original grade was the result of a finding of academic dishonesty.

Courses Taken First at Another Institution

If eligible students wish to exclude from grade point determination a grade of D, F, or WU in a course taken at another institution, they may do so by enrolling in an equivalent course at CSULB and filing a Petition for Exception to Academic Policy with Enrollment Services. The department in which the course is taught must indicate on the petition which particular course may be taken to replace the previous grade in the calculation of grade point averages. An official transcript from the institution where the original course was taken must be on file at CSULB. Only one repeat is allowed for the purpose of grade forgiveness, and only the repeated grade and grade points will be used in the determination of grade point averages, provided the second grade was A,B,C or CR. If the repeat attempt at CSULB results in a grade of A,B,C or CR the units will not count toward the 28 unit limit. If the repeat attempt at CSULB results in a grade of D, F, NC, or WU, the student may repeat the course one additional time

but only for grades averaged, and the units of the first attempt at CSULB will now count toward the 12 unit limit.

A grade received in a course taken at another institution may not be used to replace a grade in an equivalent course taken at CSULB in the calculation of grade point averages but may be used to replace it for other purposes, subject to approval by the appropriate authority at CSULB, such as an advisor in the major.

Repetition of Courses for Credit

A student may repeat for additional units or credit toward a baccalaureate or graduate degree any course specified as repeatable for credit in the CSULB catalog up to the limits specified. Each department determines the unit limits and any other limitations for its courses that may be repeated for credit. Except for courses specified as repeatable for credit and upper-division courses in an undergraduate student's major completed more than ten years prior to graduation, an undergraduate student may not enroll in or receive unit credit for a course for which the student has already received a C, B, A, or CR, including a university-level course taken at a high school or another college or university. Courses repeated for the purpose of validating major requirements will not count either as additional unit credit or toward the calculation of grade point averages. If a student completes a course with a grade of C, B, A, or CR and wishes to register for the course again only to refresh knowledge, then the student should complete and submit the Exception to Academic Policy for Undergraduate Limit form. If approved, the student must enroll with an audit (AU). (PS 09-05)

Grade Appeals

1. Grade Appeal General Information

- 1.1. The primary authority of the instructor in the assignment of grades must be respected. An instructor's evaluation of a student's work and performance in that instructor's course must not be over-ridden merely because of a difference of opinion or evaluative judgment, provided it is formed in accordance with the generally accepted canons of the relevant discipline and of the academic institution where said course is offered. The university presumes that every instructor wants and tries to be non-prejudicial, objective, and consistent in the assignment of grades. This presumption, however, may be over-ridden by weight of evidence to the contrary.
- 1.2. Although the university presumes that grades assigned are correct, the university has established this grade appeal procedure both to protect students against academic and administrative evaluations and decisions that are prejudicial, capricious, or arbitrary, and to preserve the authority of instructors to evaluate student work in a non-prejudicial, objective, and consistent way. This procedure, available equally to undergraduate and graduate students, also preserves the rights of instructors to appeal grade appeals committee findings as outlined below. The policy in its entirety constitutes the only grade appeal procedure at California State University, Long Beach.
- 1.3. The burden of proof rests upon the student submitting the appeal.
- 1.4. Students may appeal only final grades. Students who believe that individual exams and/or assignments

demonstrate evidence of prejudicial, capricious, or arbitrary grading and that those grades had direct bearing on the final grade should include them in the grade appeal file as supporting documentation.

- 1.5. If a grade appeals committee decides to change a grade, the committee need not grant the student's suggested grade but should assign a grade that is appropriate to the work submitted. The new grade shall not be lower than the original grade.
 - 1.6. Once a student has filed a formal grade appeal, nobody may change a grade until neither the student nor the instructor continues the process or the third and final level has been concluded.
- Timelines for filing an appeal and subsequent decisions specified in this policy statement refer to instructional days during the regular fall and spring semesters. In the case of courses that do not follow the traditional semester pattern (such as short-term courses given during a regular semester or programs that require year-round enrollment), students must initiate an appeal within 40 regular semester instructional days of the termination of the course.
- 1.7. All grade appeal information, whether written or oral, is confidential.
 - 1.8. The student may seek the assistance of an advisor in the preparation of the appeal file. If department and/or college committees permit oral arguments, the advisor may accompany the student to the departmental and/or college hearing and be privy to all confidential information relevant to the case.
 - 1.9. The original file, with all documentation, recommendations, final decisions, and all other materials (including a copy of the grade change, if relevant) shall be kept by the college involved for five years. One complete duplicate set of all documentation shall be kept in the office of the Academic Senate for five years. All other parties must destroy all duplicate materials within thirty instructional days of the final decision.
 - 1.10. Each college dean and the chair of the University Grade Appeals Committee shall provide a written report at the end of each academic year to the president and the Academic Senate on the number of cases heard and the disposition of each case. College deans also shall forward their reports to the chair of the University Grade Appeals Committee.
 - 1.11. If the student's appeal is compounded (or accompanied) by an allegation of unlawful discrimination as defined by federal and state laws, the student has the right to access the university's internal unlawful discrimination process and the processes available through the U.S. Department of Education Office of Civil Rights and the state of California Fair Employment and Housing Commission. However, grades may be changed only through the grade appeal process.
- ### **2. Grade Appeals Committees**
- 2.1. Each department and extra-departmental program (hereafter referred to as program) shall form a department/program grade appeals committee. If department/program faculty members are unable to serve in sufficient number to form a grade appeals committee, the chair of the council of the relevant college shall appoint the required number of

grade appeals committee members from the ranks of college faculty. A department/program grade appeals committee shall include at least one student member appointed by the Associated Students, Incorporated.

- 2.2. Each college and the university shall have a standing grade appeals committee, each of which shall include at least one student member appointed by the Associated Students, Incorporated.
- 2.3. For courses located in a college but not in a department (college-based courses), a first-level grade appeals committee must be formed. The council of the relevant college shall appoint the first-level grade appeals committee from among the faculty members of that college. If review beyond the first-level grade appeals committee is necessary, the appeal next shall go to the regular college-level grade appeals committee.
- 2.4. For courses not located in a college or department/program (university-based courses), the Curriculum and Educational Policies Council must create a first- and second-level grade appeals committee by appointing each committee from among its members.
- 2.5. For courses cross-listed between or among different units, the unit with the prefix under which the student took the course shall handle the grade appeal.
- 2.6. Committee members, at any level, shall not participate in any way in an appeal of a grade decision in which they have been involved personally. Such participation includes, but is not limited to, assignment of the grade in question, involvement in the class in question, or grading any student work for the class in question.
- 2.7. No committee member may serve on a committee at more than one level of a single appeal.
- 2.8. The committee chair at the department/program level and at the college level shall inform all parties of the composition of the grade appeals committee and of the right to peremptory challenge. The student and the instructor involved in any given appeal shall each have one (1) peremptory challenge to remove one (1) committee member from service for that particular appeal. Departments/programs and colleges must replace any removed members within a timely fashion. If peremptory strikes of members are exercised by either party, the committee shall have an additional ten (10) instructional days to review the file and render its decision.
- 2.9. A grade appeals committee deliberating an appeal during any level of the process shall consider all information submitted and may, if necessary, obtain clarification in writing from the student, the instructor, and/or committees at other levels of the process. The committee may request information to help it understand the basis for assignment of the grade. If either party does not supply appropriate grade appeal information within a reasonable time (see 2.11.) when requested by a committee, then that committee may base its decision on the corresponding information supplied by the other party.
- 2.10. Committees shall consider only information available to all parties. All parties to an appeal shall be notified by the committee chair in writing of all responses and deadlines at all points of the appeal process and shall have full opportunity to comment in writing.
- 2.11. Distribution of materials submitted in an appeal shall allow reasonable time for response by the involved parties before

committees render their decision. "Reasonable time" for responses shall generally be understood to be ten (10) instructional days from receipt of a response.

- 2.12. After making its determination, the committee hearing the appeal shall prepare a written statement of its decision, including an explanation of its reasoning and a response to the specific issues upon which the appeal is based. The chair of the committee shall place a copy of the decision statement in the appeal file and shall send copies of the statement to all parties involved.
- 2.13. Chairs of department/program and college grade appeal committees shall provide a written report to their dean at the end of each semester detailing the number and disposition of cases heard.

3. Preliminary Informal Phase of the Grade Appeals Process: Initiation of Grade Appeals

- 3.1. Students who believe they have received a final course grade that reflects prejudicial, capricious, or arbitrary grading of their academic performance must make this belief known to the instructor(s), either orally or in writing, before they begin the formal appeal process. In accordance with the Policy on Final Course Grades, Grading Procedures, and Final Assessments, students have a right to be informed of their scores and to review each of their demonstrations of competence with their instructors. If materials submitted for a demonstration of competence are not returned to the student, such materials will be retained for at least two (2) subsequent semesters by the instructor. The materials shall be accessible to the department office. In the absence of the original instructor, an instructor with appropriate qualifications may be appointed by the Chair to review the demonstration of competence with the student.
- 3.2. In the event an instructor is not available to participate, the department/program chair in the discipline/program may appoint another instructor whose areas of expertise most closely approximates that of the instructor of record to represent the interests of the latter.
- 3.3. If the student cannot resolve the problem after informal consultation with the instructor and intends to continue the process, the next step is for the student to prepare a grade appeal file.
 - 3.3.1. The file must include:
 1. a written statement describing the reasons for the appeal and the recommendation for a new grade;
 2. a Grade Appeal Form obtained from the appropriate college office and fully completed; and
 3. supporting documents, such as the class syllabus, exams, papers, assignments or other corroborating documents, that show evidence of the alleged improper grading.
 - 3.3.2. The written statement describing the reasons for the appeal shall be addressed to the department/program chair of the discipline in which the course resides. For the purposes of this policy, a program director or coordinator is considered a program chair.
 - 3.3.3. The grade appeal file must be delivered to the department/program chair within the first 40 instructional days of the regular semester

immediately following the semester or special session in which the course was completed.

3.4. After receiving the student's grade appeal file (see 3.3.1., above), the department/program chair will consult with both the student and the instructor(s) involved to attempt a resolution to the grade appeal.

3.4.1. If the instructor of record refuses to participate, the department chair shall insert a written statement to that effect in the appeal file.

3.4.2. If a student is appealing a grade assigned by the department chair, the college dean or designee shall perform all functions of the chair in the appeals process.

3.4.3. In the case of courses that do not follow the traditional semester pattern (such as short-term courses given during a regular semester or programs that require year-round enrollment), students must initiate an appeal within 40 regular semester instructional days of the termination of the course.

4. First Level of the Formal Appeals Process: Appeal to the department/program grade appeals committee.

4.1. Should consultation fail to resolve the appeal and should the student choose to continue the process, the student must ask the chair to forward the appeal to the department/program grade appeals committee. The student must make this request in writing by the last day of instruction of the regular semester immediately following the semester or special session in which the course was completed.

4.1.1. The department/program chair shall forward the appeal to the department/program grade appeals committee within ten (10) instructional days and may include a written recommendation based upon the first, consultative step in the process (outlined in 3.4., above). The chair must also inform the instructor immediately that the formal grade appeals process has been initiated and must give copies of all materials forwarded to the grade appeals committee to the instructor and to the student.

4.1.2. The instructor may submit a written response to the student's appeal and a rationale to be considered by the grade appeals committee. The department/program chair must also provide a copy of the response and rationale to the student.

4.1.3. The student may terminate the appeal at any point by submitting a written request to withdraw the appeal.

4.2. The department/program grade appeals committee shall consider the appeal, adhering to the principles and guidelines of paragraphs 1.1., 1.10., 2.9., 2.10., and 2.11., above. A department/program grade appeals committee shall reach its decision within 40 instructional days after it receives the appeal.

4.3. If the appeal is granted by the committee, the committee will then determine a grade for the student based upon the evidence included in the appeal file (e.g., exams, papers, and assignments). The committee shall communicate its decision and rationale as specified in paragraph 2.12., above and shall also provide a copy to the department/program chair.

4.3.1. If both the student and instructor accept the committee's decision, the instructor will then have ten (10) instructional days to initiate the grade change by signing the grade change form and forwarding it to the department/program chair, at which point the grade appeal process is over.

4.3.2. If the student accepts the decision of the committee but, within ten (10) instructional days of the receipt of the committee's decision, the instructor does not either file a grade change or file an appeal of the committee's finding, the grade appeal committee chair shall sign the grade change form in the place of the instructor and forward it to the department/program chair. If the department/program chair does not sign the form within ten (10) instructional days of notification, the chair of the department/program grade appeal committee will sign in lieu of the department/program chair and then the college dean will authorize the grade change.

4.3.3. If, within ten (10) instructional days, either the instructor or the student files in writing an appeal of the department/program committee's finding, the committee chair shall, within ten (10) instructional days, forward the file (including the committee's decision and rationale) to the college grade appeals committee.

4.4. If the department/program grade appeals committee rejects the appeal, it shall communicate its decision and its rationale as provided in paragraph 2.12., above, and provide a copy also to the department/program chair.

4.4.1. If, within ten (10) instructional days, the student does not request further review of the appeal, the grade appeal process is terminated.

4.4.2. If, within ten (10) instructional days, the student communicates in writing her/his wish to continue the appeal process, the committee chair shall, within ten (10) instructional days, forward the file (including the committee's decision and rationale) to the college grade appeals committee.

5. Second Level of the Formal Appeals Process: Appeal to the College Grade Appeals Committee

5.1. An appeal of a department/program grade appeals committee decision, by either the instructor or the student, begins with a written letter of appeal to have that decision reviewed. This letter of appeal should be directed to the appropriate college grade appeal committee (also called college committee in this document) by way of the department/program chair. The department/program chair must then inform within five (5) instructional days the instructor, student, and college dean in writing that an appeal has been filed and the dean must inform within five (5) instructional days the appropriate college grade appeals committee in writing that an appeal has been lodged. The chair of the department/program grade appeals committee must forward within five (5) instructional days the appeal file, including the committee's decision and rationale, to the college dean who must immediately inform the college grade appeals committee that the grade appeal file has been received and is ready for review.

- 5.2. The committee chair at the college level shall inform all parties of the composition of the grade appeals committee and of the right to peremptory challenge. The college grade appeals committee shall normally render its review decision within twenty (20) instructional days of receipt of the grade appeal file. However, if peremptory strikes of members are exercised by either party, the committee shall have an additional ten (10) instructional days to review the file and render its decision.
- 5.3. The college grade appeals committee shall review the grade appeal file, the department/program grade appeals committee's decision and rationale, and any rebuttal to that decision and rationale provided by the student or instructor in the light of paragraphs 1.1. through 4.4., above. During its review it may consider and act upon matters of both procedure and substance.
- 5.4. As a result of its review, the college grade appeals committee may confirm the decision of the department committee or it may recommend re-consideration.
- 5.4.1. If the college grade appeals committee confirms the decision of the department/program grade appeals committee, and if neither the instructor nor the student requests further review, then the grade appeal process ends. The chair of the college committee must inform in writing all parties, including the department/program chair and the department/program grade appeals committee. If a grade change has been recommended by the department/program committee but held in abeyance pending the appeal, the department/program chair shall, within ten (10) instructional days, authorize the grade change by filing the appropriate form. In the event that the department/program chair does not effect the change within ten (10) instructional days of notification, the chair of the college grade appeal committee will sign in lieu of the instructor or the department/program chair. The college dean will then authorize the grade change.
- 5.4.2. If either the student or the instructor communicates in writing her/his intention to continue the appeal process, the college committee chair shall, within ten (10) instructional days, forward the file (including the college committee's decision and rationale) to the University Grade Appeals Committee.
- 5.4.3. If the college grade appeals committee recommends re-consideration, it shall put in writing its rationale (which may involve matters of procedure or substance) and any recommendations it may have (which may include recommendations of substance or procedure, new constitution of the department/program committee, or other recommendations toward realizing a fair evaluation of the matters at issue). The chair of the college grade appeal committee shall return the grade appeal file, including the rationale and recommendations of the college committee, to the department/program grade appeals committee for re-consideration and supply copies of the recommendations to all other parties, including the department/program chair.
- 5.5. When a grade appeal decision has been returned for re-consideration, the department/program grade

appeals committee shall review the rationale and recommendations of the college grade appeals committee. It shall undertake to remedy procedural faults identified by the college committee. It shall consider anew the substance of the grade appeal, with due attention to whatever recommendations have been advanced by the college committee. The department/program grade appeals committee shall render a new decision on the appeal, which may be a reiteration of its original decision or may be a different decision (which may, but need not be, in agreement with the college committee's recommendations).

- 5.5.1. The department/program grade appeals committee shall render its reconsideration within twenty (20) instructional days of receipt of the grade appeal file. If peremptory strikes of members are exercised by either party, the committee shall have an additional ten (10) instructional days to review the file and render its decision.
- 5.5.2. Upon reaching its decision, the department/program grade appeals committee shall report, in writing, its response to all procedural faults identified by the college committee and shall again put in writing its rationale for its decision on the substance of the grade appeal. The chair of the department/program grade appeals committee shall forward these reports with the grade appeals file to the college grade appeals committee and supply copies to all other parties, including the department/program chair.
- 5.6. The college grade appeals committee shall review the re-considered decision of the department/program committee. It may seek clarification from the department/program committee. It shall either confirm or disagree with the decision of the department/program committee. The chair of the college grade appeals committee must inform all parties in writing of its decision.
- 5.6.1. If within ten (10) instructional days following notification of the college committee's decision, the student or instructor communicates in writing her/his wish to continue the appeal process, the committee chair shall forward the file (including the committee's decision and rationale) to the University Grade Appeals Committee.
- 5.6.2. If a grade change is recommended by the committee and the change is not appealed by either the instructor or the student (in compliance with 4.5.1., above), the college grade appeals committee chair shall, within ten (10) instructional days of the college committee's action, inform the college dean, in writing, of its decision and the college dean will authorize the grade change as determined by the committee.

6. Third Level of the Appeals Process: Appeal to the University Grade Appeals Committee

- 6.1. The University Grade Appeals Committee shall function as the third and final level of the grade appeals process. The University Grade Appeals Committee may communicate with the student, the instructor, and the department/program and college grade appeals committees as needed.

- 6.2. The University Grade Appeals Committee shall normally render its decision within twenty (20) instructional days of receipt of the grade appeal file.
- 6.3. The University Grade Appeals Committee shall review the grade appeals file, the lower level committees' decisions and rationales, and any rebuttals to those decisions and rationales provided by the student or instructor. It may consider both matters of procedure and substance. The committee may seek further clarification from either lower level committee or the student or instructor as needed. The University Grade Appeals Committee shall either confirm or disagree with the decision of the college grade appeals committee.
- 6.3.1. If the University Grade Appeals Committee determines that the grade appeal guidelines have not been followed, it may send the appeal back to the department/program or college grade appeals committee for reconsideration.
- 6.3.2. In the event that a grade change is authorized by the University Grade Appeals Committee, the chair of the University Grade Appeals Committee shall ensure that the appropriate change-of-grade form is properly signed by the provost and filed with Enrollment Services.
- 6.3.3. The chair of the University Grade Appeals Committee shall inform all parties to the grade appeal, in writing, of the committee's decision.
- 6.3.4. The rendering of the University Grade Appeals Committee's decision, notification of all parties of the decision, and effecting of a grade change where authorized by the committee, completes the appeal process.

Probation and Disqualification

Academic Probation

Undergraduate students are placed on academic probation if at any time their cumulative grade-point average in all college work attempted or their cumulative GPA at California State University, Long Beach falls below 2.0 (C). Graduate students are placed on academic probation when their cumulative grade-point average or grade-point average on all courses applicable to the degree falls below 3.0. Other post-baccalaureate students are placed on academic probation when their cumulative grade-point average falls below 2.5.

Undergraduate students will be removed from academic probation when their cumulative grade-point average in all college work attempted and their cumulative grade-point average at California State University, Long Beach is 2.0 (C) or higher. Graduate students will be removed from academic probation when their overall grade-point average and grade-point average on all courses applicable to the degree are 3.0 (B) or higher.

Other post-baccalaureate students will be removed from academic probation when their overall grade-point average is 2.5 or higher.

Administrative Academic Probation

An undergraduate or graduate student may be placed on administrative-academic probation by action of appropriate campus officials for any of the following reasons:

1. Withdrawal from all or a substantial portion of a program of studies in two successive semesters or in any three semesters, unless the withdrawals were directly associated with a chronic or recurring medical condition or its treatment;
2. Repeated failure to progress toward the stated degree objective or other program objective (when such failure appears to be due to circumstances within the control of the student);
3. Failure to comply, after due notice, with an academic requirement or regulation which is routine for all students or a defined group of students (e.g., failure to take placement tests, failure to complete a required practicum).

Academic Disqualification

Students who remain on academic probation for more than two consecutive semesters are subject to academic disqualification.

Undergraduate students on academic probation are subject to academic disqualification when:

1. As freshmen (fewer than 30 semester-hours of college work completed), their grade-point average falls below 1.5 on all units attempted or on all units attempted at California State University, Long Beach;
2. As sophomores (fewer than 59 semester-hours of college work completed), their grade-point average falls below 1.7 on all units attempted or on all units attempted at California State University, Long Beach;
3. As juniors (60 to 89 semester-hours of college work completed), their grade-point average falls below 1.85 on all units attempted or on all units attempted at California State University, Long Beach;
4. As seniors (90 or more semester-hours of college work completed), their grade-point average falls below 1.95 on all units attempted or on all units attempted at California State University, Long Beach; and

In addition to the above disqualification standards applicable to students on probation, individuals not on probation may be disqualified when both of the following circumstances exist:

1. At the end of any semester, if the student has a cumulative grade-point average below 1.0; and
2. The cumulative grade-point average is so low that in view of the student's overall educational record it seems unlikely that the deficiency will be removed within a reasonable period.

Graduate and post-baccalaureate students are subject to disqualification if while on probation they fail to earn grades of sufficient quality to remove themselves from probationary status. Disqualification will bar such students from any further enrollment at CSULB.

Disqualification From Impacted Programs

Students who fail to maintain an overall GPA of 2.0 will be immediately removed from an impacted major and placed in the undeclared category or in a general category appropriate to the discipline. To be reinstated as majors in the impacted program, they must reapply at the time when change-of-major requests are normally accepted.

Administrative Academic Disqualification

A student who has been placed on administrative-academic probation may be disqualified from further attendance if:

1. The conditions for removal of administrative-academic probation are not met within the period specified;
2. The student becomes subject to academic probation while on administrative-academic probation;
3. The student becomes subject to administrative-academic probation for the same or similar reason for which they have been placed on administrative-academic probation previously, although not currently in such status.

In addition, an appropriate campus administrator may disqualify a student who at any time during enrollment has demonstrated behavior so contrary to the standards of the profession for which the student is preparing as to render her/him unfit for the profession. In such cases, disqualification will occur immediately upon notice to the student, which shall include an explanation of the basis for the action, and the campus may require the student to discontinue enrollment as of the date of the notification.

For students who subsequently become eligible for reinstatement (see below), disqualification under the provisions of the preceding paragraphs constitutes a break in "continuous enrollment" within a degree major program; therefore, students disqualified may not elect any regulations in effect prior to disqualification.

Reinstatement

In order to be considered for reinstatement to CSULB, a disqualified student must demonstrate progress toward the degree. This demonstration can be achieved by:

1. Completing courses through College of Continuing and Professional Education at CSULB; or
2. Completing classes at other regionally accredited academic institutions.

All classes considered for reinstatement in the student's petition must be applicable for degree credit and toward the student's General Education or major requirements.

Progress toward meeting the GPA requirement can be demonstrated by reducing the deficiency in grade-point average by one-half at CSULB or by making equivalent grades in courses taken at other regionally accredited academic institutions. Grades earned at other regionally accredited academic institutions will not reduce the deficiency in the CSULB grade-point deficiency. Grades earned elsewhere are only indicators of academic ability.

After reducing the deficiency in the CSULB grade-point average and/or demonstrating academic ability at other regionally accredited academic institutions, the student may petition the Academic Appeals Committee for reinstatement. The petition must present evidence that the student is likely to achieve a satisfactory grade-point average and to complete requirements for the degree in accordance with the Timely Graduation Policy. The Academic Appeals Committee will only consider the petition for reinstatement of students who have remained outside of the university for at least one regular (fall or spring) semester after their dismissal.

Petition forms are available through Enrollment Services and must be filed by December 1 for the spring semester or July 1 for the fall semester. Petitions received after that date will be returned to the student to be submitted for consideration for a future semester. (PS 09-06)

Disqualified undergraduate students taking courses through College of Continuing and Professional Education will be eligible to enroll in a limited amount of courses. Fall and Spring Semesters: 6 units or two courses, as long as enrollment in these two courses does not exceed 7 units. Summer Session: 6 units or two courses, as long as enrollment in these two courses does not exceed 7 units. Winter Session: 4 units.

The University Center for Undergraduate Advising offers Reinstatement Workshops for Undergraduate Students who have been academically disqualified. The workshops help students to learn how to become reinstated to the university. For more information or to sign up for the workshop call (562) 985-7847 or visit the University Center for Undergraduate Advising, located in the Horn Center Room 103.

Academic Appeal of Disqualification

Undergraduate students who have made academic progress and believe that there were extenuating circumstances that led to their academic disqualification may file an appeal asking to extend their academic probation for an additional semester. Students must submit their appeals immediately following notification by Enrollment Services that they have been disqualified. The Appeal of Disqualification information and form are available through the University Center for Undergraduate Advising.

Academic Renewal

An undergraduate student may petition to have all the grades and units received during one or two semesters (or up to three quarter terms) of undergraduate work disregarded in the computation of grade point averages and academic standing. The work so disregarded may have been taken at any collegiate-level institution but no work taken during the disregarded terms, even if satisfactory, may apply toward baccalaureate requirements. All grades and units attempted will remain on record. At least five calendar years must have elapsed since the work in question was completed and the student must have subsequently completed 15 semester units with a 3.0 GPA (or 30 semester units with a 2.5 or 45 semester units with a 2.0) at CSULB before filing a request for disregarding the coursework. At the time of filing the petition the student must have either already met all requirements for graduation other than one or more grade point averages or all other remaining requirements are in progress during the semester of filing. No student may use academic renewal to raise any grade point average above what is required for graduation.

Students shall submit petitions for academic renewal to Enrollment Services. Final determination shall be made by the provost (or designee) in consultation with the Academic Appeals Committee. The petitioning student must certify that the work to be disregarded was substandard and not reflective of her or his current scholastic ability or present level of academic performance. This certification must include a statement explaining the extenuating circumstances causing the substandard performance during the terms in question.

The student must also provide evidence that it would be necessary to complete additional units or semesters in order to qualify for the baccalaureate degree if the request were not approved. (PS 09-08)

Academic Appeals

Students may petition for exception to academic policy. Typically, exception requests involve issues such as record errors, General Education substitutions or waivers, reinstatement, exceptions to the repeat/delete policy, and academic renewal.

Students can obtain the "Petition for Exception to Academic Policy" forms from the Office of Enrollment Services, Brotman Hall Room 101, or the Academic Advising Center, located in Horn Center, Room 103. This written appeal will be directed to the Academic Appeals Committee. Petitions must be filed with the Office of Enrollment Services, BH-101.

Cancellation of Registration or Withdrawal From CSULB

Students who find it necessary to cancel their registration or to withdraw from all classes after enrolling for any academic term are required to follow the university's official withdrawal procedures. Failure to follow formal university procedures may result in an obligation to pay fees as well as the assignment of failing grades in all courses and the need to apply for readmission before being permitted to enroll in another academic term. Information on canceling registration and withdrawal procedures is available online at the Enrollment Services website.

Students who receive financial aid funds must consult with the Financial Aid Office prior to withdrawing from the university regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. Students who have received financial aid and withdraw from the institution during the academic term or payment period may need to return or repay some or all of the funds received, which may result in a debt owed to the institution.

Refund of Student Fees

Regulations governing the refund of student fees in the California State University system are prescribed by the CSU Board of Trustees; see California Code of Regulations, Title 5, Education, Section 41802.

Educational Leave

Any registered student, undergraduate or graduate, in good academic standing may request an Educational Leave. Students requesting an Educational Leave must complete an Educational Leave Form, in advance, including an explanation of their reasons for seeking the leave and a statement of when they intend to resume academic work. The completed form should be submitted to the Office of Enrollment Services, Brotman Hall 101.

The minimum initial leave will be one full semester; the maximum will be one calendar year. A student may submit, in advance, a new educational leave request form for an extension of leave. Under no circumstances will the total number of approved educational leaves exceed two, nor will the duration of approved educational leaves extend beyond two calendar years.

Students returning from an approved educational leave are not required to submit an application for readmission to the university. Students returning from an absence for which an educational leave was appropriate but not approved in advance must reapply for admission and pay the reapplication fee.

Graduate students who plan to enroll for credit at another institution of higher education during the leave period must obtain prior approval for the transfer of course credit to the student's program from the department graduate advisor, department chair, and the College Dean or designee.

The period of an educational leave is counted in the calculation of elapsed time under the regulations governing the maximum period for completion of degree and remediation requirements. (See Baccalaureate and Graduate sections of this catalog).

For the period of an educational leave the student's rights under the "Election of Regulations" rule are preserved, maintaining the right of the student to elect regulations as if he or she had maintained continuous attendance.

An educational leave presupposes no expenditure of University resources or faculty and staff time on behalf of the student during the period of the leave. In addition, no computer facilities, no library privileges, and no student services are available to a student on educational leave.

Credit Hour

As of July 1, 2011 federal law (600.2 and 600.4) requires all accredited institutions to comply with the federal definition of the credit hour. For all CSU degree programs and courses bearing academic credit, the "credit hour" is defined as "the amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours."

A credit hour is assumed to be a 50-minute period. In courses, in which "seat time" does not apply, a credit hour may be measured by an equivalent amount of work, as demonstrated by student achievement.

BACCALAUREATE DEGREE INFORMATION

Student Success and Graduation

CSULB's core academic purpose is to graduate students with highly valued degrees. Graduation rates for CSULB students have increased dramatically in recent years and the length of time it takes students to complete degrees has decreased. The availability of needed courses and support by academic advisors and learning communities greatly improved graduation rates. These improvements were key to the naming of CSULB as one of "America's Best Colleges and Universities" by *U.S. News and World Report* and "No. 3 best value public college in the nation" by *America's Best Value Colleges*.

Frequently Asked Questions

Successful students know the answers to these frequently asked questions. Please read them carefully. Knowing these answers can help you avoid pitfalls during your first semesters on campus. For further information, see this section of the *Catalog* or contact the University Center for Undergraduate Advising at (562) 985-4837.

- 1. How can I tell what requirements I still need to meet before I graduate?** Use MyCSULB to check your Academic Requirements Report. Icons next to each requirement reflect the status of that requirement. You can bring a printout of the Academic Requirements Report to your major advisor or the University Center for Undergraduate Advising for assistance.
- 2. Can my General Education (GE) courses be used for both GE and for my major ("double counted")?** Under the 2008 GE pattern, up to ten units may double count for the major and GE. Students under the 1999 GE pattern follow the previous double count GE/major rules. See an advisor in the University Center for Undergraduate Advising (Horn Center, Room 103, 562-985-4837).
- 3. How many units will transfer from a California Community College to CSULB?** All bachelor's level courses transfer, but only 70 units of transferable course work will apply to your bachelor's degree. Additional transferable course work will receive subject credit only.
- 4. I transferred from a California Community College. Do I have to take any General Education courses?** If you have received GE certification, you are required to complete an additional nine (9) units of upper-division GE courses. If you have not been certified as having met the transfer pattern, you must meet the CSULB GE requirements.
- 5. What does General Education (GE) Certification mean?** There are three GE certification processes. Two may be completed at the California Community College (CCC). They are either (1) the California State University (CSU) Transfer Pattern or (2) the Intersegmental General Education Transfer Curriculum (IGETC). The third certification process may be completed at another CSU. In all cases, GE certification means that you have completed your lower-division GE at a CCC or at another CSU.

6. Does having an AA degree from a California Community College mean I am GE Certified? Usually not. The minimum requirements for most AA degrees do not include the lower-division GE pattern required by CSULB. CSULB also requires an additional 9 units of upper-division GE courses.

7. What is partial General Education (GE) Certification? Partial Certification means that transfer students have completed subject and unit requirements in some GE categories, but not others.

Baccalaureate Degrees

CSULB offers 71 baccalaureate majors (see a list of degree programs and admission requirements at the beginning of this *Catalog*). Baccalaureate degrees are constructed of three interrelated areas: (1) the breadth component, called General Education (GE) Program, which is the basis for the baccalaureate degree with courses that offer training in general skills, methodologies, and habits of thought; (2) the depth component, or major, which establishes an understanding of the breadth of a body of knowledge, competence in the fundamental skills and methodologies of the discipline, and understanding and skill at an appropriate depth in one or more facets of the discipline; and (3) the elective component that provides the possibility for personal exploration, enhancement, and development to complement the rest of the degree program (and might include a minor and/or a certificate program).

Requirements for the Baccalaureate Degree

1. Completion of a minimum of 120 units for the Bachelor of Arts. Completion of the minimum number of units which could range from 120 to 140 required by the major program for the Bachelor of Science, Bachelor of Fine Arts, or Bachelor of Music degrees. See the description of the requirements for each major for the specific number of units required. There are restrictions (below) on how many units in certain categories may be counted toward the minimum unit requirement.
2. Completion of at least 40 upper-division units (courses numbered 300-499). No course taken at any community college may count toward fulfillment of these 40 units.
3. Completion of at least 30 units in residence at CSULB of which at least 24 must be upper-division and at least 12 must be in the major. Units earned in Extended Education or Open University cannot be counted toward fulfillment of the residence requirement.
4. Completion of the General Education program, described below, including at least 9 units in upper-division courses completed at CSULB.
5. Completion of the specific course and unit requirements for the academic major, as shown in the alphabetic listing for the major department. If the requirements are changed during students' continuous attendance at CSULB, they have the right to meet either the requirements in effect when they entered the major or the requirements in effect at the time they graduate. All upper-division courses required for a major must be completed within the ten-

year period preceding award of the baccalaureate degree. Courses completed prior to this ten-year period can be revalidated by such demonstrations of competence or knowledge of the subject as may be prescribed by the department offering the course.

The on-line *Catalog* Table of Contents has a link at the top to "Road Maps" that shows a suggested sequence of courses to enable students to complete all degree requirements in a timely fashion. Since individual circumstances can vary, students should consult their major advisors for assistance in planning appropriate programs.

6. Satisfactory fulfillment of the Graduation Writing Assessment Requirement (GWAR) (See a description of the requirement at the end of this section.)
7. Achievement of a minimum 2.0 ("C") grade-point average in each of the following:
 - a. The entire college record.
 - b. All units attempted at CSULB.
 - c. All courses in the major.
 - d. All upper-division courses in the major completed at CSULB.
8. Formal approval by the faculty of the university.

Student Levels

Freshman	0.0 to 29.9 units
Sophomore	30.0 to 59.9 units
Junior.....	60.0 to 89.9 units
Senior	90.0 or more units
Postbaccalaureate	holding a baccalaureate or equivalent degree

Restrictions on Units That May Be Counted Toward the Minimum Required for the Baccalaureate

Activity Courses

Activity courses provide practice in such areas as music, dance, physical education and Student Recreation and Leadership. Except as required by a student's major, students may apply to the degree no more than eight units each of activity course credit in music, dance, theatre arts, or kinesiology and no more than four units of activity course credit in SRL, up to a total of no more than 20 units in all areas.

Transfer Courses

No more than 70 units of courses from a Community College may be counted toward the minimum unit requirement for the baccalaureate. (For more detail, see the section on Transfer Credit in the Academic Information section of this *Catalog*.)

Courses Taken by Non-Matriculated Students in Any Term

No more than 24 units total taken during any term while in non-matriculated status may be used to fulfill any undergraduate degree requirements. All students who have not been formally admitted to CSULB and who take courses here are non-matriculated students. Courses taken by incoming freshmen during the summer prior to their first fall are considered non-matriculated units.

Open University

Open University (Concurrent Enrollment) — Through Open University, students who are NOT matriculated in CSULB may take regular university classes during spring or fall semesters for academic credit on a "space available" basis with permission of the department chair and the course instructor. Open University enrollment does NOT constitute admission to CSULB. For more information call the College of Continuing and Professional Education at (562) 985-5561.

Self Support Courses

There is no limit on CCPE Self Support course credit, including Winter session, applicable to the degree if taken while in matriculated status in the degree program.

General Education

The Significance of General Education

The components of an undergraduate education include the major, in which the student acquires depth of knowledge, electives that allow a student to explore personal or career-related interests, and General Education (GE). General Education allows students to develop competency in academic skills that are essential to all academic majors. In addition, General Education offers students broad knowledge beyond the focus of the major, as well as exposure to the rich diversity of the human experience.

The General Education program at CSULB sequentially introduces students to the mastery of academic skills that will provide graduates with an understanding of self, the physical world, the development and functioning of human society, and its cultural and artistic endeavors, as well as an understanding of the methodologies, value systems, and thought processes employed in human inquiries. It involves three stages: Foundation, Explorations, and Capstone. Students who begin their college careers at CSULB will complete all three stages, while transfer students who enter the university with a Full General Education Certification will be expected to complete the final (Capstone) stage only, and the Human Diversity and Global Issues requirements if not met through transfer coursework.

General Education Breadth requirements are specified pursuant to Title 5, California Code of Regulations, Sections 40402.1, 40403, 40405, 40405.1, 40405.2, 40405.4, and 40508, and Sections 1 and 2 of Chapter III of the Standing Orders of the Board of Trustees of the California State University, and Executive Order 1065. CSU General Education Breadth requirements have been designated to complement the major program and electives completed by each baccalaureate candidate to assure that graduates have made noteworthy progress toward becoming truly educated persons. These requirements are designed to provide the knowledge, skills, experiences, and perspectives that will enable CSU students to expand their capacities to take part in a wide range of human interests and activities; to confront personal, moral, and social problems that are an inevitable part of human life; and to cultivate both the requisite skills and enthusiasm for lifelong learning.

The Essential GE Student Learning Outcomes

Upon completion of the GE requirements, CSU students should show mastery in each of the following:

Knowledge of Human Cultures and the Physical and Natural World

Achieved through study in the Sciences and Mathematics, Social Sciences, Humanities, Histories, Languages, and the Arts

Intellectual and Practical Skills, including:

Written Communication
Oral Communication
Critical Thinking
Quantitative Reasoning
Information Literacy and Technology Literacy
Teamwork
Creativity, Inquiry, and Discovery

Personal and Civic Responsibility, including:

Global Competencies
Intercultural Competence (cultural values/traditions-U.S.)
Ethical Reasoning and Social Responsibility
Self-Understanding
Foundation and Skills for Lifelong Learning

Integrative Learning, including:

Synthesis and Interdisciplinary Methods of Inquiry

General Education Requirements (48 units*)

The General Education curriculum is organized as three sequential phases. The first is the Foundation, a group of courses designed to provide fundamental learning skills. The second is Explorations, courses distributed across the curriculum that are intended to provide an opportunity to explore the various way of acquiring and examining knowledge while continuing to develop learning skills. The third is the Capstone, designed to integrate knowledge and skills developed earlier in the curriculum. (*Students majoring in departments within the College of Engineering are required to take only 45 units of GE).

All students must complete a distribution pattern described below.

English Language Communication and Critical Thinking (Category A, 9 units): Includes three Foundation 3 unit Courses: Written Communication in English (A1), Oral Communication in English (A2), and Critical Thinking (A3).

Science, Technology & Mathematics/Quantitative Reasoning (Category B, 9 units): Includes 3 units in life sciences (B1a) and 3 units in physical sciences (B1b) with one lab course associated with either the life sciences or the physical sciences. This requirement also includes the fourth Foundation 3 unit course in Mathematics/Quantitative Reasoning (B2).

The Arts & Humanities (Category C, 9 units): Includes 3 units in the arts (C1), 3 units in humanities (C2), and an additional 3 units in either the arts or the humanities.

Social Sciences & Citizenship (Category D, 9 units): Includes 3 units in US history (D1a) and 3 units covering the US Constitution, including CA State & local government (D1b). This requirement also includes 3 additional units in social sciences & citizenship (D2).

Lifelong Learning and Self-Development (Category E, 3 units): Includes 3 unit course that deals with the human being as a psychological, physiological, and social organism.

Capstone (Category F, 9 units): Includes at least nine (9) units chosen from approved Capstone courses (three courses). All students must fulfill 3 units (1 course) of their 9 units of capstone (three courses) by completing an approved Writing Intensive Capstone course. **(Note: At this time, students will not be required to complete a Writing Intensive capstone until such time that the campus determines that it can offer enough courses to meet student demand. Students must complete any 9 units of capstone.)**

Additional GE Requirements: The 48 units above must include courses that also fulfill the following requirements:

Global Issues (GI, 3 units): Requires a course designed to introduce students to cultures and places outside of the US.

Human Diversity (HD, 3 units): Requires a course designed to introduce students to diverse populations and cultures within the US.

General Education Policies

Only courses on the General Education Master Course List at the time the student takes the course shall count for General Education.

Because the program is intended to provide breadth, a minimum of thirty-five (35) units of the student's General Education courses must be outside the student's major department. "Courses in the major department" include all courses housed in the department offering the major, regardless of prefix. (For example, courses in French and in Italian are in the same department.)

A cross-categorized course may be counted (at the student's option) in any one of the approved categories A-F, but not in more than one.

Where appropriate exams exist, Foundation and Explorations requirements may be met by external examinations, such as Advanced Placement or International Baccalaureate exams.

Students are expected to complete the Capstone requirement at CSULB. An exception will be made for students who transfer from another CSU campus after completing some of the upper-division GE requirement at that campus. To be accepted toward the Capstone requirement at CSULB, the transfer course must be approved for upper division general education credit at the campus offering the course. Other courses may be used, on an individual basis, to meet the requirement if they are approved for General Education at the campus offering the course and if the purpose of the course meets the criteria for a CSULB Capstone course.

Students who transfer from baccalaureate institutions other than the CSU after completing upper-division General Education courses may petition to have one or more such courses accepted toward the Capstone requirement. Such petitions will be evaluated on the basis of the criteria above.

GE Requirements for Returning and Transfer Students

Students who have not maintained continuous attendance status shall be subject to the General Education requirements in effect at the time of their reentry to the university, with the following exceptions.

Previous CSULB students who were under earlier General Education requirements and who before breaking continuous attendance needed no more than three additional courses to complete the entire General Education requirement shall be allowed to complete the General Education requirement in effect at the time of the previous attendance. However, all students must complete at least 9 units of upper division General Education courses, of which a minimum of 6 units must be Capstone courses.

Previous CSULB students who were under the earlier General Education requirements and who before breaking continuous attendance completed one or more upper-division GE courses shall be required to complete additional Capstone courses as needed to complete the total of 9 upper-division units. At least two of the courses in the overall program must be Capstone courses.

Transfer students who enter CSULB with full GE certification from a California Community College must complete both the Human Diversity in the U.S. and the Global Issues requirements if these requirements were not met through transfer, but these students need not complete any other GE courses except the Capstone, which cannot be met through transfer from a community college. Transfer students who enter CSULB without full GE certification or subject-area (partial) certification from a California Community College must either complete the CSULB GE requirements, or complete and obtain a GE certification from a California Community College which will be honored as meeting CSULB's lower-division GE requirements.

Majors

Choosing a major is one of the most important, and sometimes most difficult, academic decisions students will make during their college careers. There may be many possible choices of major that would provide preparation for a given career. The section on Degrees, Options, Minors, and Certificates earlier in this *Catalog* shows the many choices available and where to find information on each. Many departments have additional information posted on their web pages, accessible from the university's home page. Students are encouraged to interview faculty in possible majors and to seek the help of student services professionals to assist them in making this important decision.

Declaration of a Major

To help ensure timely completion of graduation requirements, students who have a total of 60 units completed must have declared a major before they may register for the next term. Upper-division transfer students are required to declare their intended major on their application for admission. (PS 06-04)

Change of Major or Other Objective

Undergraduate students declaring a major for the first time or changing from one degree program or degree option program to another must meet with the new major's academic advisor who will submit a change of major to the Office of Enrollment Services electronically.

Students who are candidates for a certificate or credential program must also file a Request to Graduate. (Please see Graduation section of the *Catalog*.)

The evaluation of credits transferred to the University is based in part upon the objective indicated on the application

for admission. Students should be aware, therefore, that under some circumstances transfer courses accepted for one purpose may not be acceptable for other purposes.

Double Major

Students may complete the requirements for two baccalaureate programs concurrently in accordance with the Timely Graduation Policy. One diploma will be issued reflecting both majors. A course, or courses, may be used to satisfy the individual requirements of both majors, without limit, as long as the required pattern of course work is completed for each major.

Minors

A minor is a structured selection of courses by which a student can enrich his or her academic preparation through concentrated study of a discipline that is different from, but may be related to, the student's declared major. A minor is a means to augment or complement the major by broadening the student's academic experience or serving as preparation for a specific career. Usually a minor is not required for the baccalaureate; however, students may elect to complete a minor and have that fact noted on their records. Students should consult with an advisor in their major department for recommendations on suitable minor fields of study.

A minor consists of a minimum of 18 units, as specified by the department or program, at least nine of which must be upper-division. The minor may be in a single subject or interdisciplinary. Students may not declare or receive a minor in the same subject as the major, and the major and minor may not have the same title. The description of each minor shall have a statement listing all majors, if any, that may not be combined with that particular minor. The minimum overall GPA in courses toward the minor is 2.0. A minimum of six units of course work toward the minor must be taken at CSULB.

Students should refer to the requirements of the department and college of their major to see whether a minor is required for that major. Even if a minor is not required, students may elect to complete one or more minors from those available and have that so noted on their transcripts. Unlike certificates, minors are awarded only as part of a baccalaureate degree. Students may not finish a minor after they have graduated, except in conjunction with a second baccalaureate degree.

Certificate Programs

California State University, Long Beach offers 40 baccalaureate-level programs leading to the award of a Certificate. Certificate programs differ from baccalaureate majors and minors in their emphasis on practical and applied uses of knowledge in a specific area of human enterprise. Certificates may only be earned concurrently with or following the award of the baccalaureate degree. Certificate programs must require at least 18 units of course work, of which at least 15 units must be at the upper-division level. Many certificates require 24 to 27 units. Courses taken to fulfill the requirements for the baccalaureate may also be applied to certificate requirements. A maximum of two 500-level courses, taken by eligible students in their senior year, may be applied to a baccalaureate certificate program. Extension and/or transfer credit may comprise no more than one-fourth of the course work used to meet baccalaureate certificate requirements. A

grade-point average of at least 2.0 must be maintained in the certificate program's course work.

Students wishing to pursue a baccalaureate certificate program should consult the relevant department as early as possible to receive early advisement on the program. Students wishing to receive a certificate must so indicate on the Request to Graduate form filed with the Office of Enrollment Services.

Additional Baccalaureate Degrees

A graduated student who wishes to pursue an additional baccalaureate degree may do so by completing a minimum of 30 units in residence after graduation, of which 24 units must be upper-division courses and 12 units must be in the major. (See the *Catalog* section on admissions for restrictions on the admission of candidates for a second baccalaureate degree.)

A senior, with advance approval of the Academic Appeals Committee, may earn a maximum of twelve units toward the additional degree while in residence for the first degree. Any courses to be applied to the additional degree must be specified and taken in addition to those needed to satisfy the requirements of the first degree.

Students applying for and accepted to a second baccalaureate degree program who have received their first baccalaureate degree or equivalent from an institution outside of the U.S. will be required to complete any deficiencies in the General Education pattern and will be evaluated for General Education on the same basis as undergraduates.

Enrollment of Seniors in Graduate Courses

Undergraduates may enroll in graduate courses only under the conditions specified below:

Graduate Credit Earned as a Senior

Graduate credit usually may not be earned in advance of the baccalaureate degree. Seniors may, however, be granted approval to earn a maximum of 12 units of course work in the 400 and 500 levels designated as acceptable for graduate credit and taken at this university towards their prospective graduate programs (based upon faculty recommendation, academic performance (in general a grade-point average of 3.0 (B) in the major), and promise of academic achievement in post-graduate study). Approval is subject to the following conditions: (a) the course work must be in addition to that required for the undergraduate major; and (b) the undergraduate student must have an approval from the departmental graduate advisor and the department chair prior to enrollment. (PS-92-08)

In those areas in which graduate credit is for a credential only, approval must be obtained from the appropriate department in the College of Education. Requests submitted after completion of course(s) will not be approved.

Senior Enrollment in Graduate Courses for Undergraduate Credit

Under special conditions, seniors who have a 3.0 grade-point average or better in their major and who have adequate undergraduate preparation in the subject may enroll in up to 12 units in the 500-599 series to fulfill the

elective requirements of the bachelor's degree. The course work may not be applied to the units of 500-600 level course work required by the department or college for the master's degree. The student must have an approval from the instructor and department chair before registration in the class(es) is permitted. (PS 92-09)

Graduation Writing Assessment Requirement (GWAR)

In order to obtain a degree or certificate from CSULB, all students must demonstrate upper-division competence in academic writing in English. Continuing students who have earned 65 units and transfer students in their first semester of residency are required to take the Writing Proficiency Exam (WPE). All students must attempt to fulfill the GWAR before filing a request to graduate.

Undergraduate students fulfill the GWAR by one of the following:

1. Receiving a score of 11 or higher on the WPE;
2. Enrolling in a GWAR course and submitting a portfolio for assessment after attempting the WPE once.
3. Passing another approved CSULB assessment of writing competence;
4. Having already fulfilled the GWAR at another CSU campus prior to transfer to CSULB;
5. Earning a CSULB-approved passing score on the writing portion of an approved standardized writing assessment, such as the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT).

Information about GWAR courses and alternative GWAR assessments is available at www.csulb.edu/gwar.

Effective Fall 2010, students who are taking the WPE for the first time will be required to satisfy the GWAR within two semesters of enrollment following their first WPE attempt. To ensure that the GWAR is satisfied within the specified time, students in this group must comply with the following requirements determined by their WPE score:

1. Students receiving scores of 11 or higher have satisfied the GWAR and may proceed with completion of other degree requirements.
2. Students receiving scores of 9 or 10 must enroll in a GWAR course and submit a portfolio at the end of the course. Students are expected to fulfill the GWAR within two semesters of enrollment following their first WPE attempt. Students are not generally permitted to attempt the WPE more than one time but in rare cases may be given permission for a second attempt by a GWAR advisor. Students who have questions about their next step or need help selecting an appropriate GWAR course should schedule an appointment with a GWAR advisor in the University Center for Undergraduate Advising, Horn Center, 103.
3. Students receiving scores of 8 or lower must complete English 301A in the following semester of enrollment, must complete a GWAR course in the subsequent semester of enrollment, and must satisfy the GWAR within two semesters of enrollment following their initial WPE attempt.

Students who attempted the WPE once prior to Fall 2010 may attempt the WPE a second time or may enroll

in a GWAR course and submit a portfolio for assessment. Students are not permitted to take the WPE more than two times.

Students with degrees from non-CSU campuses must either provide evidence of fulfilling a comparable non-CSU writing assessment or fulfill the CSULB GWAR. Assessments of writing competence from non-CSU campuses are evaluated by the GWAR Coordinator for their equivalence before they are accepted to fulfill the GWAR. The form for requesting approval of a non-CSU writing assessment is available at www.csulb.edu/testing.

Students can register for the WPE at Testing, Evaluation & Assessment, BH-216 (562)985-4007 or online at www.csulb.edu/testing. Students must pay a fee each time they take the test to cover the costs of test administration and scoring. Testing, Evaluation & Assessment offers three-hour workshops one to two weeks prior to each WPE date. Information about these workshops, the WPE workbook, and related services is available at BH-216 or at www.csulb.edu/testing.

The GWAR, Registration Holds, and Application to Graduate

If undergraduate students neglect to attempt the WPE by the time they earn 65 units or, if they are upper-division transfer students, in their first semester of residency, CSULB will place a hold on their privilege to register for classes. Students must register for and take the WPE to release these registration holds.

Students with compelling reasons can request deferrals at Testing, Evaluation & Assessment. In certain circumstances, students, with help from their faculty or staff advisors, may submit an appeal or contract to release a registration hold temporarily.

If students fail to comply with requirements to enroll in a GWAR course or to meet with an advisor, CSULB will place a hold on their privilege to register for classes. Students must meet with a GWAR advisor to release these registration holds.

Graduation

Dates and Requests to Graduate

The University awards degrees at the end of each of four terms in a year: January (work completed at the end of Winter session); May or June (end of the Spring semester); August (end of Summer Session); and December (end of the Fall semester.)

Seniors and graduate students who expect to receive degrees or Certificates at the end of any semester, winter or summer session must complete the Request to Graduate form and/or Certificate form well in advance. The appropriate request for Spring or Summer candidates must be filed by the preceding October 15, and for Fall or Winter candidates by the preceding March 1, at the Office of Enrollment Services. The names of candidates who file within these deadlines will appear in the Commencement Program published each Spring. Publication of names in the program does not constitute graduation from the university. Credential students should apply in the Credential Processing Office, located in the Graduate School of Education by February 1 for December completion and by October 1 for Spring and Summer sessions.

Requests to graduate submitted later than the deadline will be processed after those submitted on time. The degree will be granted once all requirements have been completed, but the student's name will not be printed in the Commencement Program.

Completion of Records and Requirements

Prior to receiving a degree, students are responsible for the following:

- Insuring that the university has received official transcripts of all work completed at other institutions. If graduation depends on any classes taken outside CSULB during the final semester or session, the transcript must be submitted by the announced date, approximately one month after the official graduation date.
- Completing all requirements for the degree, including the minimum number of units. Units will not be counted toward the minimum if they are above the acceptable total in certain categories, as listed in the degree requirements, or if they are a repetition of a course for which credit has already been counted. Any substitutions or waivers of course requirements must be submitted by the advisor.
- Completing all "In Progress" and "Incomplete" courses that are to be completed. No additional work may be completed after the degree is awarded. No grade can be changed after the degree is awarded, except for a change resulting from a grade appeal. Any Incomplete remaining on the record as of the graduation date will be counted as if it were an "F," with units attempted but no grade points earned, unless the instructor has specified on the Incomplete form that some other grade be recorded.

Degree Clearing

Final review of records begins three weeks after final exams in the student's last term. If all degree requirements are complete, the degree and any honors are added to the transcript. The transcript is the official verification of the degree.

It is the student's responsibility to submit records of all changes in the record no later than the last day of the final semester or session. Such materials include transcripts from other institutions and amendments, substitutions, waivers, and grade changes.

Honors for Undergraduate Students

I. Graduation with Honors

A. Latin Honors

The following grade-point average (GPA) criteria are used to identify undergraduate students eligible for the honors specified:

1. equal to or greater than 3.950 graduated summa cum laude,
2. equal to or greater than 3.750 but less than 3.950 graduated magna cum laude, and
3. equal to or greater than 3.500 but less than 3.750 graduated cum laude.

An undergraduate student may be considered eligible for honors at graduation provided that a minimum of 45 units are earned at California State University, Long Beach. For the first baccalaureate degree, the GPA shall be determined from units

earned at CSULB plus transferred units. For the second baccalaureate degree, the GPA shall be determined only by courses taken after the first degree was awarded that are also required by the second major.

B. Departmental Honors

With the approval of the dean of the college, departments may elect to award departmental honors to their graduates based on GPA and/or other criteria determined by the department. The number of honors awarded by a department shall be limited to three students or five percent of graduates, whichever is larger.

C. Notification

Honors will be noted on the diploma and transcript.

II. Honor Lists

Undergraduate students exhibiting outstanding scholastic achievement are honored by being included on the President's or Dean's List. A certificate will be issued for each semester in which the student receives this honor.

A. President's List

Students will be placed on the President's List to honor them for academic achievement each semester in which they complete 12 or more graded course units with a semester GPA equal to or greater than 3.750. Students earning fewer than 12 graded course units per semester will be placed on the President's List in the spring semester of the academic year in which they accumulate 12 or more graded course units with an academic year GPA equal to or greater than 3.750.

B. Dean's List

Students will be placed on the dean's list to honor them for academic achievement each semester in which they complete 12 or more graded course units with a semester GPA equal to or greater than 3.500 but less than 3.750. Students earning fewer than 12 graded course units per semester will be placed on the Dean's List in the spring semester of the academic year in which they accumulate 12 or more graded course units with an academic year GPA equal to or greater than 3.500 but less than 3.750.

Timely Graduation for Undergraduate Students

In order to provide access to the university's undergraduate major and minor programs for as many qualified students as possible, this policy is established to ensure timely graduation of undergraduate students.

Students may earn up to 120% of the number of units required for the degree in their declared primary major. Any additional degree objectives (e.g., majors, minors, certificates) must be able to be completed within the additional units allowed. For the purpose of defining unit limits in this policy:

Units transferred from other institutions in excess of 60 units will be excluded from the unit limits.

Units earned by Advanced Placement, International Baccalaureate, and other external exams, military credit, pre-baccalaureate unit credit, as well as unit credit by examination are excluded.

After earning 90 units, students may change degree objectives only if they submit a plan demonstrating that all

degree objectives can be completed within the 120% unit limit applicable to the higher unit major.

Students who have not already filed to graduate by the time they have earned 100% of the units required for the degree in their declared primary major must file to graduate and submit a plan to graduate within the unit limits defined in this policy.

Students requesting an exception to the limits in this policy should file a Timely Graduation appeal. The appeal must include a rationale and an advisor-approved plan to graduate.

If an exception is not approved, students whose plan to graduate exceeds 120% of the number of units required for the degree in their declared primary major may be subject to restrictions on enrollment. If the student has earned any major regardless of whether he or she has declared that major, a degree will be conferred in that major. If the student has not earned a major, enrollment will be restricted to courses required to graduate in the major for which graduation is most likely to occur in a reasonable time.

Honor Societies

- Phi Beta Kappa – Founded at the College of William and Mary in 1776, it is the oldest and most prestigious honor society for students of the liberal arts and sciences. A chapter was established at California State University, Long Beach in 1977.

Graduating seniors are elected to membership in Phi Beta Kappa on the basis of extraordinary scholarly performance at this University, after study of their records by faculty members who are themselves members of Phi Beta Kappa. No action on the part of the student is necessary to initiate consideration. Inquiries should be directed to the President of the University chapter of Phi Beta Kappa, Dr. Harold Schefski, Department of Romance, German, and Russian Languages and Literatures.

Two additional societies which may elect students from all academic areas are:

- Mortar Board – Founded in 1918 as an honor society focusing on scholarship, leadership, and service. Mortar Board was the first national honor society founded by and for college senior women, and the membership expanded to include men in 1975. The California State University, Long Beach Cap and Gown Chapter was founded in 1972, and grew out of an honor club established here by seven women in 1963. The Cap and Gown Chapter is one of over 200 Mortar Board Chapters, with a total national membership of over 250,000 dedicated, active scholars. Mortar Board's focus is on collaboration and balancing positive ideology with practical leadership building experiences. Mortar Board holds that both community service and dedication to academic excellence must remain constant in order to provide a full college career. Membership is extended to service-oriented CSULB seniors who maintain a minimum 3.0 cumulative GPA.
- Phi Kappa Phi – Founded in 1897 at the University of Maine, it is the oldest and largest national honor society which recognizes and encourages superior scholarship in all academic disciplines. Chapter 86 was established at California State University, Long Beach, in 1963.

Admission to Phi Kappa Phi is by invitation only and requires nomination and approval by the chapter and national society. Membership for juniors, seniors, and graduate students is based on integrity of character, one

year residence in the University, and outstanding scholarship. Inquiries should be directed to the President of the University chapter of Phi Kappa Phi, Dr. C. J. Walter, c/o College of Business Administration.

Other societies may limit membership to particular academic areas. Among these organizations at California State University, Long Beach are the following:

- Beta Alpha Psi (Accounting) — National scholastic fraternity to give recognition to excellence in the field of accounting.
- Beta Gamma Sigma (Business Administration) — National honorary business society to recognize superior academic performance.
- Chi Epsilon (Civil Engineering) — National honor society open to Civil Engineering majors with a 2.9 GPA.
- Chi Sigma Iota (Counseling) — International honor society open to graduate students with a GPA of 3.5, scholars, and practitioners in the counseling profession.
- Eta Kappa Nu (Electrical Engineering) — National honor society furthering area interests and promoting scholarship. GPA requirement for seniors is 2.8, for juniors 3.0.
- Kappa Delta Pi (National honor society for teachers) — encourages high professional, intellectual, and personal standards. Recognizes outstanding contributions to education.
- Kappa Tau Alpha — National honor society that recognizes academic excellence and promotes scholarship in journalism and mass communication.
- Omicron Nu (Family and Consumer Sciences) — National honor society recognizing superior scholarship and promoting leadership and research in the field of Family and Consumer Sciences.
- Phi Alpha (Social Work) — National honor society to improve the goals of social work on campus. GPA requirement 3.0.
- Phi Alpha Theta (History) — National honor society in history, founded to promote the study of history through the encouragement of research, good teaching, publication, and the exchange of learning and ideas among historians.
- Phi Beta Delta (International Education) — National society, founded at CSULB, recognizes students from all disciplines with high GPAs and extensive involvement in international education or international studies.
- Phi Delta Gamma (Scholarship) — National honor society which fosters academic achievement and professional preparation.
- Phi Delta Kappa (Education) — National organization which promotes service, research, and leadership in education. Members include both students and faculty.
- Phi Epsilon Kappa (Physical Education) — National society for recognition in sports and physical education. 3.0 GPA requirement and faculty recommendation.
- Phi Mu Alpha-Sinfonia (Music) — National organization for students in music. Promotes music in America, especially contemporary American music.
- Phi Alpha Alpha (Public Administration) — National society to encourage scholarship among students of public administration.
- Phi Sigma Tau (Philosophy) — National honor society for students with a strong undergraduate concentration in philosophy.
- Pi Kappa Lambda (Music) — National honor society for scholastic achievement in music.
- Pi Lambda Theta (Education) — National organization for undergraduate and graduate students. Purpose is to maintain high standards of scholarship and preparation for teaching.
- Pi Mu Epsilon (Mathematics) — National honor society recognizing distinction in mathematics.
- Pi Sigma Alpha (Political Science) — National honor society for political scientists. Open by invitation to upper-division and graduate students with a 3.0 GPA.
- Pi Tau Sigma (Mechanical Engineering) — National honorary fraternity encouraging and recognizing outstanding scholastic achievement of students in the field.
- Psi Chi (Psychology) — National honor society recognizing distinction in Psychology. Sponsors research and other participation in psychology.
- Sigma Alpha Iota (Music) — National organization for women in music. Aims to further the development of music in America through performance, study, and participation in both campus and community projects.
- Sigma Delta Pi – Capítulo Pi Chi — One of the purposes of this society is to honor those who attain excellence in the study of the Spanish language and in the study of the literatures and cultures of the Hispanic World.
- Sigma Theta Tau (Nursing) — International honor society recognizing superior scholastic achievement, leadership, and community service in nursing.

CSULB Alumni Association

The CSULB Alumni Association is the link between the University and its more than 230,000 graduates to garner their support for The Beach.

It sponsors various alumni programs, communication vehicles to inform alumni about their alma mater, and supports the University with departmental grants and student scholarships including the prestigious President's Scholars Program.

The Association is governed by a volunteer board of directors who serve as alumni ambassadors for the university, promote its mission, and reconnect alumni with the institution. Other volunteers assist with its other programs such as Homecoming, commencement hospitality, Concerts in the Grove, and other events.

Membership dues for CSULB graduates and credential holders is a one-time \$49 fee. For non-graduates, including alumni who took CSULB classes but did not graduate, the fees is \$49 for the first year and \$25 annually thereafter.

The main benefit for members is to keep informed about their alma mater through its magazine "Beach Connection" and e-communiques. In addition, members have access at all CSU libraries (check with campus library for alumni restrictions), discounts at the Carpenter Performing Arts Center events and home 49er athletic games, discount on rental of the Earl Burns Miller Japanese Garden, access to various group insurance policies (medical, home, auto, life, etc.), the CSULB Alumni Association Credit Card through Bank of America, etc. Alumni also can access the CSULB Career Development Center for an annual fee.

For more information about the CSULB Alumni Association, check the website at www.csulb.edu/alumni or call 562.985.5252.

Giving at the Beach

Beach Fund

Though CSULB is a publicly supported institution, generous contributions to the Beach Fund are critical to keeping the University thriving. Supporting the Beach Fund allows the President and Deans to address the ongoing, immediate needs of the University. Contributions to all areas enhance state support and student fees to provide all students with access to a quality education. Such areas most impacted by your support are:

- Student Success and Access
- Teaching and Discovery
- Creativity and Innovation
- Science and Technology
- Global and Community Engagement

None of these successes can be accomplished with state funding alone. More than 20,000 alumni, parents and friends of the University contribute to the Beach Fund each year. Gifts to the Beach Fund make it possible for our gifted students to earn the lifelong benefits of a quality CSULB education and protect the value of degrees already earned. Please feel free to contact the Office of Annual and Special Giving by phone at (562) 985-5294 or via email at annualgiving@csulb.edu.

Senior Gift Campaign

Every graduating senior is contacted near graduation to initiate a pledge in support of the campus. Seniors are asked to donate \$125 to purchase a brick to be permanently placed in the Alumni Brick Plaza. Gifts of \$124 or less are designated to the Annual Fund to be used for essential campus needs. Seniors have proven to be generous and loyal donors to the University.

GRADUATE DEGREES AND OTHER POST BACCALAUREATE STUDIES

Vice Provost for Academic Affairs and Dean of Graduate Studies

Cecile Lindsay

Graduate Studies

A student who plans to become a candidate for a master's degree must hold a bachelor's degree from a regionally accredited institution or have completed equivalent academic preparation at a foreign university as determined by the appropriate campus authority. The student must have completed undergraduate course work substantially equivalent to that required at California State University, Long Beach in the discipline of intended graduate study, or must be prepared to undertake additional work to make up any deficiency. Most graduate degree programs are based upon preparation in the discipline at the undergraduate level. Undergraduate preparation is considered adequate if a candidate has met the upper-division requirements of this University for a bachelor's degree in the subject matter area of the master's degree program. Refer to specific departments for detailed requirements of each degree program. The following graduate degrees are offered:

Master of Arts Degree in:

- Anthropology
- Applied Sociology
- Art
- Asian Studies
- Communication Studies
- Communicative Disorders
- Dance
- Economics
- Education
- English
- Family and Consumer Sciences
- French and Francophone Studies
- Geography
- German
- Global Logistics
- History
- Kinesiology
- Linguistics
- Music
- Philosophy
- Political Science
- Psychology
- Religious Studies
- Spanish

Master of Business Administration

Master of Business Administration / Master of Fine Arts in Theatre Management

Master of Fine Arts Degree in:

- Art
- Creative Writing
- Dance
- Theatre Arts

Master of Music

Master of Physical Therapy

Master of Public Administration

Master of Public Health

Master of Social Work

Master of Science in Nursing/Master of Public Health

Master of Science Degree in:

- Aerospace Engineering
- Applied Statistics
- Biochemistry
- Biology
- Chemistry
- Civil Engineering
- Computer Science
- Counseling
- Criminal Justice
- Electrical Engineering
- Emergency Services Administration
- Engineering
- Geology
- Gerontology
- Health Science
- Health Care Administration
- Kinesiology
- Mathematics
- Mechanical Engineering
- Microbiology
- Nursing
- Nursing/Health Care Administration
- Nutritional Science
- Physics
- Psychology
- Recreation Administration
- Science Education
- Special Education

Ed.D. in Educational Leadership

Ph.D. in Engineering and Industrial Applied Mathematics

(awarded jointly with Claremont Graduate University)

DPT in Physical Therapy

Certificate Programs and Graduate Study

Students, whether graduates of CSULB or of another accredited institution, may complete the requirements for and be awarded certificates while in graduate standing. Certificate programs are of two types: baccalaureate certificates which may be taken concurrently with or following the award of the baccalaureate degree, and graduate certificates which require post-baccalaureate standing. The graduate certificates are listed below, with the department responsible for each certificate indicated in parentheses.

Graduate certificate programs require at least 18 units of course work, of which at least 12 units must be at the 500 or 600 level. Courses taken to fulfill the requirements for the master's degree may also be applied to certificate requirements, if the certificate program permits, but such overlap may not exceed 15 units. Courses in directed research, directed reading, internship, and independent study may comprise no more than 3 units of a graduate certificate program. Thesis and student teaching may not be used on the program. Extension and/or transfer credit may comprise no more than one-sixth of the course work used to meet graduate certificate requirements. A grade-point average of at least 3.0 must be maintained in the graduate certificate program's course work. All courses used to complete the requirements of a graduate certificate must be completed within a five-year period from the date of the initial course work.

If you wish to pursue a graduate certificate program, you should review the course requirements given in the department course listings of this catalog. You should notify the relevant department of your intention to pursue a certificate program as early as possible so as to receive early advisement on the program.

Certificates

Career Guidance Specialist
(Advanced Studies in Education and Counseling)

Community College
(Advanced Studies in Education and Counseling)

Health Care Administration (Health Care Administration)

Leisure Counseling (Recreation and Leisure Studies)

Museum Studies (Art)

Nurse Practitioner (Nursing)

Public Management Analyst
(Public Policy and Administration)

Public Sector Employer-Employee Relations and Personnel
Management (Public Policy and Administration)

Public Sector Financial Management
(Public Policy and Administration)

Reading Certificate (Teacher Education)

Systems Engineering (College of Engineering)

Teaching English to Speakers of Other Languages
(Linguistics)

Transportation Policy and Planning
(Public Policy and Administration)

Urban Executive Management
(Public Policy and Administration)

Waste Engineering and Management (Civil Engineering)

Graduate and Post-Baccalaureate Admission Requirements

Graduate and post-baccalaureate applicants may apply for a degree objective, a credential or certificate objective. Students who meet both the minimum requirements established by the CSU system and the specific professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the academic program will be admitted as Classified Post-Baccalaureate or Credential candidates. Applicants may be admitted as Conditionally Classified if, in the opinion of appropriate campus authorities, deficiencies may be remedied by additional preparation. In unusual circumstances, a campus may make exceptions to these criteria.

To meet the minimum requirements for admission to graduate and postbaccalaureate studies at CSULB, a student shall at the time of enrollment: (1) have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or have completed equivalent academic preparation as determined by appropriate campus authorities; (2) be in good academic standing at the last college or university attended; and (3) have attained an acceptable grade-point average in any of the following ways: (a) hold an advanced degree; (b) hold a baccalaureate degree with a cumulative GPA of at least 2.5 (A = 4.0); (c) hold a baccalaureate degree with a GPA of at least 2.5 in the last 60 semester (90 quarter) units attempted lower-division courses or courses taken in extension (except in adjunct enrollment at CSULB in the upper-division level) after obtaining the bachelor's degree will be excluded from the calculation.

Students in the process of completing a baccalaureate degree may be admitted on a provisional basis, subject to proof of degree completion by the established deadline, if their cumulative GPA is at least 2.7 or if the GPA in their last 60 semester or 90 quarter units are calculated at 2.5 or higher.

For information on the specific requirements for admission to a given program, see the catalog section for that program.

These and other CSU admissions requirements are subject to change as policies are revised and laws are amended. The CSU website, www.calstate.edu and the CSU admissions portal www.csumentor.edu are good sources of the most up-to-date information.

Graduate Standing — Conditionally Classified

To qualify for admission in conditionally classified graduate standing, a student must:

1. Hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed equivalent academic preparation in a foreign university as determined by an appropriate campus authority;
2. Have attained a grade-point average of at least 2.5 (A = 4.0) in the last 60 semester (90 quarter) units attempted;
3. Have been in good standing at the last college attended; and
4. Be accepted into a graduate degree curriculum on a conditional basis, subject to the requirement that any deficiencies must be remedied by additional preparation.

Graduate Standing — Classified

A student who meets the minimum requirements for admission as a graduate student, as specified in the preceding paragraph, may be admitted as a fully classified graduate student pursuing an authorized degree curriculum if the appropriate program authorities determine that he or she satisfactorily meets the professional, personal, scholastic, or other standards for admission to the graduate degree curriculum, including qualifying examinations that the appropriate program authorities may prescribe. Only those applicants who show promise of success and fitness will be admitted to graduate degree curricula, and only those who continue to demonstrate a satisfactory level of scholastic competence and fitness shall be eligible to proceed in such curricula.

Post-Baccalaureate Standing — Classified

In this status a student is eligible to enroll in a credential or certificate program, provided that such additional professional, personal, scholastic, and other standards, including qualifying examinations, as may be prescribed for the particular credential or certificate program by the appropriate campus authority, are satisfied.

Admission to the University

For admission requirements, see the Admission section of the catalog.

Admission to a Department as a Graduate Student

In order to pursue a credential or master's degree, students must be accepted by the department or college offering the degree program. In some instances (see specific department listing) this process may require supplemental application to the department or college. Following review, the department or college will determine whether or not a student meets its requirements for admission to its degree program. Departments or colleges that receive more applications from qualified students than the number of graduate spaces they have available will admit students in priority order based on the strength of candidates' qualifications.

If space is available, a student who is admissible to the University but who does not meet program requirements for admission may nevertheless be accepted as a conditionally classified graduate student by the department or college offering the program, subject to the provision that all remaining admission requirements of the program must then be fulfilled after enrollment.

Special Action

In rare and compelling circumstances, an applicant who doesn't qualify for admission under the previous provisions may be admitted by special action if on recommendation of the appropriate faculty of the department/college concerned and in the judgment of the Vice Provost for Academic Affairs and Dean of Graduate Studies or his/her designee there exists acceptable evidence that the applicant possesses sufficient academic, professional, and other potential pertinent to her/his educational objectives to merit such action, as shown through aptitude scores, recent academic performance, and experiential background.

Graduation Writing Assessment Requirement (GWAR)

As a requirement for advancement to candidacy, all graduate students must demonstrate upper-division competency in academic writing in English. Students must either submit evidence of having fulfilled this requirement elsewhere or attempt to fulfill it no later than the end of their first semester of matriculation at CSULB. All graduate students must fulfill the GWAR by one of the following:

1. Receiving a score of 11 or higher on the Writing Proficiency Exam (WPE);
2. Enrolling in a GWAR course and submitting a portfolio for assessment after attempting the WPE once.
3. Passing another approved assessment of writing competence.
4. Having fulfilled the GWAR as part of their baccalaureate degree(s) while matriculated at CSULB or at another CSU campus.
5. Earning a CSULB-approved passing score on the writing portion of an approved standardized writing assessment, such as the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT).

Information about GWAR courses and alternative GWAR assessments is available at www.csulb.edu/gwar.

Effective Fall 2010, graduate students in their first semester of residency who are taking the WPE for the first time will be required to satisfy the GWAR within two semesters of enrollment following their first WPE attempt. To ensure that the GWAR is satisfied within the specified time, students in this group must comply with the following requirements determined by their WPE score:

1. Students receiving scores of 11 or higher have satisfied the GWAR and may proceed with completion of other degree requirements.
2. Students receiving scores of 9 or 10 must enroll in a GWAR course and submit a portfolio at the end of the course. Students are expected to fulfill the GWAR within two semesters of enrollment following their first WPE attempt. Students are not generally permitted to attempt the WPE more than one time but in rare cases may be given permission for a second attempt by a GWAR advisor. Students who have questions about their next step or need help selecting an appropriate GWAR course should schedule an appointment with a GWAR advisor in the University Center for Undergraduate Advising, Horn Center, 103.
3. Students receiving scores of 8 or lower must complete English 301A in the following semester of enrollment, must complete a GWAR course in the subsequent semester of enrollment, and must satisfy the GWAR within two semester of enrollment following their initial WPE attempt.

Graduate students must satisfy the GWAR before they will be advanced to candidacy. (Advancement to candidacy requires satisfying the GWAR and satisfactorily completing six or more semester units in residence while earning a 3.0 GPA or greater.) Graduate students must also visit their graduate faculty advisors in their first semester to determine if additional departmental or program writing requirements apply to their advancement to candidacy.

Students who attempted the WPE once prior to Fall 2010 may attempt the WPE a second time or may enroll in a GVAR course and submit a portfolio for assessment. Students are not permitted to take the WPE more than two times.

Students with degrees from non-CSU campuses must either provide evidence of fulfilling a comparable non-CSU writing assessment or fulfill the CSULB GVAR. Assessments of writing competence from non-CSU campuses are evaluated by the GVAR Coordinator for their equivalence before they are accepted to fulfill the GVAR. The form for requesting approval of a non-CSU writing assessment is available at www.csulb.edu/testing.

Students can register for the WPE at Testing, Evaluation & Assessment, BH-216 (562)985-4007 or online at www.csulb.edu/testing. Students must pay a fee each time they take the test to cover the costs of test administration and scoring. Testing, Evaluation & Assessment offers three-hour workshops one to two weeks prior to each WPE date. Information about these workshops, the WPE workbook, and related services is available at BH-216 or at www.csulb.edu/testing.

The GVAR, Registration Holds, and Application to Graduate

If graduate students neglect to attempt the WPE in their first semester of residency, CSULB will place a hold on their privilege to register for classes. Students must register for and take the WPE to release these registration holds.

Students with compelling reasons can request deferrals at Testing, Evaluation & Assessment. In certain circumstances, students, with help from their faculty or staff advisors, may submit an appeal or contract to release a registration hold temporarily.

If students fail to comply with requirements to enroll in a GVAR course or to meet with an advisor, CSULB will place a hold on their privilege to register for classes. Students must meet with a GVAR advisor to release these registration holds.

Graduate Research Fellowship

The Graduate Research Fellowship is awarded by CSULB faculty to students who show potential for success in scholarly and creative activity and an interest in advanced study. Interested students should contact the office of their college dean for information on the nomination process.

Graduate Study in the International Programs

Students planning to participate and receive unit credit toward a master's degree in an International Program should consult with the graduate advisor in the department of their major and college dean or director of graduate studies before entering the degree program.

Graduate students who have not been admitted to candidacy for a master's degree and who participate in the International Programs may, upon their return to California State University, Long Beach, petition to have six units earned as resident credit in the International Programs included on their official student program for the master's degree. In no case may excess grade points earned in the International Programs be used to bring a grade-point deficiency at California State University, Long Beach to the required 3.0 (B) average.

Students admitted to candidacy for a master's degree who plan to participate in the International Program of Studies must obtain permission, prior to beginning their study abroad, to have units earned abroad applied toward satisfaction of their degree requirements. A candidate's petition to apply units earned abroad must be reviewed and recommended by the department offering the degree. The specific courses to be taken on the foreign campus, thesis research which is to be done abroad, or any other requirements such as examinations to be taken upon the student's return must be listed on the official student program. Usually no more than six units of credit may be transferred to apply toward the minimum 30 units for an advanced degree as a result of participation in the International Program of Studies, but a maximum of 12 units may be allowed by the Vice Provost for Academic Affairs and Dean of Graduate Studies or his/her designee in consultation with the University Graduate Council in a special case.

A copy of the candidate's graduate student program must be forwarded to the Resident Director for the foreign area, who must certify that any credit earned abroad is appropriate to meet graduate degree requirements.

Pending the faculty's evaluation of the student's work, a Report Delayed (RD) grade will be assigned in all courses in which work was completed abroad and which are offered to satisfy requirements toward an advanced degree.

Change of Objective

Evaluation of credits transferred to the University is based in part upon the objective indicated on the application for admission. Candidates desiring a change in graduate objective to a discipline different from that indicated on the original application must reapply to the University. Reapplication requires the submission to the Office of Enrollment Services of a newly completed Graduate and Postbaccalaureate Admission form and payment of the associated fee. The proposed new graduate department or program will review the application and notify Enrollment Services of its decision. Students who are admitted to a new discipline must then seek approval of their official student program and advancement to candidacy, using the procedures indicated below under "The Program" and "Advancement to Candidacy." Students who are not admitted to a new discipline have the option of continuing to pursue their original objective.

The only exception to the procedures described in the preceding paragraph is for students seeking to change from one degree program to another degree program within the same discipline (for purposes of this regulation, all options offered by the College of Education are considered to be part of a single discipline). In such cases, candidates must obtain department approval, asking the department to request the program change from Enrollment Services. Requests are considered on a case-by-case basis. If granted permission, candidates must then seek approval of their official student program and advancement to candidacy, using the procedures indicated below under "The Program" and "Advancement to Candidacy."

Withdrawal from the Degree Program

If a student wishes to resume graduate study after withdrawal, the student must reapply to the University and to the graduate program. If admitted, the student must be readvanced to candidacy and the department or college may determine that the student's graduate program should be changed.

University Regulations Governing the Master's Degree

General

The following regulations apply to all graduate degree programs. Specific academic and curricular requirements of individual degree programs are given in the departmental listings of this catalog.

All regulations involving a calculation of grade-point average subsequent to admission to the University as a graduate student shall be based on the following common practices and standards.

"Cumulative Graduate Grade-Point Average" shall be calculated on all upper-division and graduate-level coursework attempted by a student at this University after completion of a baccalaureate degree.

Grade-point average standards calculated on the basis of a smaller range, grouping, or set of upper-division and graduate-level courses, for example, "courses in the major" or "courses taken since admission to the degree program," presuppose that the student has met the minimum standard for any larger range, group, or set, including the Overall Graduate Grade-Point Average.

1. A student pursuing the master's degree must maintain a Cumulative Graduate Grade-Point Average of 3.0 (B). Exceptions to the 3.0 (B) Cumulative Graduate Grade-Point Average may be made only on the recommendation of the departmental faculty offering the degree, the college dean or designee, and approval by the Dean of Graduate Studies or designee.
2. At least a 3.0 (B) average must be maintained in the degree program.
3. No course with a grade lower than "C" may be applied toward the fulfillment of degree requirements.
4. Graduate students cannot repeat and delete courses either for credit or to improve their grade-point average, but may repeat and average courses and grades for courses required for the degree.
5. The individual course of studies (student program) for the master's degree must contain a minimum of 30 units in upper-division and graduate courses.
Some degree programs require additional units. Please consult individual degree program requirements.
A minimum of sixty percent of the units required for the degree shall be in the 500- and 600-level series and these shall be completed at this University, consistent with departmental requirements. Student teaching cannot be included in any master's degree program.
6. A thesis, project, or final comprehensive examination must be completed. A minimum of four and a maximum of six semester units shall be allowed for a thesis or project. Failure of the comprehensive examination or thesis requirement is failure of both options. Thus, a student failing the comprehensive examination may not proceed

to the thesis/project option or vice versa. Once a student has completed a semester of enrollment towards fulfillment of either the comprehensive examination or thesis/project option, the student may not change from one option to the other without the approval of the faculty concerned, the department chair, and the appropriate dean or designee.

7. No fewer than 24 semester units shall be completed in residence at the University. The Vice Provost for Academic Affairs and Dean of Graduate Studies or his/her designee may authorize department/college approved substitution of credit earned by alternate means for a part of the residence requirement. Units, including continuing education or extension units, accepted by transfer for application toward the minimum units required for a master's degree cannot be used to fulfill the minimum unit requirements in the 500/600 series. This 500/600 unit requirement must be completed in the major discipline and in residence at this University.
8. All requirements of the degree program must be completed within seven years of the date the student program was initiated, i.e., the date (semester) when the earliest course appearing on the student program was completed. An extension of time beyond the limit may be granted by the Vice Provost for Academic Affairs and Dean of Graduate Studies or his/her designee if warranted by individual circumstances and if the outdated work is validated by comprehensive examination in the relevant course or subject field work, or such other demonstration of competence as may be prescribed by the department and/or college.
9. A graduate student who expects to receive a degree at the end of any semester or summer session must be enrolled during that semester or session and must complete the Request to Graduate Form well in advance. The appropriate request for Spring or Summer candidates must be filed by the preceding October 15; for Fall candidates, by the preceding March 1 at the Office of Enrollment Services. The names of candidates who file within these deadlines will appear in the Commencement Program published each Spring.
Note: Graduate Studies 700 may only be used to fulfill the enrollment requirement if the applicant has completed all degree program courses prior to the semester of graduation. An incomplete grade not otherwise resolved prior to graduation will automatically revert to the letter grade indicated on the "Requirements for Assigning an Incomplete Grade" form. A course with an unresolved grade of RP (Report in Progress) will remain on the transcript but will be removed from the student's program of study. Incomplete grades cannot be resolved after graduation.
10. Proficiency of a student in all parts of a curriculum is determined by the faculty of the University. A favorable vote of the faculty is required for a student to receive the degree.

Second Master's Degree

A graduate student who is currently enrolled in a master's program at CSULB must complete that master's program before enrolling in courses for another degree. A graduate student who already holds a master's degree from this or any other accredited institution but desires to become a candidate for a second master's degree in a different field is subject to the following regulations:

1. All admission requirements of the University and college or department must be met (all general regulations listed in the catalog apply to the second master's degree);
2. Enrollment and approval of candidacy for the second degree will be granted only after the first degree has been completed and awarded;
3. All requirements for the new degree must be completed;
4. After awarding of the first master's degree, a minimum of 24 units of graduate residence credit must be earned at this University including the minimum of 500/600-series units mandated by the major department in which the student is earning the second master's degree;
5. No more than six units earned on the first degree may be applied to a second master's degree;
6. Prerequisites for an advanced course must be completed prior to enrollment in the advanced course. An instructor may disenroll a student who does not provide evidence of adequate preparation;
7. All prerequisites must be completed prior to application for candidacy;
8. Two master's degrees cannot be awarded concurrently;
9. The area or discipline in which the second degree is earned shall be designated on the transcript and a second diploma awarded.

The Program

A student must consult with the graduate advisor of the department or college to prepare a tentative degree program. After completing prerequisites and other requirements, the student must formulate an official student program and apply for advancement to candidacy.

The department will assign the student a faculty advisor who must be consulted about preparing a degree program. The advisor should have an official evaluation of the student's previous work from the Office of Enrollment Services, although transcripts provided by the student may be used to develop a tentative student program and discuss degree requirements. When the Office of Enrollment Services' evaluation and the results of tests are available, the faculty advisor can assist the student in drawing up a student program. This student program must be approved by the student's faculty advisor, the departmental graduate advisor, and college dean or director of graduate studies or, for Interdisciplinary Studies, the Vice Provost for Academic Affairs and Dean of Graduate Studies or his/her designee. The student program must list the following:

1. Courses required for removal of undergraduate deficiencies;
2. All courses taken prior to advancement to candidacy which are to apply toward the 30-unit minimum;
3. Required courses;
4. Elective courses.

The official student program, when approved, serves as the basis for the Office of Enrollment Services' graduation audit which is required before the degree can be granted. Students who have not been advanced to candidacy are subject to all changes as published in the CSULB *Catalog*, Policy Statements, and certifications.

Graduate student programs may be revised as the student advances toward the degree. Such revisions must be recommended by the faculty advisor and approved by the departmental graduate advisor and the college dean or director of graduate studies.

Advancement to Candidacy

Advancement to candidacy is the next step after achieving classified status and confers the equivalent of catalog rights on graduate students. Advancement to candidacy also signifies approval of a plan of study by the student's major department and college or, in the case of an Interdisciplinary Studies graduate student, approval by the Director of the Interdisciplinary Studies Program. The prerequisites to advancement to candidacy are:

1. Classified status;
2. Fulfillment of the CSULB Graduation Writing Assessment Requirement (GWAR). Information is available in Testing and Evaluation Services (Brotman Hall 216);
3. A minimum 3.0 overall grade-point average and a 3.0 grade-point average in all units undertaken for the student program (at least 6 units);
4. Enrollment.

All graduate students are required to advance to candidacy when the above prerequisites have been successfully completed. Advancement to candidacy is to occur at least one semester or summer session prior to the semester (session) in which the student expects to graduate. It must occur prior to a student filing the Request to Graduate form with the Office of Enrollment Services. Filing deadlines are the same as for baccalaureate degree candidates. A student must be enrolled in the semester or summer session in which advancement to candidacy takes place. All students must consult with their graduate advisor regarding advancement to candidacy and to determine any departmental requirements to graduate from the University.

An approved graduate student program remains in effect as long as a candidate is making satisfactory progress. To ensure minimum satisfactory progress toward the degree objective, the student must enroll every fall and spring semester and complete all degree requirements within seven years after completion of the first course on the student program. See also information about Graduate Studies 700 later in this section. The student may not change the graduate major without filing a new application for admission. If admitted to the new discipline, the student must then follow the steps indicated above for obtaining approval of a new student program and advancement to candidacy.

A student entering military service after having been advanced to candidacy will not be considered as having withdrawn from candidacy, provided that the student is inducted, enlisted, or called to active duty during a semester in which enrolled or not more than one semester thereafter, and provided that the student enrolls for work toward a degree within one calendar year of the date of release from service.

Students who have been advanced to candidacy and absent themselves from the University on educational leave will be considered as not having withdrawn from candidacy for an advanced degree, provided the terms of the educational leave are fulfilled.

A department or college recommends a student for advancement to candidacy by forwarding a graduate student program for approval to the college dean or director of graduate studies. After the student's program has been processed and approved, a copy of the

completed student program and a letter advancing the student to candidacy will be mailed to the candidate, with copies filed with the department or college and the Office of Enrollment Services.

A student must be enrolled in the semester or summer session in which advancement to candidacy takes place, and this must occur no later than one semester or summer session prior to completion of course requirements. Normally, a student is eligible and should file for advancement to candidacy after completing six units of graduate coursework for the graduate degree program with a 3.0 grade-point average.

Election of Regulations

Graduate students advanced to candidacy will be held responsible for the regulations governing master's degrees in effect at the time of advancement or at the time the last requirement for the degree is met. A change in master's degree objective or readmission to a graduate degree program following withdrawal requires that a new student program be filed under the current graduate policies as published in the latest edition of the catalog.

Teaching Associateships and Graduate Assistantships

Many CSULB departments have Teaching Associate (TA) and/or Graduate Assistant (GA) positions available for qualified graduate students. Students should check in department offices or on the campus web site for more information.

Comprehensive Examination

Each department or college requiring a final comprehensive examination determines the content of the examination. Such examinations may be written or oral or both. A faculty committee shall represent the department in preparing questions, administering, and reading the examination. Through the comprehensive examination, the faculty provides an opportunity for the master's degree candidate to demonstrate analytic ability and knowledge of the discipline. Working with the department chair or dean of the college and the appropriate committee, the departmental graduate advisor usually assumes responsibility for scheduling the examinations and for selecting the other faculty members to participate.

Students may not enroll for courses in preparation for the comprehensive examination or take the comprehensive examination unless they have been advanced to candidacy for the master's degree or unless advancement to candidacy will occur in the semester in which the enrollment takes place.

During the first semester of residence, the graduate student should ascertain from the faculty advisor what preparation will be expected. Early in the final semester of study for the degree, the candidate should contact the departmental graduate advisor to make arrangements for taking the examination. The department or college will notify the Office of Enrollment Services whether the student has passed or failed the final comprehensive examination. A candidate who has failed will usually be allowed to take the final comprehensive examination a second time, and the departmental graduate advisor should be contacted for specific procedures for the second attempt. To award a candidate the master's degree for a particular semester, the results of the comprehensive examination must be reported to the Office of Enrollment Services prior to the end of the semester.

Theses and Projects

A student may enroll for Thesis (course 698 or 699) only when that student has been advanced to candidacy for the degree or when advancement to candidacy will occur in the semester of initial enrollment in Thesis.

Theses and projects submitted in partial fulfillment of the requirements for a graduate degree at this University shall meet the following definitions established by the Trustees of the CSU.

A thesis is a written product of the systematic study of a significant problem. It clearly identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data, and offers a conclusion or recommendation. The finished product evidences originality, critical and independent thinking, appropriate organization and format, and thorough documentation. Normally, an oral defense of the thesis will be required.

A project is a significant undertaking appropriate to the fine and applied arts or to professional fields. It evidences originality and independent thinking, appropriate form and organization, and a rationale. It is described and summarized in a written abstract that includes the project's significance, objectives, methodology, and a conclusion or recommendation. An oral defense of the project may be required.

Students are responsible for understanding the definition of a graduate thesis as outlined above and must follow the format guidelines prescribed by the University and department in which the thesis is completed.

Thesis Committees

A student's thesis committee shall consist of at least three members qualified in the areas relating to the thesis. At least two shall be full-time faculty members at CSULB, one of whom must be tenured or tenure-track. The chair of the thesis committee must be a tenured or tenure-track faculty member from a department authorized to offer a graduate degree. The thesis committee must be approved by the department chair and the graduate or thesis advisor. Normally the chair of the committee also serves as thesis director, but this is not necessarily so. The thesis director must be a person qualified in the specific area of the thesis, but need not be a tenured or tenure-track faculty member. The committee shall be responsible for the guidance of the student throughout the thesis effort. Any change in the composition of the committee requires justification and must be approved by the appropriate department graduate advisor and college associate dean or director of graduate studies.

Thesis committee members will advise and direct students in their thesis work and ensure that the thesis meets the standards and definition of a thesis specified above.

Thesis committee members will determine the grade to be awarded for completion of the thesis; and by signing the thesis signature page, thesis committee members certify that they have determined that the thesis meets the required standards of scholarship, format, and style of the discipline.

When the thesis committee includes a thesis director who is not the chair of the committee, this person may be identified on the thesis approval page as "Thesis Director."

Thesis Committee Chairs

Thesis committee chairs will determine that the student has the proper preparation in terms of course work and research skills to pursue the proposed thesis.

In departments where this function is not carried out by graduate advisors, thesis committee chairs will advise the student in the selection of other members for the thesis committee, ensuring that the other members are appropriate to the proposed thesis effort.

Thesis committee chairs will be the major contact point with the student and will oversee the other committee members' work with the student.

Thesis committee chairs will assure that the editorial and format standards appropriate to the mechanical preparation of a thesis are followed.

Thesis committee chairs will establish guidelines for the student and timetables to be followed to ensure completion of the thesis in a reasonable time.

Thesis committee chairs will arrange for the oral defense of the thesis when required.

The thesis committee chair is responsible for canvassing the committee and reporting the grade agreed upon by its members. After the completed thesis has been reviewed by the University Thesis and Dissertation Office for conformance with prescribed format criteria and the approval page has been signed by the committee and by the dean or department chair, as appropriate, the final grade will be submitted.

Thesis and Dissertation Office

All theses must be acceptable for deposit in the University Library. The Thesis and Dissertation Office in University Library will verify that each thesis meets the format criteria prescribed by the department or degree program and by the University and that it meets all University procedural requirements for theses. Students should consult the University Thesis and Dissertation Office for information, advice, and assistance on the mechanics of preparing a completed thesis and should purchase a copy of *Master's Theses and Projects: Guide to Style and Format* (copies of this guide can also be checked out from the reserve desk in University Library). The Thesis and Dissertation Office also conducts periodic workshops on how to prepare a thesis or dissertation at CSULB.

Academic Probation and Disqualification

Graduate Students

For purposes of determining eligibility to remain at the University, both quality of performance and progress toward the student's objective will be considered. Eligibility will be determined by use of grade points and grade-point average.

Students who are enrolled in a graduate degree program in conditionally classified or classified standing will be subject to academic probation if they fail to maintain a cumulative grade-point average of at least 3.0 (as defined earlier under General Regulations Governing the Master's Degree) in all units attempted subsequent to admission to the degree program.

Every graduate student who has been advanced to candidacy must maintain a cumulative grade-point average of 3.0 and a grade-point average of 3.0 in all courses applicable to the degree. Candidacy for an advanced degree may be

revoked if a student's cumulative grade-point average falls below 3.0 at any time. Students who become subject to dismissal from an advanced degree program will be notified of the action taken by the college associate dean for graduate studies or the Vice Provost for Academic Affairs and Dean of Graduate Studies or his/her designee.

Graduate and post-baccalaureate students are subject to disqualification if while on probation they fail to earn grades of sufficient quality to remove themselves from probationary status. Disqualification will bar such students from any further enrollment at CSULB.

Other Post-Baccalaureate Students

A post-baccalaureate classified student who fails to maintain a cumulative grade-point average of 2.5 on all units attempted at the University will be placed on probation.

A student on probation who, prior to the beginning of the next term, fails to attain a cumulative grade-point average of 2.5 on all units attempted at the University will be disqualified.

A student who is disqualified because of scholastic deficiency may petition the appropriate program authority for readmission only after an absence of two semesters or upon successful completion of summer session courses which remove the grade-point deficiency.

Petitions for readmission must indicate the reason for requesting readmission and must include a statement of any academic work successfully completed since disqualification or of any other activity which gives evidence in support of the petitioner's belief that readmittance is warranted. An application for admission and required transcripts, as well as the petition, must be submitted to the Office of Enrollment Services before the dates established by the University for filing applications.

Academic Credit

Credit/No Credit Grading

A graduate student may take courses at the 100/200/300/400 levels under the Credit/No Credit grading policy; however, no course in which a grade of "CR" has been assigned may be used to fulfill the requirements for a master's degree, except that the grade of "CR" may be permitted for master's theses or projects to a maximum of six units when the individual department has specifically designated Credit/No Credit grading for the thesis/project course in the department and for field work, practicum, and/or internship courses.

For graduate students, courses at the 300/400/500/600/700 levels require "B" level proficiency to merit award of the "CR" grade; at the 100/200 levels "C" level proficiency or better is required for award of the "CR" grade.

The option of Credit/No Credit grading for graduate students on 100/200/300/400-level courses is subject to specific regulations of the individual departments regarding their graduate students and regarding the authorization for this option intrinsic to the approved course. Otherwise, no limitation exists as to the number of courses taken under this policy.

Waiver of Course Requirement and Credit by Examination

No waiver of course requirements or credit by examination may be used to satisfy master's degree requirements. However, the following rules govern course waivers or credit

by examination in satisfying prerequisites for admission to candidacy in any master's degree program.

Any candidate for a master's degree who believes that previous training has provided adequate preparation in a certain area may request a waiver from the department concerned.

A candidate may also apply for course credit by examination, but only for prerequisite courses and not to satisfy any of the requirements for the master's degree. Requests for such examinations must be made to the department concerned and approved by the department chair. Credit by examination is restricted to courses published in the current CSULB *Catalog*. Please see Credit by Examination in the General Regulations section of this catalog.

All course credit by examination will be recorded as CR (Credit) and will not be included in calculation of grade-point averages; such credit may not be used to remove a grade of "D" or "F" in a course already attempted, nor may course credit by examination be granted for any course which is a prerequisite to one for which credit has already been received.

Graduate Transfer Units by Extension

At the option of the college or department offering an advanced degree requiring a total of 30 units, up to 6 units of approved extension/continuing education or transfer credit is acceptable on graduate student programs. At the option of the college or department offering a graduate degree requiring a total of 30 units, this limit may be raised to 9 units of extension/continuing education credit if taken at CSULB. These limits may be increased further for graduate degrees requiring more than 30 units provided that (1) no graduate degree may be awarded by CSULB unless at least 24 units are taken in residence, and (2) no graduate student program may use either extension/continuing education or transfer credit to satisfy the requirement that at least 60 percent of the total units be taken at the 500 and 600 levels. Extension courses completed at campuses including California State University, Long Beach shall be acceptable within the six-unit transfer limit, provided the work can be properly evaluated and the course is acceptable as graduate work for an equivalent graduate degree on the campus where taught. Extension/continuing education and transfer course material shall be evaluated and approved by CSULB faculty teaching in the topic area in conjunction with the department graduate advisor and college associate dean or director of graduate studies. Final approval/disapproval shall be the responsibility of the Vice Provost for Academic Affairs and Dean of Graduate Studies or his/her designee.

Extension/continuing education credit may not be used to reduce the minimum units required in a discipline for a master's degree, that is, extension credit may be used to complete coursework required outside the discipline. Excess grade points earned in extension classes may not be used to offset a grade-point deficiency in the total graduate record.

Grades earned at another institution may not be used to offset grade-point deficiencies in courses taken at this University. However, grades of "C" earned at another institution in courses transferred to satisfy subject matter requirements for an advanced degree at this institution must be balanced by grades of "A" at this University to meet the required 3.0 ("B") overall average.

Credit earned by correspondence or by examination cannot be used to satisfy master's degree requirements.

Graduate Studies 700

Every semester, graduate students must be registered in a course or in GS 700 or must have an approved educational leave. Registration in GS 700 is restricted to graduate students who have completed all course work, have been advanced to candidacy, and have departmental approval. Registration in a course or in GS 700 also is required in winter or summer session if that is when a student plans to graduate. Although no unit credit is added to the student's program or transcript, GS 700 is considered as one unit of concurrent enrollment credit for fee payment purposes, payable at the College of Continuing and Professional Education (CCPE) located at 6300 State University Dr., Ste. 104. Application forms are available from CCPE and must be approved by department graduate advisors. Registration in GS 700 is CR/NC only.

Academic Load

Nine units per semester is a normal academic load for a full-time graduate student engaged in study toward a master's degree. If a candidate wishes to exceed this limit, it should be discussed with the departmental graduate advisor. The maximum load for graduate students working toward a master's degree is 16 units per semester. Students who are employed full-time should not exceed six units per semester.

Graduate students who wish to register for more than one unit of credit per week of attendance during the summer session must secure advance approval from the college associate dean or director of graduate studies. Petition forms and information may be obtained in the college offices.

Honors for Graduate Students

Graduate Dean's List

The Graduate Dean's List provides for university recognition of its most outstanding graduate students. Candidates for this honor will normally have completed all the coursework applicable to their graduate student programs at this university. The annual list is limited to one percent of the university's graduate enrollment. Those honored will be named in the Commencement Program and will receive a certificate from the administrator in charge of graduate programs or designee.

Departmental Graduate Student Honors

In recognition of outstanding graduate student achievements, departments may honor graduating master's and doctoral degree candidates by special recognition in the annual commencement ceremonies. The number of honors awarded by a department shall be limited to three students or five percent of graduates, whichever is larger. Departmental honors are usually restricted to students not otherwise recognized by university or college awards. These honors are normally conferred for excellence in and contributions to the discipline, including outstanding seminar papers, artistic exhibitions, special achievements in field work, and in university committees and functions, as well as participation in scholarly and professional organizations resulting from student research.

ACCOUNTANCY

College of Business Administration

Department Chair: Steven A. Fisher

Department Office: College of Business Administration Room 411
Telephone: (562) 985-4653

Website: www.csulb.edu/colleges/cba/accountancy/

Faculty: David Bojarsky, Michael Constas, Steven Fisher, Debra Grace, Herbert G. Hunt, III, Sudha Krishnan, John Lacey, Ping Lin, Sitikantha Mahapatra (Emeritus), Jae K. Shim (Emeritus), Praveen Sinha, Rodney Smith, Judy Yin

Administrative Support Coordinator: Kellee Zbornak

For MBA with Specialization in Accountancy, see Business Administration, Graduate Programs.

Career Possibilities

Accountant • CPA • Cost Accountant • Auditor • IRS Agent • Financial Analyst • Bank Officer • Controller • FBI Agent • Management Information Systems Manager • Credit Analyst, Financial Analyst • Appraiser • Banker • Contract Administrator • Stock Broker (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu/.)

Undergraduate Programs

Bachelor of Science in Business Administration

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

In order to graduate with an undergraduate business degree from CSULB, a student must complete a minimum of 120 units. A majority of the upper division business courses, including economics and statistics, must be completed at this university. For details, refer to the CBA Policy on Course Transfers/Substitutions.

1. Lower Division:

ACCT 201 Elementary Financial Accounting (3)
Prerequisite: None

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher; one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

MATH 115 Calculus for Business (3)
Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

STAT 108 Statistics for Everyday Life (3)
Prerequisite: None

2. Ethics Course Requirements:

Choose one of the following:

PHIL 160 Introduction to Ethics (3)

CBA/PHIL 400I Business Ethics (3)

3. Critical Thinking Course Requirements

Take one of the following:

PHIL 170 Critical Reasoning (3)

Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

I S 100 Information Technology Literacy (3)

Prerequisite: None

4. All business and pre-business majors shall demonstrate computer literacy and competency prior to taking junior and senior level courses. Requires one of the following:

A. Passing score (70%) on the Computer Proficiency Examination (CPE).

B. With Credit (Cr) or "C" or better grade in a transfer equivalent course, complete:

IS 233 Introduction to Computer Systems and Applications (3)

Prerequisite: None

5. Upper Division:

A. Take all of the following:

CBA 300 International Business (3)

Prerequisite: None

ACCT 320 Cost Accounting (4)

Prerequisites: ACCT 201 or equivalent with a grade of "C" or better.

ECON 333 Managerial Economics (3)

Prerequisites: ECON 100, 101; MATH 115 or 122.

FIN 300 Business Finance (3)

Prerequisite: None

BLAW 320 Legal and Regulatory Environment of Business (3)

Prerequisite: None

IS 300 Management Information Systems (3)

Prerequisite: IS 233 or equivalent.

IS 301 Business Communications (3)

Prerequisite: None

IS 310 Business Statistics (3)

Prerequisite: MATH 114.

HRM 360 Organizational Behavior (3)

Prerequisite: None

MGMT 300 Principles of Management (3)

Prerequisite: None

MKTG 300 Marketing (3)

Prerequisite: None

B. The following Capstone course must be taken at CSULB as a senior and after the upper-division prerequisite core courses have been completed (ACCT 320, FIN 300, MGMT 300, MKTG 300, IS 301):

MGMT 425 Business Strategy and Policy (3)

Prerequisites: ACCT 310 or 320; MGMT 300, MKTG 300, FIN 300, IS 301.

6. Elective courses to total 120 units. Students are encouraged to select electives for expansion of knowledge and intellectual interests as well as for preparation for business employment.

Option in Accountancy (120 units)

The Accountancy curriculum is designed to meet the general education goals of those entering the accounting profession. It satisfies the requirements established by the American Institute of Certified Public Accountants and may be used to meet educational requirements for the California CPA Certificate. The accounting program develops an understanding of an organization's management information system on a broad base of general education and business administration courses. The program is carefully planned and rigorous, building the conceptual, analytical, and communication skills necessary to succeed in the accounting profession. It prepares students for careers in all areas of accounting, including the necessary qualifications for professional examinations such as the C.P.A., C.M.A., C.I.A.

Requirements

Take all of the following:

ACCT 300A Intermediate Accounting (4)

Prerequisites: 300A: ACCT 201 or equivalent with a grade of "C" or better; 300B: ACCT 300A with a grade of "C" or better.

ACCT 300B Intermediate Accounting (4)

Prerequisites: 300A: ACCT 201 or equivalent with a grade of "C" or better; 300B: ACCT 300A with a grade of "C" or better.

ACCT 351 Federal Tax Law II (4)

Prerequisites: Any upper-division Accountancy course with a grade of "C" or better.

ACCT 400 Advanced Accounting (4)

Prerequisites: ACCT 300B with grade of "C" or better, IS 301.

ACCT 470 Auditing (4)

Prerequisites: ACCT 300A, 300B, 320 with grades of "C" or better, IS 301.

ACCT 480 Accounting Systems and Data Processing (4)

Prerequisites: IS 300, ACCT 300B and 320 with grades of "C" or better, IS 301.

Accountancy Courses (ACCT)

LOWER DIVISION

201. Elementary Financial Accounting (3)

Introduction to financial accounting practice.

For business majors. Laboratory and/or class computer applications required.

202. Managerial Accounting (3)

Prerequisites: ACCT 201.

The use and reporting of accounting data for managerial planning, cost control, and decision making purposes. Includes broad coverage of concepts, classifications, and behaviors of costs.

Letter grade only (A-F)

UPPER DIVISION

300A-B. Intermediate Accounting (4-4)

Prerequisites: 300A: ACCT 201 or equivalent with a grade of "C" or better; 300B: ACCT 300A with a grade of "C" or better.

Accounting theory including recording, valuation, and statement presentation of assets, liabilities, capital, and earnings. Funds statements, financial analysis, compound interest theory, and applications.

Letter grade only (A-F). Laboratory and/or class computer applications required.

310. Cost Accounting for Managers (3)

Prerequisites: ACCT 201 or equivalent.

Use and interpretation of financial statements. Evaluation of accounting information systems. Accounting for and analysis of costs. Managerial use of accounting data for planning and decision making.

Letter grade only (A-F). Not open to accounting majors for course or unit credit. Laboratory and/or class computer applications required.

320. Cost Accounting (4)

Prerequisites: ACCT 201 or equivalent with a grade of "C" or better.

Theory and practice of cost accounting. Managerial use of cost accounting data for planning, controlling and decision making. Emphasis on cost accumulation and management information systems.

Letter grade only (A-F). Laboratory and/or class computer applications required.

350. Individual Income Taxation (3)

Prerequisites: Any upper-division Accountancy course with a grade of "C" or better.

Federal income taxation of individuals and property transactions. Coverage of tax research methodology and communication of research results. Laboratory and/or class computer applications required.

Letter grade only (A-F).

351. Federal Tax Law II (4)

Prerequisites: Any upper-division Accountancy course with a grade of "C" or better.

Federal income taxation of partnerships, corporations, and s corporations. Personal and family tax planning and ethics.

Letter grade only (A-F). Laboratory and/or class computer applications required. Not open for credit to students with credit in ACCT 451.

400. Advanced Accounting (4)

Prerequisites: ACCT 300B with grade of "C" or better, IS 301.

Specialized problems in partnership and corporate accounting. Consolidations, foreign currency transactions, and translations. Fund accounting and selected topics.

Letter grade only (A-F). Laboratory and/or class computer applications required.

465. International Accounting (3)

Prerequisites: Any 300-level accounting course with grade of "C" or better, IS 301.

Contemporary accounting theory and practice from an international perspective. Comparative accounting systems in various countries based on prevailing practice in the United States. Analysis of international accounting and auditing standards.

Letter grade only (A-F). Laboratory and/or class computer applications required.

470. Auditing (4)

Prerequisites: ACCT 300A, 300B, 320 with grades of "C" or better, IS 301.

Problems of verification, valuation and presentation of financial information in reports covered by opinion of independent public accountant. Major concepts of operational auditing and relationship to independent audit. Public accountant and internal auditor responsibilities. Rules of professional conduct.

Letter grade only (A-F). Laboratory and/or class computer applications required.

480. Accounting Systems and Data Processing (4)

Prerequisites: IS 300, ACCT 300B and 320 with grades of "C" or better, IS 301.

Familiarization to accounting information systems development process. Analysis, design, development, and implementation of accounting information systems. Automation of accounting information systems studied through use and application of computers.

Letter grade only (A-F). Laboratory and/or class computer applications required.

493. Accounting Internships (3)

Prerequisite: ACCT 300B, Accounting GPA 3.0, overall GPA 3.0.

Real world accounting experience by working in public accounting or accounting divisions of private industry or governmental agencies. Class seminar analysis and evaluation of academic theory in terms of the real world environment.

Credit/No credit grading only.

495. Selected Topics in Accountancy (1-4)

Prerequisite: Consent of instructor.

Intensive study of current topics in accounting.

Letter grade only (A-F). May be repeated for a maximum of 8 units. Topics announced in the *Schedule of Classes*.

497. Directed Studies (I-4)

Prerequisites: Consent of instructor and department chair, on Dean's List, Accounting GPA 3.0.

Advanced individual projects, study, and research in accounting.

Letter grade only (A-F).

ADVANCED STUDIES IN EDUCATION AND COUNSELING

College of Education

Department Chair: Jennifer Coots

Department Assistant Chairs: Bitu Ghafoori, Hiromi Masunaga

Department Coordinator: Susan Goldman

Department Office: Education (ED) 1 Room 10

Telephone: (562) 985-4517

Email: asec@csulb.edu

Department website: <http://www.csulb.edu/asec>

College website: <http://www.ced.csulb.edu>

FAX: (562) 985-4534

Faculty: Stephen Adams, Tina Arora, Robert Berdan (Emeritus), Beverly Booker, Teresa Chen, Jennifer Coots, Jana Echevarria (Emerita), Lesley Farmer, Laura Forrest, Brandon Gamble, Bitu Ghafoori, Gary Greene, Marquita Grenot-Scheyer, Kristi Hagans, Elaine J. Haglund (Emerita), Nat Hansuvadha, Don Haviland, Carlos Hipolito-Delgado, Rose Marie Hoffman, A. Jean Houck, Simon Kim, Marilyn Korostoff, Susan Leonard-Giesen, Angela M. Locks, Joanne Tortorici Luna, Hiromi Masunaga, John Murray, Karen Nakai, Jonathan O'Brien, Anna Ortiz, Shireen Pavri, Laura Portnoi, Kristin Powers, Paul Ratanasiripong, Ali Rezaei, Catherine Richards-Tutor, William Saltzman, James Scott, Charles Slater, William Vega

Introduction

The Department of Advanced Studies in Education and Counseling offers graduate level course work in the following program areas: Educational Administration, Educational Psychology, Librarianship, Educational Technology and Media Leadership, Social and Cultural Analysis of Education, Marriage and Family Therapy (MFT), School Counseling, School Psychology, Student Development in Higher Education, and Special Education/ Education Specialist, as well as undergraduate service courses in life skills and other areas.

Students desiring information should contact the department office for referral to one of the faculty advisors.

All CED graduate level courses (500/600) are assumed to be letter grade only (A-F) unless stated otherwise.

Graduate Degrees

Master of Arts in Education with the following options:

- Educational Administration
- Educational Psychology
- Librarianship
- Social and Cultural Analysis of Education
- Educational Technology and Media Leadership

Two Master of Science degrees are available:

- Special Education
- Counseling

MS in Counseling offers three options:

- Marriage and Family Therapy
- School Counseling
- Student Development in Higher Education

Credentials

The department offers credentials in Administrative Services (Preliminary and Professional), Pupil Personnel

Services (School Counseling, School Counseling Internship, School Psychology, School Psychology Internship), Education Specialist/Special Education (Mild/Moderate and Moderate/Severe) and Teacher Librarian Services. In addition, a Graduate Certificate in Career Guidance Specialist and Community College are offered. (Please note: the Graduate Certificate in Career Guidance Specialist is under consideration for discontinuance.)

Required credential courses must be completed with a grade of "C" or better. The minimum grade point average for successful progress in the credential programs of the department is 3.0 on all units to be applied to the credential program. Students falling below 3.0 will be placed on probation. To maintain status in the credential program students must earn sufficient grade points to bring GPA back to 3.0 by the end of the regular semester following the semester in which the GPA fell below 3.0. Refer to this Catalog for policy.

Master of Arts in Education

Candidates for degrees in Master of Arts programs must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time. Program application deadlines may vary. Visit the College of Education website for program details, application guidelines and materials, and application deadlines (www.ced.csulb.edu). All university regulations governing the master's degree apply to college programs. Program requirements published in the university Catalog in effect during the year a candidate advances to candidacy are the requirements the candidate will be held to (catalog rights).

Option in Educational Administration

Educational leaders serve in many capacities. No matter what position an individual holds within an educational organization, all efforts should be directed at supporting the equitable academic achievement of all students being served. The courses in the Educational Administration Option are designed to prepare leaders for this important work. Emphasis is placed on 1) examining the role of schooling in a democratic society, 2) multiple and varied aspects of educational leadership, 3) building collaboratives, 4) managing and guiding change, and 5) working with diverse populations. The program's primary mission is to educate candidates who will assume leadership positions in diverse, urban, K-12 schools and districts. Visit the program website for program details (www.ced.csulb.edu/academic/masters.cfm).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.

2. 15 upper-division units in education, including EDP 400 or equivalent.
3. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
4. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the Preliminary Administrative Services Masters/Credential Program must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional Admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Complete EDP 400.
3. Complete EDAD 541 and one other EDAD course for a total of 6 units.
4. Resolve all incomplete grades.
5. Maintain a 3.0 grade point average.
6. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

A minimum of 30 units with a 21-unit concentration in Educational Administration is required; 21 units must be at the 500/600 level taken at this university.

1. Take one of the following (3 units):
SCAE 560, SCAE 561, SCAE 564
2. Take one of the following (3 units):
EDP 520, EDP 595
3. Take one of the following chosen with advisor consultation:
EDAD 695, EDAD 698 Thesis (must take 6 units)
4. Take all of the following (21 units):
EDAD 541 Leadership, Organizational Management, Ethics (3)
Prerequisites: Admission to the Preliminary Administrative Service Credential Program.
EDAD 544 Legal Aspects of Education: Implications and Applications for School Leadership (3)
Prerequisites: EDAD 541.

EDAD 647A Fiscal Resources Educational Administration (3)
Prerequisites: EDAD 541.

EDAD 647B Human Resources in Educational Admin (3)
Prerequisites: EDAD 541.

EDAD 677A Curriculum/Program Devand Evaluation (3)
Prerequisites: EDAD 541. Corequisites: EDAD 677B.

EDAD 677B Instructional Leadership & Assessment (3)
Prerequisites: EDAD 541. Corequisites: EDAD 677A.

EDAD 649 Urban Schools and Communities: Academic, Social, Political, and Cultural Issues (3)
Prerequisites: EDAD 541.

Option in Educational Psychology

The Option in Educational Psychology is a research-oriented program designed for students and educators to develop their understanding of learning and development, testing and assessment, research, and program evaluation in education. This program offers a rigorous curriculum in these areas and requires that the student declare a "foundation" emphasis within the Option. There are two Tracks in this Option: Track 1 (MA, Option in Educational Psychology) and Track 2 (MA, Option in Educational Psychology plus School Psychology Credential Program). Admission to the MA, Option in Educational Psychology does not guarantee acceptance to the highly competitive School Psychology Credential Program. Visit the program website for program details (www.ced.csulb.edu/academic/masters.cfm).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree in a behavioral science, education, or a related field.
2. Minimum 3.00 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. Minimum score of 150 on the Verbal section of the Graduate Record Exam and 140 on the Quantitative section with a combined score of 300 overall.
4. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the Educational Psychology program for Track 1 or Track 2 must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Complete one of the following (or equivalent): EDP 301 or EDP 302.
3. For Track 1 candidates, complete all of the following (or equivalent): EDP 305, EDP 419, EDSP 350.
4. For Track 2 candidates, complete both of the following (or equivalent): EDP 405, EDP 419.
5. Complete 6-9 units of core courses.
6. Resolve all incomplete grades.
7. Maintain a 3.0 grade point average in the prerequisites and in all core courses.
8. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

Master's Objective Track 1

The degree objective requires a total of 33 units (not including prerequisites) made up of a 27-unit core and a 6-unit "foundation" that culminates in either (a) a master's thesis or (b) a written comprehensive examination.

1. Degree Core:

A. Take all of the following:

- EDP 519 Quantitative Educational Data Analysis I (3)
Prerequisites: EDP 419 or equivalent.
- EDP 520 Quantitative Research Methods in Educ (3)
Prerequisites: EDP 419 or equivalent.
- EDP 541 Sem in Educ Measurement & Assessment (3)
Prerequisites: EDP 419, 519, and 520 or equivalent.
- EDP 595 Qualitative Research Methods in Educ (3)
Prerequisites: EDP 400 or equivalent.
- EDP 596 Program Evaluation in Education (3)
Prerequisites: EDP 419 and 520, or equivalent.
- EDP 604 Seminar in Human Development (3)
Prerequisites: EDP 301 or 302, and EDP 400 or 419.
- EDP 605 Theories of Learning, Cognition, Motivation, and Social Development (3)
Prerequisites: EDP 301 or 302.
- EDP 619 Quantitative Educational Data Analysis II (3)
Prerequisites: EDP 519 or equivalent.

B. Take one of the following:

- EDSP 564 or 500/600 level elective (with program advisor approval)

2. Foundation

For the "foundation" culminating in a master's thesis:

- Complete all of the above 27 units of core courses
- Complete 6 units of EDP 698, Thesis
- Students are strongly encouraged to complete EDP 696, Thesis Study (3 units) as a 500/600 level elective

For the "foundation" culminating in a written comprehensive examination:

- Complete all of the above 27 units of core courses
- Take 6 units of 500/600 level electives selected with the approval of the program advisor.

Master's Objective Track 2

Assignment to Track 2 requires that students are admitted to both the Master of Arts in education, Option in Educational Psychology and the School Psychology Credential Program. The degree objective requires a total of 32 units (not including prerequisites) made up of a 23-unit core and 9-unit "foundation" that culminates in either (a) a master's thesis or (b) a written comprehensive examination.

1. Degree Core:

A. Take all of the following:

- EDP 520 Quantitative Research Methods in Educ (3)
Prerequisites: EDP 419 or equivalent.

- EDP 524A Psychoeducational Assessment (3)
Prerequisites/Corequisites: EDP 528; Corequisites: EDP 524B and admittance to the School Psychology Program.

- EDP 524B Psychoeducational Assessment: Clinical Applications (2)
Prerequisites/Corequisites: EDP 528; Corequisites: EDP 524A and admittance to the School Psychology Program.

- EDP 579 Curriculum-Based Assessments and Academic Interventions (4)
Prerequisites: Admission to the School Psychology Program and EDP 524A and 524B.

- EDP 604 Seminar in Human Development (3)
Prerequisites: EDP 301 or 302, and EDP 400 or 419.

- EDP 605 Theories of Learning, Cognition, Motivation, and Social Development (3)
Prerequisites: EDP 301 or 302.

B. Take both of the following:

- EDP 525A Psychoeducational Assessment of Culturally and Linguistically Diverse Students (3)
Prerequisites: EDP 524A, 524B. Corequisites: EDP 525B.

- EDP 525B Psychoeducational Assessment of Culturally and Linguistically Diverse Students: Clinical Applications (2)
Prerequisites: EDP 524A, 524B. Corequisites: EDP 525A.

2. Foundation

For the "foundation" culminating in a master's thesis:

- Complete all of the above 23 units of core courses
- Complete 6 units of EDP 698, Thesis
- Complete one of the following:
EDP 541, 595, 596, or 696

For the "foundation" culminating in a written comprehensive examination:

- Complete all of the above 23 units of core courses
- Complete all of the following:

- EDP 519 Quantitative Educational Data Analysis I (3)
Prerequisites: EDP 419 or equivalent.

- EDP 541 Sem in Educ Measurement & Assessment (3)
Prerequisites: EDP 419, 519, and 520 or equivalent.

- EDP 596 Program Evaluation in Education (3)
Prerequisites: EDP 419 and 520, or equivalent.

Option in Educational Technology and Media Leadership

Serving the mission of enhancing education through the use of technology, educational technology specialists perform many functions in schools, educational institutions, and training agencies. This option prepares leaders in the field who will evaluate, design, and effectively use technology for educational purposes. Combining both theory

and practice, this option is designed for individuals seeking career growth in K-12 and university settings and for those planning to pursue doctoral degrees. Visit the program website for program details (www.ced.csulb.edu/academic/masters.cfm).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 3.00 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. Upper-division coursework in statistics and research.
4. Upper-division coursework in the use of technology and computer applications (3 units), e.g., ETEC 411, ETEC 444, or equivalent experience
5. Minimum 3.0 grade point average in all prerequisite coursework (items 3 & 4 above).
6. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the Educational Technology and Media Leadership program must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Maintain a 3.0 grade point average in all course work.
3. Resolve all incomplete grades.
4. Complete all prerequisites and at least 6 units of the program in residence.
5. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

Students must complete a minimum of 30 units of upper-division and graduate courses, of which at least 21 units must be at the 500/600 level taken at this university. With consent of the program advisor, students may count up to 6 units of previously taken graduate courses toward the

degree. However, a student who completes a 6 unit thesis or project may possibly count 9 units of previously taken courses toward the degree.

1. Core courses (21 units):

A. Research Methods:

Take the following:

EDP 520 Quantitative Research Methods in Educ (3)
Prerequisites: EDP 419 or equivalent.

Also complete course prerequisites:

ED P 400, ED P 419, or equivalent

B. Educational Technology:

Take all of the following:

ETEC 510 Foundations of Educational Technology (3)
Prerequisites: Either ETEC 411, 444. Equivalent experience satisfying the California Level I computer technology standard, or consent of instructor.

ETEC 523 Computer Tech in Education, Level II (3)
Prerequisites: ETEC 444 or equivalent experience satisfying California Level I computer technology standard.

ETEC 525 Social and Cultural Implications of Educational Technology (3)
Prerequisites: None.

ETEC 530 Educational Technology Leadership (3)
Prerequisites: ETEC 523, or consent of instructor.

ETEC 551 Education and the Internet (3)
Prerequisites: Either ETEC 411, 444, equivalent experience satisfying the California Level I computer technology standard, or consent of instructor.

ETEC 570 E-Learning Design and Development (3)
Prerequisites: ETEC 523 or consent of instructor.

2. Electives (6 units): In consultation with program advisor, students will select 6 additional units. Options include, but are not limited to, the following:

- A. Educational Technology: ETEC 535, 580;
- B. Educational Psychology: EDP 595, 696;
- C. Librarianship: ELIB 530A, 530B, 540, 550;
- D. Special Education: EDSP 542;
- E. Computer Science: CECS 401E, 410E;
- F. Other courses, including those outside the College of Education, chosen in consultation with program advisor.

3. Exit requirement (3 - 6 units); Electronic portfolio with interview and one of the following chosen in consultation with the program advisor:

- A. Pass a comprehensive examination;
- B. EDP 699 (6 units) Project with written Project Report;
- C. EDP 698 Thesis (must take 6 units).

Option in Librarianship

This program is currently under consideration for discontinuance. You should refer to currently active programs in related areas: Teacher Librarian Services Credential and the Master of Arts in Educational Technology and Media Leadership.

The Master's degree option in Librarianship provides a rigorous academic foundation for professional leadership in library and information professions that serve the needs of a culturally diverse, technology-informed society. Because the Master of Arts degree option incorporates work toward the Teacher Librarian Services Credential, candidates with this specialization may pursue their credential and degree simultaneously. Visit the program website for program details (www.ced.csulb.edu/academic/masters.cfm).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 3.00 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the Librarianship program must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Maintain a 3.0 grade point average in all course work.
3. Resolve all incomplete grades.
4. Complete at least 6 units of the program.
5. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

A minimum of 36 units is required, with at least 24 units in the 500/600 level series taken at this university. In consultation with the advisor, a comprehensive examination track or thesis track is selected.

Note: Information in this section does not include all of the requirements for the Teacher Librarian Services Credential, which is typically pursued simultaneously with the Master of Arts degree. For additional information, go to www.csulb.edu/lmt.

1. Core courses (21 units):

A. Library Media.

Take all of the following:

ELIB 500 Foundations of Information (3)
Prerequisites: None.

ELIB 510 Collection Development (3)
Prerequisites: None.

ELIB 520 Info Literacy and Reference Services (3)
Prerequisites: None.

ELIB 540 Organization of Information (3)

Prerequisites: None.

ELIB 550 Management of Info Organizations (3)

Prerequisites: None.

B. Technology.

Take one of the following:

ELIB 570, ETEC 523, PPA 521 (for public services)

C. Research methods.

Take one of the following: EDP 520, EDP 595

2. Electives (9 units).

The balance of the program is completed through advisor-approved electives. Choices include, but are not limited to, the following:

A. Youth Services: ELIB 530A, 530B; EDCI 625;

B. Higher Education Services: COUN 548, 552; EDP 490;

C. Public Services: FCS 529; PPA 500, 525, 533, 535;

D. Advanced Technology: ETEC 530, 551, 553, 623.

3. Field experience (3-4 units).

Take one of the following:

ELIB 580, ETEC 580

4. One of the following chosen in consultation with faculty advisor upon advancement to candidacy (3-6 units):

A. Comprehensive exam; EDP 697, Research (3 units)

B. Thesis; EDP 698, Thesis (must take 6 units)

Option in Social and Cultural Analysis of Education

The Master of Arts Degree in Education, Option in Social and Cultural Analysis of Education (SCA), focuses on the social and cultural analysis of education in urban and international contexts. Emphasizing critical approaches to education, including critical theory and critical pedagogy, the degree's interdisciplinary nature provides the intellectual rigor necessary for analyzing the relationship between education and society and effecting social and educational justice. SCA courses examine education in its historical, social and political contexts, and may be applied to all levels of education—locally, nationally, and internationally. After completion of the program, graduates have a variety of career choices, not only in the educational realm, but also in the private sector and in non-governmental organizations. The program also serves as an ideal foundation for further academic study at the doctoral level. Visit the program website for program details (www.ced.csulb.edu/academic/masters.cfm).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 3.00 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the Social and Cultural Analysis of Education program must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Complete at least 6 units of the program, including SCAE 550 and 3 additional units.
3. Set academic, professional, and personal goals in consultation with advisor (facilitated through SCAE 550 and SCAE 551)
4. Maintain a 3.0 grade point average in all course work.
5. Resolve all incomplete grades.
6. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

All students must complete thirty-three (33) units of upper-division and graduate level courses, of which twenty-one (21) units must be at the 500/600 level. Students who complete a master's thesis or project must enroll in six (6) additional units while completing the culminating experience. For all students, at least twenty-four (24) units must be completed in residency. With consent of the student's advisor and after following procedures for course equivalencies, students may count up to six (6) units of previously taken graduate courses toward the degree. A student who completes a thesis or project may potentially count up to nine (9) units of previously taken graduate courses toward the degree.

1. Core courses (6 units)

Complete the following:

SCAE 550 Foundations of Social and Cultural Analysis of Education (3)
Prerequisites: None.

SCAE 551 Critical Pedagogies (3)
Prerequisites: None.

2. Emphasis Area (9 units)

Take three courses in one area:

A. International Contexts:

SCAE 566, 567, 568, 564

B. Urban Contexts:

SCAE 560, 561, 562, 564

3. Second Emphasis Area (3 units)

Choose one course from the SCAE 566-568 series for international contexts or from the SCAE 560-562 series for urban contexts.

4. Electives (6 units)

Choose 2 courses in consultation with faculty advisor.

5. Research Methods Courses (6 units)

Take the following course:

EDP 400 Introduction to Educational Research (3)
Prerequisites: None.

Take one of the following courses:

EDP 520, EDP 595

6. Capstone Course (3 units)

Take the following course:

SCAE 695 Social and Cultural Analysis of Education Capstone (3)
Prerequisites: None.

7. Culminating Experience. In consultation with faculty advisor, choose one of the following:

A. Comprehensive examination

B. Six units of EDP 698: Thesis over two semesters

C. Six units of EDP 699: Project over two semesters

Master of Science in Education

Candidates for degrees in Master of Science programs must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time. Program application deadlines may vary. Visit the College of Education website for program details, application guidelines and materials, and application deadlines (www.ced.csulb.edu/academic/masters.cfm). All university regulations governing the master's degree apply to college programs. Program requirements published in the university catalog in effect during the year a candidate advances to candidacy are the requirements the candidate will be held to (catalog rights).

Master of Science in Counseling

Counselors serve valuable functions in fields of education, health and human services, and business. Their domains of practice include public and private educational institutions, medical facilities and allied health agencies, social service agencies and organizations, state and federal human service agencies and programs, correctional facilities, business and industry, and private practice. The program's philosophy is to introduce students to a variety of approaches to counseling, and to encourage the development of competencies within these approaches.

The program combines theory and practice utilizing on and off campus course work and field work assignments. Required courses are offered predominantly in the evening, but most field assignments require daytime participation during normal business hours defined by the off-campus sites.

Students coming from diverse experiential backgrounds are trained at the graduate level to be able to perform entry level duties expected by the counseling profession and its specialty areas. Students are prepared to assume future leadership positions in their area(s) of expertise after additional work experiences have been acquired in the field following graduation.

The Master of Science in Counseling Program consists of three Options:

1. Marriage and Family Therapy
2. School Counseling
3. Student Development in Higher Education

The total number of course units needed to satisfy requirements for graduation depends upon the Option selected by the student. See below and visit the program website for Option details (www.ced.csulb.edu/academic/masters.cfm).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university in a behavioral science, education, or related field.
2. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time. Program Option application deadlines may vary.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the selected Counseling program Option must be submitted to the College of Education Graduate Studies Office (ED1-7). You may only apply to one program per year. A program Option application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program Option application does not require a set of transcripts.

Applicants are not allowed more than 9 semester unit credits applied to curriculum requirements of the option selected prior to admission into the first semester of the program.

Conditional Admission

Successful applicants are admitted to the program Option with Conditional Admission status.

Advancement to Candidacy - Clear Admission

See individual Options below.

Option in Marriage and Family Therapy

Students in this Option will prepare for licensed independent MFT practice to work in private practice, community-agency settings, government-court settings, hospitals, clinics, Employee Assistance Programs, and city-county-state agencies to provide counseling services for adults, children, families and couples.

Prerequisite

Take the following course:

EDP 400 Intro to Educational Research (3) (or equivalent)
Prerequisites: None.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Complete COUN 510, 513, 515, 522, 608, 609.
3. Maintain a 3.0 grade point average in all course work.
4. Resolve all incomplete grades.
5. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

Take all of the following (58 units) and choose option A or B below:

COUN 508A Family Systems Applied to Aging and Lifespan Development (3)
Prerequisites: None.

COUN 508B Family Systems Methods (3)
Prerequisites: COUN 508A or consent of instructor.

COUN 510 Law and Ethics for Counselors (3)
Prerequisites: None.

COUN 511 Counseling the Alcohol/ Chemically Dependent Person (2)
Prerequisites: None.

COUN 512 Child and Spousal/Partner Abuse (1)
Prerequisites: None.

COUN 513 Introduction to Clinical Interviewing (3)
Prerequisites: None.

COUN 514 Medication and Counseling (2)
Prerequisites: COUN 513 or consent of instructor.

COUN 515 Counseling Theories (3)
Prerequisites: COUN 513.

COUN 522 Counseling Methods and Techniques (3)
Prerequisites/Corequisites: COUN 513, 515.

COUN 543 Human Sexuality Counseling (3)
Prerequisites: COUN 515.

COUN 555 Cross-Cultural Counseling (3)
Prerequisites: COUN 510, 513, 515; COUN 506 for School Counseling Option, COUN 538 for SDHE Option, or their equivalent upon approval of the instructor.

COUN 556 Counseling Children and Adolescents (3)
Prerequisites: COUN 515 and 522, or consent of instructor.

COUN 557 Counseling Couples (3)
Prerequisites: COUN 515.

COUN 601 Trauma and Grief Counseling (3)
Prerequisites: COUN 556 or consent of instructor.

COUN 608 Seminar in Marriage and Family Therapy (3)
Prerequisites: COUN 510, 511, 512, 513, 515, 522.
Recommended: COUN 556.

COUN 609 MFT Practicum (4)
Prerequisites: COUN 510, 511, 512, 513, 515, 522 and 608.

COUN 638 Group Counseling (3)
Prerequisites: Admission to the MS in Counseling and/or PPS School Counseling Credential, or School Psychology Program, COUN 510, 513, 515 or equivalent upon approval of instructor.

COUN 643D Counseling Field Work: Marriage and Family Therapy (3)
Prerequisites: COUN 608, 609.

COUN 644D Advanced Counseling Field Work:

Marriage and Family Therapy (3)

Prerequisites: COUN 638, 643D.

COUN 685 Community Mental Health Counseling (1)

Prerequisites: None

Take one of the following:

EDP 520, EDP 595

Select an Option:

Option A - Thesis (total units: 64):

Take EDP 698 Thesis (must enroll in 6 units)

Option B - Comprehensive Exam (total units: 62):

Take an additional 4 units of approved electives from courses in the Counseling program.

Elective options include:

COUN 559 Play-Art Therapy (3)

COUN 680 Family Trauma Treatment Seminar (3)

COUN 681 Spirituality and Counseling (1)

COUN 682 Gestalt Psychotherapy (2)

COUN 683 Cognitive Behavioral Therapy (2)

COUN 692A/B Introduction/Advanced Psychodrama (1/1)

COUN 684 Advanced Clinical Case Formulation (1)

Option in School Counseling

The Master of Science in Counseling (School Counseling Option) and the Pupil Personnel Services School Counseling Credential Programs are designed to prepare counselors to work in elementary, middle, and high schools. Both programs support a comprehensive, developmental, and collaborative school counseling model. Based upon the American School Counselor Association's National Standards for K-12 School Counseling Programs and their 2003 National Model, our programs further support a balanced, holistic approach that considers the academic, career development, and personal/social needs of K-12 students. Graduates are expected to become proactive leaders who will advocate for their students and themselves, as counseling professionals working toward equity, achievement, and opportunity for all students.

Students entering the Master of Science in Counseling (School Option) program concurrently fulfill requirements for the Pupil Personnel Services School Counseling Credential and must apply to both programs. The Pupil Personnel Services School Counseling Credential (PPS/SC) is required by the California Commission on Teacher Credentialing (CTC) for persons employed by the public schools as school counselors. (See Credential Programs)

Each year the School Counseling Programs Information and Application Packet is revised. Applicants must use the application developed specifically for the year for which they are applying.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Complete COUN 506, COUN 513, COUN 515, EDP 400.
3. Maintain a 3.0 grade point average in all course work.
4. Resolve all incomplete grades.
5. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

Take all of the following (51-57 units):

COUN 506 Counseling in School Settings (3)

Prerequisites: Official admission to the School Counseling Program.

COUN 507 Career/Acd Counseling in K-12 Settings (3)

Prerequisites: COUN 506.

COUN 510 Law and Ethics for Counselors (3)

Prerequisites: None.

COUN 513 Introduction to Clinical Interviewing (3)

Prerequisites: None.

COUN 515 Counseling Theories (3)

Prerequisites: COUN 513.

COUN 555 Cross-Cultural Counseling (3)

Prerequisites: COUN 510, 513, 515; COUN 506 for School Counseling Option, COUN 538 for SDHE Option, or their equivalent upon approval of the instructor.

COUN 606 Current Issues in Prof School Counseling (3)

Prerequisites: COUN 506.

COUN 607 School Counseling Practicum (3)

Prerequisites: COUN 506, 515.

COUN 638 Group Counseling (3)

Prerequisites: Admission to the MS in Counseling and/or PPS School Counseling Credential, or School Psychology Program, COUN 510, 513, 515 or equivalent upon approval of instructor.

COUN 643A Counseling Field Work: School Counseling (3)

Prerequisites: COUN 607, Certificate of Clearance, EDP 536 (must be taken concurrently with either COUN 643A or 644A.)

COUN 644A Advanced Counseling Field Work: Advanced School Counseling (3)

Prerequisites: COUN 507, 638, 643A; EDP 536 (must be taken concurrently with either COUN 643A or 644A); pass CBEST.

COUN 695C Integrative Seminar in Professional School Counseling (3)

Prerequisites: Advancement to candidacy; COUN 507, 555, 638; EDP 596; and permission to enroll from School Counseling Program Coordinator. Prerequisites/Corequisites: COUN 643A.

EDP 400 Intro to Educational Research (3) (or equivalent)

Prerequisites: None.

EDP 520 Quantitative Research Methods in Education (3)

Prerequisites: EDP 419 or equivalent.

EDP 536 Collaborative Consultation in the Schools (3)

Prerequisites/Corequisites: COUN 643A, 644A; EDP 642A, 642B, or Field Placement in Special Education.

EDP 596 Program Evaluation in Education (3)

Prerequisites: EDP 400 and 520, or equivalent.

EDP 604 Seminar in Human Development (3)

Prerequisites: EDP 301 or 302, and EDP 400 or 419.

EDP 698 Thesis (must take 6 units) or comprehensive examination.

Prerequisites: Advancement to candidacy, EDP 519 or 520 or 595 or 696, approval by director, department chair and associate dean.

Option in Student Development in Higher Education (SDHE)

Students completing this option are employed in residence halls, financial aid, student activities, adult re-entry, admissions, career centers, academic advising, disabled student services, counseling centers, orientation, TRIO and Educational Opportunity Programs, multicultural affairs, and community outreach in two- and four-year institutions.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Complete COUN 510, 513, 538, 593; EDP 400.
3. Maintain a 3.0 grade point average in all course work.
4. Resolve all incomplete grades.
5. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

Take all of the following (51 – 57 units):

- COUN 510 Law and Ethics for Counselors (3)
Prerequisites: None.
- COUN 513 Introduction to Clinical Interviewing (3)
Prerequisites: None.
- COUN 515 Counseling Theories (3)
Prerequisites: COUN 513.
- COUN 516 Counseling the Adult (3)
Prerequisites: COUN 515.
- COUN 538 Student Development in Higher Education (3)
Prerequisites: None.
- COUN 547 Student Development Theory in Higher Education: Theory to Practice (3)
Prerequisites: COUN 538.
- COUN 548 Students in U. S. Higher Education (3)
Prerequisites: COUN 538.
- COUN 549 Management of Student Development in Higher Education (3)
Prerequisites: None.
- COUN 555 Cross-Cultural Counseling (3)
Prerequisites: COUN 510, 513, 515, 538, or their equivalent upon approval of the instructor.
- COUN 593 Seminar in Professional Development in Counseling and Human Services (1)
Prerequisites: COUN 538 and 548 (must have completed or concurrently enrolled).
- COUN 638 Group Counseling (3)
Prerequisites: Admission to the MS in Counseling, and/or PPS School Counseling Credential, or School Psychology Program, COUN 510, 513, 515 or equivalent upon approval of instructor.
- COUN 643B Counseling Field Work: Student Development in Higher Education (3)
Prerequisites: COUN 516, 538.
- COUN 644B Advanced Counseling Field Work: Student Development in Higher Education (3)
Prerequisites: COUN 516, 538, 643B.
- COUN 693A Intermediate Seminar in Professional Development in Student Development in Higher Education (1)
Prerequisites: COUN 593.
- COUN 693B Advanced Professional Development Sem. in Student Development in Higher Education (1)
Prerequisites: COUN 593, COUN 693A.
- EDP 400 Intro to Educational Research (3) (or equivalent)
Prerequisites: None.
- EDP 520 Quantitative Research Methods in Education (3)
Prerequisites: EDP 419 or equivalent.
- EDP 596 Program Evaluation in Education (3)
Prerequisites: EDP 400 and 520, or equivalent.

Take one of the following:

SCAE 560, SCAE 561, SCAE 562

Take one of the following:

EDP 698 Thesis (must take 6 units)
Comprehensive examination

Master of Science in Special Education

Students in this master's degree program work toward attaining leadership positions in public and private schools and agencies in the community that provide services for individuals with disabilities. The program is aimed at developing advanced skills and knowledge of current research in special education, and demonstration of the ability to engage in reflective inquiry. The program culminates with a thesis or comprehensive exam. The program does not result in a credential to teach students with disabilities. Students who want to teach individuals with disabilities should refer to the Education Specialist Credential Program section. Visit the program website for program details (www.ced.csulb.edu/academic/masters.cfm).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university, to include 24 upper-division units in 3 areas of study:
 - A. Human development: EDP 301 or EDP 302 (or equivalent).
 - B. Statistics and measurement: EDP 400 (or equivalent).
 - C. Individual differences: EDSP 350 (or equivalent).
2. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. Special education teaching credential, or equivalent experience.
4. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the Special Education program must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts. Prospective candidates should attend an on-campus program orientation.

Conditional Admission

Successful applicants are admitted to the program with Conditional Admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. For advancement to candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).

2. Maintain a 3.0 grade point average in all course work.
3. Resolve all incomplete grades.
4. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

Students must complete a minimum of 30 units of upper-division and graduate courses with a minimum of 21 units at the 500/600-level taken at this university. Degree requirements include the following courses:

1. Foundation Courses:
 - EDP 520 Quantitative Research Methods in Educ (3)
Prerequisites: EDP 419 or equivalent.
 - EDSP 546C Practicum in Special Education (3)
Prerequisites: None.
 - EDSP 550 Emerging Perspectives in Special Educ (3)
Prerequisites: None.
2. Required Specialization Courses:
 - EDSP 535 Collaborative Partnerships and Effective Communication in School Settings (3)
Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of individualized Induction Plan, or consent of instructor.
 - EDSP 542 Technology in Special Education (3)
Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.
 - EDSP 566 Transition Into, Through, and Beyond School for Individuals with Disabilities (3)
Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualist Induction Plan, or consent of instructor.
3. One of the following advanced methods courses:
 - EDSP 563 Advanced Methods of Teaching Individuals with Significant Disabilities (3)
Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.
 - EDSP 565 Advanced Methods of Teaching Individuals with Mild/Moderate Disabilities (3)
Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.
4. One of the following pathways with advisor consultation:
 - A. Comprehensive exam: EDSP 695S, Seminar (3 units) and written comprehensive exam;
 - B. Thesis: EDP 698, Thesis (must take 6 units).
5. Take 3-6 units of electives with advisor consultation.

CREDENTIAL PROGRAMS

Program requirements subject to change to align with changes in CTC requirements.

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be

submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

A separate application to the selected credential program must be submitted to the College of Education Graduate Studies Office (ED1-7) or to the Teacher Preparation and Advising Center (ED1-67) for the Preliminary Specialist Education Credential. A credential program application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts. Deadlines for submitting an application for programs vary. Refer to the online directions for specific dates.

Pupil Personnel Services

The College of Education offers two of the four Pupil Personnel Services Credential programs issued by the California Commission on Teacher Credentialing (CTC): School Counseling and School Psychology.

School Counseling Credential (code 802)

The Master of Science in Counseling (School Counseling Option) and the Pupil Personnel Services School Counseling Credential Programs are designed to prepare counselors to work in elementary, middle, and high schools. Both programs support a comprehensive, developmental, and collaborative school counseling model. Based upon the American School Counselor Association's National Standards for K-12 School Counseling Programs and their 2003 National Model, our programs further support a balanced, holistic approach that considers the academic, career development, and personal/social needs of K-12 students. Graduates are expected to become proactive leaders who will advocate for their students and themselves as counseling professionals working toward equity, achievement, and opportunity for all students.

The Pupil Personnel Services School Counseling Credential (PPS/SC) is required by the California Commission on Teacher Credentialing (CTC) for persons employed by the public schools as school counselors. Neither a Master's Degree nor a teaching credential is required for school counseling positions in the State of California. However, in keeping with national standards, students entering the CSULB Pupil Personnel Services School Counseling Credential Program need to earn a Master of Science in Counseling (School Counseling Option) concurrently with the credential, unless they already have a Master's Degree in Counseling from CSULB or another institution. Thus, applicants to the Pupil Personnel Services School Counseling Credential Program who lack a Master's Degree in Counseling must concurrently apply to the Master of Science in Counseling (School Counseling Option) Program to be considered.

Courses required for the Pupil Personnel Services School Counseling Credential are the same courses that are required for the Master of Science in Counseling (School Counseling Option). Thus, students seeking the Pupil Personnel Services School Counseling Credential are required to take all coursework required for the Master of Science in Counseling (School Counseling Option).

Prerequisites

1. Baccalaureate degree from an accredited college or university with some coursework in the social sciences, behavioral sciences, or related fields.
2. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Each year the School Counseling Programs Information and Application Packet is revised. Applicants must use the application developed specifically for the year for which they are applying. Candidates are admitted for fall only, although admitted candidates may begin coursework during the preceding summer semester. Applications and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets.

CBEST Requirement

Admitted students must take the California Basic Educational Skills Test (CBEST) no later than the second available administration date following enrollment in the program.

Requirements

1. Completion of the Master of Science in Counseling (School Counseling Option) or an approved equivalent degree.
2. All of the following:
 - COUN 506 Counseling in School Settings (3)
Prerequisites: Official admission to the School Counseling Program.
 - COUN 507 Career/Acd Counseling in K-12 Settings (3)
Prerequisites: COUN 506.
 - COUN 510 Law and Ethics for Counselors (3)
Prerequisites: None.
 - COUN 513 Introduction to Clinical Interviewing (3)
Prerequisites: None.
 - COUN 515 Counseling Theories (3)
Prerequisites: COUN 513.
 - COUN 555 Cross-Cultural Counseling (3)
Prerequisites: COUN 510, 513, 515, 538, or their equivalent upon approval of the instructor.
 - COUN 606 Current Issues in Prof School Counseling (3)
Prerequisites: COUN 506.
 - COUN 607 School Counseling Practicum (3)
Prerequisites: COUN 506, 515.
 - COUN 638 Group Counseling (3)
Prerequisites: Admission to the MS in Counseling, and/or PPS School Counseling Credential, or School Psychology Program, COUN 510, 513, 515 or equivalent upon approval of instructor.
 - COUN 643A Counseling Field Work: School Counseling (3)
Prerequisites: COUN 607, Certificate of Clearance, EDP 536 (must be taken concurrently with either COUN 643A or 644A.)
 - COUN 644A Advanced Counseling Field Work: Advanced School Counseling (3)
Prerequisites: COUN 507, 638, 643A; EDP 536 (must be taken concurrently with either COUN 643A or 644A); pass CBEST.
 - COUN 695C Integrative Seminar in Professional School Counseling (3)
Prerequisites: Advancement to candidacy; COUN 507, 555, 638; EDP 596; and permission to enroll from School Counseling Program Coordinator. Prerequisites/Corequisites: COUN 643A.
 - EDP 400 Intro to Educational Research (3) (or equivalent)
Prerequisites: None.

- EDP 520 Quantitative Research Methods in Education (3)
Prerequisites: EDP 419 or equivalent.
- EDP 536 Collaborative Consultation in the Schools (3)
Prerequisites/Corequisites: COUN 643A, 644A; EDP 642A, 642B, or Field Placement in Special Education.
- EDP 596 Program Evaluation in Education (3)
Prerequisites: EDP 400 and 520, or equivalent.
- EDP 604 Seminar in Human Development (3)
Prerequisites: EDP 301 or 302, and EDP 400 or 419.

3. Fieldwork Prerequisites:
 - A. School Counseling Field Work (COUN 643A) (300 hrs of approved activities, average of 20 hours per week)
 - (1) COUN 607
 - (2) Certificate of Clearance
 - B. Advanced School Counseling Field Work (COUN 644A) (300 hours of approved activities, average of 20 hours per week):
 - (1) COUN 507, 638, 643A; EDP 536 (or concurrent enrollment in 536)
 - (2) Pass CBEST
4. Certification of program completion by the faculty is required. The faculty may require students to complete additional course work, fieldwork, or demonstrate specific competencies before recommendation to the CTC for the PPS School Counseling credential.

School Counseling Internship

For additional information, contact the School Counseling Program Coordinator.

School Psychology Credential (code 804)

The School Psychology Credential program, accredited by the National Association of School Psychologists (NASP) and the California Commission on Teacher Credentialing (CTC), prepares graduates to consult with teachers, parents, administrators and others regarding the learning and behavior of children in grades PreK-12. School psychologists develop and implement interventions and monitor the progress of students with special needs, assist students in developing productive and successful school careers, and assist teachers in the areas of behavior management and instruction. A teaching credential is not required.

Prerequisites

1. Baccalaureate degree from an accredited college or university.
2. Minimum 3.0 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. Possession of a master's degree in a related field or admission into the Master of Arts in Education, Option in Educational Psychology.
4. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets.

Requirements

The following are required for graduation from the School Psychology Program:

1. Students who enter the School Psychology Credential program without an earned master's degree in one of the behavioral sciences must complete the Master of Arts in Education degree with the Option in Educational Psychology;
2. Complete all of the following prerequisites (or acceptable equivalents):

EDP 301 (or EDP 302) Child Development and Learning: A Cross-Cultural Perspective (3)
Prerequisites: None.

EDP 419 Educational Statistics (3)
Prerequisites: Satisfactory completion of an undergraduate mathematics course suitable for general education math credit and, if required by the major, a lower-division statistics course.

EDP 405 Positive Strategies-Classroom Management (3)
Prerequisites: None.

3. Complete a minimum of 60 units of graduate coursework or the equivalent (with approval of the School Psychology faculty) in the following areas of study:

Educational Psychology:

EDP 520 Quantitative Research Methods in Educ (3)
Prerequisites: EDP 419 or equivalent.

EDP 528 Introduction to School Psychology (3)
Prerequisite: Admission to the School Psychology program.

EDP 605 Theories of Learning, Cognition, Motivation, and Social Development (3)
Prerequisites: EDP 301 or 302.

Counseling:

EDP 517 Counseling and Mental Health in Schools (3)
Prerequisite: Admission to the School Psychology program.
Concurrent enrollment in ED P 641A or consent of instructor.

COUN 601 Trauma and Grief Counseling (3)
Prerequisites: COUN 556 or consent of instructor.

Assessment and Intervention:

EDP 524A Psychoeducational Assessment (3)
Prerequisites/Corequisites: EDP 528; Corequisites: EDP 524B and admittance to the School Psychology Program.

EDP 524B Psychoeducational Assessment: Clinical Applications (2)
Prerequisites/Corequisites: EDP 528; Corequisites: EDP 524A and admittance to the School Psychology Program.

EDP 525A Psychoeducational Assessment of Culturally and Linguistically Diverse Students (3)
Prerequisites: EDP 524A, 524B. Corequisites: EDP 525B.

EDP 525B Psychoeducational Assessment of Culturally and Linguistically Diverse Students: Clinical Applications (2)
Prerequisites: EDP 524A, 524B. Corequisites: EDP 525A.

EDP 527 Advanced Assessment for Intervention (3)
Prerequisites: EDP 525A, 525B, 579. Corequisites: EDP 642A.

EDP 536 Collaborative Consultation in the Schools (3)
Prerequisites/Corequisites: COUN 643A, 644A; EDP 642A, 642B, or Field Placement in Special Education.

EDP 560 Behavioral Analysis and Positive Behavioral Interventions (3)
Prerequisites: EDP 405.

EDP 579 Curriculum-Based Assessments and Academic Interventions (4)
Prerequisites: Admission to the School Psychology Program and EDP 524A and 524B.

Practica and Fieldwork:

EDP 641A School Psychology Practicum (2)
Prerequisites: Admission to School Psychology Program, EDP 524A, 524B, 525A, 525B, and 528. Prerequisites/Corequisites: EDP 579.

EDP 641B School Psychology Practicum (2)
Prerequisites: Admission to the School Psychology Program, EDP 524A, 524B, 525A, 525B, 528, and 641A.

EDP 642A Field Work I - School Psychology (3)
Prerequisites: EDP 525A, completion of acceptable masters degree, concurrent enrollment in EDP 527, and approval of program coordinator.

EDP 642B Field Work II - School Psychology (3)
Prerequisites: EDP 527, 642A, and approval of program coordinator.

Complete 4 advisor-approved elective courses;

3. Students are annually evaluated for specific professional competencies. If students are found insufficient on one or more of the competencies, the student may be required to complete additional course work, practica, fieldwork, and/or other activities before being approved for the PPS intern or full credential;
4. A Certificate of Clearance and successful performance on the CBEST is required prior to enrolling in practica;
5. Fieldwork in School Psychology prerequisites: Master's degree in related field and all program courses except EDP 527, 560, and EDP 642A and 642B;
6. Completion of the National School Psychology Examination (ETS/PRAXIS II #10400) prior to completion of the program.

School Psychology Internship

See Program Coordinator for details.

An internship performed under the supervision and with permission of the School Psychology faculty and the school district which hires the intern is required. In order to be recommended to a district as a possible intern, the student must have all program entry requirements and be approved by the School Psychology credential coordinator.

Special Education Credentials

The Education Specialist Credential Program prepares and recommends for certification special education teaching candidates in the CTC Education Specialist Credential categories of Mild/Moderate and Moderate/Severe. An Intern Option is also available in collaboration with certain school districts. Please consult with the Teacher Preparation Advising Center for further information.

Preliminary Level I – Education Specialist Credential and Intern Option:

**Mild/Moderate Disabilities (code 468)
Moderate/Severe Disabilities (code 469)**

Professional Level II – Education Specialist Credential: Mild/Moderate Disabilities (code 468) Moderate/Severe Disabilities (code 469)

This Specialist Credential program prepares candidates in the areas of Mild/Moderate and Moderate/Severe disabilities in a program approved by the California Commission on Teacher Credentialing. The program is designed so that candidates may

be certified in both areas of authorization if they complete two separate field experiences, i.e., one with students with mild and moderate disabilities and one with students with moderate and severe disabilities. Upon admission to the program, candidates must identify an area of authorization and indicate whether their goal is to become certified in one or both areas. An Intern Option is also available in partnership with selected school districts. Please consult the College of Education Teacher Preparation Advising Center for further information. An Education Specialist Credential can also be earned in conjunction with the Integrated Teacher Education Program (ITEP). Please refer to the Liberal Studies Department for information on this.

Preliminary Level I – Education Specialist Credential Program: Mild/Moderate and Moderate/Severe

The Education Specialist Credential Program prepares candidates in the areas of Mild/Moderate and Moderate/Severe disabilities in a program approved by the California Commission on Teacher Credentialing. The program is designed so that candidates may be certified in both areas of authorization if they complete the corresponding methods course and two separate field experiences, i.e., one with students with mild and moderate disabilities and one with students with moderate and severe disabilities. Upon admission to the program, candidates must identify an area of authorization and indicate whether their goal is to become certified in one or both areas. An Intern Option is also available in partnership with selected school districts. Candidates should consult an advisor in the College of Education Teacher Preparation Advising Center (TPAC) for further information. An Education Specialist Credential can also be earned in conjunction with the Integrated Teacher Education Program (ITEP). Candidates should consult an advisor in the Liberal Studies Department for further information.

Application

Application for admission to the Education Specialist Credential Program (ESCP) should be made the semester before beginning the required courses. Students may apply to the program while taking prerequisite courses and may be admitted on a conditional basis pending their completion. Applications are available online at www.ced.csulb.edu/special-education. Applications should be submitted to the Teacher Preparation Advising Center.

Admission

1. Be admitted to the University as a post-baccalaureate (credential) student. (Note that application to the University is a separate process. Apply through www.csumentor.edu)
2. Submit an Education Specialist Credential Program application by the posted application deadline.
3. Attain a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate course work or a grade point average of at least 2.75 in the last 60 semester units or 90 quarter units completed.
4. Provide documentation of a structured field experience of at least 45 hours in a K-12 general education classroom setting.

5. Submit two letters of recommendation from individuals who are well acquainted with your educational training, relevant teaching, and other related experiences.
6. Submit a typed personal essay describing how your interest in special education began; the experiences, training and talents that you bring to the area of special education; your short-term and long-term career goals; and how the program's goals fit your personal goals.
7. Submit a negative tuberculosis skin test or chest X-ray taken within the last three years. (TB clearance must be valid through advanced field study (student teaching).)
8. Submit proof of having taken the California Basic Educational Skills Test (CBEST). You must have attempted all three parts of the CBEST. Passage of the CBEST is required before you begin your advanced field study (student teaching).
9. Pass an oral interview with program faculty.
10. Demonstrate proficiency in reading and writing English by (1) attaining a minimum passing score of 37 on each of the reading and writing portions of the CBEST exam; and/or (2) through demonstration of appropriate writing skills on your personal essay and oral communication skills in the interview with program faculty.
11. Demonstrate personal and professional character traits that satisfy the standards of the teaching profession and display a suitable aptitude for teaching students with special needs in public schools through the application documentation and interview with program faculty. (Candidates must continue to demonstrate appropriate personal and professional character traits through completion of the program.)
12. Submit an application for a Certificate of Clearance to the California Commission on Teacher Credentialing (CTC) or provide evidence of recent fingerprint clearance. Submit a copy of the Certificate as demonstration of clearance or a copy of a certified mail receipt as demonstration of submitting an application.
13. Submit proof of having demonstrated subject matter competence by passing all three sub-tests of the California Subject Exam for Teachers: Multiple Subjects (CSET: Multiple Subjects) or the appropriate single subject CSET exam in Math, Science, or Language Arts to meet the highly qualified teacher mandate. See the program advisor for more information.

Applicants will be informed by email of the decision of the program faculty regarding acceptance into the program shortly after the interview. Upon acceptance, the candidate is required to meet with an assigned program faculty for advisement and may begin taking Preliminary program coursework in the advised sequence.

Application and Admission to the Intern Option

Interns are teachers of record employed by a local school district who earn their credential concurrent with meeting their classroom teaching responsibilities. Prior to applying for the Education Specialist Intern Program (ESIP), applicants must be admitted to the Education Specialist Program (see above).

In addition, Education Specialist Intern Program candidates must:

1. Be employed by a collaborating school district in a qualifying special education classroom or setting.

2. Submit an application for an intern credential (CTC Application 41-4) to the Commission on Teacher Credentialing through the college Credential Center.
3. Maintain continuous university matriculation for the duration of the internship.
4. Submit proof of passage of the California Basic Educational Skills Test (CBEST).
5. Meet the U.S. Constitution requirement (through POSC 100 or 391 or equivalent course at another institution or by exam).
6. Submit a valid Certificate of Clearance (fingerprint background check).
7. Complete all Education Specialist Program prerequisites.
8. Submit one copy of official sealed transcripts from all universities/colleges attended indicating a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate course work or a grade point average of at least 2.75 in the last 60 semester units or 90 quarter units completed.

Requirements for the ESCP and ESIP

To be considered for full admission in the ESCP and ESIP programs, candidates must complete all prerequisite courses (13 units):

Take one of the following:

ED P 301, ED P 302, HDEV 307I, PSY 361

Take all of the following:

EDSP 350 Introduction to Teaching the Exceptional Individual (3)

Prerequisites: None.

EDSP 454 Supporting the Academic and Language Development of English Learners (3)

Prerequisites: Consent of Instructor.

ED P 405 Positive Strategies for Classroom Management (3)

Prerequisites: None.

ETEC 110 Introduction to Computers as Tools (1)

Prerequisites: None.

Fully admitted candidates complete core courses (33 units)

Take all of the following:

EDSP 480 Foundations of Inclusive Education in a Diverse Society: Philosophical and Historical Perspectives and Legal Mandates (3)

Prerequisites: Admission to Education Specialist Credential Program.

EDSP 534 Collaboration and Transition in Special Education (3)

Prerequisites: Full admittance to Education Specialist Credential Program or ITEP, and successful completion of EDSP 480.

EDSP 564 Assessment and Evaluation of Students with Disabilities (3)

Prerequisites: Admission to the Education Specialist Credential Program or consent of instructor.

ED P 560 Behavioral Analysis and Positive Behavioral Interventions (3)

Prerequisites: EDP 405.

EDEL 462 Teaching and Learning Mathematics, K-8 (3)

Prerequisites: Admission to the Multiple Subject Credential Program.

Take one of the following:

EDEL 452, EDSE 457

Take one of the following:

EDSP 577, EDSP 578

Core courses include the advanced fieldwork courses:

Take one of the following pairs of courses:

EDSP 587A and EDSP 587B

or

EDSP 588A and EDSP 588B

Candidates for dual authorization must complete the methods course and 6 units of student teaching in the second authorization.

A grade of "D" or "F" in any of the core courses will result in the candidate being dropped from the program. The candidate's overall grade point average must continue to meet the program admission standard. A 3.0 grade point average with no grade below "C" in the core courses is required to advance to fieldwork (student teaching).

Candidates in the ESIP program must identify and work closely with a site-based support team comprised of their site-support coach, principal, and other school and district support personnel throughout the program.

Advanced Fieldwork (Student Teaching) Requirements for the ESCP and ESIP

The final phase of the ESCP and ESIP programs is advanced fieldwork (student teaching). Candidates are required to student teach for 4 days a week for the length of the semesters that they are enrolled in advanced field study courses. ESCP candidates student teach as a traditional student teacher under the direction of a master teacher. ESIP candidates use their own K-12 special education classroom setting in which they are the teacher of record as their student teaching placement.

A separate application is required for advanced fieldwork (student teaching). Applications for advanced fieldwork must be submitted by the posted deadlines during the semester prior to which the candidate wishes to student teach. Application packets are distributed at program Fieldwork Information meetings, which are announced in program courses and posted on the program website. Upon notification of acceptance to advanced field study, candidates register for Advanced Field Study: EDSP 587 A & B or EDSP 588 A & B.

To be eligible for advanced fieldwork (student teaching), candidates must:

1. Pass CBEST.
2. Complete all program prerequisite and core courses with a 3.0 grade point average and with no grade below "C" in the core courses.
3. Have on file a negative tuberculosis skin test or chest X-ray valid through completion of student teaching.
4. Meet the U.S. Constitution requirement (through POSC 100 or 391 or equivalent course at another institution or by exam).
5. Submit proof of character clearance (fingerprint background check).
6. Submit a student teaching application by the appropriate deadline: October 1 for spring student teaching; March 1 for fall student teaching.

Applying for the Preliminary Education Specialist Credential

To be eligible for the Preliminary Education Specialist Credential, candidates must successfully meet all program requirements, including passing student teaching. They must also pass the Reading Instruction Competency Assessment

(RICA). Candidates may take the RICA at any time prior to applying for the credential. RICA information booklets are available in the Teacher Preparation Advising Center (ED1-67). Candidates apply for the credential through the college Credential Center.

Petition Process

Appeals to program decisions or requests for policy waivers are made by filing a written appeal to the program appeals committee. The committee reviews the written statement and supporting evidence. After the review, the committee renders its final decision. Examples of petitionable policies are: the minimum grade point average required for program admission, waiving the deadline for submission of a test score, waiving an application deadline, completing all program courses prior to student teaching, readmission to student teaching, and course equivalencies. Consult the program coordinator for items not listed here. Students follow university procedures (available elsewhere in this Catalog) to appeal a course final grade.

Professional Level II – Education Specialist Credential: Mild/Moderate and Moderate/Severe

These Level II requirements apply only to students who began their Level I training prior to 2010. Level II requirements are under revision for those beginning their Level I preparation after 2010.

Professional Level II Education Specialist Credential preparation is intended to enable new Education Specialist teachers to apply their Level I preparation to the demands of their professional positions while also developing as reflective practitioners in advanced skill areas and knowledge. The Level II program incorporates several courses in the Master of Science in Special Education program and students are encouraged to apply to the M.S. in Special Education program.

Application and Admission

Candidates are encouraged to apply for admission to the Professional Level II Education Specialist Credential program in the semester immediately prior to their anticipated completion of Level I. The CTC requires that candidates complete Level II within five years of the completion of Level I. Candidates must be employed for at least 2 years under a Level I credential to be granted a Level II credential. Upon completion of the Level I credential, candidates have 120 days of employment to select a support provider and develop a Level II Individualized Induction Plan. To be considered for admission, candidates must provide verification of the following:

Prerequisite Conditions and Requirements

1. Admission to the University.
2. Overall GPA of 2.85 in college and university course work (last 60 units).
3. Completion of Preliminary Level I Credential or Certificate of Eligibility.
4. Take one of the following health science requirement:
HSC 411A, HSC 411B
5. CPR certification.
6. Two letters of recommendation (from employer and a university faculty member at previous institution).

7. Interview with program faculty.
8. Attendance at an on-campus program orientation.

Requirements

1. Complete the following course and complete an Individualized Induction Plan:
EDSP 546C Practicum in Special Education (3)
Select area of emphasis (mild/moderate or moderate/severe); identify specialization and action research focus; and identify non-university activities if applicable.
2. Complete the following core courses:
EDSP 550 Emerging Perspectives in Special Education (3)
Prerequisite: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.
EDSP 535 Collaborative Partnerships and Effective Communication in School Settings (3)
Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.
3. Complete one specialization course:
EDSP 542, EDSP 566
4. Complete one advanced methods course:
EDSP 563, EDSP 565
5. Participate in an Exit interview with University Faculty Mentor and District Support Provider.

Administrative Services Credentials

Certification of school administrators is established through a two-tiered credentialing process.

Upon completion of all Preliminary Administrative Services Credential Program coursework and requirements (Tier 1), candidates apply to the California Commission for Teacher Credentialing (CTC) for a Preliminary Administrative Services Certificate of Eligibility. The Certificate has no expiration date and authorizes the holder to seek an administrative position. The Certificate informs the future employing school district/agency of eligibility to serve. Once the candidate accepts employment as an administrator, the candidate applies to the California Commission for Teacher Credentialing for the Preliminary Administrative Services Credential authorizing the candidate to serve as an administrator in the state of California. Once issued, the Preliminary Credential is valid for five (5) years and it is not renewable.

The Professional Administrative Services Credential (Tier 2) cannot be pursued until the candidate is employed in a position requiring an administrative credential. Once issued, it is valid for five years and is renewable subject to fulfillment of professional development requirements (see complete description of the Professional Administrative Services Credential program below).

Preliminary Administrative Services Credential (code 501)

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.

2. 15 upper-division units in education, including EDP 400 or equivalent.
3. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
4. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).
5. An entity that operates a program for the Preliminary Administrative Services Credential shall determine, prior to recommending a candidate for the credential, that the candidate possesses a baccalaureate degree and a valid teaching credential; or a services credential with a specialization in pupil personnel services, library services, health services, or clinical rehabilitative services; or a designated subjects credential and a baccalaureate degree.

Application

An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. Preference will be given to individuals with 3 or more years of classroom teaching and/or related educational experiences.

Requirements

Prerequisite: Enrollment in courses is contingent upon acceptance in the Educational Administration program and the University. Candidates who have not been accepted in the program may not enroll in Educational Administration courses.

1. Take all of the following:
 - EDAD 541 Leadership, Organizational Management, and Ethics (3)
Prerequisites: Admission to the Preliminary Administrative Services Credential Program.
 - EDAD 544 Legal Aspects of Education: Implications and Applications for School Leadership (3)
Prerequisites: EDAD 541.
 - EDAD 647A Fiscal Resources in Educational Admin (3)
Prerequisites: EDAD 541.
 - EDAD 647B Human Resources in Educational Administration (3)
Prerequisites: EDAD 541.
 - EDAD 649 Urban Schools and Communities: Academic, Social, Political, and Cultural Issues (3)
Prerequisites: EDAD 541.
 - EDAD 677A Curriculum/Program Development and Evaluation (3)
Prerequisites: EDAD 541. Corequisites: EDAD 677B.
 - EDAD 677B Instructional Leadership & Assessment (3)
Prerequisites: EDAD 541. Corequisites: EDAD 677A.
 - EDAD 680 Field Experience in Educational Admin (3)
Prerequisites: Admission to program, EDAD 541, completion of at least three additional courses in the Preliminary Administrative Services Credential program, consent of instructor.
2. The CBEST must be passed prior to entrance into EDAD 680. The CBEST must be taken no later than the second available test administration date following enrollment in the program.

Exit Requirements

1. Verification of three years of successful experience in a position requiring one of the credentials in Item #2 of the "Clear Admission Requirements" (see above);

2. Verification of completion of the State requirement of a mainstreaming course or approved equivalent coursework;
3. Presentation of a professional Exit Portfolio to program faculty with program artifacts of course and field related experiences documenting the candidate's competence and readiness to serve as a school administrator.

Professional Administrative Services Credential – Tier II (code 502)

Certification under the Professional Administrative Services Credential (Tier II) authorizes the candidate to serve in any position requiring the Administrative Services Credential. The Professional Credential cannot be pursued until the candidate is employed in a position requiring an administrative credential. The program requirements must be completed within the five year authorization of the Preliminary Administrative Services Credential. Once issued, the Professional Credential is valid for five years and is renewable subject to fulfillment of professional development requirements.

Prerequisites

1. Possession of a valid Preliminary Administrative Services Credential;
2. Written verification of employment in an administrative position by an educational agency.

Application

1. Program application and evidence that prerequisites have been met.
2. Current resume.
3. Personal narrative describing philosophy of leadership and academic and professional goals while in the program.
4. Copy of valid Preliminary Administrative Services Credential.
5. Written evidence of mentor's commitment to work with the candidate for the duration of the program.
6. Personal contact (phone, email, in person) with program coordinator prior to program application.

Requirements

The Professional Administrative Services Credential Program has a unique format intended to meet the needs of the busy, practicing administrator. Candidates complete the program in 10 semester units. The program is designed to provide the candidate with professional support through an introductory 2-unit course (EDAD 640) in which the Mentoring and Professional Induction Plan is developed. The plan is developed collaboratively among the candidate, the school district mentor, and the University supervisor. The academic core program consists of two courses, EDAD 658 and 659, which must be completed with a grade of "B" or better. The final requirement is a two (2) unit candidate assessment (EDAD 692) in which the candidate participates in a Portfolio Exhibition.

1. Development of the candidate's Professional Induction Plan during EDAD 640.
2. Completion of the following courses:
 - A. EDAD 640 Mentoring and Professional Development Planning for the New Administrator (2)
Prerequisites: Admission to EDAD Professional Administrative Services Program.

- B. EDAD 658 Organizational Development, Culture, and Change (3)
Prerequisites: EDAD 640.
 - C. EDAD 659 Educl Governance, Politics and Policy (3)
Prerequisites: EDAD 640.
 - D. EDAD 692 Administrator Portfolio Development and Exhibition (2)
Prerequisites: Completion of the Professional Development Plan, including the core courses, electives and/or professional development activities.
3. Presentation: Administrative Portfolio during EDAD 692.

Exit Requirements

1. Provide verification of two years of successful full time experience in a position requiring the Administrative Services Credential.
2. Present to program faculty, school district mentor, and a panel of other candidates a professional portfolio containing artifacts that demonstrate competency in each of the six administrative services credential standards and satisfactory progress toward attaining goals identified in the candidate's Professional Induction Plan developed in EDAD 640.

Teacher Librarian Services Credential (code 700)

The 27-unit credential program in Teacher Librarian Services prepares students for service as a teacher librarian, grades PK-adult, in the State of California. The coursework can also be applied to the Masters of Arts in Education, Option in Educational Technology and Media Leadership.

Prerequisites

1. Baccalaureate degree from an accredited college or university.
2. Minimum 3.0 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. Valid California teaching credential.
4. Passage of California Basic Educational Skills Test (CBEST) or equivalent.
5. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. Candidates may bring in a maximum of 6 units through extension courses. A working knowledge of word processing, databases, spreadsheets, desktop publishing, presentation software, Internet searching and e-mail usage is expected.

Requirements

1. Complete the following core courses (24 units):
 - ETEC 510 Foundations of Educational Technology (3)
Prerequisite: Either ETEC 411, 444, equivalent experience satisfying the California Level I computer technology standard, or consent of instructor.
 - ETEC 523 Computer Technology in Education, Level II (3)
Prerequisites: ETEC 444 or equivalent experience satisfying California Level I computer technology standard.
 - ETEC 525 Social and Cultural Implications of Educational Technology (3)
Prerequisites: None

- ETEC 530 Educational Technology Leadership (3)
Prerequisites: ETEC 523, or consent of the instructor.
- ETEC 551 Education and the Internet (3)
Prerequisites: Either ETEC 411, 444, equivalent experience satisfying the California Level I computer technology standard, or consent of instructor.
- ETEC 570 E-Learning Design and Development (3)
Prerequisite: ETEC 523 or consent of instructor.
- ELIB 530A Library Media Materials for Elementary Grades (K-5) (3)
Prerequisites: None
- ELIB 540 Organization of Information (3)
Prerequisites: None

2. Field Experience (3 units):

- ETEC 580 Field Experience in Educational Technology (3)
Prerequisites: ETEC 523 and either ETEC 530, EDP 520 or 595.

Graduate Certificate in Community College

The community college graduate certificate is designed to prepare graduate students to work in community college settings as teaching faculty or counselors. Courses offered in this program provide students with an overview of the community college and its role in the American higher education system. Students will gain insights and experiences in the classroom and in fieldwork that will strengthen their knowledge and skills in working with community college students, faculty, and staff. The certificate program consists of 18 units; 9 units are from the master's degree program and must be approved by the student's master's degree program graduate advisor; and 9 units are specific to the study of college students, the community college, and fieldwork; 15 units must be completed at CSULB. All students will be required to:

1. Submit a Graduate Certificate in Community College application to the Office of Graduate Studies by the posted deadline.
2. Be enrolled in a master's degree program or have an earned master's degree in a discipline leading to teaching or counseling in post-secondary education settings.
3. Complete 9 units of coursework in Educational Psychology:
 - COUN 552 Introduction to the Community College (3)
Prerequisites: Enrollment in M.A., M.S. or Credential Programs.
 - COUN 548 Students in U. S. Higher Education (3)
Prerequisites: COUN 538.
 - COUN 644B Advanced Counseling Field Work: Student Development in Higher Education (3) (counseling or teaching focused)
Prerequisites: COUN 516, 538, 643B.
4. Complete an additional 9 units approved by their master's degree program graduate advisor for consideration to fulfill the 18 units required for the certificate. These courses may include pedagogy, learning theory, instructional management, and/or teaching methodology courses in the student's major area of study, or any other courses in the discipline deemed appropriate by the master's degree program graduate advisor.

Graduate Certificate in Career Guidance Specialist

This option is under consideration for suspension or discontinuance and selected courses will not be offered in the 2010-11 academic year.

Students may only pursue the certificate program in combination with a CSULB degree program.

Admission

1. File an Application for Graduate Admission, along with two complete sets of official transcripts, with the University Office of Admissions no later than March 1 for fall semester or October 1 for spring semester;
2. Transcripts must verify a GPA of 2.85 or higher on the last 60 semester (or 90 quarter) units of course work taken;
3. Evidence of completing at least a baccalaureate degree prior to beginning the Graduate Certificate program;
4. Two letters of recommendation (send only after notification by the program);
5. A type-written personal statement (send only after notification by the program);
6. Screening interview(s) (upon notification by the program);
7. Items 1-5 above must be on file in the department no later than November 1 for the following spring semester, or April 1 for the following fall semester;
8. Applicants are allowed only nine semester units credit applied to curriculum requirements completed prior to admission into the first semester of the program.

Requirements

1. Fulfill the Graduation Writing Assessment (GWAR);
2. Approved electives in the Departments of Advanced Studies in Education and Counseling; Human Resources Management; Occupational Studies; Psychology or Sociology as needed to fulfill 19 units upon waiver of any core course units granted upon admission to certificate program.

Counseling

COUN 191 Career and Personal Explorations
COUN 300 The Fundamentals of Peer Advising and Counseling
COUN 360 Life and Career Decisions
COUN 506 Counseling in School Settings
COUN 510 Laws and Ethics for Counselors
COUN 511 Counseling the Alcohol/Chemically Dependent Person
COUN 512 Child and Spousal/Partner Abuse
COUN 513 Introduction to Clinical Interviewing
COUN 514 Medications and Counseling
COUN 515 Counseling Theory
COUN 516 Counseling the Adult
COUN 522 Counseling Methods and Techniques
COUN 538 Student Development in Higher Education
COUN 543 Human Sexuality Counseling
COUN 547 Student Development Theory
COUN 548 Students in U.S. Higher Education

COUN 549 Management of Student Dev in Higher Education
COUN 552 Introduction to the Community College
COUN 555 Cross-Cultural Counseling
COUN 556 Counseling Children and Adolescents
COUN 557 Counseling Couples
COUN 593 Sem in Professional Dev in Counseling & Human Services
COUN 601 Trauma and Grief counseling
COUN 606 Current Issues in Professional School Counseling
COUN 607 School Counseling Practicum
COUN 608 Seminar and Practicum in Marriage and Family Therapy
COUN 609 MFT Practicum
COUN 638 Group Counseling
COUN 643A,B,D Counseling Field Work
COUN 644A,B,D Advanced Counseling Field Work
COUN 690 Sem in School Counseling Supervision: Theory & Practice
COUN 692 Special Topics in Counseling
COUN 693 Adv Sem in Professional Development and Counseling
COUN 695C Seminar in Professional Development in Counseling and Human Services

Educational Administration

EDAD 541 Leadership, Organizational Management, and Ethics
EDAD 544 Legal Aspects of Education: Implications and Applications for School Leadership
EDAD 580 Introduction to Field Experience in Administration
EDAD 640 Mentoring and Professional Development Planning for the New Administrator
EDAD 647A Fiscal Resources in Educational Administration.
EDAD 647B Human Resources in Educational Administration
EDAD 649 Urban Schools and Communities: Academic, Social, Political, and Cultural Issues
EDAD 658 Organizational Development, Culture, and Change
EDAD 659 Educational Governance, Politics and Policy
EDAD 677A Curriculum/Program Development and Evaluation
EDAD 677B Instructional Leadership and Assessment
EDAD 680 Field Experience in Administration
EDAD 692 Administrator Portfolio Development and Exhibition
EDAD 695 Master's Research Study in Educational Administration
EDAD 697 Directed Research
EDAD 698 Thesis

Educational Psychology

COUN 430 Orientation to Counseling
EDP 301 Child Development and Learning a Cross-Cultural Perspective
EDP 302 Early and Late Adolescent Development and Learning: A Cross-Cultural Perspective
EDP 305 Educational Psychology
EDP 373I Nonverbal Communication: Interaction of Mind & Body
EDP 400 Introduction to Educational Research
EDP 405 Positive Strategies for Classroom Management

EDP 419 Educational Statistics
EDP 490 Special Topics in Educational Psychology
EDP 492 Internships in the Human Services
EDP 517 Counseling and Mental Health in Schools
EDP 519 Quantitative Educational Data Analysis I
EDP 520 Quantitative Research Methods in Education
EDP 524A Psychoeducational Assessment
EDP 525A Psychoeducational Diagnosis in Multicultural Settings
EDP 527 Clinical Practice in School Psychology
EDP 528 Orientation to Professional School Psychology
EDSP 535 Collaborative Partnerships and Effective Communication
in School Settings
EDP 536 Collaborative Consultation in the Schools
EDP 541 Seminar in Educational Measurement and Assessment
EDP 560 Behavior Analysis Positive Behavioral Interventions
EDP 579 Curriculum-Based Academic Assessments & Interventions
EDP 595 Qualitative Research Methods in Education
EDP 596 Program Evaluation in Education
EDP 604 Seminar in Human Development
EDP 605 Seminar in Consultation on School Learning
EDP 619 Quantitative Educational Data Analysis II
EDP 641 Practicum in School Psychology
EDP 642A,B Field Work - School Psychology
EDSP 350 Introduction to Teaching the Exceptional Individual

Foundations of Education

EDP 432 Social and Cultural Diversity in Educational Settings
EDP 485 Theoretical Foundations of Language Minority Education
EDP 492 Internships in the Human Services
EDP 573 Intercultural Communication in Education
SCAE 560 History of Social and Educational (In)equality
SCAE 561 Urban Educational Policy
SCAE 562 Agency, Resistance and Identity in Education
SCAE 564 Language and Education Policies
SCAE 566 Themes in Comparative International Education
SCAE 567 Educational Issues in Global Perspective
SCAE 568 Globalization and Educational Reform
SCAE 695 Social and Cultural Analysis of Education Capstone

Educational Library

ELIB 497 Independent Study
ELIB 500 Foundations of Information
ELIB 510 Collection Development
ELIB 520 Information Literacy and Reference Services
ELIB 530A Library Media Materials for Elementary Grades
ELIB 530B Library Media Materials for Secondary Grades
ELIB 540 Organization of Information
ELIB 550 Management of Information Organizations
ELIB 570 Library Media Technologies
ELIB 580 Field Experience in Libraries

Research

EDP 400 Introduction to Educational Research
EDP 419 Educational Statistics
EDP 519 Quantitative Educational Data Analysis I
EDP 520 Quantitative Research Methods in Education
EDP 541 Seminar in Educational Measurement and Assessment
EDP 595 Qualitative Research Methods in Education
EDP 619 Quantitative Educational Data Analysis II
EDAD 695 Masters Project
EDP 696 Thesis Study: Plan, Development and Organizing Aspects
EDAD 697 Directed Research
EDP 697 Directed Research
EDAD 698 Thesis
EDP 698 Thesis
EDP 699 Project

Educational Technology

EDSP 542 Assistive Technology and Augmentative Communication
ETEC 110 Introduction to Computers as Tools
ETEC 435 Accessible Electronic and Information Technologies
ETEC 444 Computer Technology in Education, Level I
ETEC 449 Technology Applications for Educators
ETEC 510 Foundations of Educational Technology
ETEC 523 Computer Technology in Education, Level II
ETEC 525 Social and Cultural Implications of Educational
Technology
ETEC 530 Educational Technology Leadership
ETEC 535 Accessible Electronic and Information Technologies
ETEC 551 Education and the Internet
ETEC 553 Instructional Design
ETEC 570 E-Learning Design and Development
ETEC 580 Field Experience in Educational Technology
ETEC 623 Developing Technology-Based Learning
ELIB 570 Library Media Technologies

Education Specialist (Special Education)

EDP 405 Positive Strategies for Classroom Management
EDSP 303 Preparing to Teach Special Populations in the General
Education Classroom
EDSP 350 Introduction to Teaching the Exceptional Individual
EDSP 355A Collaborative Models of Inclusive Education:
Partnerships and Strategies for Teaching All Students in
Elementary Schools
EDSP 454 Supporting the Academic and Language Development of
English Learners
EDSP 480 Foundations of Inclusive Education in a Diverse Society
EDSP 535 Collaborative Partnerships and Effective Communication
in School Settings
EDSP 542 Assistive Technology and Augmentative Communication

EDSP 546C Practicum in Special Education
EDSP 550 Emerging Perspectives in Special Education
EDSP 563 Advanced Methods of Teaching Individuals with Significant Disabilities
EDSP 564 Assessment and Evaluation of Students with Disabilities
EDSP 565 Advanced Methods Mild/Moderate
EDSP 566 Career Planning and Transition for Youth and Adults with Disabilities
EDSP 567 Curriculum and Instruction: Literacy
EDSP 569 Curriculum and Instruction: Math
EDP 571 Advanced Approaches for Special Populations
EDSP 587 A,B Advanced Field Study Mild/Moderate
EDSP 588 A,B Advanced Field Study Moderate/Severe
EDSP 695S Seminar in Special Education

Counseling Courses (COUN)

LOWER DIVISION

191. Career and Personal Explorations (3)

Prerequisite or Corequisite: Any foundation (G.E. Category A1, A2, A3, or B2) class.

Designed for, but not limited to, entering and undeclared students. Exploration of issues, topics and tasks related to personal, educational and career choices. Includes educational and career planning, exploration of personal characteristics and individual differences, life and work values and interests, decision making, goal setting, and job/career search preparation.

Not open for credit to students with credit in EDP 191 or EDP 360I/COUN 360I.

UPPER DIVISION

300. The Fundamentals of Peer Advising and Counseling (3)

Introduction to theories of student development, academic advising, multiculturalism, and counseling. Basic skill development and knowledge of policies and procedures to provide effective peer advising. Includes a service-learning component that places students in advising and other peer support services internships on campus.

Letter grade only (A-F).

360I. Life and Career Decisions (3)

Prerequisites: Completion of GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Conducting in-depth self analysis designed to facilitate career and personal choices. How education and personal life experiences influence career and life decisions. Career development theories and assessments with applications to student career development and choices. Sound decision-making and goal-setting processes.

Not open for credit to students with credit in EDP 360I. Letter grade only (A-F).

430. Orientation to Counseling (3)

A survey of the specialties, functions, roles, models and activities commonly employed in the counseling profession. The course will also include practice in rudimentary active listening skills, a survey of historical and conceptual frameworks, voluntary participation in community-educational services, and developing a professional orientation perspective, and exploring the special needs of clients and other professional considerations.

Not open for credit to students with credit in EDP 430.

GRADUATE LEVEL

506. Counseling in School Settings (3)

Prerequisite: Official admission to the School Counseling Program.

Overview of issues related to school counseling and the role of the professional school counselor. Includes a practicum component designed to develop counseling skills and promote helping relationships. Field experiences are required. School Counseling students are expected to take this course in their first semester in the program.

Not open for credit to students with credit in EDP 506. Letter grade only (A-F).

507. Career and Academic Counseling in K-12 Settings (3)

Prerequisite: COUN 506.

Emphasis on career development theory and practice, the world of work, post-school planning, and academic counseling in K-12 settings. Application of theory through culturally sensitive interventions.

Letter grade only (A-F).

508A. Family Systems Applied to Aging and Lifespan Development (3)

Family systems assessment and counseling applied to lifespan development theories.

Not open for credit to students with credit in EDP 508A. Letter grade only (A-F).

508B. Family Systems Methods (3)

Prerequisite: COUN 508A or consent of instructor.

The application and practice of family systems therapeutic methods.

Not open for credit to students with credit in EDP 508B. Letter grade only (A-F).

510. Law and Ethics for Counselors (3)

An introduction to professional identity as counselors and examination of laws and ethics related to the counseling profession and its specializations (MFT, career/vocational rehabilitation, student development and administration, and school counseling).

Not open for credit to students with credit in EDP 510. Letter grade only (A-F).

511. Counseling the Alcohol/ Chemically Dependent Person (2)

Survey of the theories, etiologies, and major treatment approaches for counseling and preventing alcohol and chemical dependency, and the role of family and community resources, referrals, and prevention programs.

Not open for credit to students with credit in EDP 511. Letter grade only (A-F).

512. Child and Spousal/Partner Abuse (1)

Child and spousal/partner abuse assessment indicators, laws, community resources, mandatory reporting requirements for child abuse and spousal/partner violence, assessment, detection, and interventions for the child, family, spouse/partner, and the offender. Designed for licensure requirements for mental health practitioners and graduate students.

Not open for credit to students with credit in EDP 512. Letter grade only (A-F).

513. Introduction to Clinical Interviewing (3)

A foundation course that provides training in core interviewing skills including active listening, case exploration, goal setting, conducting a mental status exam, and assessing for self-harm.

Not open for credit to students with credit in EDP 513. Letter grade only (A-F)

514. Medication and Counseling (2)

Prerequisites: COUN 513 or consent of instructor.

An examination of the categories of psychotropic medications: antidepressants including antipsychotics, anxiolytics, and mood stabilizers. Major side-effects of these medications and a brief overview of their medical management are reviewed. Herbal alternatives to pharmacologic agents will be explored. Identification of information resources for counselors and clients.

Not open for credit to students with credit in EDP 514. Letter grade only (A-F).

515. Counseling Theories (3)

Prerequisite: COUN 513.

Major counseling theories examined and the competencies of each developed for use in helping relationships.

Not open for credit to students with credit in EDP 515. Letter grade only (A-F).

516. Counseling the Adult (3)

Prerequisite: COUN 515.

Theory and practice of counseling and guidance of the adult.

Not open for credit to students with credit in EDP 516. Letter grade only (A-F).

522. Counseling Methods and Techniques (3)

Prerequisites/Corequisites: COUN 513, 515.

An applied course which provides practice in the methods and techniques of the major theoretical approaches employed in counseling.

Not open for credit to students with credit in EDP 522. Letter grade only (A-F).

538. Student Development in Higher Education (3)

Survey of student development in public and private colleges and universities, focusing on historical, philosophical and theoretical foundations; roles and functions; legal, ethical, and organizational issues.

Not open for credit to students with credit in EDP 538. Letter grade only (A-F).

539. Seminar in Student Athlete Development (3)

Prerequisite: Graduate standing.

Examination of student-athlete administration and advising in higher education: history, principles, techniques, and professional standards for student-athlete programs and services.

Letter grade only (A-F). Same course as KIN 539. Not open for credit to students with credit in KIN 539.

540. The Fundamentals of Peer Advising and Counseling (3)

Introduction to theories of student development, multiculturalism, and counseling. Basic skill development and knowledge of policies and procedures to provide effective academic peer advising. Includes a twenty hour service-learning component that places students in advising internships on campus.

Letter grade only (A-F).

543. Human Sexuality Counseling (3)

Prerequisite: COUN 515.

Training in human sexuality education, counseling, and therapy. An examination of personal attitudes and values. The study of the physiological, psychological, and sociocultural variables associated with sexual behavior, sexual identity, and sexual disorders. For MFT certification only.

Not open for credit to students with credit in EDP 543. Letter grade only (A-F).

547. Student Development Theory in Higher Education: Theory to Practice (3)

Prerequisite: COUN 538.

Explores student development theory and the application of

theory to practice for programs and services in student affairs/ higher education. Examine cognitive, psychosocial, and person/ environment theories and their application to traditional and non-traditional student populations.

Not open for credit to students with credit in EDP 547. Letter grade only (A-F).

548. Students in U. S. Higher Education (3)

Prerequisite: COUN 538.

Focus on concepts of community and culture in United States college with an emphasis on understanding the diversity of student population to include age, gender, ethnic culture, sexual orientation, and people with disabilities.

Not open for credit to students with credit in EDP 548. Letter grade only (A-F).

549. Management of Student Development in Higher Education (3)

Analysis of management and organizational theory and practice as it pertains to student development in higher education. Includes study of human and physical resources management.

Not open for credit to students with credit in EDP 549. Letter grade only (A-F).

552. Introduction to the Community College (3)

Prerequisite: Enrollment in M.A., M.S. or Credential Programs.

Introduction, orientation, and survey of California and American community college. Components and modules include teaching and learning, leadership and governance issues, organization and administration, student development, classroom research, institutional resources, and student diversity and equity in the community college.

Not open for credit to students with credit in EDP 552. Letter grade only (A-F).

555. Cross-Cultural Counseling (3)

Prerequisites: COUN 510, 513, 515; COUN 506 for School Counseling Option, COUN 538 for SDHE Option, or their equivalent upon approval of the instructor.

Study of U.S. and international cultural factors, perspectives and personal and societal values that affect the counseling relationship, methods, and outcomes. These factors include historical, geographical, socio-psychological, educational and counseling factors from various cultural groups that students will encounter in their professional settings.

Not open for credit to students with credit in EDP 555. Letter grade only (A-F).

556. Counseling Children and Adolescents (3)

Prerequisites: COUN 515 and 522, or consent of instructor.

Theories and application of the methods and techniques of the major theoretical approaches employed in counseling children and adolescents.

Not open for credit to students with credit in EDP 556.

557. Counseling Couples (3)

Prerequisites: COUN 515.

Couple development theories, issues, and practices pertaining to counseling couples.

Not open for credit to students with credit in EDP 557. Letter grade only (A-F).

559. Play and Art Therapy for Children/Adolescents (3)

Prerequisites: COUN 508A and 556 or consent of instructor.

Experiential survey and the practice of play and art techniques employed in therapy as applied to theoretical orientations and problematic behavior.

Not open for credit to students with credit in EDP 559. Letter grade only (A-F).

Counseling Courses (COUN)

593. Seminar in Professional Development in Counseling and Human Services (1)

Prerequisite: COUN 538 and 548 (must have completed or concurrently enrolled)

Experiential orientation to profession of counseling and student development/student affairs in higher education with an emphasis on opportunities to observe interactions between organizational and student cultures, and the functions and role of student affairs professionals in the work environment through fifty-hour practicum.

Not open for credit to students with credit in EDP 593. Letter grade only (A-F).

601. Trauma and Grief Counseling (3)

Prerequisites: COUN 556 or consent of instructor. Required course for students in the Marriage and Family Therapy Program and a recommended course for graduate students in the other Counseling Programs.

Overview of developmentally informed models of trauma response, identifying and assessing problematic responses to trauma and loss, and guidelines for working with traumatized children, adolescents and families in various settings. Current treatment approaches of forms of post-traumatic distress and traumatic bereavement.

Not open for credit to students with credit in EDP 601. Letter grade only (A-F).

606. Current Issues in Professional School Counseling (3)

Prerequisite: COUN 506.

A variety of current issues in school counseling presented in learning modules. Topics include assessment, education of students with disabilities, school violence prevention, crisis counseling, comprehensive counseling plans, and classroom management.

Letter grading only (A-F).

607. School Counseling Practicum (3)

Prerequisites: COUN 506, 515.

Practical application of counseling theory to work with children and adolescents. Supervised counseling, consultation, and case management experiences conducted in the educational psychology/counseling clinic and in school settings.

Not open for credit to students with credit in EDP 607. Letter grade only (A-F).

608. Seminar in Marriage and Family Therapy (3)

Prerequisites: COUN 510, 511, 512, 513, 515, 522.
Recommended: COUN 556.

Theories, research, treatment planning, and therapeutic methods of MFT counseling utilizing major psychotherapeutic approaches regarding assessment, diagnosis, and treatment of various mental health problems.

Not open for credit to students with credit in EDP 608. Letter grade only (A-F).

609. MFT Practicum (4)

Prerequisites: COUN 510, 511, 512, 513, 515, 522, and 608.

Practicum application submitted no later than March 1 for the following fall semester, and October 1 for the spring semester.

MFT students will provide counseling services to clients at the CED Community Clinic, receive live supervision from MFT faculty members, and participate in a practicum program at an approved off-campus agency.

Not open for credit to students with credit in EDP 609. Letter grade only (A-F).

638. Group Counseling (3)

Prerequisites: Admission to the MS in Counseling, and/or PPS School Counseling Credential, or School Psychology Program, COUN 510, 513, 515 or equivalent upon approval of instructor.

Review of theories and applications of small group processes in guidance and counseling. Laboratory practice is provided and issues and roles relating to the selection of participants, leadership, interaction methods, problem-solving, and evaluation are examined. Students will learn how to proficiently facilitate the group process and address multicultural issues in group settings.

Not open for credit to students with credit in EDP 638. Letter grade only (A-F).

643A,B,D. Counseling Field Work (3)

A. School Counseling (3)

Prerequisites: COUN 607, Certificate of Clearance, EDP 536 (must be taken concurrently with either COUN 643A or 644A).

Practical experiences in counseling and guidance activities under supervision in approved school settings (total of 300 hours). Emphasis on personal and professional development as school counselors.

Applications for field work must be made no later than March 1 for the following summer or fall semester, and October 1 for the spring semester. Credit/No Credit grading only. Not open for credit to students with credit in EDP 643A.

B. Student Development in Higher Education (3)

Prerequisites: COUN 516, 538.

Practical experiences of 225 hours in counseling and guidance activities under supervision in approved settings.

Applications for field work must be made no later than March 1 for the following fall semester, and October 1 for the spring semester. Not open for credit to students with credit in EDP 541. Credit/No Credit grading only.

D. Marriage and Family Therapy

Prerequisites: COUN 608, 609.

Practical required experiences of 150 hours in counseling activities under supervision in approved settings.

Applications for field work must be made no later than March 1 for the following summer or fall semester and October 1 for the spring semester. Credit/No Credit grading only. Not open for credit to students with credit in EDP 643D.

644A,B,D. Advanced Counseling Field Work (3)

A. Advanced School Counseling (3)

Prerequisites: COUN 507 (or EDP 530 or 531 for students who have advanced to candidacy prior to Fall 2005), 638, 643A; EDP 536 (must be taken concurrently with either COUN 643A or 644A); pass CBEST.

Continued practical experiences in counseling and guidance activities under supervision in approved school settings (total of 300 hours). Emphasis on personal and professional development as school counselors.

Applications for field work must be made no later than March 1 for the following summer or fall semester, and October 1 for the spring semester. Credit/No Credit grading only. Not open for credit to students with credit in EDP 644A.

B. Student Development in Higher Education (3)

Prerequisites: COUN 516, 538, 643B.

Continued practical experiences of 225 hours in counseling and guidance activities under supervision in approved settings.

Applications for field work must be made no later than March 1 for the following fall semester, and October 1 for the spring semester. Not open for credit to students with credit in EDP 541 or 644B. Credit/No Credit grading only.

D. Marriage and Family Therapy (3)

Prerequisites: COUN 638, 643D.

Continued practical required experiences of 150 hours in counseling activities under supervision in approved settings.

Applications for field work must be made no later than March 1 for the following summer or fall semester and October 1 for the spring semester. Credit/No Credit grading only. Not open for credit to students with credit in EDP 644D.

680. Family Trauma Treatment Seminar (3)

Hands-on training in evidence-based treatment for families contending with trauma or loss. Readings,

lectures, and in-class demonstrations and practice will focus on family assessment, goal-setting, narrative sharing, and family training on resilience-enhancing skills.

Letter grade only (A-F).

681. Spirituality and Counseling (1)

Experiential seminar on spiritual issues in counseling with an emphasis on helping future counselors increase their awareness of spiritual diversity to help them become better counselors.

Letter grade only (A-F).

682. Gestalt Psychotherapy (2)

Prerequisite: COUN 515 or consent of instructor.

This seminar is designed to be an experiential learning process of Gestalt Therapy. Readings, lectures, in-class demonstrations, and practice will provide grounding in Gestalt theory, assessment, techniques, and treatment planning.

Letter grade only (A-F).

683. Cognitive Behavioral Therapy (2)

Prerequisite: COUN 515 or consent of instructor.

Students will be trained on conducting evidence-based treatment for individuals utilizing Cognitive Behavioral Therapy (CBT). Readings, lectures, in-class demonstrations, and practice will provide grounding in CBT theory, assessment, techniques, and treatment planning.

Letter grade only (A-F).

684. Advanced Clinical Case Formulation Seminar (1)

Advanced seminar on clinical case formulation with an emphasis on helping counselors in practicum and fieldwork improve their understanding of underlying issues that impact clients.

Letter grade only (A-F).

685. Community Mental Health Counseling (1)

Advanced seminar on community mental health counseling with an emphasis on helping counselors gain skills required in contemporary community mental health settings, including recovery-oriented treatment for severe mental illness, case management, client advocacy, and local community service resources.

Letter grade only (A-F).

690. Seminar in School Counseling Supervision: Theory and Practice (3)

Prerequisite: Consent of instructor.

Focus on models and methods of school counseling supervision. Designed to prepare school counselors to be effective site supervisors for school counseling field work students.

Open to advanced students in the School Counseling Program as well as practicing school counselors. Letter grade only (A-F).

692. Selected Topics in Counseling (1-6)

Advanced study of special topics in the field of counseling. Continuing education and non-degree students may enroll for units subject to suitable changes in course content.

May be repeated to a maximum of 12 units with different topics, which includes previously earned credit in EDP 692. Topics announced in the CSULB or CCPE *Schedule of Classes*.

- A. Introduction to Psychodrama
- B. Advanced Psychodrama

Prerequisites: COUN 692A or consent of instructor.

693A. Intermediate Seminar in Professional Development in Student Development in Higher Education (1)

Prerequisites: COUN 593.

Explore professional development topics to prepare for professional work in student development in higher education. Attendance at a local, regional or national professional conference required.

Not open for credit to students with credit in COUN 693. Letter grade only (A-F).

693B. Advanced Professional Development Seminar in Student Development in Higher Education (1)

Prerequisites: COUN 593, COUN 693A

Explore advanced professional development topics in student development in higher education. Demonstrate an integration of roles, philosophy and theory for counseling and student development work. Attendance at a local, regional and national conference required.

Letter grade only (A-F).

695C. Integrative Seminar in Professional School Counseling (3)

Prerequisites: Advancement to candidacy; COUN 507 (or EDP 531 for students who have advanced to candidacy prior to Fall 2005), 555, 638; EDP 596; and permission to enroll from School Counseling Program Coordinator. Prerequisite/Corequisite: COUN 643A.

Designed to support integration and synthesis of knowledge, skills, and attitudes learned and developed during the school counseling program, and to facilitate the transition from graduate student to counseling professional and lifelong learner.

Not open for credit to students with credit in EDP 695C. Letter grade only (A-F).

Educational Administration Courses (EDAD)

GRADUATE LEVEL

541. Leadership, Organizational Management, and Ethics (3)

Prerequisite: Admission to the Preliminary Administrative Services Credential Program.

Examines the relationship between leadership and organizations; the role of educational leaders; a shared vision to support equitable academic achievement for all students; multiple measures to guide decision making; the relationship among political, social, economic, legal, and cultural factors and schools.

Ten hours field experience required. Letter grade only (A-F).

544. Legal Aspects of Education: Implications and Applications for School Leadership (3)

Prerequisite: EDAD 541.

Implications and applications of school law including accessing technological sources of legal information, conducting basic legal research, demonstrating operational knowledge of school law, creating a conceptual and ethical legal leadership framework, developing legal foundational knowledge.

Ten hours field experience required. Letter grade only (A-F).

580. Introduction to Field Experience in Administration (3)

Prerequisite: Approval by the Program Coordinator, Department of Advanced Studies in Education and Counseling.

First of two on-the-job field experiences. Application of leadership theory to practical settings in quasi-administrative roles. Requires 100 hours of site-based field participation.

Credit/No Credit grading only.

Educational Administration Courses (EDAD)

640. Mentoring and Professional Development Planning for the New Administrator (2)

Prerequisite: Admission to EDAD Professional Administrative Services Program.

Development of Individualized Induction Plan based on pre-assessed skills and competence; plan includes assessment documents, mentoring component, goal identification based on CTC standards; completion strategies, evidence/indicators of goal attainment and evaluation plan.

Credit/No Credit grading only.

647A. Fiscal Resources in Educational Administration (3)

Prerequisites: EDAD 541

Examines foundational concepts and theories of public school finance; social, economic, political, legal and technological dimensions stemming from federal, state, local influence; identification of revenue sources, budgeting strategies/procedures, equitable resource allocation mechanisms, fiscal policy implications.

Letter grade only (A-F). Includes at least 10 hours of field experience.

647B. Human Resources in Educational Administration (3)

Prerequisites: EDAD 541.

Examines fundamental human resource leadership issues; laws, ethics, and procedures governing certificated and classified personnel; employee recruitment, selection, retention and performance appraisal systems, professional development programs; staffing, unions, collective bargaining and contract management, strategic planning, problem solving strategies.

Letter grade only (A-F). Includes at least 10 hours of field experiences.

649. Urban Schools and Communities: Academic, Social, Political, and Cultural Issues (3)

Prerequisite: EDAD 541

Examines dynamics of urban schools and communities with emphasis on academic, social, political and cultural issues. Explores culturally diverse families and communities, forming partnerships and effective communication strategies, conflict resolution strategies.

Letter grade only (A-F). Includes at least 10 hours of structured field experiences.

658. Organizational Development, Culture, and Change (3)

Prerequisite: EDAD 640.

Explores elements that influence schools as effective organizations, transformational leadership, organizational development, learning strategies for developing successful school cultures and instructional programs. Study of larger political, social, legal and supervisory contexts of organizations; use of behavior/management sciences.

Letter grade only (A-F).

659. Educational Governance, Politics and Policy (3)

Prerequisite: EDAD 640.

Examination of systemic impact of governance systems at federal, state, local levels; implementation and policy development strategies; politics of public education, micro-politics of school sites using theoretical and pragmatic perspectives.

Letter grade only (A-F).

677A. Curriculum/Program Development and Evaluation (3)

Prerequisite: EDAD 541. Corequisite: EDAD 677B.

Examines teaching, learning, and achievement for all students; policy impact on curriculum development, implementation, and assessment; distributed instructional leadership and accountability; multiple measures and data-driven assessment for program evaluation; closing the achievement gap; communication and partnership with stakeholders.

Not open for credit to students with credit in EDP 677 or EDAD 650. Ten hours field experience required. Letter grade only (A-F).

677B. Instructional Leadership and Assessment (3)

Prerequisite: EDAD 541. Corequisite: EDAD 677A.

Examination of instructional leadership and supervision practices that facilitate and sustain continuous school improvement; assessment policies and practices; distributed leadership and accountability; achievement disparities between/among student subgroups; adult learning theory; technology; teacher evaluation and differentiated professional development; and community partnerships. Includes 10 hours of field experience.

Letter grade only (A-F).

680. Field Experience in Educational Administration (3)

Prerequisites: Admission to program, EDAD 541, completion of at least three additional courses in the Preliminary Administrative Services Credential program, consent of instructor.

Application/demonstration of standards based competence as quasi-administrator.

Requires three week, full-time participation at site other than candidate's own. Credit/No Credit grading only.

692. Administrator Portfolio Development and Exhibition (2)

Prerequisite: Completion of the Professional Development Plan, including the core courses, electives and/or professional development activities.

Development and presentation of Professional Portfolio reflecting and documenting progress/mastery of goals connected to CTC Administrative Standards.

Credit/No Credit grading only.

695. Master's Research Study in Educational Administration (3)

Prerequisites: EDP 520 or 595; advancement to candidacy in Educational Administration Option, approval of graduate advisor and written application to the Graduate Office. Application for enrollment must be made to the Graduate Office by March 1 for the summer or fall semester or by October 1 for the spring semester.

Application of action based research methods to identify, study, and analyze a school/district based problem. Preparation of culminating research study to include related literature, data collection methods, findings, recommendations and implications.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters. Not open for credit to students pursuing the Thesis option.

697. Directed Research (1-3)

Prerequisites: Consent of instructor, department chair and associate dean.

Individual research or intensive study under the guidance of a faculty member.

May be repeated to a maximum of 3 units for certificate and degree purposes, subject to suitable change in course content. Application for enrollment must be made by March 1 for the fall semester or by October 1 for spring. Letter grade only (A-F).

698. Thesis (3)

Prerequisites: Advancement to candidacy, EDP 595 or 696, approval by director, department chair and associate dean.

Planning, preparation and completion of a thesis under supervision of a faculty committee.

Must be taken for six units. Application for enrollment must be made to the Graduate Studies Office by March 1 for the fall semester or summer session or October 1 for the spring semester. Letter grade only (A-F).

Educational Psychology Courses (EDP)

UPPER DIVISION

301. Child Development and Learning: A Cross-Cultural Perspective (3)

Explores the physical, cognitive, communicative/linguistic, and socio-emotional development of the child from the prenatal through adolescent period across diverse cultures with an emphasis on the learning process and developmentally appropriate teaching practices.

302. Early and Late Adolescent Development and Learning: A Cross-Cultural Perspective (3)

Explores social, emotional, cognitive, and physical development in early and late adolescence across cultures with an emphasis on the learning process and developmentally appropriate teaching practices.

305. Educational Psychology (3)

Overview of Educational Psychology. Analysis of theories of learning as they relate to intellectual, social, and personal development of diverse learners. Emphasis on learning, motivation, and development with attention to educational practices that foster critical thinking, problem solving, and performance skills.

373I. Nonverbal Communication: Interaction of Mind and Body (3)

Prerequisites: GE Foundation, one or more Exploration course(s), and upper-division standing.

History and theories of the development of mind/body integration. Enhancement of personal and interpersonal relations through lectures, discussion, films, and movement experiences. Analysis and synthesis of the interdependence of the psychological and physical processes in nonverbal communication.

Same course as DANC 373I. Not open for credit to students with credit in DANC 373I.

390. Selected Topics in Education (1-3)

Orientation to and exploration of topics relevant to the college student as a learner-scholar and decision-maker within the changing campus, community and societal milieu. Lectures, discussion, field study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

400. Introduction to Educational Research (3)

Explores a wide range of research methods used in education. Topics include traditions, theories, approaches, and applications of qualitative and quantitative research methods.

Letter grade only (A-F). May not be used as a substitute for EDP 419.

405. Positive Strategies for Classroom Management (3)

Models and strategies of classroom management to promote student prosocial behaviors and academic growth. Includes information regarding school-wide models of positive behavior support and classroom interventions to support positive behaviors in both general and special education programs.

Letter grade only (A-F).

419. Educational Statistics (3)

Prerequisite: Satisfactory completion of an undergraduate mathematics course suitable for general education math credit and, if required by the major, a lower-division statistics course.

Introduction to descriptive and inferential statistical methods with application to educational research problems. Emphasis on understanding statistical concepts, computation skills, and the use of computer programs in data analysis.

(Lecture 2 hours, laboratory 2 hours)

432. Social and Cultural Diversity in Educational Settings (3)

Examination of personal attitudes toward distinct groups of people. Study of historical and structural factors that either promote or diminish equal human worth and either empower or oppress people based on class, race/ethnicity, gender, sexual orientation, ability, language, or religion.

439. SDAIE: Specially Designed Academic Instruction in English (3)

Theories of second language acquisition and practical applications, including methods of teaching content to English language learners; oral, reading and writing strategies; and curriculum development with application to K-12 teaching.

Letter grade only (A-F). Same course as EDEL 439 and EDSE 439. Not open for credit to students with credit in EDEL 439 and EDSE 439.

485. Theoretical Foundations of Language Minority Education (3)

Introduction to theoretical foundations of language minority instruction. Background on the historical and political context of the development of educational language policies. Models of bilingual and English language development education.

Letter grade only (A-F). Not open for credit to students with credit in LING 485.

490. Selected Topics in Educational Psychology (1-6)

Prerequisite: Consent of instructor.

Topics of current interest in educational psychology selected for intensive study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

492. Internships in the Human Services (3)

Prerequisite: Consent of instructor.

Students are placed in agencies and organizations to engage in volunteer or paid work in human services/mental health. The required 15 hour seminar will focus on personal values, interpersonal communications skills, critical thinking, and problem solving. Development of knowledge and skills transferable to future careers will be stressed.

A minimum of 120 hours field experience is required for the semester.

497. Independent Study (1-3)

Prerequisites: Consent of instructor and department chair.

Independent study undertaken under the supervision of a faculty member.

May be repeated to a maximum of 6 units, with no more than 3 units applicable to credential or major requirement.

GRADUATE LEVEL

517. Counseling and Mental Health in Schools (3)

Prerequisite: Admission to the School Psychology program. Concurrent enrollment in ED P 641A or consent of instructor.

Theory, research and techniques of counseling and mental health service delivery used in analysis of case studies from fieldwork. Required for school psychology students.

Not open for credit to students with credit in EDP 631. Letter grade only (A-F).

518. School Crisis Response (3)

Prerequisite: ED P 528 or consent of instructor.

Students will learn about the impact of school crises on children and school communities, and how to prepare and respond to these events, including trauma screening and triage, threat assessment, suicide prevention, and dealing with death at schools.

Letter grade only (A-F).

Educational Psychology Courses (EDP)

519. Quantitative Educational Data Analysis I (3)

Prerequisites: ED P 419 or equivalent. An advanced educational univariate data analysis course. Hypothesis testing using analysis of variance, analysis of covariance, multiple regression, and path analysis.

Letter grade only (A-F).

520. Quantitative Research Methods in Education (3)

Prerequisites: For majors in MA in Educational Psychology: ED P 419 or equivalent. For other majors: ED P 400 or equivalent.

Examination and application of quantitative educational research methodology including research designs, sampling methods, inferential statistics and hypothesis testing, and the structure and content of a research proposal.

Letter grade only (A-F).

524A. Psychoeducational Assessment (3)

Prerequisite/Corequisite: EDP 528; Corequisites: EDP 524B and admittance to the School Psychology Program.

Theories of cognition and their implications for understanding learning, development, and diagnosis of disability. The history of intelligence testing and psychometric and socio-cultural strengths and limitations of cognitive tests.

Not open for credit to students with credit in EDP 524. Letter grade only (A-F).

524B. Psychoeducational Assessment: Clinical Applications (2)

Prerequisite/Corequisite: EDP 528; Corequisites: EDP 524A and admittance to the School Psychology Program.

Practice in administration and interpretation of individually administered cognitive tests, and tests of psychological processing and achievement. Students will practice administering tests to adults and children, be observed for proficiency, and learn to apply these results to making instructional placement and eligibility decisions.

Letter grade only (A-F).

525A. Psychoeducational Assessment of Culturally and Linguistically Diverse Students (3)

Prerequisites: EDP 524A, 524B. Corequisite: EDP 525B.

Assessment theory and practice of culturally and linguistically diverse (CLD) individuals. Interpreting assessments to make eligibility, instructional and accountability decisions consistent with ethical, legal and measurement standards. Discussion of sociocultural issues and exemplary programs for CLD students.

Not open for credit to students with credit in EDP 525. Letter grade only (A-F).

525B. Psychoeducational Assessment of Culturally and Linguistically Diverse Students: Clinical Applications (2)

Prerequisites: EDP 524A, 524B. Corequisite: EDP 525A.

Application of psychoeducational assessment practices within a clinical setting for culturally and linguistically diverse (CLD) students. Advanced training in selection, administration and interpretation of individually administered cognitive tests, and tests of psychological processing and achievement for CLD students.

Letter grade only (A-F).

527. Advanced Assessment for Intervention (3)

Prerequisites: EDP 525A, 525B, 579. Corequisite: EDP 642A.

Advanced assessment and intervention with children ages 3-5, secondary students, and students with moderate to severe disabilities. Topics include identifying useful and appropriate assessments, developing and implementing empirically-validated

interventions, and issues and challenges in serving these specific populations.

Letter grade only (A-F).

528. Introduction to School Psychology (3)

Prerequisite: Admission to the School Psychology program.

Introduction to the practice of school psychology including history of the field, school psychologist roles and functions, and common service delivery models. Also included are federal and state laws, ethical standards, and literature and research informing the practice of school psychology.

Letter grade only (A-F).

536. Collaborative Consultation in the Schools (3)

Prerequisites/Corequisites: COUN 643A, 644A, EDP 642A, 642B, or Field Placement in Special Education.

Theory and practice of collaborative consultation in the schools. Models, roles and skills will be discussed, rehearsed during in-class simulations, and practiced in field settings. Field experience required.

Letter grade only (A-F).

541. Seminar in Educational Measurement and Assessment (3)

Prerequisites: ED P 419, 519, and 520, or equivalent. Advanced studies examining the reliability and validity of test scores, item response theory, and other statistical approaches for the improvement of educational testing. Practical application of administration and interpretation of assessment outcomes.

Letter grade only (A-F).

560. Functional Behavior Assessment and Positive Behavior Support (3)

Prerequisite: ED P 405.

Designing, implementing, monitoring, and evaluating comprehensive behavior support plans based on functional behavior assessment data. Developmental and mental health factors impacting the behavior of students with autism, emotional disturbance, and severe cognitive disabilities are included.

Letter grade only (A-F).

571. Advanced Approaches to Teaching Special Populations in General Education Settings (3)

Prerequisite: Hold Preliminary Multiple or Single Subject Credential, or equivalent, or consent of instructor.

Issues in teaching special populations in elementary and secondary schools, including students who are gifted, at-risk, and have disabilities. Emphasis on establishing inclusive climates; federal, state, and local regulations; assessment; instructional strategies and modifications; collaborative school structure and classroom management.

Meets state Professional Clear credential requirement. Letter grade only (A-F).

573. Intercultural Communication in Education (3)

Introduction to the facets, parameters, and techniques of intercultural communication and its relationship to functioning in a multicultural educational environment. Situates intercultural communication within the broader social, cultural and historical context and within the study of culture itself.

Letter grade only (A-F).

579. Curriculum-Based Assessments and Academic Interventions (4)

Prerequisites: Admission to the school psychology program and EDP 524A and 524B.

Evidence-based interventions for diverse learners, including students with disabilities, elementary and secondary students, and English Language Learners. Theories and application of curriculum-based assessments and data-based intervention development, implementation and evaluation.

Letter grade only (A-F). (3 hours seminar, 3 hours laboratory)

590. Selected Topics in Educational Psychology (1-3)

Prerequisite: Consent of instructor.

Advanced study of special topics in education and counseling. A student may enroll for 1-3 units to a maximum of 6 units for certificate and degree purposes, subject to suitable changes in course content. Non-degree and non-certificate students may enroll for additional units subject to suitable change in course content.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters or different topics in the same semester. Topics announced in the *Schedule of Classes*.

595. Qualitative Research Methods in Education (3)

Prerequisites: ED P 400 or equivalent.

Examination, analysis, and application of qualitative research methodology including various types of methods, designs, data collection strategies, data analysis and presentation of findings techniques; qualitative research study construction.

Letter grade only (A-F).

596. Program Evaluation in Education (3)

Prerequisites: For majors in Educational Psychology: ED P 419 and 520, or equivalent. For other majors: ED P 400 and 520, or equivalent.

Identifying and comparing various approaches to program evaluation in educational settings including needs assessments; selecting evaluation questions and criteria; collecting, analyzing, and interpreting qualitative and quantitative evaluation data; and the mechanics and process of developing an evaluation plan.

Letter grade only (A-F).

603. Developmental Risk and Resilience (3)

Prerequisite: ED P 301 or 302.

Examines psychological disorders, such as autism, attention deficit disorder, conduct disorder, depression, anorexia, and selective mutism from a developmental perspective. Major topics include: contrasting psychopathology models; environmental/genetic/neurobiological factors, classification and epidemiology; scientifically-based interventions and expected outcomes; and developmental resilience.

Letter grade only (A-F).

604. Seminar in Human Development (3)

Prerequisites: EDP 301 or 302, and EDP 400 or 419.

Theories and issues in developmental psychology, cognitive, linguistic, perceptual, biological, psychomotor, social and emotional development; nature-nurture and individual differences.

Letter grade only (A-F).

605. Theories of Learning, Cognition, Motivation, and Social Development (3)

Prerequisite: EDP 301 or 302.

Analysis of current theory and research in the areas of student learning, cognition, motivation, and social development and their application in maximizing learning of all students.

Letter grade only (A-F).

619. Quantitative Educational Data Analysis II (3)

Prerequisite: EDP 519 or equivalent.

Advanced multivariate statistical analysis course: multivariate analysis of variance, discriminant function analysis, canonical correlation, exploratory factor analysis, and structural equation modeling.

Approximately 20 hours of applied work in approved educational settings is required. Letter grade only (A-F)

641A. School Psychology Practicum (2)

Prerequisites: Admission to school psychology program, EDP 524A, 524B, 525A, 525B, and 528. Prerequisite/Corequisite: EDP 579.

Seminar and completion of 150 contiguous hours of supervised field placement for a minimum of one and maximum of 5 full days per week, with a minimum of 4 weeks and maximum of 1 year at no more than two sites and with two supervisors.

Credit/No Credit grading only.

641B. School Psychology Practicum (2)

Prerequisites: Admission to the school psychology program, EDP 524A, 524B, 525A, 525B, 528, and 641A.

Seminar and completion of 150 contiguous hours of supervised field placement for a minimum of one and maximum of 5 full days per week, with a minimum of 4 weeks and maximum of 1 year at no more than two sites and with two supervisors.

Credit/No Credit grading only.

642A. Field Work I - School Psychology (3)

Prerequisites: EDP 525A, completion of acceptable masters degree, concurrent enrollment in EDP 527, and approval of program coordinator.

Application for field work should be made by October 1 for the spring semester, or by March 1 for summer (if offered) or fall semester.

Credit/No Credit grading only.

642B. Field Work II - School Psychology (3)

Prerequisites: EDP 527, 642A, and approval of program coordinator.

Continuation of school psychology field work experiences. Application for field work should be made by October 1 for the spring semester, or by March 1 for summer (if offered) or fall semester.

Credit/No Credit grading only.

696. Thesis Study: Plan Development and Organizing Aspects (3)

Prerequisites: EDP 400 or 419 and EDP 520 or 595.

Designed for students planning to write a thesis. Form a thesis committee by midterm in the course. Accomplish a completed draft of the thesis plan by the end of the term.

697. Directed Research (1-3)

Prerequisites: Consent of instructor, department chair, and associate dean.

A student may enroll for 1-3 units to a maximum of 6 units for certificate and degree purposes, subject to suitable change in course content. Application for enrollment including an approved directed research proposal must be made to the Office of Graduate Studies and Research by March 1 for the fall semester or October 1 for spring.

Letter grade only (A-F). May be repeated to a maximum of 6 units, with different topics in different semesters or with different topics in the same semester.

698. Thesis (3)

Prerequisites: Advancement to candidacy, EDP 519 or 520 or 595 or 696, approval by director, department chair and associate dean.

Planning, preparation and completion of a thesis under supervision of a faculty committee.

Must be taken for six units. Application for enrollment must be made to the Graduate Studies Office by March 1 for the fall semester or October 1 for the spring semester. Letter grade only (A-F).

699. Project (3)

Prerequisites: Advancement to candidacy, approval of graduate advisor, and written application to the College of Education Graduate Office.

Information and discussion related to the development of master's degree projects in Educational Psychology, School Administration, Counseling and related fields.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Project application to be made to the College of Education Graduate Office by March 1 for the Summer or Fall semester or October 1 for the Spring semester.

Educational Psychology Courses (EDP)

DOCTORAL COURSES

703. Policy Issues in Community Colleges (1-3)

In-depth analysis of the community college system specific to 1) local, state, and federal governance policies; 2) local, state, and national economic policies; 3) social and political influences on policy. Future trends in educational policy.

Letter grade only (A-F).

704. Exploration of Campus Cultures: Impact and Influence (1-3)

Examination of faculty, administrative, and student cultures in terms of values, behavioral norms, impacts, and influences. Students will study research methods for campus cultures. Implications for higher education policies and practices.

Letter grading only (A-F).

705. Finance in Education (1-3)

Examination of higher education finance and governmental influences that shape this process. Through simulations students gain a working knowledge of finance, philosophies, vision, and processes for the design and implementation of resource planning in both two- and four-year institutions.

Letter grade only (A-F).

707. Student Learning and Development Theory in Higher Education (1-3)

Student development and learning theories based on cognitive, psychosocial, typology, and person-environment perspectives. Analysis and critique of theoretical tenets relevant to understanding the college experience.

Letter grade only (A-F).

708. Leadership in Education (1-3)

Current research and theories on leadership and organizational change. Multicultural organizational development theories, planning, change, effective strategies for becoming a catalyst for change. Case studies of organizational leadership for change. Examines issues, barriers, supports for, and processes and outcomes of change.

Letter grade only (A-F).

709. Collaborative Reforms: Designing and Implementing Responsive Curricula (1-3)

The role of faculty and others in the collaborative development and implementation of responsive curricula. Explore systems for curricular redesign and reform at 2- and 4-year institutions and processes for their implementation.

Letter grade only (A-F).

711. Field Research Study in Education I (1-3)

First in a series of faculty-led field research courses. Individual and small group formats. Students are exposed to and participate in approved research topics or a faculty member's research.

Letter grade only (A-F).

790. Selected Topics in Higher Education (1-3)

Examines such issues of the CEO's roles and responsibilities, managing change, facilitating focus groups, data-based organizational change, applications of technology, responding to the needs of student populations, working with governing boards, staff development programs, and personnel assessment instruments.

Letter grade only (A-F). May be repeated to a maximum of 24 units. Topics announced in the *Schedule of Classes*.

797. Directed Individual Study (1-6)

Prerequisites: Consent of instructor, department chair and associate dean.

Individual research or intensive study under the guidance of a faculty member.

Letter grade only (A-F). May be repeated to a maximum of 36 units.

798. Doctoral Dissertation (3)

Prerequisites: Approval of instructor/doctoral candidacy required.

Specifically for students researching and writing dissertations.

Credit/No credit grading only. May be repeated to a maximum of 24 units.

Education Specialist Courses (EDSP)

303. Preparing to Teach Special Populations in the General Education Classroom (1)

Prerequisites: Concurrent enrollment in EDEL 380.

Emphasis on roles and responsibilities of the general education teacher in the Individualized Education Program (IEP) process. Relevant state and federal laws pertaining to the education of exceptional populations.

Letter grade only (A-F).

350. Introduction to Teaching the Exceptional Individual (3)

Characteristics and etiology of different categories of disability are addressed. Future educators and other school professionals will learn about history, legislation, and processes pertaining to educating students with exceptionalities. Two 2-hour fieldwork observations of individuals with exceptionalities in educational settings are required.

Letter grade only (A-F). Field work required.

355A. Collaborative Models of Inclusive Education: Partnerships and Strategies for Teaching All Students in Elementary Schools (3)

Overview of collaborative educational models; family, school, community partnership models; access, equity, historical, legal, social, political perspectives for diverse students with special needs; roles and responsibilities of the general educator as a team member at the elementary level; Individualized Education Program process.

Letter grade only (A-F). Not open for credit to students with credit in EDSP 355.

355B. Collaborative Models of Inclusive Education: Partnerships and Strategies for Teaching All Students in Secondary Schools (3)

Overview of collaborative educational models; family, school, community partnership models; access, equity, historical, legal, social, political perspectives for diverse students with special needs; roles and responsibilities of the general educator as a team member at the secondary level; Individualized Education Program process.

Letter grade only (A-F).

454. Supporting the Academic and Language Development of English Learners (3)

Prerequisite: Consent of instructor.

Addresses typical and atypical language development and acquisition in school-aged children from non-English speaking backgrounds. Focus will be on assessment and instruction for English Learners, emphasizing sheltered instruction. Typical language development and language disabilities are addressed.

Letter grade only (A-F).

480. Foundations of Inclusive Education in a Diverse Society: Philosophical and Historical Perspectives and Legal Mandates (3)

Prerequisite: Admission to Education Specialist Credential Program.

Philosophical and historical foundations of special education in a diverse society. Discussion of educational theories, legal mandates, and models for serving students with special needs in inclusive settings, with particular focus on students who are culturally and linguistically diverse.

Letter grade only (A-F).

534. Collaboration and Transition in Special Education (3)

Prerequisites: Full admittance to Education Specialist Credential Program or ITEP, and successful completion of EDSP 480.

Methods for developing collaborative partnerships and effectively communicating with educators, community members, families, and individuals with disabilities. Examination of major issues and approaches to promoting successful transition of youth with disabilities into, through, and beyond school.

Letter grade only (A-F).

535. Collaborative Partnerships and Effective Communication in School Settings (3)

Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.

Methods for developing collaborative partnerships and effectively communicating with educators, community members, families, and individuals with disabilities.

Letter grade only (A-F).

542. Technology in Special Education (3)

Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.

Overview of Assistive Technology and Augmentative Communication for individuals with exceptional needs. Examination of legislation, devices, and services using assistive technology and augmentative communication. Introduction to assistive technology assessment and advanced development of Computer Assisted Instruction.

Letter grade only (A-F).

546C. Practicum in Special Education (3)

Supervised experience with individuals with exceptionalities in schools, clinics, post-secondary education, workplaces, and residential settings.

Application should be made by March 1 for the fall semester and October 1 for the spring semester. Letter grade only (A-F).

550. Emerging Perspectives in Special Education (3)

Prerequisite: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.

Interpretation and application of emerging research in special education. Historical foundations, litigation, legislation, policy and practice in special education, emphasizing the last century. Current and emerging issues in the field. Relationships between research and practice.

Letter grade only (A-F).

563. Advanced Methods of Teaching Individuals with Significant Disabilities (3)

Prerequisite: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.

Formal and informal assessment procedures responsive to the cultural, socio-economic and linguistic characteristics of individual students with significant disabilities. Data-based decision making, curriculum adaptations and modifications, and instructional strategies. Collaboration with community agencies for successful transition from school to work.

Letter grade only (A-F).

564. Assessment and Evaluation of Students with Disabilities (3)

Prerequisite(s): Admission to the Education Specialist Credential Program or consent of instructor.

Knowledge and use of appropriate formal, informal, and authentic assessment procedures for planning, monitoring and evaluating instructional programs for students with disabilities. Emphasis on

issues in assessing and evaluating culturally and linguistically diverse students.

Letter grade only (A-F).

565. Advanced Methods of Teaching Individuals with Mild/Moderate Disabilities (3)

Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.

Advanced assessment, methods, strategies, and curriculum adaptations for students with mild/moderate disabilities at all levels. Emphasis on collaboration, diversity, literacy, technology and transition.

Letter grade only (A-F).

566. Transition Into, Through, and Beyond School for Individuals with Disabilities (3)

Prerequisites: Acceptance in Education Specialist Level II program or Master of Science in Special Education program, development of an Individualized Induction Plan, or consent of instructor.

Examination of major issues and approaches to promoting successful transition of youth with disabilities into, through, and beyond school. Emphasis on instructional strategies for teaching adolescent youth with disabilities at the secondary level.

Letter grade only (A-F).

567. Curriculum and Instruction for Students with Disabilities: Literacy, Communication, Social and Physical Education (3)

Prerequisites: Full admittance to the Level I Education Specialist Program or Education Specialist ITEP and completion or concurrent enrollment in EDSP 564.

Curricular issues, models and practices related to teaching students with disabilities in literacy, communication, physical education, and social behaviors. Emphasis on core curriculum, standards-based instruction, and differentiating instruction. Instructional planning and validated teaching strategies.

Letter grade only (A-F).

569. Curriculum and Instruction for Students with Disabilities: Math, Science, and Life skills (3)

Prerequisites: Full admittance to the Level I Education Specialist Program or Education Specialist ITEP and completion or concurrent enrollment in EDSP 564.

Curricular issues, models and practices related to teaching students with disabilities in math, other content areas, and life skills. Emphasis on core curriculum, standards based instruction, and differentiating instruction. Instructional planning and validated teaching strategies.

Letter grade only (A-F).

577. Instructional Methods and Strategies for Individuals with Mild/Moderate Disabilities (3)

Prerequisites: Full admittance to Level 1 Education Specialist Credential Program or ITEP, completion of ETEC 110 or equivalent, and EDSP 564

Instructional methods, strategies, and curricular adaptations for students with mild/moderate disabilities from kindergarten to age 22. Research-based interventions, using data for program planning, and use of technology are emphasized.

Letter grade only (A-F).

578. Instructional Methods and Strategies for Individuals with Moderate/Severe Disabilities (3)

Prerequisites: Full admittance to Level 1 Education Specialist Credential Program or ITEP, and completion of ETEC 110 or equivalent, and EDSP 564

Instructional methods, teaching strategies, and curricular adaptations for students with moderate/severe disabilities from kindergarten to age 22, including evaluation, program planning, and use of technology for instruction and communication; knowledge related to movement, mobility, and sensory needs addressed.

Letter grade only (A-F).

Education Specialist Courses (EDSP)

587A. Advanced Field Study and Seminar: Education Specialist Credential in Mild/Moderate Disabilities (6)

Prerequisite: Admission to the Level I Education Specialist Credential in Mild/Moderate Disabilities. Must complete all Level I courses. Application for admission should be made by March 1 for the summer and fall semester and October 1 for the spring semester.

Advanced field study in a public or private school or community-based site serving individuals with mild/moderate disabilities. Candidates will demonstrate competencies in their own classroom or with a master teacher, under the supervision of a university supervisor.

Students may concurrently enroll in EDSP 587B upon advisement by their faculty advisor. Credit/No Credit grading only.

587B. Advanced Field Study and Seminar: Education Specialist Credential in Mild/Moderate Disabilities (6)

Prerequisite: EDSP 587A or concurrent enrollment in EDSP 587A upon advisement by their faculty advisor. Application for admission should be made by March 1 for the summer and fall semester and October 1 for the spring semester.

Advanced field study in a public or private school or community-based site serving individuals with mild/moderate disabilities. Candidates will demonstrate competencies in their own classroom or with a master teacher, under the supervision of a university supervisor.

Credit/No Credit grading only.

588A. Advanced Field Study and Seminar: Education Specialist Credential in Moderate/Severe Disabilities (6)

Prerequisite: Admission to the Level I Education Specialist Credential in Moderate/Severe Disabilities. Must complete all Level I courses. Application for admission should be made by March 1 for the summer and fall semester and October 1 for the Spring semester.

Advanced field study in a public or private school or community-based site serving individuals with moderate/severe disabilities. Candidates will demonstrate competencies in their own classroom or with a master teacher, under the supervision of a university supervisor.

Students may concurrently enroll in EDSP 588B upon advisement by their faculty advisor. Credit/No Credit grading only.

588B. Advanced Field Study and Seminar: Education Specialist Credential in Moderate/Severe Disabilities (6)

Prerequisite: EDSP588A or concurrent enrollment in EDSP 588A upon advisement by their faculty advisor. Application for admission should be made by March 1 for the summer and fall semester and October 1 for the spring semester.

Advanced field study in a public or private school or community-based site serving individuals with moderate/severe disabilities. Candidates will demonstrate competencies in their own classroom or with a master teacher, under the supervision of a university supervisor.

Credit/No Credit grading only.

695S. Seminar in Special Education (3)

Prerequisites: Advancement to candidacy, and written application to Graduate Office. Application for enrollment must be made by March 1 for the summer session or fall semester, or by October 1 for the spring semester.

Studies of problems and issues in special education. Relating research to practice in the area of exceptional individuals. For qualified candidates preparing for the comprehensive examination.

Not open for credit to students with credit in EDP 650. Letter grade only (A-F).

Educational Technology Courses (ETEC)

LOWER DIVISION

110. Introduction to Computers as Tools (1)

Introduction to operations, terminology, and components of computing systems. Introduction to computer applications including word processing, databases, and spreadsheets. Introduction to University e-mail systems and electronic searching.

Letter grade only (A-F).

171. Critical Thinking Using Computer Technology (3)

Prerequisite/Corequisite: GE Foundation Category A1 Written English.

Cultivates critical thinking abilities in conjunction with the use of computer technology. Introduces basic hands-on computer skills to facilitate critical thinking and learning. Critically examines the use of computer technology in academic and personal lives.

Letter grade only (A-F). (2 hours lecture, 2 hours laboratory)

UPPER DIVISION

411. Assessment of Computer Technology Competency, Level I (1)

Appropriate only for students who are already proficient with the material in ETEC 444. Provides students with an opportunity to meet the California Level I computer technology requirement by a performance assessment. Two class meetings and online activities.

Credit/No Credit grading only.

435./535. Accessible Electronic and Information Technologies (3)

Prerequisite: Either ETEC 110, 411, 444 or consent of instructor.

Critical use, analysis and evaluation of computer applications of computer technologies for accessibility and usability for populations with diverse needs. Terminology, design principles, and applications of accessible technologies. Legal and ethical issues in developing or adopting accessible electronic and information technologies.

Letter grade only (A-F).

444. Computer Technology in Education, Level I (3)

Prerequisites: Course design assumes familiarity with topics introduced in ETEC 110.

Introduction to educational computer technology: resources and tools for professional use; strategies for integrating computers into teaching; applications to diverse learners; legal, ethical, and societal issues. Meets the Level I teaching credential computer technology standard.

(Seminar 2 hours, laboratory 2 hours)

GRADUATE LEVEL

510. Foundations of Educational Technology (3)

Prerequisite: Either ETEC 411, 444, equivalent experience satisfying the California Level I computer technology standard, or consent of instructor.

Introduction to the field of educational technology. Overview of theoretical approaches, research trends, major developments, and prominent issues in the field. Incorporation of social, historical, psychological, and philosophical perspectives in the study of educational technology.

Letter grade only (A-F). (Seminar 3 hours)

523. Computer Technology in Education, Level II (3)

Prerequisites: ETEC 444 or equivalent experience satisfying California Level I computer technology standard.

Principles for integrating computer technology into learning environments to improve: planning, designing and implementing learning experiences; educational communication and collaboration; assessment and evaluation.

Meets California Level II computer technology standard. (Seminar 2 hours, laboratory 2 hours) Letter grade only (A-F).

525. Social and Cultural Implications of Educational Technology (3)

Examination of social and cultural implications of educational technologies, considering issues of cultural bias, equity, and questions of who benefits from particular technologies. International applications of computer technologies to promote learning about different cultures.

530. Educational Technology Leadership (3)

Prerequisites: ETEC 523, or consent of the instructor.

Examines leadership related to implementation of educational technology in education. Theory, knowledge, and skills necessary to use, evaluate, plan, and implement technologies in education system. Examines broader issues including security and cyber ethics.

535./435. Accessible Electronic and Information Technologies (3)

Prerequisite: Either ETEC 110, 411, 444 or consent of instructor.

Critical use, analysis and evaluation of computer applications of computer technologies for accessibility and usability for populations with diverse needs. Terminology, design principles, and applications of accessible technologies. Legal and ethical issues in developing or adopting accessible electronic and information technologies.

Letter grade only (A-F).

551. Education and the Internet (3)

Prerequisites: Either ETEC 411, 444, equivalent experience satisfying the California Level I computer technology standard, or consent of instructor.

Survey of educational applications across the Internet; characteristics of teaching and learning mediated through the Internet; analysis and design of Internet-based learning activities; design and development of online courses; implementation, management, and administration of online learning.

(Seminar 2 hours, Laboratory 2 hours)

553. Instructional Design (3)

Prerequisites: ETEC 523 or equivalent experience satisfying the California Level II computer technology standard.

Principles of instructional design emphasis on designing effective teaching strategies with educational technology. Theories and models to plan, create, evaluate and refine learner-centered educational activities.

Letter grade only (A-F).

570. E-Learning Design and Development (3)

Prerequisite: ETEC 523 or consent of instructor.

Introduction to e-learning design and development, including project management, instructional analyses and strategies, software selection, and evaluation. Interactive multimedia development applications, processes, and principles. Design and production of technology-enhanced instruction.

Letter grade only (A-F). (Seminar 2 hours, Laboratory 2 hours)

580. Field Experience in Educational Technology (3)

Prerequisites: ETEC 523 and either ETEC 530, EDP 520 or 595.

Students investigate and experience occupation or environment utilizing a form of educational technology. Under instructor guidance, students perform 90 field experience hours in educational technology environment. Instructor approval required for site selection.

Letter grading only (A-F).

623. Developing Technology – Based Learning (3)

Prerequisites: ETEC 523, 553.

Discussion, demonstration, and hands-on experience toward development of technology-based interactive learning programs.

Concepts of technology-based instructional design. Authoring tools for creating simulations, educational games, and interactive assessment tools.

(Seminar 2 hours, laboratory 2 hours)

695. Seminar in Educational Technology (3)

Prerequisites: Successful completion of all required course work for the Master of Arts in Education, Option in Educational Technology.

Studies in educational technology including reviews of literature, critique of educational technology research, and systematic development and evaluation of areas of students' prior work.

For qualified candidates preparing for the comprehensive examination. Application for enrollment must be made by March 1 for summer session or fall semester or by October 1 for spring semester. Letter grade only (A-F). May be repeated to maximum of 6 units.

Educational Library Courses (ELIB)

UPPER DIVISION

497. Independent Study (1-3)

Prerequisites: Consent of instructor and department chair.

Independent study under faculty supervision. May be repeated to a maximum of 6 units, no more than 3 units applicable to credential or major requirement.

GRADUATE LEVEL

500. Foundations of Information (3)

Role of information and information technology in organizations (particularly in Western education) and society. Topics include societal needs and demands, diffusion of knowledge and technology, information seeking and use, information/technology and culture.

Letter grade only (A-F).

510. Collection Development (3)

Criteria, tools, procedures and policies for evaluating, selecting and maintaining informational resources to use in information organizations.

Letter grade only (A-F).

520. Information Literacy and Reference Services (3)

Philosophy of reference service and information literacy. Criteria for evaluation, selection, setup and use of selected basic reference sources to reflect cultural and linguistic diversity of students. Uses of reference sources and information literacy processes.

Letter grade only (A-F).

530A. Library Media Materials for Elementary Grades (K-5) (3)

Selection and use of fiction and non-fiction books, audiovisual and electronic media, and related materials of interest to children that reflect California's cultural diversity and support current curriculum frameworks. Criteria and tools for selection and use. Current issues.

Letter grade only (A-F).

530B. Library Media Materials for Secondary Grades (6-12) (3)

Selection and use of fiction and non-fiction books, audiovisual and electronic media, and related materials of interest to young adults that reflect California's cultural and support current curriculum frameworks. Criteria and tools for selection and use. Current issues.

Letter grade only (A-F).

Educational Library Courses (ELIB)

540. Organization of Information (3)

Rationale and use of library catalogs. Principles and practice in classification and cataloging applied to school library media centers. Processing/organization of information. Current issues.

Letter grade only (A-F).

550. Management of Information Organizations (3)

Philosophy, principles and problems of planning, organizing, supervising and managing a school library media program, technology service, or other information organization.

Letter grade only (A-F).

570. Library Media Technologies (3)

Prerequisite: Level I computer technology knowledge and skills.

Evaluation, selection, and integration of computer, digital, audiovisual and other technologies for use in schools and other library settings; issues of technology planning, instruction, collaboration, assessment, and digital citizenship.

Letter grade only (A-F).

580. Field Experience in Libraries (3)

Prerequisite: Consent of program coordinator.

Course Description: Students will model effective practices in administering a library program under the supervision of a qualified library professional. Applications for field experience are due March 1 for the summer or fall semester and October 1 for the spring semester.

Letter grade only (A-F).

Social and Cultural Analysis of Education Courses (SCAE)

550. Foundations of Social and Cultural Analysis of Education (3)

Introduction to central theories and concepts and development of core competencies in social and cultural analysis of education; discussion of applications of critical theories and pedagogies in education; examination of the significance of social difference (e.g. race, class, gender, sexuality, language).

Letter grade only (A-F).

551. Critical Pedagogies (3)

In-depth examination of foundations and constructs of critical pedagogy in various educational contexts; applications of critical pedagogies in the United States and around the world; exploration of the relationship between critical pedagogies and social and educational justice.

Letter grade only (A-F).

560. History of Social and Educational (In)equality (3)

Historical survey of education as an institution; struggles for educational justice from the 19th century to present; analysis of the historical foundation of persistent educational inequities; emphasis on peoples of color, women, people with disabilities, LGBT individuals, and immigrants.

Letter grade only (A-F). Not open for credit to students with credit in ED P 576.

561. Urban Educational Policy (3)

Critical examination of the historical, cultural and political-economic dimensions of educational policy; impact of educational policy on student learning, experiences and outcomes; issues of difference, identity and justice in educational policy; special attention to urban education policy issues in California.

Letter grade only (A-F). Not open for credit to students with credit in ED P 575.

562. Agency, Resistance and Identity in Education (3)

Sociological and anthropological approaches to understanding youth cultures, academic resilience, identity formation, and how students influence, and are influenced by, educational experiences; youth and community organizing; race, class and gender, sexuality, language, etc. as factors in education.

Letter grade only (A-F). Not open for credit to students with credit in ED P 574.

564. Language and Education Policies (3)

Examination and analysis of historical and contemporary U.S. language policies, educational language policies, and legal decisions as context for current educational language practices; comparison of experiences with other nations; discussion of the relationship between language attitudes and educational policy formation.

Letter grade only (A-F). Not open for credit to students with credit in ED P 672.

566. Themes in Comparative International Education (3)

Examination of the historical and theoretical foundations as well as current debates, tensions and themes in the field of comparative international education; discussion of practical applications to address social and educational inequalities that exist around the world.

Letter grade only (A-F). Not open for credit to students with credit in ED P 582.

567. Educational Issues in Global Perspective (3)

Analysis of topical issues related to education in various international contexts; examination of topical issues across countries. Students have the opportunity to select the issues under investigation in consultation with the instructor.

Letter grade only (A-F). Not open for credit to students with credit in ED P 583.

568. Globalization and Educational Reform (3)

In-depth study of globalization and its impact on education around the world; analysis of policy borrowing and lending processes in the educational arena; national and local interpretations of global or borrowed educational policies; examination of educational reform processes.

Letter grade only (A-F).

695. Social and Cultural Analysis of Education Capstone (3)

Synthesis of concepts and ideas in the social and cultural analysis of education; implications of social and cultural theories for educational practice in a variety of settings; strategies for effecting social and educational justice.

Letter grade only (A-F).

AFRICANA STUDIES

College of Liberal Arts

Department Chair: Maulana Karenga

Department Office: Psychology Building (PSY), Room 306
Telephone / FAX: (562) 985-4624 / (562) 985-5599

Faculty: LaRese Hubbard, Maulana Karenga, Alosi Moloi, Bede M. Ssensalo, Skyne Uku-Wertimer, Aaron Wilson

Undergraduate Advisor: Maulana Karenga

Administrative Support Coordinator: Monique Hedrick-Walters

Students desiring information should contact the department office for referral or the faculty advisor.

Career Possibilities

Social Scientist • Social Worker • Counselor • Teacher
• Archivist • Journalist • Public Relations Consultant
• Community Organizer • Recreation • Law • School
Administrator • Linguist • Parole Officer • Probation Officer
• Editor • Writer • Urban/Regional Planner • Public Policy
Administrator • Foreign Policy Officer • Researcher (Some
of these, and other careers, require additional education or
experience. For more information, see www.careers.csulb.edu.)

Introduction

The discipline of Africana Studies focuses on the critical study of African Americans, Continental Africans, Afro-Caribbeans and Afro-Latinos, but also allows for study of African peoples in Asia and Europe. It emphasizes an interdisciplinary and multicultural approach to teaching.

The Africana Studies Department encourages students to take advantage of opportunities to do service learning and internships, and study abroad. The Department encourages and supports faculty/student collaboration in conferences, forums, field trips and joint research and writing projects.

The subspecialties of the disciplines of Africana Studies include: Africana theory and philosophy; Africana women's studies; African American historical studies; and Continental African studies.

Undergraduate Programs

Bachelor of Arts in Africana Studies (120 units)

Requirements

A minimum of 39 units is required for the major in Africana Studies; 12 lower division and 27 upper-division units. The distribution of courses within Africana Studies affords the students the opportunity for in-depth exploration of African American Studies, in Continental African Studies or a combination of the two, as well as other Diasporan studies, e.g., Caribbean basin.

Lower Division (12 units)

Take the following course:

AFRS 110 Introduction to Africana Studies (3)
Prerequisite/Corequisite: One GE Foundation course.

Take one of the following:

AFRS 120 African American History to 1865 (3)
Prerequisite/Corequisite: One GE Foundation course.

AFRS 121 African American Hist 1865-Present (3)
Prerequisite/Corequisite: One GE Foundation course.

Take 6 units electives, select one course from the following groups:

Group A (Social Science):

AFRS 115, 120, 150, 154, 200, 201, 210

Group B (Humanities):

AFRS 140, 155, 160, 170A, 170B, 180, 205, 240, 255

Upper-division Core (27 units):

Take all of the following courses:

AFRS 330 Politics of the African American Community (3)
Prerequisites: AFRS 110 and 121.

AFRS 335 Economic Development in the African American Community (3)
Prerequisites: AFRS 110 and 121.

AFRS 495 Research Methods in Africana Studies (3)
Prerequisites: AFRS 110 and 6 units upper-division work in Africana Studies. For Department majors.

Take one of the following:

AFRS 332 Civil Rights and the Law (3)
Prerequisite: GE Foundation requirements.

AFRS 354 African American Women and the Civil Rights Movement (3)
Prerequisite: GE Foundation requirements.

Take electives (15 units), one or more selected from the following groups:

Group A (Social Sciences):

AFRS 304; 310, 319, 325, 331, 332, 337, 345, 404, 410, 430

Group B (Humanities):

AFRS 343A, 343B, 346, 353I, 363, 370, 415

Group C (Theory):

AFRS 380, 400I, 454I, 460, 475, 498I

Certificate in Africana Studies

Students majoring in other departments of the University but interested in Africana Studies may concurrently pursue this certificate. Courses used to meet the certificate requirement may, where applicable, also be used simultaneously to meet General Education requirements or the major and minor requirements of cooperating departments.

Requirements

1. A major in another academic discipline. Certificate can be completed prior to or simultaneously with completion of the B.A. requirement.
2. A minimum of 24 units of which at least 12 must be in upper-division courses, with two or more courses selected from each of the following:

Group A: AFRS 110, 154, 210, 325, 330, 332, 335, 370, 420

Group B: AFRS 160, 343A, 346, 363, 450

Group C: AFRS 120, 121, 200, 201, 304, 330, 337, 354, 400I, 410, 454I

Minor in Africana Studies

Requirements

The Minor in Africana Studies is open to any non-Africana Studies majors.

The Minor in Africana Studies requires a minimum of 24 units of which at least 12 units must be in upper-division courses.

Take two or more courses from each of the following:

Group A: AFRS 120, 121, 154, 200, 201, 210, 304, 310, 325, 330, 332, 335, 354, 370, 400I, 404, 410, 420, 430

Group B: AFRS 140, 155, 160, 180, 205, 255, 337, 343A, 343B, 346, 353I, 363, 370, 415, 450, 454I, 475, 498I

Take the following core course:

AFRS 110 Introduction to Africana Studies (3)
Prerequisite/Corequisite: One GE Foundation course.

AFRS 495 Research Methods in Africana Studies (3)
Prerequisites: AFRS 110 and 6 units upper-division work in Africana Studies. For Department majors.

Africana Studies Courses (AFRS)

LOWER DIVISION

100S. Composition I (3)

Prerequisites: Students who score 146 or below on the English Placement Test and who have not taken equivalent courses in another department are eligible for enrollment in this course.

Students who score a total of 146 or below on the English Placement Test and who have not taken equivalent courses in another department, are eligible for enrollment in this course.

Composition I does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA. Must have a "C" or better to earn credit.

Basic course in writing, offering intensive practice in every stage of writing process from generating ideas to final proofreading, as well as to the developing stronger reading comprehension for specific writing tasks.

Same course as ASAM 100S, CHLS 104S, ENGL 100S. Not open for credit to students with credit in: ENGL 1, ASAM 1, AFRS 1, CHLS 1, ASAM 100S, CHLS 104S, ENGL 100S

100. Composition II (3)

Prerequisite(s): Students who score 147 or above on the English Placement Test, are exempt from the EPT, have credit in AFRS 100S (or its equivalent), or consent of the instructor.

Composition II does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA.

An expository writing course designed for first-year students. Satisfies one of the writing requirements for general education at CSULB. It emphasizes academic writing, focusing primarily on analytical reading and thesis-driven writing.

Same course as ENGL 100, ASAM 100, CHLS 104. Not open for credit to students with credit in: ENGL 100, ASAM 100, CHLS 104, ENGL 100, ASAM 100, CHLS 104.

110. Introduction to Africana Studies (3)

Prerequisite/Corequisite: One GE Foundation course.

A critical survey of the major themes, issues, concepts, current research, schools of thought, theorists and scholars in the discipline of Africana Studies, as well as its historical evolution and academic rationale.

115. Introduction to African Politics (3)

A review of recent developments or changes in the government, parties, political ideologies, politics, leadership and political processes in selected African countries.

120. African American History to 1865 (3)

Prerequisite/Corequisite: One GE Foundation course.

Survey course on African American history with origins in African culture and civilization. Focus on the role, impact and significance of African Americans in the U.S. from the colonial period through the American Revolution, enslavement and the Civil War.

121. African American History Since 1865-Present (3)

Prerequisite/Corequisite: One GE Foundation course.

Impact of social, economic and political change on African Americans after the Reconstruction period. Issues of migration, education, cultural development and business enterprises will be examined.

140. Introduction to African American Literature (3)

Prerequisite/Corequisite: One GE Foundation course.

A study of selected or representative literature of the African American writer. Special attention will be given to style, content, methodology and thematic approach.

150. Critical Thinking in Africana Studies (3)

Prerequisite: Completion of or concurrent enrollment in AFRS 100 or equivalent.

Introduction to the nature and process of critical thinking. Extensive practice in critical reasoning directed toward developing cognitive skills and dispositions central to its application in academic work and in the analysis and advocacy of personal perspectives and social issues.

154. Introduction to Africana Women's Studies (3)

Prerequisite/Corequisite: One GE Foundation course.

Critical introduction to basic concepts, perspectives and methodology in Africana women studies, focusing on historical and contemporary continental and diasporan African women's experience, initiatives, issues, and intersections of race/class/gender within the context of their oppression, resistance and internal creative capacity.

155. African American Music (3)

Prerequisite/Corequisite: One GE Foundation course.

Nontechnical survey of African American music. Some attention given to the impact of social movements on the musician and the music produced. Gospel, jazz and well-known derivatives will be highlighted.

160. Introduction to Africana Arts (3)

Prerequisite/Corequisite: One GE Foundation course.

A presentation of prevailing themes, methodology, concepts and meaning in African American art. Equal time will be given to early and contemporary art. The work of some Continental African artists will be introduced as appropriate.

167. Exploitation of the African American Athlete (3)

Study of the socio-dynamics of amateur, professional and collegiate sports activity in the United States as it relates to the African American community. Case studies of well-known African American athletes will also be presented.

170A. Elementary Swahili (4)

Prerequisites/Corequisite: Any Foundation course.

Introduction to grammar, syntax, comprehension, reading, writing and conversation in the language. Attention will be given to cultural context throughout the course.

Letter grade only (A-F).

170B. Elementary Swahili (4)

Prerequisites: AFRS 170A or equivalent competency.

A continuation of AFRS 170A. Advanced grammar, syntax, comprehension, reading, writing and conversation in the language

Letter grade only(A-F).

180. African American Language in America (3)

Historical, phonological, and sociological aspects of the language of African Americans; traces early uses in Africa; linguistic development from lingua franca to pidgin and creole; linguistic symbols, terms, and analysis applied to African American English; difference versus deficit theory.

200. Ancient African Civilizations (3)

Prerequisite: GE Foundation requirements.

A study of ancient African empires, kingdoms and states, including discussions of political institutions, social structures, education, cultural values, trade and international relations.

201. History of Slavery (3)

Prerequisite: GE Foundation requirements.

Historical examination of trans-Atlantic slave trade and its impact on Africa and the Western Hemisphere. Nature of slavery in Africa, Greece, Italy, the Caribbean, the Middle East, South America, and the United States. Legacy of slavery.

205. Modern Black South African Literature (3)

Prerequisite: GE Foundation requirements.

Study of South African literature written in English by Africans since 1800's to present. "Black" used broadly to include South Africans of mixed parentage whom the racial laws and policies of the white minority government separated, classifying them as "Coloreds."

Letter grade only (A-F).

210. African American Community (3)

Prerequisites: GE Foundation requirements.

Examines the social structure and challenges in the community life of African-Americans as compared to other ethnic groups. Explore and analyze how institutional and stratified pattern, demographic changes, social movements, community organizational programs affect African-Americans. Case studies presented.

214. Introduction to Africana Aesthetics (3)

Prerequisite: GE A.1 (Communication). Corequisite GE A.3 (Critical Thinking)

African Aesthetic is the philosophy of goodness, beauty and creativity informed by an African worldview. Surveys key 20th century writing on Africana aesthetics by African philosophers, such as Alain Locke, W.E.B. Dubois, Zora Neale Hurston, and Margaret Walker.

Letter grade only (A-F).

215. U.S. Diversity and the Ethnic Experience (3)

Prerequisites: Open only to Integrated Teacher Education Program students.

Survey of four major ethnic groups (American Indians, African American, Latino American, and Asian American) in American society from the colonial era to the present. Special attention to the formation and transformation of each ethnic group and their individual and collective roles in the development of the United States.

Same course as AIS 215, ASAM 215, CHLS 215. Not open for credit to students with credit in AIS 215, ASAM 215, B/ST 215, CHLS 215. Departments take turns offering the course in the Fall semester. Letter grade only (A-F).

216. Caribbean Intellectual Thought (3)

Prerequisite: AFRS 110.

An introduction to 20th century Caribbean intellectuals and their contributions to African American social and political thought and issues facing the African diaspora.

Letter grade only (A-F).

240. African and African American Folklore and Culture (3)

An examination and presentation of material on folklore, folk tales, and folk heroes in the African American community. Some attention also given to African mythology.

254. Africana Womanist Religious Thought (3)

Prerequisite: AFRS 154 or 110.

Critical survey of the major spiritual and ethical themes and concepts of Africana womanist religious thought in Christianity, Islam and African traditions of Kawaïda, Ifa and Maat, including voice, Afrocentricity, claiming, naming, self-defining gender jihad, complementarity, mutual respect, and reciprocity.

Letter grade only (A-F).

255. Introduction to Hip Hop (3)

Prerequisites: GE Foundation requirements.

A critical exploration of Hip Hop's history and culture, which includes analysis of its impact and influence on contemporary aesthetic culture, race relations, gender politics and struggles for social justice.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper-division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

304. The African Colonial Experience (3)

Prerequisite: GE Foundation requirements.

Critical examination of colonialism as a world phenomenon focusing on colonialism in Africa as the paradigm and point of departure for a specific and comparative understanding.

310. African American Male and Female Relationships (3)

A comprehensive study of male/female patterns of interaction in the African American community. Some attention given to institutional impact, role changes and projected images of relationships.

319. The Ethnic Experience in the U.S. (3)

Prerequisite: GE Foundation requirements.

Comparative study of race, cultures, and ethnic relations in U.S. society with special focus on experiences of four core groups: Native Americans, African Americans, Asian Americans, and Latino Americans.

Same course as AIS 319, ASAM 319, CHLS 319, WGSS 319. Not open for credit to student with credit in AIS 319, ASAM 319, CHLS 319, WGSS 319. (Lecture/Discussion.)

325. Africana Psychology (3)

Prerequisite: AFRS 110 or PSY 100

Develops the concept of Africana Psychology. Using comparative techniques, the course introduces students to common consequences in the experience of being a person of African descent, or a person of color.

330. Politics of the African American Community (3)

Prerequisites: AFRS 110 and 121.

Study of the perspectives, styles, problems and dynamics of political activity in the African American Community.

331. African American Juvenile (3)

Prerequisite: AFRS 210 or consent of instructor.

Critical approach to the problem of juvenile justice in the African American community.

332. Civil Rights and the Law (3)

Prerequisite: GE Foundation requirements.

Designed to provide the student with a basic understanding of the interaction between the American legal system and civil rights of African Americans, other minorities, women and the general citizenry.

335. Economic Development in the African American Community (3)

Prerequisites: AFRS 110 and 121.

Development of business and banking institutions in the African American community. Some attention given to the impact of external factors on development.

Letter grade only (A-F).

337. Cultures of African Peoples (3)

Prerequisites: GE Foundation requirement, AFRS 200 or consent of instructor.

Critical presentation of a cultural map of African people, emphasizing geography, migration and cultural similarities.

343A. African Literature (3)

Prerequisites: GE Foundation requirements and one or more Exploration courses.

A general survey of traditional and contemporary African Literature within the context of the historical, political, social, economic, and cultural movements. Also a comparison of Pan-African literature and Western literature.

343B. Caribbean Literature (3)

Prerequisite: GE Foundation requirements.

A general survey of traditional and contemporary Caribbean literature within the context of the historical, political, social, economic and cultural movements. Also a comparison of Pan-African literature and Western literature.

345. Politics of Black Power (3)

Systematic analysis of the Black Power movement of the 1960's, including contributions and contradictions of major organizations, leadership, and ideologies.

346. Africana Theatre (3)

Prerequisites: GE Foundation requirements.

Introductory survey course of Africana theatre as a historic medium, profoundly revealing in its humanistic, literary, social and cultural heritage as it relates to Africa, America and the Caribbean. (Lecture 2 hours, activity 2 hours)

353I. Religions of African Peoples (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses and upper-division standing.

Critical examination of selected spiritual and ethical traditions of the world African community with emphasis on Maat, Ifa, Christianity and Islam, their sacred texts and commentaries, major themes, representative figures, and comparative analyses of their continental and diaspora expressions.

354. African American Women and the Civil Rights Movement (3)

Prerequisite: GE Foundation requirements.

A critical examination of vital and multiple roles African American women played in the modern civil rights movement. Emphasis on African American women's agency, activism and shared vision, and role as an essential political force in reconceiving and reshaping U.S. history.

363. History of African Art (3)

Prerequisite: GE Foundation requirements.

Survey of African art from antiquity to the present as an integral part of African culture, including historical, cultural and religious contexts.

370. African and African American Images in the Mass Media (3)

Prerequisite: AFRS 121

Examination of portrayal of African and African American people in mass media, past and present. Primary emphasis on newspapers, radio, films and television.

380. African Political Theory (3)

Prerequisite: AFRS 115.

Examination of theorists and theories which shape African political philosophy. Special attention given to the concepts of Pan-Africanism, African socialism, Negritude and revolution.

381. African Americans and Party Politics (3)

Analysis of African American participation in U.S. political party process. Special features include information on African American participation in Republican, Democratic and third-party organizations. Material and discussion on independent African American political party efforts included.

400I. African American Social Thought (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Survey of African American intellectual history, with emphasis on social theories and opposing schools of intellectual thought.

404. Contemporary Issues of the Africana World (3)

Study of the shifting power and international status of the Africana world. Domestic issues, geo-politics and the diplomatic policies of selected countries will be highlighted.

410. The African American Family (3)

Prerequisites: GE Foundation requirements. AFRS 325 or consent of instructor.

Systematic study and social-historical analysis of the structure and function of the African American Family in the United States. Sociological/ theoretical analysis of the models of family units, roles and interpersonal relations in society. Comparison with other family units in America.

415. International Africana Children's Literature (3)

A survey of literature for and/or about African and African American children by authors from Africa, the U.S. the Caribbean and the rest of the Diaspora.

420. African American Children in Public Schools (3)

Theories, concepts and principles relating to the intellectual growth, development and learning of African American children.

423. Issues in Psychological Assessment of African Americans (3)

Prerequisites: candidates must have working knowledge of statistical concepts, upper-division standing in Africana Studies or consent of instructor.

Examination of issues, problems, and practices in the assessment of African American children.

430. African Political Leadership in the Twentieth Century (3)

Prerequisite: GE Foundation requirements.

Critical examination of African's search for national liberation and cohesion, collectively built institutions, movements/parties and ideological self-definition. Comparative study of traditional African leadership concepts and modern forms. Focus on selected countries and major African leaders.

450. Africana Writers Workshop (3)

Prerequisite: ENGL 100, AFRS 100, or equivalent.

Requires extensive writing in four major areas: poetry, drama, fiction and documentaries. It assumes that technical or grammatical problems of writing have been taken care of and focuses on themes which are Afrocentric.

452. Crime and Justice in the African American Context (3)

Prerequisite: AFRS 210 or 332

Study of the interrelationship between criminal behavior, race, ethnicity, class, social context and the criminal justice system.

454I. Africana Womanism: An Intellectual History (3)

Prerequisites: GE Foundation requirements, one or more exploration courses and upper-division standing.

Historical and critical study of the major schools of thought in Africana womanism, including continental and diasporan sources, historical evolution, cultural grounding, methodology, discourse on and with feminism, enduring and current issues and its relevance and relation to social change.

460. Continental African Thought (3)

Prerequisite: Background knowledge of African history, culture or society highly recommended.

Analysis of philosophical, social and religious systems of thought of Africa from antiquity to the present.

475. Racism and Sexism: An Analytical Approach (3)

Prerequisite: AFRS 332

Examination of institutions and a study of legislation which has been written and implemented in consequence of racism and sexism in American society. Social theories used to support and reject concepts of racism and sexism will also be presented.

490. Selected Topics in Africana Studies (3)

Prerequisite: Consent of instructor.

Topics of current interest in Africana Studies selected for intensive development.

May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

495. Research Methods in Africana Studies (3)

Prerequisites: AFRS 110 and 6 units upper-division work in Africana Studies. For Department majors.

Presents information on use of scientific methods in Africana Studies, research theory, research design, sampling, measurement and science techniques. Focuses on instrument construction as well as test reliability and validity.

Letter grade only (A-F).

498I. Ancient Egyptian Ethical Thought (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Critical study of ethical thought of ancient Egypt with due attention to theological, literary and socio-historical context in which it was developed and evolved, including examination of its major ethical texts and comparative analysis with surrounding traditions.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Permits individual students to pursue topics of special research interest.

May be repeated to a maximum of 6 units.

AMERICAN INDIAN STUDIES

College of Liberal Arts

Director: Troy Johnson

Telephone: (562) 985-8703

Faculty: Troy Johnson, Craig Stone, Gabriel Estrada

Academic Advisor: Troy Johnson

Department Secretary: Espie Contreras

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

American Indian Affairs • Social Scientist • Archivist, Social Worker • Journalist • Counselor • Teacher • Public Relations Consultant • Community Organizer • School Administrator • Linguist • Law Parole Officer • Probation Officer • Editor • Writer • Urban/Regional Planner • Public Policy Administrator • Foreign Policy Officer • Researcher (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

American Indian Studies is an interdisciplinary study of the American Indian. The options are designed to provide students with various fields of knowledge of American Indian Studies with opportunities for emphasis on particular topical, cultural and geographical interests. The program is governed by a committee of faculty representing a variety of schools and departments throughout the university.

Courses offer two directions: 1) content directed toward American Indian culture in the North Western Hemisphere; and 2) relevant content leading toward understanding the American Indian experience.

Students may pursue a program in American Indian Studies through a minor, certificate or concentration in American Indian Studies in the Liberal Studies Degree.

Undergraduate Programs

Certificate in American Indian Studies

Students pursuing any approved degree or credential program of the University may at the same time earn a Certificate in American Indian Studies. Courses taken to meet the requirements may be used, where applicable, to meet General Education requirements or the degree or credential requirements of cooperating departments. Certification of successful completion of requirements will be issued upon the recommendation of the American Indian Studies Program Director.

Requirements

1. A Bachelor's degree with a major in a traditional discipline. (Certificate requirements may be completed prior to the completion of B.A. requirement).
2. Submission of all college/university transcripts to the academic advising coordinator, who will work with the

student to develop a well-integrated program of studies. Interested students are strongly encouraged to meet with the academic advising coordinator after having completed the lower division core courses.

3. A minimum of 24 units, distributed as follows.

Core Courses

Lower Division Core:

Take 9 units from the following courses:
AIS 101, 105, 106, 200, 215, 222.

Upper Division Core:

Take 15 units from the following courses:
AIS 300, 308, 319, 320, 335, 340, 400, 420, 485, 490, 497, 499.

Minor in American Indian Studies

Requirements

A minimum of 21 units.

Lower Division:

Take 9 units from the following courses:
AIS 101, 105, 106, 200, 215, 222.

Upper Division:

Take 12 units from the following courses:
AIS 300, 308, 319, 320, 335, 340, 400, 420, 485, 490, 497, 499.

American Indian Studies Courses (AIS)

LOWER DIVISION

101. Introduction to the Study of Native American People (3)

Corequisite/Prerequisite: Any GE Foundation course.

Examines history, culture, religion, art and societies of American Indian. Introduction to historical aspects of Native American experience and discuss these aspects of Native life as applied to contemporary American Indian issues.

Letter grade only (A-F).

102. Aztec Language and Culture (3)

Aztec Language and Culture

Beginning the study of Nahuatl (Aztec). Practice in songs, grammar, reading, performance, pronunciation, writing. Comparison of Classic Aztec and Modern Nahuatl texts and arts. Cultural focus on healing and history.

105. American Indian History – Pre 1871 (3)

Prerequisite/Corequisite: One course from GE category A1.

Survey of histories and cultures of American Indian Peoples in North America from pre-contact to 1871 and analysis of political, cultural, legal and military relationships that developed between American Indians and foreign nations.

106. American Indian History – Post 1871 (3)

Prerequisite/Corequisite: One course from GE category A1.

Survey of histories and cultures of American Indian Peoples in North America from 1871 to present.

200. Contemporary Issues in American Indian Studies (3)

Analysis of major issues in contemporary American Indian affairs, politics, art, philosophy, education, reservations life, economics, government relations, Indian organizations, Indian-white relations, legal issues, land rights, media issues, Indian activist movements, and community concerns.

215. U.S. Diversity and the Ethnic Experience (3)

Prerequisites: Open only to Integrated Teacher Education Program students.

Survey of American Indian, African American, Latino American, and Asian Americans in American society from the colonial era to present. Special attention to the formation and transformation of each ethnic group and their roles in the development of the United States.

Same course as AFRS 215, ASAM 215, CHLS 215. Not open for credit to student with credit in AFRS 215, ASAM 215, B/ST 215, CHLS 215. Departments take turns offering the course in the Fall semester. Letter grade only (A-F).

222. American Indian Museum Studies (3)

Prerequisite: One G.E. Foundation course.

Designed as a hybrid, online and face-to-face introduction to the meaning and significance of American Indian Art in the display and exhibition of American Indian culture. Includes fieldtrips to museums, online discussions and activities.

Letter grade only (A-F).

UPPER DIVISION

General Education Category A must be completed prior to taking any upper-division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300. American Indians in Cinema (3)

Examines the creation of stereotypical and positive images of Americans in cinema utilizing silent cinema through contemporary era. Discusses contemporary images created from American Indian perspective that offer different images of American Indians in society.

Class content will vary dependent on films available for instruction. Letter grade only (A-F).

308. California Indian History (3)

Prerequisite: GE Foundation requirements.

Study of relationship between Indian people and various European powers that influenced the settlement of the State of California. Areas to be explored include: indigenous people of California, Spanish invasion of 1769, Mexican secularization in 1834, and seizure by U.S. in 1846.

Letter grade only (A-F). Not open for credit to students with credit in AIS 208.

313. American Indian Genders and Sexualities

Analysis of popular, feminist, queer and tribally specific theories and representations of American Indian genders and sexualities with a focus on literatures by American Indian women, men and two-spirit peoples.

Same course as WGSS 313. Not open for credit to students with credit in WGSS 313.

315. Contemporary Indigenous Peoples of Aztlan and Latin America (3)

Contemporary Indigenous Nations Studies of Latin and US America focused on the Aztec, Pueblo, Taino, Maya, Pipil, Aymara, Chicaqno/Latino and Mauri in transnational contexts. Uses international indigenous film, literature, performance, history, economic, diasporic, gender, Chicano/Latino, and American Indian studies approaches.

Same course as CHLS 315. Not open for credit to students with credit in CHLS 315.

319. The Ethnic Experience in the U.S. (3)

Prerequisite: GE Foundation requirements.

Examination of dynamics of development of our multicultural society, emphasizing study of the four distinct ethnic strands of American society (Asian American, Black American, Mexican American, and American Indian) and their role in maintenance of cultural diversity in United States.

Same course as AFRS 319, ASAM 319, CHLS 319, WGSS 319. Not open for credit to student with credit in AFRS 319, ASAM 319, B/ST 319, CHLS 319, WGSS 319. (Lecture/Discussion)

320. American Indian Art and Material Culture (3)

Survey of North American Indian art; emphasis on art forms of the U.S., Alaska, and Canada. Traditional and contemporary art and artists will be explored, focusing on aesthetic, theoretical, historical, religious, and philosophical aspects as they relate to American Indian culture.

335. American Indian Philosophies (3)

Detailed examination of American Indian tribal cultures and worldviews. Comparison of tribal philosophy and beliefs with that of western society. Special emphasis placed on traditional philosophical traditions as practiced in the cultural regions of North America and the sub-Arctic.

Letter grade only (A-F).

340. American Indian Literature (3)

Prerequisite: GE Foundation requirements.

Analysis of the written and oral literacy traditions developed by American Indians. Range of works studied: oral history, tales, myths, song, prayer, poetry, short story, and novel.

Same course as ENGL 340. Not open for credit to student with credit in ENGL 340.

400. Advanced Historiography of American Indian People (3)

Introduction to historical writings relating to American Indians. Analyze the attitudes, assumptions, and evidence that have been used to portray American Indian people and the settling of America. Provides a foundation for understanding of how history has been shaped and will advance research skills.

Letter grade only (A-F).

420. American Indian Traditional Material Culture, Arts and Crafts (3)

Prerequisites: AIS 320, or consent of instructor.

Techniques, materials, concepts and processes in the creation of American Indian traditional arts and crafts. Selected artistic projects in the creation of tribal arts.

(Lecture-activity 6 hours.)

421. American Indian Fine Arts: Post 1900 (3)

Examines North American Indian arts with emphasis on major art forms of the continental U.S., Alaska, and Canada. Explores relationship between contemporary art and artists with specific attention to aesthetic, theoretical, historical, religious, and philosophical aspects.

Letter grade only (A-F).

485. American Indians and the Law (3)

Prerequisites: Completion of the GE Foundation requirement, completion of one or more Exploration courses and upper-division status.

Provides an in-depth study of the legal relationships between the United States, individual states, Indian people, and Indian Nations. Begins with first contact between Indian people and English colonists and continues to the present time.

Letter grade only (A-F).

490. Selected Topics in American Indian Studies (1-3)

Prerequisite: Consent of instructor.

Topics of current interest in American Indian studies selected for intensive development.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

497. Fieldwork in American Indian Studies (1-3)

Prerequisites: Upper-division standing, consent of instructor.

Supervised experience relevant to specific aspects of American Indian community in off-campus setting. Project must be related to student's major or certificate program. Regular meetings with faculty supervisor and written reports required.

May be repeated to a maximum of 6 units.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed Studies to permit individual students to pursue topics of special interest.

May be repeated to a maximum of 6 units.

AMERICAN STUDIES

College of Liberal Arts

Director: Brett Mizelle

Department Office: Faculty Offices 2 (FO2), Room 109
Telephone / FAX: (562) 985-4424 / (562) 985-5431
Website: <http://www.csulb.edu/colleges/cla/programs/americanstudies>

Affiliated Faculty: Elyse M. Blankley (English/Women's, Gender, and Sexuality Studies), Patricia A. Cleary (History), Sharon D. Downey (Communication Studies), Linda N. España-Maram (Asian and Asian American Studies), Araceli Esperza (English), J. William Gibson (Sociology), Paul Gilmore (English), George Hart (English), Ann Johnson (Communication Studies), Troy Johnson (American Indian Studies), Maulana Karenga (Black Studies), Karen Kleinfelder (Art), Dennis Lopez (English), Eileen Luhr (History), Brett Mizelle (History), Charles Noble (Political Science), Daniel J. O'Connor (Liberal Studies), Carlos R. Piar (Religious Studies), Karen Rasmussen (Communication Studies), Maythee Rojas (Women's, Gender, and Sexuality Studies), Max Rosenkrantz (Philosophy), Anna Sandoval (Chicano and Latino Studies), Sarah Schrank (History), Nancy Strow Sheley (English/Liberal Studies), Craig R. Smith (Communication Studies), Jon R. Stone (Religious Studies), Dean S. Toji (Asian and Asian American Studies), John N. Tsuchida (Asian and Asian American Studies), Frederick Wegener (English), Hugh Wilford (History), Alison Wrynn (Kinesiology and Physical Education)

Career Possibilities

Advertising • Entertainment • Journalism • Management • Marketing • Mass Media (film, radio, television) • Politics • Professional Writing and Editing (creative or technical) • Public Relations • Publishing • Historian • Administrator in Historic and Cultural Preservation • Teacher • Museum Curator • Multimedia Specialist • Preservation and Environmental Law • College Instructor • Environmental Public History Review Specialist • Human Resources Manager • Systems Analysts • Insurance Broker (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

What is an American? How and why is culture important to our lives and identities? How do we represent the past and what importance—and limitations—do these representations have? How and why does culture—including popular culture, the arts, and literature—serve as a site of social struggle? How do diverse groups within the Americas imagine their identities and their relation to the United States? What happens when we look at our world(s) from a variety of perspectives? These are some of the questions that are addressed in American Studies, an interdisciplinary approach to American history, life, and culture.

American Studies is a vital, malleable, and growing academic enterprise, one known for the new questions it has posed, the new perspectives it has brought to the study of the cultures of the United States, and the new information it has introduced into scholarly and public conversations about national identity and experience. Students in this interdisciplinary program play an active role in their own education, working with the program director to design their own plan of inquiry into various aspects of American society and culture.

The American Studies Program offers a major leading to the bachelor's degree and a minor. Students are strongly encouraged to meet with the program director at an early stage in their studies for general education and preparatory course recommendations. The program director also provides ongoing advising and career information for American Studies students.

Bachelor of Arts in American Studies (120 units)

American Studies is an interdisciplinary study of American culture. The American Studies Program offers a major leading to the bachelor's degree and a minor. The Program is governed by a committee of faculty from various departments and schools who also serve as advisors. Majors confer with the program director to plan their programs, which are recorded on official advising forms.

Students planning to major in American Studies should consult the program director early in their academic careers for general education and preparatory course recommendations and for teaching credential information.

Requirements

A minimum of 36 units distributed as follows:

Core courses (21 units):

Take the following courses:

AMST 300 Introduction to American Studies (3)

Prerequisites: None

AMST 350I California Culture (3)

Prerequisites: GE Foundation requirement requirement; upper-division standing Interdisciplinary examination of the culture of California.

AMST 498 Senior Seminar in American Studies (3)

Prerequisites: Completion of AMST 300 and 18 units of upper-division work in American Studies or affiliated fields.

Take 6 additional units in AMST-designated courses, which include AMST 351, 360, 421I and 495.

Take 3 units from the following courses:

HIST 477A American Cultural History (3)

Prerequisites: None

HIST 477B American Cultural History (3)

Prerequisites: None

Take 3 units from the following courses:

ENGL 372I Comedy in the United States (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

ENGL 375 American Ethnic Writers (3)

Prerequisites: ENGL 100; GE Foundation requirements.

Elective pattern (15 units):

Students choose a five-course elective pattern in consultation with the program advisor in one of the following areas of concentration. No more than two courses in this elective pattern can come from any one academic department.

1. American Institutions, Ideas, and Experiences
2. Diversity and Difference
3. Popular Culture, Media, and Consumerism
4. Public Culture and Civic Engagement
5. Student Designed Area of Concentration

Minor in American Studies

Minimum of 18 units.

Take all of the following courses:

AMST 300 Introduction to American Studies (3)

Prerequisites: None

AMST 350I California Culture (3)

Prerequisites: GE Foundation requirement requirement; upper-division standing Interdisciplinary examination of the culture of California.

Take one of the following courses:

HIST 477A American Cultural History (3)

Prerequisites: None

HIST 477B American Cultural History (3)

Prerequisites: None

Take 9 units chosen in consultation with faculty advisor.

American Studies Courses (AMST)

UPPER DIVISION

300. Introduction to American Studies (3)

Interdisciplinary approaches to study of American civilization from colonial period through twentieth century. Significant issues and problems in American life examined from perspectives of several disciplines.

350I. California Culture (3)

Prerequisites: GE Foundation requirement requirement; upper-division standing Interdisciplinary examination of the culture of California.

Interdisciplinary examination of California culture. Emphasis on how California's history, politics, environment, social movements, art, and literature produce a contested and always changing culture.

351. Celebrity in American Culture (3)

Prerequisites: GE Foundation requirement; upper-division standing

Interdisciplinary examination of the changing meanings of fame in American society, addressing the production, consumption and cultural work of celebrity.

360. Explorations in American Popular Culture (3)

Prerequisites: GE Foundation requirement; upper-division standing.

Examines broad terrain of American popular culture from multiple disciplinary perspectives, interrogating both the form and content of cultural production and reception in the past and present.

Not open for credit to students with credit in AMST 200.

421I. Animals in American Culture (3)

Prerequisites: GE Foundation requirement; upper-division standing

Interdisciplinary examination of the role of non-human animals in making cultural meaning. Traces the many ways in which animals, not just humans, have shaped American history and culture.

495. Selected Topics in American Studies (3)

Prerequisites: GE Foundation; upper-division status.

Topics of current interest in American Studies selected for intensive development.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in *Schedule of Classes*.

498. Senior Seminar in American Studies (3)

Prerequisites: Completion of AMST 300 and 18 units of upper-division work in American Studies or affiliated fields.

Capstone research course for American Studies majors

Letter grade only (A-F).

ANTHROPOLOGY

College of Liberal Arts

Department Chair: Barbara LeMaster

Department Office: Faculty Office FO3-305

Telephone: (562) 985-5171

FAX: (562) 985-4379

Website: <http://www.csulb.edu/depts/anthro>

Faculty: Jayne Howell, Alexandra Jaffe, Wendy Klein, Daniel O. Larson, Barbara LeMaster, Carl P. Lipo, Ron Loewe, Hector Neff, Karen Quintiliani, Steve Rousso-Schindler, George M. Scott, R. Scott Wilson, Marcus Young Owl

Advisors

Undergraduate: Marcus Young Owl

Graduate: Ron Loewe

Administrative Coordinator: Libby Azevedo

Career Possibilities

Anthropologist • Archaeologist • Archivist • Attorney • Physician Lawyer • Curator • Writer • Researcher • Linguist • Social Worker • Tour Guide • Cultural Resource Manager • Urban Planner • Foreign Service Officer • Personnel Manager • Health Researcher • Immigration Inspector • Teacher (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The undergraduate major in Anthropology is designed to provide students with knowledge of the various fields of Anthropology and with opportunities for emphasis in particular topical and geographical interests. The undergraduate minor in Anthropology is recommended for students preparing for careers which will require practical knowledge of different cultural and linguistic backgrounds. The graduate program is designed to meet the needs of students who are seeking to expand their knowledge and increase their competence in anthropology. Graduate students are responsible for observing the general requirements for the M.A. degree as stated in this catalog. It is also recommended that prospective students consult with the Graduate Advisor at their earliest opportunity.

Undergraduate Programs

Bachelor of Arts in Anthropology

Lower Division:

Take all of the following courses:

ANTH 110 Introduction to Physical Anthropology (3)
Prerequisites/Corequisites: Any B.2 GE Foundation course.

ANTH 120 Introduction to Cultural Anthropology (3)
Prerequisite/Corequisite: Any GE Foundation course.

ANTH 140 Pyramids, Tombs and Treasure: Wonders of the Past (3)
Prerequisite/Corequisite: Any GE Foundation course.

ANTH 170 Introduction to Linguistics (3)
Prerequisite/Corequisite: Any GE Foundation course.

Take an approved introductory statistics course.

Upper Division (total of 33 units):

Required Core Courses (15 units):

Take all of the following courses:

ANTH 313 World Prehistory (3)
Prerequisite: GE Foundation requirement.

ANTH 314 Global Ethnography (3)
Prerequisites: GE Foundation requirement.

ANTH 401 Foundations of Anthropology (3)
Prerequisites: ANTH 313 and 314 with grade of "C" or better, or consent of instructor.

ANTH 435 Human Evolution (3)
Prerequisites: ANTH 110.

Take one of the following:

ANTH 413 Language and Culture (3)
Prerequisites: None

ANTH 475 Language and Gender in Cross-Cultural Perspective (3)
Prerequisites: None

In consultation with the Undergraduate Advisor, an additional 18 units will be selected from the courses listed below. The major allows students to be generalists picking upper-division electives from differing subfields, or to specialize in one subfield. Courses are grouped by topic/subfield as a guide for students.

Archaeology:

ANTH 405, 448, 449, 450, 451, 455, 456, 471, 473, 487

Biological Anthropology:

ANTH 315, 318, 319, 363, 402, 434, 436, 437, 480A

Cultural Anthropology:

ANTH 305I, 307I, 311I, 321, 322, 324, 329, 332, 335, 448, 351, 353, 412I, 414, 416, 417, 419, 420, 421, 422, 427, 428, 431, 432, 436, 440, 441, 442, 444, 454, 478

Linguistic Anthropology:

ANTH 412I, 413, 421, 475

Students may apply a maximum of 2 Anthropology Capstone courses to the major. Students may apply Anthropology Human Diversity classes to the major.

Students may take a total of 6 units of ANTH 490 and, with approval of the undergraduate advisor and sponsoring faculty members, up to 6 units of ANTH 496, 498, or 499.

Minor in Anthropology

A minimum of 21 units in a program approved by the major advisor.

Lower Division Required:

Take all of the following courses:

ANTH 110 Introduction to Physical Anthropology (3)
Prerequisites/Corequisites: Any B.2 GE Foundation course.

ANTH 120 Introduction to Cultural Anthropology (3)
Prerequisite/Corequisite: Any GE Foundation course

ANTH 140 Pyramids, Tombs and Treasure: Wonders of the Past (3)
Prerequisite/Corequisite: Any GE Foundation course.

ANTH 170 Introduction to Linguistics (3)
Prerequisite/Corequisite: Any GE Foundation course.

Upper Division Electives:

Take 9 units of anthropology courses in consultation with the major advisor.

Interdisciplinary Minor in Crosscultural Language and Academic Development Studies

For requirements, see description in the Advanced Studies in Education and Counseling section of this catalog.

Graduate Programs

Master of Arts in Anthropology

The department offers a master's degree in anthropology and an option in applied anthropology.

Prerequisites

1. A bachelor's degree in anthropology; or
2. A bachelor's degree with 24 units of upper-division courses in anthropology, comparable to those required of anthropology majors at this University;
3. A B.A. degree in any field and other background appropriate to graduate study in anthropology. Students whose background in anthropology seems inadequate may be required to fulfill specific undergraduate deficiencies before admission to candidacy. Deficiencies will be determined by the departmental graduate advisor after consultation with the student and a review of the student's transcript records.

Advancement to Candidacy

1. Acceptance into the M.A. program by the department;
2. Satisfaction of the general University requirements for advancement to candidacy (including fulfilling the GVAR);
3. Approval of the candidate's graduate program by the departmental graduate advisor;
4. The candidate must have taken:
ANTH 501, 510, and 560 or 561 totalling 9 core units.

Requirements

1. A minimum of 33 units of 400-level upper-division and graduate courses, of which 21 units must be at the 500-600 level in a program approved by the Graduate Advisor. These 33 units must include the following courses:
Take all of the following courses:
ANTH 501 Current Trends in Anthropological Theory (3)
Prerequisites: ANTH 401 or equivalent, and graduate standing.
ANTH 510 Proseminar (3)
Prerequisites: Six units of upper-division anthropology courses or consent of instructor.
Take one of the following courses:
ANTH 560 Ethnographic Research Methods (3)
Prerequisite: Graduate standing or consent of instructor.
ANTH 561 Basic Computer Research Applications in Anthropology (3)
Prerequisite: ANTH 560 or consent of instructor.
2. Up to 6 units of course work outside the Department of Anthropology may be included in the 33 unit total;
3. Competence in appropriate research skills. These may include: familiarity with computer languages and use of computers, or statistical training and facility, or a reading knowledge of a foreign language;
4. Either A) Comprehensive Examination, or B) M.A. Thesis.

Option in Applied Anthropology

Students with a B.A. in Anthropology, as well as those who can apply their previous training and experience to the practice of anthropology, are welcome to apply. All graduate students participate in research projects and internships. Within the global context of urban and regional cultural change, the program offers three concentrations: multicultural education, medical/health care, and community/organizations. Regional emphasis begins with the languages, cultures, and organizations of southern California and the Southwest and extends globally.

Prerequisites

1. A bachelor's degree in anthropology; or
2. A bachelor's degree with 24 units of upper-division courses in anthropology, comparable to those required of anthropology majors at this University; or
3. A bachelor's degree in another field, either a social science, humanity, education, or medical science one, with fewer than 24 units of upper-division course work in anthropology, showing evidence of strong potential skills in applied anthropology.

Students under category (3) should submit a petition together with whatever supporting materials as recommended by the Graduate Advisor. If the Graduate Student Committee considers an applicant to lack a basic understanding of anthropological theories and methods, such an applicant will be accepted provisionally into the program (as an unclassified post-baccalaureate student), in which case he/she will be advised to enroll in courses during the first semester recommended by the Committee. Providing that the student performs satisfactorily in these courses, he/she will be admitted into the program the following semester, gaining classified status, and credit will be given for those courses completed the previous semester that are required for the Master of Arts degree.

Advancement to Candidacy

1. Classified status;
2. Satisfaction of the general University requirements for advancement to candidacy (including fulfilling the GVAR);
3. Approval of the candidate's graduate program by the departmental graduate advisor.

Requirements

- Students must complete a minimum of 36 units of 400 upper level upper division and graduate courses in a program approved by the Graduate Advisor, including:
1. ANTH 501, 503, 505, 510, 517, 530, 560, 561 and 6 units of 698
 2. Two upper division/graduate elective courses selected in consultation with the Graduate Advisor
 3. Up to 3 units of course work outside the Department of Anthropology may be included in the 36 unit total. Students may substitute other courses for those normally required, but only with the approval of the Graduate Advisor.
 4. Students must undertake and satisfactorily complete, under the supervision of the committee, a Thesis or Project.

Anthropology Courses (ANTH)

LOWER DIVISION

110. Introduction to Physical Anthropology (3)

Prerequisites/Corequisites: Any B.2 GE Foundation course.

Physical nature of human beings; relation of humans to other animals; heredity and principles of biological evolution; human fossils; significance of physical variation in modern populations; the origin and adaptive value of technology.

120. Introduction to Cultural Anthropology (3)

Prerequisite/Corequisite: Any GE Foundation course.

Nature of culture; comparative and historical approach to religion, social organization, subsistence patterns and other aspects of cultures around the world; meanings of human nature, cultural universals and cultural differences.

140. Pyramids, Tombs and Treasure: Wonders of the Past (3)

Prerequisite/Corequisite: Any GE Foundation course.

Exploration into the many enigmas that remain in the study of the human past. Investigates how archaeologists are able to produce answers to many enduring problems using a scientific understanding of the archaeological record and material remains.

170. Introduction to Linguistics (3)

Prerequisite/Corequisite: Any GE Foundation course.

Nature of language; its relation to culture; language structure and processes of change; language universals, contrasts and relationships.

Same course as LING 170. Not open for credit to student with credit in LING 170.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper-division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

305I. Radical Social Analysis (3)

Prerequisite: GE Foundation requirement, one or more Explorations courses and upper-division standing.

Radical examination of society and culture, focusing on classic Marxian texts as well as current critical theory and analysis. Special emphasis on critiques of capitalism and the effects of global inequality on humanity.

307I. Modernization in Global Perspective (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Exploration of psychological and material problems in modern society (both western and Third World) due to accelerating change beginning with advance of technology, rise of capitalism, abandonment of "old values," increasing complexity of bureaucracy, and lowering of social barriers.

311I. Human Adventure (3)

Prerequisite: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Exploration of the evolution of key features of humanity from our origins through the present and into the future.

313. World Prehistory (3)

Prerequisite: GE Foundation requirement.

Origin of human beings and their cultures, development of agriculture, growth of city life, and the rise of civilization; a survey of world-wide prehistory from the Old Stone Age to the Iron Age.

314. Global Ethnography (3)

Prerequisites: GE Foundation requirement.

Recent and contemporary cultures around the world; a comparative survey of their ecological adaptations, social institutions, technology, subsistence strategies, degrees of complexity, and patterns of change.

315. Human Variation (3)

Prerequisite: GE Foundation requirement.

Biological variation and differences in modern humans. Biological concepts of biospecies and subspecies. Biological adaptations. Racism and genocide. Rise of the race concept and the social meaning of this concept. Biology of several American ethnic groups.

318. Human Genetics (3)

Prerequisites: ANTH 110 or equivalent BIOL course, a quantitative course.

Genetic background for normal and abnormal development; population differences; human reproduction, pregnancy, prenatal diagnosis and birth defects; introduction to population and evolutionary genetics; application to social, moral, legal and ethical problems and to genetic counseling.

319. Human Growth and Development (3)

Prerequisite: BIOL 205 or 207.

Analysis of the sequence of events in the development of people from conception to death; organ development; rapid and retarded growth patterns; the processes of aging and death from a broad ethnic and ecological perspective.

321. North American Indians (3)

Comparative study of traditional Native American societies, social organization, belief systems and religions, crafts and adaptation to varied environments; cultural changes in response to European contacts.

322. California Indians (3)

Survey of native Californian groups; discussion of the diversity of aboriginal culture prior to western contact as background for analysis of the impact of Europeans; problems of intercultural relations; and the current status of native Californians.

324. Peoples of South America (3)

Survey of the present day peoples of South America; tribal Indians, peasant communities, village life, the emerging middle class, and other social groups; examination of the Indian, European, and African heritage and present day cultural and social changes.

329. Cultural Diversity in California (3)

Prerequisite: GE Foundation requirement.

Examination of current cultural diversity in California, including ethnicity, nationality, class, gender, religion, and region; and the impact of this diversity on public institutions will be covered.

Letter grade only (A-F).

332. Chinese Culture and Society (3)

Anthropological perspectives on revolution, socialism, and institutional change in China, ethnic diversity, family and kinship patterns, politics, economy, international relations, and religion in premodern and modern times.

335. Japanese Culture and Society (3)

Cultural and social institutions; kinship, family structure, religion, law, politics and economy from traditional to modern times.

351. Sex Roles and Culture (3)

Interaction of biological, cultural and historical factors on male/female roles and status in traditional and contemporary cultures and societies.

353. Health and Healing (3)

Prerequisite: GE Foundation requirement.

Cultural perspective of health and health care delivery; coverage of diverse cultures in the United States and abroad; emphasis on increasing personal awareness through exposure to diverse perceptions of illness and treatment.

363. Natural History of Primates (3)

Prerequisites: ANTH 110.

Relationship of primates to other mammals; adaptation of arboreal mammals; functional and evolutionary aspects of primate anatomy and physiology; effects of size; primate ecology; survey of the Order Primates: Prosimii, Tarsoidea, New World and Old World Monkeys, Hominoids.

401. Foundations of Anthropology (3) F

Prerequisites: ANTH 313 and 314 with grade of "C" or better, or consent of instructor.

Introduction to history of anthropological theory from inception to current approaches; frames theories in the social context in which they emerged.

Letter grade only (A-F).

402. Evolutionary Theory (3)

Prerequisites: Upper-division standing and ANTH 110 with a grade of "C" or better.

Development of evolutionary thought and its impact on Anthropology; origins of physical anthropology; Mendelian genetics, transmutationalism, populational genetics, Hardy-Weinberg equilibrium, non-Darwinian evolution, and modern synthesis; scientific method, the application of evolutionary theory to human origins, primate biology, behavioral biology. Current theoretical perspectives.

Letter grade only (A-F).

403. Evolutionary Anthropology (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses, and completion of any lower-division course in anthropology with a grade of "C" or better.

Overview of the application of evolutionary theory to human behavior and culture. Fundamentals of Darwinian evolution, cultural transmission, behavioral ecology, and complex social systems. Applications in ethnology, archeology, biological anthropology and historical linguistics with relevance to issues facing modern societies.

May be repeated to a maximum of 6 units in different semesters. Letter grade only (A-F).

405. Principles of Archaeology (4)

Prerequisites: ANTH 140 and GE Foundation requirement.

Exploration of the techniques, methods, and goals of archaeological research. Study of ceramics, lithics and other parts of the archaeological record. Examination of issues in sampling, survey, excavation and dating of archaeological materials. General problems encountered in explaining archaeological phenomena.

Letter grade only (A-F). Not open for credit to students with credit in ANTH 205. Not open for credit to students with credit in ANTH 301. (3 hours lecture, 2 hours activity)

412I. Culture and Communication (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Culture and its influence on the communication process; practical application to intercultural and multicultural situations; cultural patterns in America and abroad and their effect on verbal and nonverbal communicative behavior; cultural dimensions of ethnocentrism, stereotypes, and prejudices and their effect on communication; multicultural approaches to human interaction.

413. Language and Culture (3)

Relation of language to social and cultural practices and processes; issues of meaning, identity and power within and across cultures. Same course as LING 413. Not open for credit to students with credit in LING 413.

414./514. Anthropology of Religion (3)

Prerequisites: ANTH 120 and upper-division/graduate standing or consent of instructor.

Anthropological examination of religious behavior and beliefs, which focuses on these phenomena in sociocultural and adaptive

contexts. Using the cross-cultural and cultural evolutionary approach, hunter-gatherer religions through civilized ones will be covered.

Letter grade only (A-F).

416./516. Urban Anthropology (3)

Comparative analysis of development and role of urban centers in ancient and modern cultures; interrelationships of urban and rural populations; patterns of similarity and difference in urbanism of contrasting cultures; implications for a multi-national world.

417./517. Applied Anthropology (3)

Prerequisites: ANTH 120 and upper-division/graduate standing or consent of instructor.

Brief orientation to applied anthropology, its history and ethics; policy and applied anthropology domains (needs assessment, program evaluation, social impact assessment, environmental, advocacy); applied research methods; student proposals for internship research.

419./519. Encounters and Identities (3)

Prerequisite: Graduate and advanced undergraduate students.

Examination of how cultural anthropologists have dealt, theoretically, with the concept of identity; concentrates more on theories than geographic regions, emphasis on recent theoretical developments such as post-modern and post-colonial approaches to the study of contemporary subjectivities.

Letter grade only (A-F).

420./520. Culture, Power and Politics (3)

Prerequisite: ANTH 120 and upper-division/graduate standing or consent of instructor.

Examines from an anthropological perspective how culture shapes the social construction of power and the practice of politics from an anthropological perspective.

421. Education Across Cultures (3)

Cross cultural perspectives on formal and informal education and socialization, using theory and methods from anthropology and linguistics. Cultural variation in schooling and multiculturalism in U.S. American classrooms. Cultural, linguistic and educational issues facing indigenous, minority and immigrant populations in schools.

Same course as LING 425. Not open for credit to students with credit in LING 425.

422./522. The Anthropology of Gender (3)

Prerequisites: Upper-division standing and ANTH 351 or consent of instructor.

Examines anthropological perspectives on gender and how these perspectives have challenged and transformed anthropology and feminism; class will locate gender relations in the production of anthropological knowledge, in colonial and postcolonial social fields, and in the movement of global capitalism.

Letter grade only (A-F).

427./527. Global East Asia (3)

Prerequisites: Graduate and advanced undergraduate students.

Examine of how socio-cultural formations in an East Asian context articulate with global flows of capital, people, and ideas.

Letter grade only (A-F).

428./528. Historical Ethnography (3)

Prerequisite: Consent of instructor.

Development of the specialization of historical ethnography in anthropology, combined ethnographic and historical approaches to ethnographic questions, methodological and theoretical issues in historical ethnography.

Letter grade only (A-F).

431./531. New Media Ethnography (3)

Prerequisite: ANTH 120 or consent of instructor.

Theory and techniques in the planning, production and presentation of multimedia and hypermedia ethnography. Students will work in production teams to produce an ethnography that takes advantage of different modes of ethnographic research and presentation

(interactive video, photography, print, sound).

Letter grade only (A-F). Course fee may be required. (Lecture 2 hours; Lab 2 hours)

432. Peoples of Mexico and Central America (3)

Survey of present-day peoples of Mexico and Central America; indigenous and mestizo cultures and their heritage; examination of recent change.

Not open for credit to students with credit in ANTH 323.

434. Primate Evolution (3)

Prerequisite: ANTH 110. Recommended: ANTH 363, upper-division physical anthropology, biology, or anatomy/physiology course.

Primate evolutionary biology, minus the sub-family hominidae; fossil record and analysis of fossils (through the use of fossil casts); detailed cranial anatomy (particularly teeth) examined in the laboratory section; literature on primate evolution surveyed.

(Lecture 2 hours, Lab 3 hours)

435. Human Evolution (3)

Prerequisites: ANTH 110.

Fossil and molecular evidence for human evolution with a consideration of the importance of cultural factors.

436. Medical Anthropology (3)

Prerequisites: ANTH 353 recommended.

Interaction of cultural, biological and environmental elements in human response to disease; emphasis on an ecosystem approach with evolutionary and comparative perspectives.

437. Primate Ecology (3)

Prerequisite: ANTH 110 or a comparable biology course with a grade of "C" or better; ANTH 363 recommended.

Survey of interaction of primates with their environment. Focus on physiological ecology, nutritional ecology, chemical ecology, population ecology and behavioral ecology of primate species.

Letter grade only (A-F). (Lecture 3 hours)

440. Ethnographic Field School (3-6)

Prerequisite: Consent of instructor.

Experiential course gives opportunity to apply standard ethnographic methods to study, observe, and learn about a non-U.S. culture. Analysis of methodology and data collection will occur throughout the course. Location, topics and activities will vary.

Letter grade only (A-F).

441./541. Ethnographic Film Production I (3)

Prerequisite: ANTH 120 or consent of instructor

Intermediate-level theory and methodology for ethnographic/documentary film production. Students will work in teams and learn the fundamentals of how to produce an ethnographic film from conception through completion using professional-quality production and post-production equipment.

Letter grade only (A-F). Course fee may be required. (Lecture 2 hours; Lab 2 hours)

442./542. Ethnographic Film Production (4)

Prerequisite: ANTH 120 and 441/541 or consent of instructor

Advanced-level theory and methodology for ethnographic/documentary film production. Students will work in teams and learn the fundamentals of how to produce an ethnographic film from conception through completion using professional-quality production and post-production equipment.

Letter grade only (A-F). Course fee may be required. (Lecture 3 hours; Lab 2 hours)

444./544. Transnational Migrants (3)

Prerequisites: ANTH 120 and upper-division/graduate standing or consent of instructor.

Anthropological examination of the lives of immigrants and refugees. Explores the way studies of migration challenge our understanding of the local context of globalization and transnationalism. Focus

on theories of culture, ethnicity, and identity as well as theories of incorporation, adaptation and nativism and the relevance of applied anthropology through research and advocacy.

Letter grade only (A-F).

448. Ancient Civilizations of Mexico and Central America (3)

Origin and growth of the Aztec, Maya and other civilizations of Mexico and Central America.

Not open for credit to students with credit in ANTH 345.

449. Prehistoric Cultures of North America (3)

Archaeological evidence of origin and growth of the native American cultures north of Mexico; regional cultures and broad continental patterns of development.

Not open for credit to students with credit in ANTH 347.

450. Archaeological Field Research (1-10)

Prerequisite: Consent of instructor.

Introduction to field acquisition of archaeological data through remote sensing, geophysics, survey, and excavation; instructional emphasis is on recovery, recording techniques, and the management of field projects; locations will vary and may be offered on Saturdays.

May be repeated to a maximum of 10 units in different semesters. Course fee may be required.

451. Archaeological Artifacts Analyses (4)

Prerequisite: ANTH 140 or equivalent.

Study of the products of human activity; nature of measurement and observation within the archaeological record; Explanations of artifact variability. study of lithics, ceramics, and other types of archaeological materials. Practical experience in the study of materials, sampling, errors.

Letter grade only (A-F). (Lec 3 hrs, Lab 2 hrs)

454. Culture and Aging (3)

Cultural perspectives on aging and the aged in America and elsewhere. Attention to insider views from specific societies and to comparison of aging concerns in diverse settings.

455./555. Archaeological Method and Theory I (4)

Prerequisite: Consent of instructor.

Examination of theoretical constructs in the analysis of archaeological data. Development and construction of a metalanguage for the discussion and analysis of historical phenomenon. Key debates in archaeological literature about the nature of theory, knowledge, theory and units.

Letter grade only (A-F). (Lec 3 hrs, Lab 2 hrs)

456./556. Archaeological Method and Theory II (4)

Prerequisites: Consent of instructor and ANTH 455.

Analysis of conceptual frameworks employed by archaeologists in obtaining explanation in the three major areas of culture history, cultural reconstruction, and explanatory prehistory. Introduction to evolutionary theory as used in archaeology. Debates about the nature of evolutionary explanations.

Letter grade only (A-F).

458. Ethnographic Methods (4)

Prerequisites: ANTH 110, 120, 140, and 170 or consent of instructor.

Introduction to purposes of cultural anthropology fieldwork, methodology used to collect ethnographic data, and ways of analyzing and reporting data collected; focus on identifying and defining research problems and populations, and ethical issues that arise when conducting research.

471. Prehistory of Eastern North America (3)

Prerequisites: ANTH 140 or equivalent.

Ecological and evolutionary account of prehistoric cultural developments in North America east of the Rocky Mountains. Cultural and environmental change from appearance of people in New World to collapse of indigenous cultural systems.

Letter grade only (A-F).

473. Archaeology of California (3)

Prerequisites: ANTH 140 or 405 or 313.

Overview of the archaeology of California, from initial human colonization through European contact. Emphasis on environmental change, human-environment interactions, the development of social complexity, and the consequences of European colonization.

Letter grade only (A-F).

475. Language and Gender in Cross-Cultural Perspective (3)

Analysis of men's and women's communication in its social and cultural context; role of gender in interpreting conversational interactions in the U.S. and elsewhere; acquisition of gender differences; cultural dimensions of perceptions and stereotypes and their effect on communication.

Same course as LING 470, WGSS 475. Not open for credit to students with credit in LING 470, WGSS 475.

478. Anthropology and Film (3)

Prerequisite: One lower-division anthropology course or consent of instructor.

This seminar critically analyzes issues of an anthropological nature as presented in ethnographic and commercial films. Representations of anthropologists, anthropological theories and methods, and populations and concerns of anthropological interest are contrasted with scholarship published on the same issues.

Letter grade only (A-F) for majors/minors.

480A. Osteology I (3)

Introduction to skeletal anatomy, measurement and analysis of osteological collections, applied anthropometrics and morphometrics.

(Lecture 2 hours, Lab 3 hours)

487. Cultural Resource Management (3)

Prerequisite: ANTH 405.

Introduction to the practice of public archaeology in the United States: historical and legal background; federal, state, and local programs; archaeology and Native Americans; contract archaeology; survey, evaluation, and mitigation projects; professional employment in U.S. cultural resource management.

Letter grade only (A-F).

490. Selected Topics in Anthropology (3)

Topics of current interest in anthropology selected for intensive development.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*. Course fee may be required.

496. Internship (3)

Prerequisites: Upper-division standing, approval of faculty mentor.

Supervised internship in an area of anthropology within or outside the University; field experience of 90 hours in which the student gains practical experience in an area of anthropology.

Letter grade only (A-F).

498. Senior Thesis (1-6)

Prerequisites: Open only to Anthropology major, senior standing, and consent of a faculty mentor.

Research for and writing of a senior thesis under the direction and guidance of an Anthropology Department faculty mentor.

Letter grade only (A-F).

499. Guided Studies in Anthropology (1-3)

Prerequisite: Consent of department.

Selected topics in anthropology and preparation of a research report.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL

501. Current Trends in Anthropological Theory (3)

Prerequisites: ANTH 401 or equivalent, and graduate standing.

Examination of current themes used by leading anthropologists in the areas of our graduate program, i.e.: Applied Anthropology, Linguistic Anthropology, and Archaeology. Investigation of how theories shape problems and analytic techniques, and what makes theory 'cutting edge'.

Letter grade only (A-F).

503. The Anthropological Perspective (3)

Prerequisite: Graduate standing or consent of instructor.

Through reading and discussion of ethnographies and reports of applied anthropological work, reviews scientific understanding of process of inquiry and action in the human sciences, leading to identification of a common core perspective within anthropology.

Letter grade only (A-F).

505. Practicing Anthropology (3)

Prerequisite: Graduate standing or consent of instructor.

Review of practical contributions by anthropologists in non-academic settings; Attention to specific skills used by practicing anthropologists; business writing including resumes, contracts; oral presentations using audiovisual aides; internal and external contracting; time management; project management; working across disciplines; ethics.

Letter grade only (A-F).

510. Proseminar (3) F

Prerequisites: Six units of upper-division anthropology courses or consent of instructor.

Development of proposal planning, budgeting, and writing skills, particularly in applied anthropology, linguistics, and archaeology; both academic and contract/consulting types of proposals will be covered.

Letter grade only (A-F).

514./414. Anthropology of Religion (3)

Prerequisite: ANTH 120 and upper-division/graduate standing or consent of instructor.

Anthropological examination of religious behavior and beliefs, which will focus on these phenomena in their sociocultural and adaptive contexts using cross-cultural and cultural evolutionary approach, hunter-gatherer religions through civilized ones.

Letter grade only (A-F).

516./416. Urban Anthropology (3)

Comparative analysis of development and role of urban centers in ancient and modern cultures; interrelationships of urban and rural populations; patterns of similarity and difference in urbanism of contrasting cultures; implications for a multi-national world.

Letter grade only (A-F).

517./417. Applied Anthropology (3)

Prerequisites: ANTH 120 and upper-division/graduate standing or consent of instructor.

Brief orientation to applied anthropology, its history and ethics; policy and applied anthropology domains (needs assessment, program evaluation, social impact assessment, environmental, advocacy); applied research methods; student proposals for internship research.

Letter grade only (A-F).

519./419. Encounters and Identities (3)

Prerequisite: Graduate and advanced undergraduate students.

Examination of how cultural anthropologists have dealt, theoretically, with the concept of identity; concentrates more on theories than geographic regions, emphasis on recent theoretical developments such as post-modern and post-colonial approaches to the study of contemporary subjectivities.

Letter grade only (A-F).

520./420. Culture, Power and Politics (3)

Prerequisite: ANTH 120 and upper-division/graduate standing or consent of instructor.

Examines from an anthropological perspective how culture shapes the social construction of power and the practice of politics from an anthropological perspective.

522./422. The Anthropology of Gender (3)

Prerequisite: Graduate standing or consent of instructor (ANTH 351 recommended).

Examines anthropological perspectives on gender and how these perspectives have challenged and transformed anthropology and feminism; class will locate gender relations in the production of anthropological knowledge, in colonial and postcolonial social fields, and in the movement of global capitalism.

Letter grade only (A-F).

527./427. Global East Asia (3)

Prerequisites: Graduate and advanced undergraduate students.

Examine how socio-cultural formations in an East Asian context articulate with global flows of capital, people, and ideas.

Letter grade only (A-F).

528./428. Historical Ethnography (3)

Prerequisite: Graduate standing or consent of instructor.

Development of the specialization of historical ethnography in anthropology, combined ethnographic and historical approaches to ethnographic questions, methodological and theoretical issues in historical ethnography.

Letter grade only (A-F).

530. Ethnography of Communication (3)

Prerequisite: Graduate standing.

Study of talk and other forms of communication from an ethnographic perspective. Emphasizes relevant methods and theories. Among the major topics presented from this perspective are language socialization, genres of speaking, intercultural communication, speech styles, strategic uses of language, and literacy.

Letter grade only (A-F). Same course as LING 533. Not open for credit to student with credit in LING 533.

531./431. New Media Ethnography (3)

Prerequisite: Graduate standing or consent of instructor.

Theory and techniques in the planning, production and presentation of multimedia and hypermedia ethnography. Students will work in production teams to produce an ethnography that takes advantage of different modes of ethnographic research and presentation (interactive video, photography, print, sound).

Letter grade only (A-F). Course fee may be required. (Lecture 2 hours; Lab 2 hours)

540. Ethnographic Field School (3-6)

Prerequisite: Consent of instructor.

This experiential course gives students an opportunity to apply standard ethnographic methods to study, observe, and learn about a non-U.S. culture. Analysis of methodology and data collection will occur throughout the course. Location, topics and activities will vary.

Letter grade only (A-F).

541./441. Ethnographic Film Production I (3)

Prerequisite: Consent of instructor

Intermediate-level theory and methodology for ethnographic/documentary film production. Students will work in teams and learn the fundamentals of how to produce an ethnographic film from conception through completion using professional-quality production and post-production equipment.

Letter grade only (A-F). Course fee may be required. (Lecture 2 hours; Lab 2 hours)

542./442. Ethnographic Film Production II (4)

Prerequisite: Consent of instructor

Advanced-level theory and methodology for ethnographic/documentary film production. Students will work in teams and learn the fundamentals of how to produce an ethnographic film from conception through completion using professional-quality production and post-production equipment.

Letter grade only (A-F). Course fee may be required. (Lecture 3 hours; Lab 2 hours)

544./444. Transnational Migrants (3)

Prerequisites: Graduate standing or consent of instructor

Anthropological examination of the lives of immigrants and refugees. Explores the way studies of migration challenge our understanding of the local context of globalization and transnationalism. Focus on theories of culture, ethnicity, and identity as well as theories of incorporation, adaptation and nativism and the relevance of applied anthropology through research and advocacy.

Letter grade only (A-F).

555./455. Archaeological Method and Theory I (4)

Prerequisite: Graduate standing or consent of instructor.

Examination of theoretical constructs in the analysis of archaeological data. Development and construction of a metalanguage for the discussion and analysis of historical phenomenon. Key debates in archaeological literature about the nature of theory, knowledge, theory and units.

Letter grade only (A-F). (Lec 3 hrs, Lab 2 hrs)

556./456. Archaeological Method and Theory II (4)

Prerequisite: Graduate standing and consent of instructor.

Analysis of conceptual frameworks employed by archaeologists in obtaining explanation in the three major areas of culture history, cultural reconstruction, and explanatory prehistory. Introduction to evolutionary theory as used in archaeology. Debates about the nature of evolutionary explanations.

Letter grade only (A-F).

560. Ethnographic Research Methods (3)

Prerequisite: Graduate standing or consent of instructor.

A practice-oriented seminar in ethnographic research methodology, emphasizing techniques, methods, and concepts of ethnographic research. The course examines several qualitative, in-depth methods used by anthropologists as well as research design and research ethics.

561. Basic Computer Research Applications in Anthropology (3)

Prerequisite: ANTH 560 or consent of instructor.

Basics qualitative and quantitative computer methods employing currently appropriate software and statistical techniques. Methods covered will be specifically related to research in archaeology and applied anthropology; and the presentation of results, as well as various research problems, will be addressed.

Letter grade only (A-F).

570. Linguistic Field Methods (3)

Prerequisite: Completion of LING 420 and 421, or consent of instructor.

Introduction to linguistic field work with a native speaker of an unfamiliar non-European language. Phonetic transcription and investigation of phonological, morphological, and syntactic structures of the selected language within the context of linguistic universals.

Letter grade only (A-F). Same course as LING 580. Not open for credit to students with credit in LING 580.

591. Preceptorial Reading in Archaeological Science (3)

Prerequisite: Graduate standing.

Training in the problems, principles, and methods involved in the explanation of prehistory within a scientific framework; Meeting times to be arranged.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

592. Research Preparation in Archaeological Science (3)

Prerequisite: Graduate standing.

Training in steps required for conducted research in archaeological science. Consists of development of research questions, research design and proposal.

May be repeated to a maximum of 6 units in different semesters.
Credit/No Credit only.

597. Directed Readings in Anthropology (1-3)

Prerequisites: Senior or graduate standing and consent of instructor.

Selected topics in anthropology will be studied in depth. A written report will be prepared.

Letter grade only (A-F).

600. Seminar in Ethnology and Social Anthropology (3)

Topics of substantive and theoretical importance and their application to research problems.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*. Course fee may be required.

620. Seminar in Archaeology (3)

Prerequisites: Six upper-division units in archaeological courses or consent of instructor.

Important recent discoveries; contemporary ideas, trends and problems.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

630. Seminar in Anthropological Linguistics (3)

Prerequisite: Consent of instructor.

Areas and methods of linguistic study and research; evaluation and intensive scrutiny.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

697. Directed Research (1-3)

Prerequisite: Consent of department.

Research in anthropology on an individual basis.

Letter grade only (A-F).

698. Thesis or Applied Project (1-6)

Prerequisite: Consent of department.

Planning, preparation and completion of a thesis (6 units) or an applied project (3 units) in anthropology.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester.

ART

College of the Arts

Department Chair: Christopher Miles

Department Administrative Office: Fine Arts (FA) 4, Room 106

Department Student Services Office: Fine Arts (FA) 4, Room 102

Telephone / FAX: (562) 985-4376 / 985-1650

Undergraduate Advisor: B.A./B.F.A.: Duan Jackson (562) 985-4381

Graduate Advisor: M.A./M.F.A.: Margaret Black (562) 985-7910

Faculty: Jeffery Atherton, Margaret Black, Kendall Brown, Andrew Byrom, Mason Cooley, Domenic A. Cretara, Bryan Crockett, Tanya Cummings, Laurie Gatlin, Todd Gray, Jen Grey, David A. Hadlock, Peter Holliday, Tor Hovind, Yu Ji, Karen Kleinfelder, Thomas J. Krumpak, Jay Kvapil, Anthony Marsh, Mark Michelin, Christopher Miles, Julia I. Miller, Aubry Mintz, Kimiko Miyoshi, Catha Paquette, Sunook Park, Robin Richesson, Kyle Riedel, Mark Ruwedel, Roxanne Sexauer, Nizan Shaked, Carol Shaw-Sutton, Fran Siegel, Carlos Silveira, Matthew Simms, Rebecca Sittler Schrock, Marian Stewart, Craig C. Stone, Tiffany Sum, Marie Thibeault, Michael Whitlow, George Zebot

Administrative Coordinator: Karen Warner

Career Possibilities

Advertising Consultant or Designer • Animator • Architectural Blacksmith • Architectural Illustrator • Art Advisor • Art Appraiser • Art Buyer • Art Consultant • Art Critic • Art Director • Art Educator • Art Fabricator • Art Historian • Art Journalist • Artist • Art Librarian • Art Publicist • Art Therapist • Author • Backdrop Designer • Billboard Artist • CAD Designer • Caricaturist • Cartographer • Cartoonist • Ceramic Artist • Ceramic Designer • Commercial Artist • Commercial Photographer • Community Activist • Community Artist • Community Arts Instructor • Concept Illustrator • Conservator • Digital Fabrication • Digital/new media artist • Director • Display Designer Commercial • Display Designer Retail • Documentarian • Drawer • Editor • Fashion Illustrator • Fiber Artist • Fine Art Photographer • Gallery Director • Graphic Designer • Illustrator • Information Architect • Interactive Media Designer • Installation Artist • Jewelry Designer • Master Printer • Medical Illustrator • Metalsmith • Metals Artist • Muralist • Museum Curator • Museum Educator • Museum Registrar • Museum Staff • Painter • Performance Artist • Photographer • Photo Journalist • Police Sketch Artist • Preparator • Printmaker • Prop Fabricator • Public Artist • Renderer • Sculptor • Set Decorator • Set Designer • Storyboard Artist • Technical Illustrator • Textile Designer • Video Artist • Videographer • Web Designer • Wood Artist • Wood Worker
(Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The diversity of the Department of Art programs, the quality of instruction, and the professional caliber of its faculty all combine to provide an exceptional opportunity and challenge to students seeking meaningful educational experiences and careers in the visual arts.

Programs at a Glance

Bachelor of Arts:

Art
Art History
Art Education

Bachelor of Fine Arts

Specializations
Photography, Ceramics, Drawing/Painting, Illustration/Animation, 3-D Media-Fiber/Metal/Wood, Printmaking, Sculpture, Graphic Design

Master of Arts:

Art, Concentration in Art Education
Art, Concentration in Art History
Art, Concentration in Studio Art

Master of Fine Arts

Art, Concentration in Studio Art
Tracks

Ceramics, Drawing and Painting, Fibers, Illustration/Animation, Metals, Photography, Printmaking, Sculpture/4D, Visual Communication Design, and Wood

Certificates

Museum and Curatorial Studies
Biomedical Art

Accreditation

The Department of Art is an accredited institutional member of the National Association of Schools of Art and Design (National Association of Schools of Art and Design, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, phone: 703-437-0700).

Admission Under Impaction

Bachelor of Arts in Studio Art

Bachelor of Fine Arts

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html

Admission to Baccalaureate Degree Options in Studio Art

The number of applicants to programs in Art usually exceeds the number that can be accommodated. For this reason, the department has been authorized by the California State University to apply supplemental admission criteria. Admission is on a competitive basis, and continuing CSULB students and transfer applicants will be considered equally.

Freshmen applying to the university as Art Education or Art History majors will be admitted to the major if they meet all requirements for admission to the university. Students applying to the B.A. in the Option in Studio Art or to one of the BFA degree options will be admitted as pre-Studio Art majors. Admission as a pre-Studio Art major does not guarantee admission to the major.

Continuing students must apply for admission to the option during the month of November for the following fall or during the month of August for admission for the following spring. Applications must be submitted at such a date so that students can be admitted to an option by the time they reach 60 units.

Transfer applicants must apply during the initial filing period and must designate the major on the application. Students who are not admitted to the major will be admitted to an alternate major if they have listed one on the application. If no alternate major is listed, the student will not be admitted to the university.

Transfer students who qualify for admission to the university may be admitted to the Art Education or Art History major. Students applying for the B.A. in the Option in Studio Art, must meet the criteria for admission to the major. Students applying to a B.F.A. option must supply a portfolio of their creative work to the Department of Art as part of the application process.

Students interested in a BFA program, should apply to the BA in Studio Art program as early in their academic career as possible, but no later than 60 units. Students in the BA program may then apply to the BFA program (Art Photography, Ceramics, Drawing and Painting, Illustration, 3-D Media: Fiber, Metal or Wood, Printmaking, Sculpture, or Graphic Design Options) when they have completed a minimum of 72 units, but may not apply after they have completed more than a maximum of 96 units.

Students who are not admitted to the designated major will be admitted to an alternate major if they have listed one on the application. If no alternate major is listed, the student will not be admitted to the university.

Admission Procedures for Change of Major

Currently enrolled students who are undeclared or majors in other departments and who wish to apply for admission to degree option programs in art must:

1. Submit a Change of Degree Objective form to the Department of Art Student Services Office during the months of November or August;
2. Students applying for the B.F.A. degree programs in Art must also supply transcripts of college-level academic work attempted, and a portfolio of their creative work.

Undergraduate Programs

Bachelor of Arts in Art

Option in Studio Art (120 units)

Requirements

Lower Division:

Take the following courses:

ART 101 Artists in Their Own Words (3)
Prerequisite: None

AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course

Take 3 units of the following:
100-level AH (3)

Take one of the following courses:

ART 101 Artists in Their Own Words (3)
Prerequisite: None

DESN 300 Designers in Their Own Words (3)
Prerequisites: AH 111A and 111B or consent of instructor.

Take all the following courses:

ART 130 Foundation Two-Dimensional (3)
Prerequisite: None

ART 131 Foundation Three Dimensional (3)
Prerequisite: None

ART 181 Foundation Drawing (3)
Prerequisite: None

ART 184 Foundation Life Drawing (3)
Prerequisite: ART 181

ART 221 Shop Orientation (1)
Prerequisite: None

Take one of the following courses:

ART 132 Foundation Color Theory (3)
Prerequisite/Corequisite: ART 130

ART 287 Introduction to Painting (3)
Prerequisites: ART 130, 181

Take one course from the following:

ART 132, 149, 223, 241, 270, 271, 287

Take one course from the following:

ART 251A, 251B, 261, 263, 265

Take one course from the following:

ART 132, 149, 223, 241, 251A, 251B, 261, 263, 265, 270, 271, 287

Upper Division:

Take 9 units of Art History

Take one course from two of the following programs:
Drawing and Painting, Printmaking, Illustration,
Photography, Graphic Design;

Take one course from two of the following programs:
Ceramics, Fiber, Metal, Sculpture/4D, or Wood;

Take 12 upper division units from one of the following programs:

Art History, Art Education, Ceramics, Drawing and
Painting, Fiber, Graphic Design, Illustration, Metal,
Photography, Printmaking, Sculpture/4D, Wood.

Option in Art History (120 units)

Requirements

Lower Division:

Take all the following:

AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course

ART 130 Foundation Two Dimensional (3)
Prerequisite: None

ART 131 Foundation Three Dimensional (3)
Prerequisite: None

Take one of the following:

HIST 131 Early Western Civilization (3)
Corequisite: ENGL 100

HIST 132 Modern Western Civilization (3)
Corequisite: ENGL 100

Take 3 courses from the following:

AH 112; either AH 113A or AH 113B; and either AH 114
or AH 116

Take one course from the following:

ART 181, 184, 263, 287

Upper Division Art History:

Take the following:

AH 446 Art History Methodologies and Writing (3)

Prerequisites: Undergraduate Art History major with senior standing or consent of instructor.

AH 447 Historiography of Art History (3)

Prerequisites: Undergraduate Art History major with senior standing or consent of instructor

Take one course from the following: AH 415, 448, 449, 450

Take three courses from one of the following 6 groups, plus

one course from each of the remaining 5 groups:

1. AH 416, 417, 465, 408, 409, 497

2. AH 410, 423, 424, 425, 426, 427, 497

3. AH 400, 401, 402, 431, 436, 437, 455, 456, 497

4. AH 411, 430, 438, 439, 441, 497

5. AH 466, 467, 468, 469, 470A, 470B, 471A, 471B, 471C, 497

6. AH 457A, 457B, 457C, 458, 459, 460, 497

One of the 8 courses from these groups should be: AH 497

Foreign Language Requirement:

Complete three semesters of French or German (or other pre-approved foreign language) with an average grade of "B" or better.

Option in Art Education (120 units)

Requirements

Lower Division:

Take all of the following:

AH 111A Foundation Art History I (3)

Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)

Prerequisites: One GE Foundation course

ART 130 Foundation Two Dimensional Design (3)

Prerequisite: None

ART 131 Foundation Three Dimensional (3)

Prerequisite: None

ART 149 Foundation Computer Art (3)

Prerequisites: ART 130

ART 181 Foundation Drawing (3)

Prerequisite: None

ART 184 Foundation Life Drawing (3)

Prerequisites: ART 181

ART 251A Introduction to Ceramics: Hand-building (3)

Prerequisites/Corequisites: ART 131

ART 251B Introduction to Ceramics: Wheel Throwing (3)

Prerequisites/Corequisites: ART 131

ART 287 Introduction to Painting (3)

Prerequisites: ART 130, 181

Take 3 units of the following:

100-level AH (Non-West)

Upper Division:

Take all of the following:

ART 305 Art Disciplines and New Technology (3)

Prerequisites: Completion of 12 units of Art Foundation

ART 401 Cross-Cultural Perspective in Art Education (3)

Prerequisites: Completion of 12 units of Art Foundation

ART 407 Art Practicum (3)

Prerequisite: Completion of 12 units of Art Foundation

ART 408 Perspectives in Contemporary Art Education (3)

Prerequisite: None

ART 412 Aesthetic Theories in Art Education (3)

Prerequisite: None

ART 415 On-Site Studies in Art Education (3)

Prerequisite: None

Take one of the following:

AH 438 Art of Early to Mid Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor

AH 439 Art of Mid to Late Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor

Take one course from the following:

AH 455, 456, 457C, 458, 466, 467, 468, 469, 470A, 470B, 471A, 471B

Take five course courses from the following:

ART 317, 328A, 340, 341A, 341B, 342A, 349, 355, 356, 357A, 357B, 358A, 359A, 367A, 363A, 370, 371A, 371B, 376, 377, 381, 383, 384, 385, 387, 408, 450A

Single Subject Teaching Credential in Art

In addition to meeting the subject matter competence requirement for the Single Subject Teaching Credential in Art through the Option in Art Education major, prospective art teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses in their junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures. Before student teaching in art, students must pass a portfolio review. A passing score on the CBEST is also required. For information concerning requirements for the B.A. program, teacher preparation, as well as the fifth year for the credential, consult the art education advisor.

Bachelor of Fine Arts

The Bachelor of Fine Arts degree is offered for the student eventually seeking a Master of Fine Arts degree, the position of a professional artist or designer, and for teaching studio art within a selected specialization. The B.F.A. degree program is demanding, requiring high quality performance in order to develop the professional competence of talented students toward successful entrance into the professional art field.

Option in Art Photography (132 units)

Requirements

Lower Division:

Take all the following courses:

AH 111A Foundation Art History I (3)

Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)

Prerequisites: One GE Foundation course

Take 3 units of the following:

100-level AH

Take 6 units of the following:

ART 101 Artists in Their Own Words (3)
Prerequisite: None

Take all the following courses:

ART 130 Foundation Two Dimensional (3)
Prerequisite: None

ART 131 Foundation Three Dimensional (3)
Prerequisite: None

ART 149 Introduction to Computer Art (3)
Prerequisites: ART 130

ART 181 Foundation Drawing (3)
Prerequisite: None

ART 241 Introduction to Photography (3)
Prerequisites: ART 130, 181

Upper Division:

Take all the following courses:

AH 400 19th Century Photography (3)
Prerequisites: AH 111B or consent of instructor

ART 340 Intermediate Photography (3)
Prerequisites: ART 130, 181, 241; AH 111A, 111B

ART 342A Color Photography (3)
Prerequisite/Corequisite: ART 340.

ART 406A Digital Imagery for the Arts (3)
Prerequisites: ART 149, 340, or consent of instructor

ART 406B Advanced Digital Imagery for the Arts (3)
Prerequisites: ART 406A or 506A, 444

ART 414 Documentary Photography (3)
Prerequisites: ART 340, 444, or consent of instructor

ART 444 Advanced Black and White Photography (3)
Prerequisite: ART 340

ART 447 Photography Studio Specialities (3)
Prerequisites: Undergraduate Art History major with senior standing or consent of instructor

ART 449 Experimental Practices in Photography (3)
Prerequisites: ART 340

ART 473 Seminar in Photo-Based Art (3)
Prerequisite: for 473: ART 406A, or 444, or consent of instructor

ART 491C Senior Project (1)
Prerequisite: None

ART 499V Special Studies in Art Photography (3)
Prerequisites: ART 406A, or 444, or consent of instructor

Take 3 units from the following courses:

ART 436A, ART 450A

Take 3 units from the following courses:

AH 438, AH 439, AH 441

Take 3 units upper-division AH

Take 3 units ART outside specialization (lower or upper division)

Option in Ceramics (132 units)

Requirements

Lower Division:

Take all of the following courses:

AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course

ART 130 Foundation Two Dimensional (3)
Prerequisite: None

ART 131 Foundation Three Dimensional (3)
Prerequisite: None

ART 181 Foundation Drawing (3)
Prerequisite: None

ART 251A Introduction to Ceramics: Handbuilding (3)
Prerequisites/Corequisites: ART 131

ART 251B Introduction to Ceramics: Wheel Throwing (3)
Prerequisites/Corequisites: ART 131

ART 287 Introduction to Painting (3)
Prerequisites: ART 130, 181

Take 3 units of the following:

100-level AH

Take one of the following courses:

ART 184 Foundation Life Drawing (3)
Prerequisites: ART 181

ART 261 Introduction to Life Sculpture (3)
Prerequisite/Corequisite: ART 131 or 181; AH 111A or 111B, or consent of instructor.

Upper Division:

Take all of the following courses:

ART 341A Intermediate Ceramics Handbuilding (3)
Prerequisites: ART 130, 131, 251A, 181; AH 111A, 111B

ART 341B Intermediate Ceramics: Wheel Throwing (3)
Prerequisites: ART 130, 131, 251B, 181; AH 111A, 111B

ART 343A Ceramics Sculpture (3)
Prerequisites: ART 341A

ART 343B Advanced Wheel Throwing (3)
Prerequisites: ART 341B

ART 352A Ceramics: Glaze Technology (3)
Prerequisite: ART 130, 131, 251A or 251B, 181; AH 111A, 111B

ART 352B Ceramics Plaster Shop (3)
Prerequisites: ART 130, 251A or 251B, 181; AH 111A, 111B

ART 451A Advanced Ceramics (3)
Prerequisite: ART 343A or 343B

ART 451B Advanced Ceramics (3)
Prerequisite: ART 451A

ART 491A Ceramics: Senior Project (1)
Prerequisite: ART 451A or 451B or consent of instructor

AH 364 History of Ceramics (3)
Prerequisite: None

Take 9 units of AH only 3 units may be AH 438, 439 or 441

Take 9 units ART outside the specialization

Option in Drawing and Painting (132 units)

Requirements

Lower Division:

Take all of the following course:

AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course

ART 130 Foundation Two-Dimensional (3)
Prerequisite: None

ART 131 Foundation Three Dimensional (3)
Prerequisite: None

ART 181 Foundation Drawing (3)
Prerequisite: None

ART 184 Foundation Life Drawing (3)
Prerequisites: ART 181

ART 287 Introduction to Painting (3)
Prerequisites: ART 130, 181

Take 3 units of the following:

100-level AH

Take one course selected from:

ART 251A Introduction to Ceramics: Handbuilding (3)

Prerequisites/Corequisites: ART 131

ART 251B Introduction to Ceramics: Wheel Throwing (3)

Prerequisites/Corequisites: ART 131

ART 261 Introduction to Life Sculpture (3)

Prerequisite/Corequisite: ART 131 or 181; AH 111A or 111B, or consent of instructor.

ART 263 Introduction to Sculpture/4D (3)

Prerequisites: ART 131 or consent of instructor

Upper Division:

Take all of the following courses:

ART 381 Intermediate Drawing (3)

Prerequisites: ART 130, 181, 184; AH 111A, 111B

ART 383 Life Painting (3)

Prerequisites: ART 130, 181, 184, 287; AH 111A, 111B

ART 384 Intermediate Life Drawing (3)

Prerequisites: ART 130, 181, 184; AH 111A, 111B

ART 387 Painting (3)

Prerequisites: ART 130, 181, 184, 287; AH 111A, 111B

ART 388 Color Theory and Composition (3)

Prerequisites/Corequisites: ART 130, ART 287, and 6 units selected from AH 111A, 111B.

ART 491G Drawing and Painting Senior Project (1)

Prerequisite: ART 496A. Corequisite: ART 496B.

ART 496A BFA Capstone: Drawing and Painting (3)

Prerequisites: Drawing and Painting major. Completion of 6 to 12 units of required 400 level classes in Drawing and Painting including (but not limited to) ART 481 or 487 and ART 483 or 484

ART 496B BFA Capstone: Drawing and Painting (3)

Prerequisite: ART 496A. Corequisite: ART 491G

Contemporary Practices Track

Take all of the following courses:

ART 481 Advanced Drawing (3)

Prerequisite: ART 381

ART 487 Advanced Painting (3)

Prerequisite: ART 387

ART 492G Concentrated Studies in Abstract Painting (3)

Prerequisites/Corequisites: ART 387 or consent of instructor

Take one of the following courses:

ART 483 Advanced Life Painting (3)

Prerequisite: ART 383

ART 484 Advanced Life Drawing (3)

Prerequisites: ART 384 or consent of instructor.

Take 9 units of AH

Take 9 units ART outside the specialization

Figurative Track

Take all of the following courses:

ART 483 Advanced Life Painting (3)

Prerequisite: ART 383

ART 484 Advanced Life Drawing (3)

Prerequisites: ART 384 or consent of instructor.

ART 492F Concentrated Studies in Life Drawing (3)

Prerequisites/Corequisites: ART 384 or consent of instructor

ART 492Z Concentrated Studies in Life Painting (3)

Prerequisite: ART 383 or consent of instructor.

Take one of the following courses

ART 481 Advanced Drawing (3)

Prerequisite: ART 381

ART 487 Advanced Painting (3)

Prerequisite: ART 387

Take 9 units of AH

Take 6 units ART outside the specialization

Option in Illustration (132 units)

Requirements

Lower Division:

Take all the following courses:

AH 111A Foundation Art History I (3)

Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)

Prerequisites: One GE Foundation course

ART 130 Foundation Two Dimensional (3)

Prerequisite: None

ART 131 Foundation Three Dimensional (3)

Prerequisite: None

ART 181 Foundation Drawing (3)

Prerequisite: None

ART 184 Foundation Life Drawing (3)

Prerequisites: ART 181

ART 223 Introduction to Typography (3)

Prerequisite: For Art majors: ART 130, 181. For Design majors: DESN 120A and 132A.

ART 271 Introduction to Rendering (3)

Prerequisite: ART 130, 181.

ART 287 Introduction to Painting (3)

Prerequisites: ART 130, 181

Take 3 units of the following:

100-level AH

Upper Division:

Take all of the following:

ART 371A Illustration (3)

Prerequisites/Corequisites: ART 130, 131, 181, 184, 287; AH 111A, 111B.

ART 372 Anatomy for Artists (3)

Prerequisites: ART 130, 131, 181, 184; AH 111A, 111B.

ART 491E Illustration/Animation Senior Project (1)

Prerequisites: Senior Illustration/Animation Major

Take 6 units of AH

Animation Track

Take all the following courses:

ART 390 Drawing: Figures in Context (3)

Prerequisites: ART 371A or consent of instructor

ART 391 Animation 1 (3)

Prerequisites/Corequisites: ART 130, 131, 181, 184, 287; AH 111A, 111B.

ART 392 Animation 2 (3)

Prerequisite/Corequisite: ART 371A.

ART 393 Character Design (3)

Prerequisites: ART 371A or consent of instructor

ART 472 Storyboarding for Film and Television (3)

Prerequisites: ART 130, 181, 184, 271 or consent of instructor

ART 499E Special Studies in Animation (3)

Prerequisite: Illustration /Animation Major or consent of instructor

Take 9 units from the following courses:

ART 384, 416, 417, 426, 427, 476, 478, 499E

Take 6 units from the following courses:

ART 371B, 373, 383, 385, 482

Take 6 units Art outside the specialization

Illustration Track

Take all the following courses:

- ART 321 Graphic Design I: Intro to Graphic Design (3)
Prerequisites: For Art Majors: ART 130, 131, 181, 184, 223; 132 or 287; AH 111A, 111B. For Design Majors: ART 223; DESN 120A, 120B, 132A, 132B; AH 111A, 111B
- ART 371B Illustration (3)
Prerequisite: 371A. Prerequisites/Corequisites: ART 223, 271
- ART 382 Production for Fine Arts (3)
Prerequisites: ART 223 or consent of instructor
- ART 383 Life Painting (3)
Prerequisites: ART 130, 181, 184, 287; AH 111A, 111B
- ART 471A Advanced Illustration (3)
Prerequisite: ART 371B
- ART 471B Advanced Illustration (3)
Prerequisite: ART 471A
- ART 482 Sequential Imagery (3)
Prerequisite: ART 223 or consent of instructor

Take one of the following courses:

- ART 374A Biomedical Rendering (3)
Prerequisites: ART 130, 184, 287; AH 111A, 111B; or consent of instructor
- ART 499F Special Studies in Illustration (3)
Prerequisite: Illustration major or consent of instructor

Take 6 units from the following courses:

- ART 373, 385, 391, 476, 483

Take 9 units Art outside the specialization

Option in 3-D Media (Fiber, Metal or Wood) (132 units)

Lower Division:

Take all of the following courses:

- AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course
- AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course
- ART 130 Foundation Two Dimensional (3)
Prerequisite: None
- ART 131 Foundation Three Dimensional (3)
Prerequisite: None
- ART 181 Foundation Drawing (3)
Prerequisite: None
- ART 221 Shop Orientation (1)
Prerequisite: None
- ART 263 Introduction to Sculpture/4D (3)
Prerequisites: ART 131 or consent of instructor
- ART 287 Introduction to Painting (3)
Prerequisites: ART 130, 181

Take 3 units of the following:

- 100-level AH

Take one of the following courses:

- ART 251A Introduction to Beginning Ceramics: Handbuilding (3)
Prerequisites/Corequisites: ART 131
- ART 251B Introduction to Beginning Ceramics: Wheel Throwing (3)
Prerequisites/Corequisites: ART 131

Take one of the following courses:

- ART 184 Foundation Life Drawing (3)
Prerequisites: ART 181
- ART 261 Introduction to Life Sculpture (3)
Prerequisite/Corequisite: ART 131 or 181; AH 111A or 111B, or consent of instructor.

Upper Division:

Take one of the following specializations:

Fiber

Take all of the following courses:

- ART 316 Fiber: Pattern Design and Printing (3)
Prerequisites: ART 130, 131, 287; 6 units from AH 111A, 111B.
- ART 317 Fiber: Textile Dyeing (3)
Prerequisites: ART 130, 131, 287; AH 111A, 111B.
- ART 328A Fiber and Mixed Media: Sculptural Forms (3)
Prerequisites: ART 130, 131, AH 111A, 111B
- ART 388 Color Theory and Composition (3)
Prerequisites/Corequisites: ART 130, ART 287, and 6 units selected from AH 111A, 111B.
- ART 428A Fiber: Weaving, Dyeing, Woven Structures (3)
Prerequisites: ART 130, 131; AH 111A, 111B
- ART 432 Fiber and Mixed Media: Advanced (3)
Prerequisites: ART 130, 131, 181; ART 132 or 287; ART 317 or 328A; ART 428A or 430
- ART 491B 3-D Media: Senior Project (1)
Prerequisite: 3-D Media major or consent of instructor
- ART 499N Special Studies in Fiber & Mixed Media (3)
Prerequisite: 3-D Media major or consent of instructor

Take 3 units from the following courses:

- ART 328B, 428B or 430

Take 6 units of AH

Take one of the following choices:

- ART 333, three units AH

Take 9 units ART outside the specialization

Metal

Take all of the following courses:

- ART 357A Beginning Metals and Jewelry (3)
Prerequisites: ART 130, 131, 181, 287; 6 units from: AH 111A, 111B
- ART 357B Beginning Metals and Jewelry (3)
Prerequisites: ART 357A
- ART 358A Metalsmithing (3)
Prerequisites: ART 357A
- ART 358B Metalsmithing (3)
Prerequisites: ART 357A
- ART 458A Adv Metalsmithing/Jewelry & Enameling (3)
Prerequisites: ART 357B, 358B or consent of instructor
- ART 458B Adv Metalsmithing/Jewelry & Enameling (3)
Prerequisites: ART 357B, 358B or consent of instructor
- ART 491B 3-D Media: Senior Project (1)
Prerequisite: 3-D Media major or consent of instructor

Take 6 units from the following courses:

- ART 355, 356, 359A, 359B, or 499J

Take 6 units AH

Take one of the following choices:

- ART 333, three units AH

Take 9 units ART outside the specialization

Wood

Take all of the following courses:

- ART 354A Introduction Wood (3)
Prerequisites: ART 130, 131, 181, 221; AH 111A, 111B
- ART 354B Intermediate Wood (3)
Prerequisites: ART 130, 131, 181, 221; AH 111A, 111B
- ART 381 Intermediate Drawing (3)
Prerequisites: ART 130, 181, 184; AH 111A, 111B
- ART 454A Advanced Wood (3)
Prerequisites: ART 354A and 354B

- ART 454B Advanced Wood (3)
Prerequisites: ART 354A and 354B
- ART 491B 3-D Media: Senior Project (1)
Prerequisite: 3-D Media major or consent of instructor

Take the following course for 9 units:

- ART 499B Special Studies in Wood (9)
Prerequisite: ART 354B or consent of instructor

Take 6 units AH

Take one of the following choices:

- ART 333, three units AH

Take 9 units ART outside the specialization

Option in Printmaking (132 units)

Requirements

Lower Division:

Take all of the following courses:

- AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course
- AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course
- ART 130 Foundation Two Dimensional (3)
Prerequisite: None
- ART 131 Foundation Three Dimensional (3)
Prerequisite: None
- ART 181 Foundation Drawing (3)
Prerequisite: None
- ART 184 Foundation Life Drawing (3)
Prerequisites: ART 181

Take one course from the following:

- ART 132 Foundation Color Theory (3)
Prerequisite/Corequisite: ART 130
- ART 270 Introduction to Printmaking (3)
Prerequisites: ART 181
- ART 287 Introduction to Painting (3)
Prerequisites: ART 130, 181

Take 3 units of the following:

- 100-level AH

Take one of the following:

- ART 149 Introduction to Computer Art (3)
Prerequisites: ART 130
- ART 241 Introduction to Photography (3)
Prerequisites: ART 130, 181

Upper Division:

Take all of the following courses:

- ART 370 Printmaking (3)
Prerequisites: ART 130, 181; 3 units from AH 111A, 111B
- ART 376 Printmaking: Relief Printing (3)
Prerequisites: ART 130, 181; 3 units from AH 111A, 111B
- ART 377 Printmaking: Silkscreen (3)
Prerequisites: ART 130, 181; 3 units from AH 111A, 111B
- ART 378 Printmaking: Etching (3)
Prerequisites: ART 130, 181; 3 units from AH 111A, 111B
- ART 379 Printmaking: Lithography (3)
Prerequisites: ART 130, 181; 3 units from AH 111A, 111B
- ART 381 Intermediate Drawing (3)
Prerequisites: ART 130, 181, 184; AH 111A, 111B
- ART 475 Printmaking: Photo and Digital Processes (3)
Prerequisites: ART 130, 181; 3 units from AH 111A, 111B
- ART 480 Printmaking: Monotype/Monoprint (3)
Prerequisites: ART 130, 181; 3 units from AH 111A, 111B

- ART 491P Printmaking: Senior Project (1)
Prerequisites: None
- ART 499R Special Studies in Printmaking (6)
Prerequisite: Printmaking major or consent of instructor
- AH 365 History of Prints and Drawings (3)
Prerequisites: AH 111A, 111B, or consent of instructor
- AH 439 Twentieth Century Art from 1945 (3)
Prerequisites: AH 111A, 111B, or consent of instructor

Take 6 units elective upper division Art History (AH)

Take 9 units ART outside the specialization

Option in Sculpture (132 units)

Requirements

Take all of the following courses:

- AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course
- AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course
- ART 101 Artists in Their Own Words (3)
Prerequisite: None
- ART 130 Foundation Two Dimensional (3)
Prerequisite: None
- ART 131 Foundation Three Dimensional (3)
Prerequisite: None
- ART 221 Shop Orientation (1)
Prerequisite: None
- ART 261 Introduction to Life Sculpture (3)
Prerequisite/Corequisite: ART 131 or 181; AH 111A or 111B, or consent of instructor.
- ART 263 Introduction to Sculpture/4D (3)
Prerequisites: ART 131 or consent of instructor.

Take 3 units of the following:

- 100-level AH

Take one of the following courses:

- ART 149 Foundation Computer Art (3)
Prerequisites: ART 130
- ART 241 Introduction to Photography (3)
Prerequisites: ART 130, 181

Take one of the following courses:

- ART 181 Foundation Drawing (3)
Prerequisite: None
- ART 184 Foundation Life Drawing (3)
Prerequisites: ART 181

Take 6 units from the following courses:

- ART 132, 149, 181, 184, 223, 241, 251A, 251B, 265, 270, 271, 287

Upper Division:

Take all of the following courses:

- ART 360A Sculpture/4D: Intermediate (3)
Prerequisites: ART 130, 131, 263; AH 111A or 111B, or consent of instructor.
- ART 360B Sculpture/4D: Intermediate (3)
Prerequisites: ART 360A or consent of instructor
- ART 363A Sculpture/4D: Fabrication Lab A (3)
Prerequisites/Corequisites: ART 131; AH 111A or 111B, or consent of instructor.
- ART 474 Seminar in Sculpture and Time-Based Art (3)
Prerequisites: ART 261 or 263, or consent of instructor.
- ART 491F Sculpture/4D Senior Project (1)
Prerequisites: Senior Sculpture major; consent of instructor

Take 6 units from the following courses:

- AH 438, 439, 441

Take one of the following choices:

ART 333, any upper division Art History (AH)

Take 3 units from the following course:

ART 328A, 341A, 341B, 354A, 354B, 358A, 359A, 359B, 361, 363B, 364, 436A, 436B, 440, 450A, 450B, 460A, 460B, 461

Take 6 units from the following courses:

ART 361, 367A, 367B, 363C, 364, 436A, 436B, 450A, 450B, 460A, 460B, 461, 474

Track A

Take all of the following Sculpture/4D courses:

ART 367A Sculpture/4D: Mold Making Lab (3)
Prerequisites: ART 130, 131; AH 111A or 111B.

ART 367B Sculpture/4D: Foundry Lab (3)
Prerequisites: ART 130, 131; AH 111A or 111B, or consent of instructor.

ART 363B Sculpture/4D: Fabrication Lab B (3)
Prerequisite: ART 363A or consent of instructor.

Track B

Take all of the following Sculpture/4D courses;

ART 364 Sculpture/4D: Electronics, Mechanics, Kinetics (3)
Prerequisites: AH 111A, 111B; ART 130, 131; ART 261 or 263; or consent of instructor.

ART 436A Video Art (3)
Prerequisites: None

ART 450A Sculpture/4D: Intermedia/New Genres (3)
Prerequisites: ART 241 or 263, or consent of instructor.

Option in Graphic Design (132 units)

Requirements

Lower Division:

Take all of the following courses:

AH 111A Foundation Art History I (3)
Prerequisites: One GE Foundation course

AH 111B Foundation Art History II (3)
Prerequisites: One GE Foundation course

ART 130 Foundation Two Dimensional (3)
Prerequisite: None

ART 131 Foundation Three Dimensional (3)
Prerequisite: None

ART 181 Foundation Drawing (3)
Prerequisite: None

ART 184 Foundation Life Drawing (3)
Prerequisites: ART 181

ART 223 Lettering-Typography (3)
Prerequisite: For Art majors: ART 130, 181. For Design majors: DESN 120A and 132A.

Take 3 units of the following:

100-level AH

Take one of the following courses:

ART 132 Foundation Color Theory (3)
Prerequisite/Corequisite: ART 130

ART 287 Introduction to Painting (3)
Prerequisites: ART 130, 181

Upper Division:

Take all of the following courses:

ART 318 Type II: Intermediate Typography (3)
Prerequisites: For Art majors: ART 130, 131, 181, 184, 223; 132 or 287; AH 111A, 111B or consent of instructor. For Design majors: DESN 120A, 132A and ART 223

ART 321 Introduction to Graphic Design (3)

Prerequisites: For Art Majors: ART 130, 131, 181, 184, 223; 132 or 287; AH 111A, 111B. For Design Majors: ART 223; DESN 120A, 120B, 132A, 132B; AH 111A, 111B

ART 327 Graphic Design II: Intermediate Graphic Design (3)

Prerequisites: ART 223, 318, 321

ART 331 Advertising I: Introduction to Concept Development (3)

Prerequisites: ART 130, 131, 181, 184, 223, 318, 321; 132 or 287; AH 111A, 111B

ART 334 Graphic Design III: Exploration and Experimentation (3)

Prerequisite: BFA Graphic Design major or consent of instructor

ART 335 Advertising II: Intermediate Concept Development and Art Direction (3)

Prerequisites: BFA Graphic Design major or consent of instructor

ART 336 Graphic Design IV: Development and Analysis (3)

Prerequisites: ART 334, 335 or consent of instructor

ART 337 Graphic Design V: Packaging Design (3)

Prerequisites: BFA Graphic Design Major and ART 321, 334, 335, or consent of instructor

ART 419 Media Design: 5D; Designing the Future (3)

Prerequisite: BFA Graphic Design Major or consent of instructor

ART 423 Graphic Design VI: Advanced Topics (3)

Prerequisites: ART 334, 335, 336, 337

ART 424 Advertising III: Advanced Topics (3)

Prerequisites: ART 335, 423

Take 6 units from the following courses:

ART 365, 366, 420, 421, 442, 486, 499S

Take AH 444 History of Graphic Design (3)

Take 3 units of Art History (AH)

Take 6 units ART outside the specialization

Certificate in Biomedical Art

This is an interdisciplinary program sponsored by the Art and Biological Sciences Departments. Special permission is not required for a student to pursue the Certificate in Biomedical Art, however it is only available to students who are presently enrolled in a degree program in the biological sciences or in art at CSULB.

Please contact Robin Richesson, rrichess@csulb.edu, for the Certificate Program Planner. The student may apply for certification upon completion of the following:

Requirements

1. A major in art or biological sciences;
2. A 2.75 overall GPA and 3.25 in the major:

Take all the following courses (38 units):

ART 149 Foundation Computer Art (3)
Prerequisite: ART 130

ART 181 Foundation Drawing (3)
Prerequisite: None

ART 184 Foundation Life Drawing (3)
Prerequisites: ART 181

ART 271 Introduction to Rendering (3)
Prerequisite: ART 130, 181

ART 372 Anatomy for Artists (3)
Prerequisites: ART 130, 131, 181, 184; AH 111A, 111B

ART 374A Biomedical Rendering (3)
Prerequisites: ART 130, 184, 287; AH 111A, 111B; or consent of instructor

ART 374B Biomedical Rendering (3)

Prerequisites: ART 130, 184, 287; AH 111A, 111B; or consent of instructor

ART 426 Computer Animation 1 (3)

Prerequisites: ART 391 or 476 or consent of instructor

ART 476 Experimental Animation 1 (3)

Prerequisites: For 476: ART 130, 131, 181, 184. For 576: graduate student in Art or consent of instructor

ART 499F Special Studies in Illustration (3)

Prerequisite: Illustration major or consent of instructor

BIOL 200 General Biology (4)

Prerequisites: GE Foundation requirements

BIOL 208 Human Anatomy (4)

Prerequisites: GE Foundation requirements

Note: BIOL 200 waived for Biology majors.

Questions may be addressed to: Robin Richesson, Department of Art, rrichess@csulb.edu (562) 985-9068 or Kelly Young, Department of Biological Sciences, kyoung4@csulb.edu (562) 985-4859.

Graduate Programs

Master of Arts in Art

Master of Fine Arts in Art

Departmental Review Process

Admission to a degree program at CSULB is a two-part process that requires application to and acceptance by both the University and the Department of Art into a specific degree program. (See the detailed information on CSULB graduate application and admission requirements earlier in this catalog.)

For graduate programs, the Department of Art accepts applications for Fall admission only, with applications being accepted December 1 through January 4. Application forms are available on the web (www.art.csulb.edu).

Department of Art application materials must be sent to the Department of Art Student Services Office, FA4 – 106. University Application must be made to the CSULB Office of Enrollment Services, Brotman Hall. Call (562) 985-4145 or 1655 to obtain a CSU application booklet, or apply online at www.csumentor.edu. There is a \$55.00 fee for the University application process. (Do not send the Department of Art this fee.)

Some art programs may conduct applicant interviews, in which case program faculty will contact the applicant directly. Acceptance decisions are normally sent out by March 15th.

Acceptance to Degree Program in Art

Graduate applications are reviewed within the Department of Art by appropriate faculty. The admissions process for all graduate programs is highly competitive, and only those applicants who are recommended by the reviewing faculty may be admitted. Applicants are admitted as either Classified or Conditionally Classified. A Classified Graduate Student has been recommended for admission, and has satisfied all prerequisites. A Conditionally Classified Graduate Student has been recommended for admission, but has outstanding prerequisites to complete. Acceptance is

not complete until the applicant has received both notification of acceptance from the Department of Art and official notification from the CSULB Office of Enrollment Services.

All applicants must be accepted by the Department of Art in order to be officially accepted by the University. There is no fee for the departmental application process.

International Students must be accepted by the Department of Art and pass the TOEFL examination (minimum score of 550) before they can be admitted to the University. International students must apply to CSULB through the Center for International Education at (562) 985-5476.

CSU general requirements include: a bachelor's degree from a regionally accredited institution; a grade point average of at least 2.5 in the last 60 semester units taken; and good standing at the last college attended.

MA and MFA Prerequisites

An applicant may be accepted if, in addition to having satisfied specific prerequisites set by the Department of Art for each degree concentration, the applicant has satisfied the minimum university standards found in the Admission section of this catalog.

The Department of Art requires a minimum GPA of 3.0 in upper-division (junior and senior level) art prerequisite units.

Special Action: In rare and compelling circumstances, an applicant who does not qualify for admission under the previous provisions may be admitted by special action if on recommendation of the appropriate faculty of the department/college concerned and in the judgment of the Associate Vice President for Graduate and Undergraduate Programs or his/her designee there exists acceptable evidence that the applicant possesses sufficient academic, professional, and other potential pertinent to her/his educational objectives to merit such action, as shown through aptitude scores, recent academic performance, and experiential background.

Concentrations Prerequisites

An applicant who has deficiencies in prerequisites for a concentration, but who in the judgment of the Department of Art can meet these prerequisites with additional preparation specified at time of admission, may be admitted with conditionally classified graduate standing. Students who have deficiencies in prerequisites for a concentration, but who are willing to engage in additional preparation to meet prerequisites, may apply.

NOTE: Courses taken as prerequisites for a graduate degree may not be counted toward the graduate degree program of study.

Art Education Prerequisites

Applicants must complete 36 units of coursework approved by the Art Education faculty and must have a minimum 3.0 GPA in prerequisite courses.

Take 15 units upper-division units approved by the Art Education faculty

Take 9 upper-division units of Art or Education electives

Take 12 units AH (6 may be lower division, 6 must be upper division)

Art History Prerequisites

Applicants must complete the following prerequisite coursework. Equivalents to listed prerequisites must be approved by the Art History faculty.

Take 3 units from the following courses: AH 447 or 547 or the equivalent

Take 3 units from the following courses: AH 448, 449, 450, 548, 549 or 550 (theory/criticism) or the equivalent

Take 9 units additional upper-division Art History

Take 9 units upper-division Art or Art History

Take four sequential semesters (or the equivalent) of college-level French, German, or a language appropriate to the applicant's intended area of research with a 3.0 grade point average or better in the language courses.

MA Art History applicants should have completed prerequisite coursework prior to beginning coursework in the MA program. Applicants must have maintained a 3.0 GPA or better in all prerequisite coursework. Prerequisite coursework with grades lower than a C or grades of "pass" or "credit" will not be considered as having satisfied stated prerequisites.

The core Art History faculty functions as a committee of the whole in reviewing all materials and information in the application file. Applicants who have been recommended for admission by the Art History faculty, and who have met all university entrance requirements and have fulfilled all MA Art History prerequisites, shall be admitted with classified status.

In some instances, applicants who have not met all prerequisites may, upon the recommendation of the Art History faculty, be admitted to the MA program on a conditional basis, but must complete all prerequisites by the end of the second semester in the MA program. Students may complete the foreign language prerequisite by completing the required coursework, or by passing a departmentally administered foreign language exam in French, German, or other pre-approved language. Completion of all prerequisites by the end of the second semester is a requirement for the student to advance to candidacy and continue study in the MA program.

Studio Art Prerequisites

The Department of Art prefers, but does not require, that Studio Art applicants have undergraduate degrees in art. Application to our graduate programs is competitive and most applicants to the studio programs will have an undergraduate degree in art, many with a BFA in their chosen media. For Studio Art admissions, all required application materials are mandatory in order for the applicant to be considered, but the part of the application that is given the most weight is the portfolio of work. The Department of Art invites all applicants who feel they have strong portfolios to apply. If faculty feel the application is strong, but the applicant needs additional preparatory work, the Department of Art may admit the applicant with conditionally classified graduate standing, with specific prerequisites stated on a case-by-case basis at the time of admission.

Departmental Application Requirements

December 1 through January 4 prior to the fall term for which the applicant seeks admission, applicant must submit departmental application materials as follows:

Art Education: Department of Art application, statement of purpose, writing sample, portfolio of studio work, transcripts, and two letters of recommendation

Art History: Department of Art application, statement of purpose, writing sample, transcripts, and two letters of recommendation

Studio Art: Department of Art application, statement of purpose, portfolio of studio work, transcripts, and two letters of recommendation

Applicants may contact the Department of Art Graduate Advisor for additional information about applying. Additionally, faculty contacts for each of the programs can be found on the department website.

Transcripts

When you formally apply to the University, two official (sealed) sets are required; send one to Enrollment Services and one to the Department of Art.

Transfer Units

Transfer units are allowed on a case-by-case basis. With faculty approval, up to 12 post-baccalaureate units from another university may be accepted into the MA degree program and up to 24 units (for example, from a previous MA degree) into the MFA degree program. In the case of an existing MA degree from CSULB with a concentration in Studio Art, up to 30 units may be accepted into the MFA degree.

MA and MFA Degree Requirements

1. A minimum overall GPA of 3.0, with no grade below a "C".
2. Successful fulfillment of the Graduation Writing Assessment Requirement (GWAR) by passing the Writing Proficiency Examination (WPE), usually completed in the first semester in residence at CSULB and required to be fulfilled prior to Advancement to Candidacy. Students unable to pass the WPE may be able to fulfill the requirement by completing a special GWAR course.
3. Successful completion of an Advancement to Candidacy review. Reviews generally occur when a student has completed between one third and one half of the units required for the degree, and require the submission of a complete list of coursework for the degree. Additional advancement requirements:
 - Art Education majors satisfy assigned written topics and prepare an oral defense of their research.
 - Art History majors present a qualifying paper and satisfy the language requirement in either French or German (or an approved substitution).
 - Studio Art majors participate in a group exhibition in the Art Department galleries and present an oral defense of their work.

If all scheduled units for the MA or MFA degree have been completed but the final written component has not been approved and submitted, registration in GS-700 (1 unit, no credit) through University Extension is required in order to maintain in enrollment until the semester of graduation. Care should be taken not to exceed the University limit of seven years for all masters' degrees.

Additional information may be found in the "Department of Art Graduate Guidelines," given to each student accepted into a master's program.

Art Education Concentration for the MA

32 approved units to include:

Take one of the following:

ART 509A Research in Art Education (2)

Prerequisite: Art Education major or consent of instructor

ART 509B Research in Art Education (2)

Prerequisite: Art Education major or consent of instructor

Take both of the following:

ART 601A Seminar in Art Education (3)

Prerequisite: Graduate student in Art Education or consent of instructor

ART 601B Seminar in Art Education (3)

Prerequisite: Graduate student in Art Education or consent of instructor

Take one of the following:

ART 695 Graduate Studies: Field Problems (6)

Prerequisites: None

ART 697 Graduate Studies: Directed (6)

Prerequisites: None

Take 6 units of graduate level Art History beyond the 12 units taken as prerequisites, to complete a cumulative total of 18 units

Take 6 units elective Art, Art Education, or Art History

Take one of the following:

Take 6 units ART 698A Thesis or Project, with student completing a Thesis, or combination of Project, Project Report and Comprehensive Exam, as culminating experience within degree program.

Transferred units are allowed on a case-by-case basis. A minimum of 70% of units applied to degree must be 500/600 level courses taken at CSULB. Undergraduate coursework applied to degree must be upper-division (300 or 400 level). Undergraduate courses may not be used as substitutes for any course specifically required by course number for degree. All double-numbered (400-level/500-level) courses applied to degree must be taken at the 500 level. All coursework applied to degree must be approved.

Art History Concentration for the MA

39 approved units to include:

Take both of the following courses:

AH 546 Art History Methodologies and Writing (3)

AH 597 Seminar in Art History (9)

Take 15 units Art History

Take 6 units Art or Art History

Take 6 units AH 698 Thesis as culminating experience within degree program.

Take at least 24 of the 39 required units must be 500/600 level courses taken at CSULB.

Take graduate-level or upper-division courses in other CSULB departments may be approved as course substitutions with approval of student's Thesis Committee.

Transferred units are allowed on a case-by-case basis. A minimum of 70% of units applied to degree must be 500/600 level courses taken at CSULB. Undergraduate coursework applied to degree must be upper-division (300 or 400 level). Undergraduate courses may not be used as substitutes for any course specifically required by course number for degree. All double-numbered (400-level/500-level) courses applied to degree must be taken at the 500 level. All coursework applied to degree must be approved.

Graduate-level or upper-division courses in other CSULB departments may be approved as course substitutions with approval of student's Thesis Committee.

In addition to fulfilling university requirements for advancement to candidacy, MA Art History students must

also complete the Writing Proficiency Exam (WPE), an approved qualifying research paper, and all unfinished degree program prerequisites. Advancement to candidacy confers the equivalent of catalog rights on the student and signifies approval of a plan of study for completion of coursework and the production and supervision of the student's thesis. Students in the MA program are expected to complete all requirements for advancement by the end of the second semester of study in the program.

Museum and Curatorial Studies Emphasis for the Art History MA

39 approved units to include:

Take all the following courses:

AH 530 Introduction to Curatorial Practices (3)

Prerequisites: AH 111A, 111B, or consent of instructor

AH 531 History of Museums and Exhibitions (3)

Prerequisites: AH 111A, 111B or consent of advisor and instructor

AH 539 Art of Mid to Late Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor

AH 545A Museum-Gallery Practices (3)

Prerequisites: AH 431 or AH 531 or consent of instructor. First in a four-course sequence

AH 545B Museum-Gallery Practices (3)

Prerequisites: AH 545A or consent of instructor

AH 545C Museum-Gallery Practices (3)

Prerequisites: AH 545B or consent of instructor. Third in a four-course sequence

AH 545D Museum-Gallery Practices (3)

Prerequisites: AH 545C or consent of instructor. Fourth in a four-course sequence

AH 546 Art History Methodologies and Writing (3)

Prerequisites: Graduate standing in Art History or consent of instructor

AH 597 Seminar in Art History (6)

Prerequisite: Consent of instructor

Take one the following courses:

AH 542 Internship in Museum Studies (3)

Prerequisites: AH 430/530 or consent of instructor

AH 597 Seminar in Art History (3)

Prerequisite: Consent of instructor

Take the following:

AH 698 Thesis (as culminating degree experience)

Studio Art Concentration for the MA

33 approved units to include:

Take 21 units of Art

Take 6 units of graduate-level Art History

Take 6 units of the following:

ART 698B Project (culminating degree experience)

Transferred units are allowed on a case-by-case basis. A minimum of 70% of units applied to degree must be 500/600 level courses taken at CSULB. Undergraduate coursework applied to degree must be upper-division (300 or 400 level). Undergraduate courses may not be used as substitutes for any course specifically required by course number for degree. All double-numbered (400-level/500-level) courses applied to degree must be taken at the 500 level. All coursework applied to degree must be approved.

Studio Art Concentration for the MFA

60 units of approved graduate units.

Transferred units are allowed on a case-by-case basis. A

minimum of 70% of units applied to degree must be 500/600 level courses taken at CSULB. Undergraduate coursework applied to degree must be upper-division (300 or 400 level). Undergraduate courses may not be used as substitutes for any course specifically required by course number for degree. All double-numbered (400-level/500-level) courses applied to degree must be taken at the 500 level. All coursework applied to degree must be approved.

At least 39 units must be in studio courses. No more than 3 units of ART 693 (teaching internship) may be applied to degree.

Students are admitted into discipline-specific tracks. All students take a core of 21 units. Each student takes an additional 39 units of approved coursework according to the track into which the student was admitted.

Additional information, expectations, recommendations and guidelines for each track are included in the "Department of Art Graduate Guidelines" given to each student accepted into the MFA Concentration, and available upon request to applicants.

MFA Core Requirements

6 units of graduate-level Art History.

9 units of ART 694 (Graduate Studies: Directed Studio) taken with members of student's Project Committee beginning four semesters prior to completion of degree, or semester prior to advancement, which ever comes first. (Student must continue to enroll in 3 units of ART 694 per semester for all semesters between advancement and semester of MFA project.)

6 units of ART 699 (Graduate Studies: MFA Project) taken in the final semester with members of student's Project Committee.

MFA Tracks

In addition to the MFA Core requirements, each MFA student takes 39 additional approved units according to the following discipline-based tracks into which students are admitted. NOTE: All 597, 598 and 599-numbered courses are studio-oriented variable-topic graduate courses, each with a discipline-specific focus, but with specific topic and structure varying from term to term.

Ceramics Track:

Take 12 units from the following:
ART 597A, 598A, 599A

Take 6 units from any of the following:
ART 597, 598 or 599 courses

Take one of the following:
ART 681, 683

Take one of the following:
ART 682, 684

Take 15 units additional coursework.

Drawing and Painting Contemporary Practices Track:

Take 12 units from the following:
ART 597K, 598K, 599K

Take 6 units from any of the following:
ART 597, 598 or 599 courses

Take the following:
ART 681 Graduate Studies: Art Theory/Criticism (3)
Prerequisite: Graduate M.F.A. student or consent of instructor
ART 682 Graduate Studies: Professional Practices for

Studio Art (3)

Prerequisite: Graduate M.F.A. student or consent of instructor

Take 15 units additional coursework.

Drawing and Painting Figurative Track:

Take 12 units from the following:
ART 597L, 598L, 599L

Take 6 units from any of the following:
ART 597, 598 or 599 courses

Take the following:
ART 681 Graduate Studies: Art Theory/Criticism (3)
Prerequisite: Graduate M.F.A. student or consent of instructor

ART 682 Graduate Studies: Professional Practices for
Studio Art (3)

Prerequisite: Graduate M.F.A. student or consent of instructor.

Take 15 units additional coursework.

Fiber Track:

Take 12 units from the following:
ART 597N, 598N, 599N

Take 6 units from any of the following:
ART 597, 598 or 599 courses

Take the following:
ART 681 Graduate Studies: Art Theory/Criticism (3)
Prerequisite: Graduate M.F.A. student or consent of instructor

ART 682 Graduate Studies: Professional Practices for
Studio Art (3)

Prerequisite: Graduate M.F.A. student or consent of instructor

Take 15 units additional coursework.

Graphic Design Track:

Take 12 units from the following:
ART 597S, 598S, 599S

Take 6 units from any of the following:
ART 597, 598 or 599 courses

Take the following:
ART 683 Graduate Studies: Image as Text (3)
Prerequisites: Graduate M.F.A. student or consent of
instructor

ART 684 Graduate Studies: Professional Practices for
Visual Communication (3)

Prerequisites: Graduate M.F.A. student or consent of
instructor

Take 15 units additional coursework.

Illustration/Animation Track:

Take 12 units from the following:
ART 597F, 598F, 599F

Take 6 units from any of the following:
ART 597, 598 or 599 courses

Take the following:
ART 683 Graduate Studies: Image as Text (3)
Prerequisites: Graduate M.F.A. student or consent of
instructor

ART 684 Graduate Studies: Professional Practices for
Visual Communication (3)

Prerequisites: Graduate M.F.A. student or consent of
instructor

Take 15 units additional coursework.

Metal Track:

Take 12 units from the following:
ART 597J, 598J, 599J

Take 6 units from any of the following:
ART 597, 598 or 599 courses

Take one of the following:
ART 681, 683

Take one of the following:

ART 682, 684

Take 15 units additional coursework.

Photography Track:

Take 12 units from the following:

ART 597V, 598V, 599V

Take 6 units from any of the following:

ART 597, 598 or 599 courses

Take 6 units of the following:

ART 680 Graduate Interdisciplinary Critique (3)

Prerequisites: None

Take 6 units of the following:

ART 681 Graduate Studies: Art Theory/Criticism (3)

Prerequisite: Graduate M.F.A. student or consent of instructor

Take the following:

ART 682 Graduate Studies: Professional Practices for Studio Art (3)

Prerequisite: Graduate M.F.A. student or consent of instructor.

Take 3 units from the following:

ART 536A, 550, 680

Take 3 units additional coursework.

Printmaking Track A:

Take 12 units from the following:

ART 597R, 598R, 599R

Take 6 units from any of the following:

ART 597, 598 or 599 courses

Take one of the following:

ART 681, 683

Take one of the following:

ART 682, 684

Take 15 units additional coursework.

Printmaking Track B:

Take 12 units from the following:

ART 597R, 598R, 599R

Take 6 units from any of the following:

ART 597, 598 or 599 courses

Take 3 units from the following:

ART 597D, 597L, 597F

Take one of the following:

ART 681, 683

Take one of the following:

ART 682, 684

Take 3 units from the following:

ART 373, 384, 481

Take one of the following:

ART 481, 484

Take 3 units from the following:

ART 492F, 499F, 693

Take 3 units additional coursework.

Printmaking Track C:

Take 12 units from the following:

ART 597R, 598R, 599R

Take 6 units from any of the following:

ART 597, 598 or 599 courses

Take one of the following:

ART 681, 683

Take one of the following:

ART 682, 684

Take the following:

ART 575 Printmaking: Photo and Digital Processes (3)

Prerequisites: Graduate M.F.A. student or consent of instructor

Take one of the following:

ART 340, 349

Take 3 units from the following:

ART 449, 506A, 693

Take 3 units from the following:

ART 506B, 573, 693

Take 3 units from the following:

ART 499, 514, 680

Sculpture/4D Track:

Take 12 units from the following:

ART 597O, 598O, 599O

Take 6 units from any of the following:

ART 597, 598 or 599 courses

Take 6 units of the following:

ART 681 Graduate Studies: Art Theory/Criticism (3)

Prerequisite: Graduate M.F.A. student or consent of instructor

Take the following:

ART 680 Graduate Interdisciplinary Critique (3)

Prerequisites: None

ART 682 Graduate Studies: Professional Practices for

Studio Art (3)

Prerequisite: Graduate M.F.A. student or consent of instructor

Take 3 units from the following:

ART 536A, 550, or 680

Take 6 units additional coursework.

Wood Track:

Take 12 units from the following:

ART 597B, 598B, 599B

Take 6 units from any of the following:

ART 597, 598 or 599 courses

Take one of the following:

ART 681, 683

Take one of the following:

ART 682, 684

Take 15 units additional coursework.

Graduate Certificate in Museum Studies

This certificate is primarily directed toward graduate students in Art History and the visual arts, but does not exclude students in other fields. The specifically tracked course of study has an emphasis placed primarily on contemporary art.

A student may pursue the Certificate in Museum Studies as a program of study in itself, or in combination with a program of study directed toward the achievement of one of the department's degrees. A student may, with approval of both the Museum Studies Program and the student's Project or Thesis Committee, count up to 15 units of coursework toward both the degree and the certificate.

Admission to the program is by permission of the Museum Studies faculty and the head of the Art History Program. Applicants wishing to pursue the Certificate Program in Museum Studies should apply for the desired degree program during the regular Department of Art graduate application window of January 1 through 31, and should indicate interest in pursuing the Certificate Program in Museum Studies concurrently.

Applicants wishing to pursue the Certificate Program in Museum Studies separate from a degree program should contact the Department of Art Graduate Advisor.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Requirements

A total of 30 units to include:

Take all of the following courses:

AH 530 Introduction to Curatorial Practices (3)

Prerequisites: AH 111A, 111B, or consent of instructor

AH 531 History of Museums and Exhibition (3)

Prerequisites: AH 111A, 111B or consent of advisor and instructor

AH 542 Internship in Museum Studies (3)

Prerequisites: AH 430/530 or consent of instructor

AH 539 Art of Mid to Late Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor

AH 545A Museum-Gallery Practices (3)

Prerequisites: AH 431 or AH 531 or consent of instructor. First in a four-course sequence

AH 545B Museum-Gallery Practices (3)

Prerequisites: AH 545A or consent of instructor

AH 545C Museum-Gallery Practices (3)

Prerequisites: AH 545B or consent of instructor. Third in a four-course sequence

AH 545D Museum-Gallery Practices (3)

Prerequisites: AH 545C or consent of instructor. Fourth in a four-course sequence

AH 597 Seminar in Art History (3)

Prerequisite: Consent of instructor

Take one of the following courses:

AH 547 Photo Studio Specialties (3)

Prerequisite: ART 340

AH 550 Sculpture/4D: Intermedia/New Genres/New Media (3)

(or approved substitution)

Prerequisite: None

Single Subject Teaching Credential in Art

For information, refer to the undergraduate section in this department.

Foundation Art

Foundation Art

The classes listed below are the foundation art classes that are required of most studio art majors. When foundation studio classes are chosen, be aware of the prerequisites; do not take the studio classes out of order.

AH 111A,B. Foundation Art History I, II

ART 130. Foundation Two-Dimensional

131. Foundation Three-Dimensional

132. Foundation Color Theory

149. Foundation Computer Art

181. Foundation Drawing

184. Foundation Life Drawing

Art Courses (ART)

LOWER DIVISION

101. Artists in Their Own Words (3)

Forum for students to hear first hand from artists and arts scholars

discussing and contextualizing their work within their contemporary field. Includes multiple lecturers by visitors and additional class lectures providing further context.

Credit/No Credit grading only. May be repeated to a maximum of 12 units in different semesters.

110. Introduction to the Visual Arts (3)

Prerequisite/Corequisite: One GE Foundation course.

Exploration of meanings, purposes, styles, materials and forms of art and architecture. Multicultural perspective. Development of awareness through examination and comparison of art and artifacts, past and present.

130. Foundation Two-Dimensional (3)

Foundation course required to be taken by all majors within the Department of Art prior to 200-level or above art courses. Exploration and application of principles, components and terminology of two-dimensional design via relational, problem-solving and visual-vocabulary exercises.

Letter grade only (A-F). (6 hours lab)

131. Foundation Three Dimensional (3)

Foundation course required to be taken by all studio and art education majors within the Department of Art prior to 200-level or above art courses. Focus on structural, material, and compositional concerns involved in dealing with three-dimensional form.

Letter grade only (A-F). (6 hours lab)

132. Foundation Color Theory (3)

Prerequisite/Corequisite: ART 130

Foundation course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Also satisfies requirements or choices in some BFA degrees. Focus on visual and aesthetic interactions of color. (Not open to students with credit for ART 182.)

Letter grade only (A-F). (6 hours lab)

149. Foundation Computer Art (3)

Prerequisites: ART 130.

Foundation course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Also satisfies requirements or choices in some BFA degrees. Project-based exploration of art-related digital imaging, layout, and vector software, and introduction to interactive and web-based media.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.) Not open for credit to students with credit in ART 349A.

181. Foundation Drawing (3)

Foundation course intended to be taken by all majors within the Department of Art prior to 200-level or above art courses. Introduction to drawing with emphasis on perspective, light, shadow, and volume in composition using a variety of media.

Letter grade only (A-F). (6 hrs. lab.)

184. Foundation Life Drawing (3)

Prerequisites: ART 181.

Foundation course required in the BA Studio Art. Also satisfies requirements or choices in all other undergraduate degrees in the Department of Art. Introduction to drawing from the human figure.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

221. Shop Orientation (1)

Familiarization with student workshop facilities, specific instruction on safety procedures and methods in use of tools and equipment. Safety lectures and technical demonstrations followed by hands-on experience. Projects familiarize students with machinery and facilitate the acquisition of basic woodworking skills.

Credit/No Credit grading only. (2 hours activity)

223. Introduction to Typography (3)

Prerequisite: For Art majors: ART 130, 181. For Design majors: DESN 120A and 132A.

Introductory course in the fundamentals of typographic form. Close examination of the architecture of letterforms and alphabet construction.

Letter grade only (A-F). (6 hours lab) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

241. Introduction to Photography (3)

Prerequisites: ART 130, 181.

Introductory course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Also satisfies requirements or choices in some BFA degrees. Fundamentals of black-and-white photography: cameras, darkroom techniques, photographic vision, critical issues.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

251A. Introduction to Ceramics: Handbuilding (3)

Prerequisites/Corequisites: ART 131.

Introductory course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Also satisfies requirements or choices in BA Art Education and some BFA degrees. Includes slab, coil, and molding techniques; glazing, firing.

Letter grade only (A-F). (6 hrs. lab.)

251B. Introduction to Ceramics: Wheel Throwing (3)

Prerequisites/Corequisites: ART 131.

Introductory course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Satisfies requirements or choices in BA Art Education and some BFA degrees. Development of forms with potters wheel, glazing and firing.

Letter grade only (A-F). (6 hrs. lab.)

261. Introduction to Life Sculpture (3)

Prerequisite/Corequisite: ART 131 or 181; AH 111A or 111B, or consent of instructor.

Introduction to modeling from the human figure with emphasis on a range of approaches and techniques to figurative sculpture.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

263. Introduction to Sculpture/4D (3)

Prerequisites: ART 131 or consent of instructor.

Introductory course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Also satisfies requirements or choices in BA Art History and most BFA degrees. Exploration of art in three and four dimensions.

Letter grade only (A-F). (6 hrs lab)

265. Introduction to Fiber (3)

Prerequisites: ART 130, 131

Introductory course satisfying a choice between requirements in the BA Studio Art. Satisfies requirements or choices in some BFA degrees. Introduction to mixed media and fiber/fabric materials, processes and approaches including surface design, papermaking, weaving, hand-construction.

Letter grade only (A-F). (6 hours lab)

270. Introduction to Printmaking (3)

Prerequisites: ART 181

Introductory course satisfying a choice between requirements in the BA Studio Art. Satisfies requirements or choices in some BFA degrees. Exploration of multiple printmaking processes and possibilities for producing art in multiples, variations, and unique works. Focus on non-toxic approaches.

Letter grade only (A-F). (6 hours lab.)

271. Introduction to Rendering (3)

Prerequisite: ART 130, 181.

Introductory course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Satisfies requirements or choices in some BFA degrees. Graphic visualization for convincing representation.

Letter grade only (A-F). (6 hrs. lab.)

287. Introduction to Painting (3)

Prerequisites: ART 130, 181.

Introductory course satisfying a choice between requirements in the BA Studio Art (Students choose from a group of courses). Satisfies requirements or choices in BA Art Education, BA Art History, and most BFA degrees. Introduction to painting problems using opaque media.

Letter grade only (A-F). (6 hrs. lab.)

Art Education

(ART 407 & 499P acceptable for M.A., Art Education Specialization)

300. Art, Adolescence, and the Child
301. Cross-Cultural Perspectives in Art Education
305. Art Disciplines and New Technology
375. Art and Social Action: A Global Perspective
401./501. Cross Cultural and Community-based Practices
407. Art Practicum
408./508. Historical Perspectives in Contemporary Art Education
412./512. Aesthetic Theories and Art Education
415. On-Site Studies in Art Education
499P. Special Studies in Art Education

Art History

AH 364. History of Ceramics 1900 to Present
365. History of Prints and Drawings
400./500. 19th Century Photography
401./501. American Art to 1900
402. The Rise of Landscape Painting
408./508. Early Christian and Byzantine Art
409./509. Romanesque Art
410./510. Gothic Art
411./511. History and Criticism of Photography
415./515. Issues in Art History: Theory and Practice
416./516. Greek Art
417./517. Roman Art
423./523. Early Renaissance Art in Italy
424./524. High Renaissance Art in Italy
425./525. Northern Renaissance Painting
426./526. Baroque Art in Spain, the Netherlands, and England
427./527. Baroque Art in Italy, France, and Germany
431./531. History of Museums and Exhibitions
430./530. Museum Practices
436./536. Neo-Classicism to Romanticism, 1789-1850
437./537. Impressionism to Post-Impressionism, 1850-1900
438./538. Art of Early to Mid Twentieth Century
439./539. Art of Mid to Late Twentieth Century
441./541. Contemporary Art in Context
444./544. History of Graphic Design
446./546. Art History Methodologies and Writing
447./547. Historiography of Art History
448./548. Western Art Theory & Criticism to Mid-19th Century
449./549. West Art Theory & Criticism Mid-19th to Mid-20th Century
450./550. West Art Theory & Criticism Mid-20th Century to Present
455./555. Traditional Art of Africa: A Thematic Approach

456./556. American Indian Art: Western Perspectives
457A./557A. Pre-Columbian Art: Mesoamerica
457B./557B. Pre-Columbian Art: The Andes
457C./557C. Pre-Columbian Art
458./558. Art of Latin America: 1800-1940
459./559. Art of Latin America: 1940 to Present
460./560. Art of Mexico: 1780 to Present
465./565. Ancient Art of the Near East
466./566. Buddhist Art of India and S.E. Asia
467./567. Hindu and Islamic Art of India
468./568. Early Chinese Art
469./569. Later Chinese Art
470A./570A. Japanese Buddhist Art to 1500
470B./570B. Japanese Art 1500-1868
471A./571A. Modern Japanese Graphic Art
471B./571B. Modern Japanese Plastic Art
471C./571C. Modern Japanese Architecture
495. Independent Study In Art History
496. Special Studies in Art History
497./597. Seminar in Art History
498. Selected Topics in Art History
499Q. Special Studies in Museum Studies

Ceramics

ART 341A. Intermediate Ceramics: Handbuilding
341B. Intermediate Ceramics: Wheel Throwing
343A. Ceramics Sculpture
343B. Advanced Wheel Throwing
352A. Ceramics: Glaze Technology
352B. Ceramics Plaster Shop
451A-B. Advanced Ceramics
453./573. Seminar in Ceramic Arts
491A. Ceramics: Senior Project
499A. Special Studies in Ceramics

Drawing and Painting

ART 381. Intermediate Drawing
383. Life Painting
384. Intermediate Life Drawing
385. Watercolor Painting
387. Painting
388. Color Theory and Composition
389. Materials and Techniques of Drawing and Painting
481. Advanced Drawing
483. Advanced Life Painting
484. Advanced Life Drawing
487. Advanced Painting
491G. Drawing and Painting Senior Project
492F. Concentrated Studies in Life Drawing
492G. Concentrated Studies in Abstract Painting
492Z./592Z. Concentrated Studies in Life Painting
496A. BFA Capstone: Drawing and Painting
496B. BFA Capstone: Drawing and Painting
499D. Special Studies in Drawing
499K. Special Studies in Painting

Fiber

ART 316. Fiber: Pattern Design and Printing
317. Fiber: Textile Dyeing
328A. Fiber and Mixed Media: Sculptural Forms
328B. Fiber and Mixed Media: Sculptural Forms
428A. Fiber: Weaving, Dyeing, Woven Structures
428B. Fiber: Weaving, Dyeing, Woven Structures

430. Fiber: Artist Books and Papermaking
432. Fiber: Fiber and Mixed Media: Advanced
491B. 3-D Media: Senior Project
499N. Special Studies in Fiber and Mixed Media

Graphic Design

ART 318. TYPE II: Intermediate Typography
321. Graphic Design I: Introduction to Graphic Design
327. Graphic Design II: Intermediate Graphic Design
331. Advertising I: Introduction to Concept Development
332. Graphic Design: Professional Preparation
334. Graphic Design III: Exploration and Experimentation
335. Advertising II: Intermediate Concept Dev & Art Direction
336. Graphic Design IV: Development and Analysis
337. Graphic Design V: Packaging Design
365. Media Design: Motion Graphics
366. Media Design: Web and Interactive Design
419./519. Media Design: 5D; Designing the Future
420. Graphic Design Workshop
421. Advanced Typography
423. Graphic Design VI: Advanced Topics
424. Advertising III: Advanced Topics
442. Internship in Graphic Design
486. Media Design: Advanced Topics
499S. Special Studies in Visual Communication Design

Illustration / Animation

ART 371A. Illustration
371B. Illustration
372. Anatomy for Artists
373. Costumed Figure Drawing
374A. Biomedical Rendering
374B. Biomedical Rendering
382. Production Fine Art
390. Drawing Figures in Context
391. Animation 1
392. Animation 2
393. Character Design
416./516. Animation 3
417./517. Animation 4
426./526. Computer Animation 1
427./527. Computer Animation 2
471A. Advanced Illustration
471B. Advanced Illustration
472./572. Storyboarding for Film and Television
476./576. Experimental Animation 1
478./578. Experimental Animation 2
482./582. Sequential Imaging
491E. Illustration/Animation Senior Project
499E. Special Studies in Animation
499F. Special Studies in Illustration

Metal

ART 355. Enameling
356. Jewelry Casting
357A-B. Beginning Metals and Jewelry
358A-B. Metalsmithing
359A. Architectural Metalwork and Blacksmithing
359B. Sculptural Metalwork
458A,B. Advanced Metalsmithing/Jewelry and Enameling
491B. Senior Project
499J. Special Studies in Metalsmithing and Jewelry

Museum Studies

AH 430./530. Introduction to Curatorial Practices
431./531. History of Museums and Exhibitions
499Q. Special Studies in Museum Studies

Photography

ART 340. Intermediate Photography
342A. Color Photography
406A. Digital Imagery for the Arts
406B. Advanced Digital Imagery for the Arts
414./514. Documentary Photography
444. Advanced Black and White Photography
447. Photography Studio Specialties
449. Experimental Practices in Photography
473./573. Seminar in Photo-Based Art
491C. Photography – Senior Project
499V. Special Studies in Art Photography

Printmaking

ART 370. Printmaking
376. Printmaking: Relief Printing
377. Printmaking: Silkscreen
378. Printmaking: Etching
379. Printmaking: Lithography
475./575. Printmaking: Photo and Digital Processes
480./580. Printmaking: Monotype/Monoprint
491P. Printmaking: Senior Project
499R. Special Studies in Printmaking

Sculpture

ART 360A. Sculpture/4D: Intermediate
360B. Sculpture/4D: Intermediate
361. Sculpture/4D: Observation
367A. Sculpture: Mold Making Lab
367B. Sculpture/4D: Foundry Lab
363A. Sculpture/4D: Fabrication Lab A
363B. Sculpture/4D: Fabrication Lab B
363C. Sculpture/4D: Fabrication Lab C
364. Sculpture/4D: Electronics, Mechanics, Kinetics
436A./536. Sculpture/4D: Video Art
436B./536. Sculpture/4D: Video Art
450A. Sculpture/4D: Intermedia/New Genres
450B. Sculpture/4D: Intermedia/New Media
460A,B Sculpture/4D: Advanced
461. Sculpture/4D: Advanced Sculpture from Observation
474./574. Seminar in Sculpture and Time-Base Art
491F. Sculpture/4D Senior Project
499M. Special Studies in Life Sculpture
499O. Special Studies in Sculpture/4D

Wood

ART 354A. Introduction to Wood
354B. Intermediate Wood
454A,B. Advanced Wood
491B. 3-D Senior Project
499B. Special Studies in Wood

Art Courses (ART)

UPPER DIVISION

300. Art, Adolescence, and the Child (3)

Experiences in self-expression from the California Visual and Performing Arts Framework while addressing children's artistic and aesthetic development. Following state content standards, students develop aesthetic perception, learn skills for talking about art, and gain understanding in historical and cultural contexts.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

301. Cross Cultural Perspectives in Art Education (3)

Prerequisites: Completion of 12 units of Art Foundation.

Theory and practice as understood in and across cultures. Application of the state content standards as written in the California Visual and Performing Arts Framework and reflecting racial, ethnic, linguistic, gender, sexual, cultural and cross-cultural perspectives.

Letter grade only (A-F). A minimum of 15 hours of community service learning required. (6 hrs. lab.)

305. Art Disciplines and New Technology (3)

Prerequisites: Completion of 12 units of Art Foundation.

Develops skills in making and talking about art through interrelating art production with art criticism, cultural-historical connections, and philosophical aesthetics. Emphasizes newer art forms and technology, including video and computer, providing additional approaches for the artist and art educator.

Letter grade only (A-F). (6 hrs. lab.)

316. Fiber: Pattern Design and Printing (3)

Prerequisites: ART 130, 131, 287; 6 units from AH 111A, 111B.

Variety of design concepts for both hand and commercial application of pattern to textiles and other surfaces. To include pattern system design, stamping, and silkscreen printing.

Letter grade only (A-F). (6 hrs. lab)

317. Fiber: Textile Dyeing (3)

Prerequisites: ART 130, 131, 287; AH 111A, 111B.

Exploration of a variety of design concepts and dye processes to include natural and chemical (acid and fiber reactive) dye technology using discharge, shaped resists, batik, and direct painting techniques.

Letter grade only (A-F). Not open for credit to students with credit in ART 327B. (6 hrs. lab.)

318. TYPE II: Intermediate Typography (3)

Prerequisites: For Art majors: ART 130, 131, 181, 184, 223; 132 or 287; AH 111A, 111B or consent of instructor. For Design majors: DESN 120A, 132A and ART 223.

Focus on the compositional use of type and its relationship to issues of visual hierarchy, readability and page structure. Students continue their exploration of typography as an expressive visual form.

Letter grade only (A-F). (6 hrs. lab.) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

320. Practical and Theoretical Issues in the Visual Arts (3)

Focus on developments in art of 60s through present. Consideration of factors that shape the face of contemporary art. Includes lectures, slide presentations, screenings and guest lectures from artists.

Letter grade only (A-F). Not open for credit to students with credit in ART 320A. (6 hrs. lab.)

Art Courses (ART)

321. Graphic Design I: Introduction to Graphic Design (3)

Prerequisites: For Art Majors: ART 130, 131, 181, 184, 223; 132 or 287; AH 111A, 111B. For Design Majors: ART 223; DESN 120A, 120B, 132A, 132B; AH 111A, 111B

Introductory course, exploring formal constructs of combining type and image and of image creation. Enhance understanding of problem definition and concept development. Explore the relationships of form to content.

Letter grade only (A-F). (6 hours lab) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

327. Graphic Design II: Intermediate Graphic Design (3)

Prerequisites: ART 223, 318, 321

Intermediate course, developing formal and conceptual skills using type and image, learning fundamentals of preparing art for print.

Letter grade only (A-F). (6 hours lab) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

328A. Fiber and Mixed Media: Sculptural Forms (3)

Prerequisites: ART 130, 131, AH 111A, 111B.

Exploration of concepts and materials using non-loom textile techniques. Development from 2-D relief surfaces to full 3-D forms. May include basic fiber structures of stitching, wrapping, feltmaking, papermaking, twining, knitting, crochet, and coiling.

Letter grade only (A-F). (6 hrs. lab.)

328B. Fiber and Mixed Media: Sculptural Forms (3)

Prerequisites: ART 328A.

Designed to strengthen a working understanding on non-loom fiber structures. Emphasis on development of personal expression within media.

Letter grade only (A-F). (6 hrs. lab.)

331. Advertising I: Introduction to Concept Development (3)

Prerequisites: ART 130, 131, 181, 184, 223, 318, 321; 132 or 287; AH 111A, 111B

Introduction to learning how to think more conceptually through creating print ads primarily by understanding the foundations of setting an objective, planning a creative strategy, identifying a target; and by learning various ways to think creatively.

Letter grade only (A-F). (6 hrs. lab.)

332. Graphic Design: Professional Preparation (3)

Prerequisites: ART 318, 321, 327, 331.

Engages topics regarding the profession of Graphic Design, including portfolio and resume development, presentations, interview skills, pricing and negotiating, ethical guidelines, and project organizational skills.

Letter grade only (A-F). (6 hrs. lab.)

333. Behind the Art Scene (3)

Prerequisites: AH 111A, 111B, 3 units 100-level AH

Examination of factors influencing the development and understanding of contemporary art focusing on examples in art from the mid-twentieth century to the present.

Letter grade only (A-F).

334. Graphic Design III: Exploration and Experimentation (3)

Prerequisite: BFA Graphic Design major or consent of instructor.

Advanced design course, examining and creating traditional, alternative and experimental solutions across a variety of media.

Letter grade only (A-F). (6 hrs. lab.) Student-owned laptop computer

is required. See Department website for current hardware and software specifications.

335. Advertising II: Intermediate Concept Development and Art Direction (3)

Prerequisites: BFA Graphic Design major or consent of instructor.

Development of concept and design advertising projects that are strategically sound, creatively unexpected, innovative and of portfolio quality.

Letter grade only (A-F). (6 hrs. lab.) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

336. Graphic Design IV: Development and Analysis (3)

Prerequisites: ART 334, 335 or consent of instructor.

Learn and practice in-depth research and analytical procedures that establish visual concept development and create systematic applications design.

Letter grade only (A-F). (6 hours lab) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

337. Graphic Design V: Packaging Design (3)

Prerequisites: BFA Graphic Design Major and ART 321, 334, 335, or consent of Instructor

Materials, processes and the design of packaging.

Letter grade only (A-F). (6 hours lab) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

340. Intermediate Photography (3)

Prerequisites: ART 130, 181, 241; AH 111A, 111B.

Further study of black and white darkroom and camera work and the possibilities of the black and white digital photograph. Development of series and bodies of work.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

341A. Intermediate Ceramics: Handbuilding (3)

Prerequisites: ART 130, 131, 251A, 181; AH 111A, 111B.

Design problems with handbuilt ceramic forms with emphasis on surface.

Letter grade only (A-F). (6 hrs. lab.)

341B. Intermediate Ceramics: Wheel Throwing (3)

Prerequisites: ART 130, 131, 251B, 181; AH 111A, 111B.

Design problems with wheel-thrown ceramic forms with emphasis on surface.

Letter grade only (A-F). (6 hrs. lab.)

342A. Color Photography (3)

Prerequisite/Corequisite: ART 340.

Use and control of color, primarily within digital photographic processes. Contemporary approaches to art-based color photography will be emphasized..

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

343A. Ceramics Sculpture (3)

Prerequisites: ART 341A.

Advanced studies in ceramic sculpture.

Letter grade only (A-F). (6 hrs. lab.)

343B. Advanced Wheel Throwing (3)

Prerequisites: ART 341B.

Advanced studies in ceramic form employing the potters wheel.

Letter grade only (A-F). (6 hrs. lab.)

349. Computer Art (3)

Prerequisites: ART 149, 6 units from AH 113A, 113B, 111A, 111B.

Basic theory and hands-on use of microcomputers employing graphics in "Paint Programs" with color hardcopy output and animation production on video tape. Emphasis on computer graphic

applications in students' individual studio art disciplines.

Letter grade only (A-F). Course fee may be required. Not open for credit to students with credit in ART 349B. (6 hrs. lab)

352A. Ceramics: Glaze Technology (3)

Prerequisite: ART 130, 131, 251A or 251B, 181; AH 111A, 111B.

Nature of raw materials as they relate to the development of clay bodies and ceramic glazes.

Letter grade only (A-F). (6 hrs. lab.)

352B. Ceramics Plaster Shop (3)

Prerequisites: ART 130, 251A or 251B, 181; AH 111A, 111B.

Use of plaster molds for making ceramic art including press molds, slip casting, and jiggering.

Letter grade only (A-F). (6 hrs. lab.)

354A. Introduction to Wood (3)

Prerequisites: ART 130, 131, 181, 221; AH 111A, 111B.

Introduction to tools, techniques, and concepts used in making of handcrafted wood objects. Basic shaping techniques of carving, joinery, and construction with intent of understanding character and language of wood.

Letter grade only (A-F). (6 hrs. lab)

354B. Intermediate Wood (3)

Prerequisites: ART 130, 131, 181, 221; AH 111A, 111B.

Intermediate study of tools and processes of making complex wooden structures. Layout techniques, joinery methods, and non-rectilinear form are explored in greater detail.

Letter grade only (A-F). (6 hrs. lab)

355. Enameling (3)

Techniques, materials, and concepts of enameling on metals. Introduction to tools and metalworking techniques associated with making enameled metal objects. Emphasis on exploration of characteristics of enamels and metals, stressing individual advancement of interest and expression.

Letter grade only (A-F). Course fee may be required. May be repeated to a maximum of 6 units. (6 hrs. lab.) Not open for credit to students with credit in ART 355A.

356. Jewelry Casting (3)

Prerequisite: ART 130, 131, 181; AH 111A, 111B; or consent of instructor.

Design and creation of jewelry through lost-wax casting techniques and processes.

Course fee may be required. May be repeated to a maximum of 6 units. (6 hrs. lab.)

357A-B. Beginning Metals and Jewelry (3-3)

Prerequisites: For ART 357A: ART 130, 131, 181, 287; 6 units from: AH 111A, 111B. For ART 357B: ART 357A.

Design and creation of jewelry.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

358A. Metalsmithing (3)

Prerequisites: ART 357A.

Design and creation of flatware and hollowware.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

358B. Metalsmithing (3)

Prerequisites: ART 357A.

Design and creation of flatware and hollowware.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

359A. Architectural Metalwork and Blacksmithing (3)

Prerequisites: ART 130, 131, 181; AH 111A, 111B.

Techniques, materials and concepts of metal craft for developing art forms in larger scale and in architectural context. Hot forging and fabricating with ferrous metals. Basic techniques of cutting,

forming, joining welding and surface design of metals. Making of tools.

May be repeated to a maximum of 6 units. Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

359B. Sculptural Metalwork (3)

Prerequisites: ART 130, 131, 181; AH 111A, 111B.

Introduction to metalforming and construction techniques in the design and creation of sculptural form and composition in metal on an architectural scale.

May be repeated to a maximum of 6 units. Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

360A. Sculpture/4D: Intermediate (3)

Prerequisites: ART 130, 131, 263; AH 111A or 111B, or consent of instructor.

Exploration of a broad range of sculptural techniques and approaches from traditional 3D media to installation, site-specific and time-based practices.

(6 hrs. lab.) Letter grade only (A-F).

360B. Sculpture/4D: Intermediate (3)

Prerequisites: ART 360A or consent of instructor.

Exploration and refinement in a wide range of sculptural techniques and strategies. Introduction to installations and public work. Some work will be with time based kinetic art. Will include introduction to 3-D art theory.

(6 hrs. lab.) Letter grade only (A-F).

361. Sculpture/4D: Observation (3)

Prerequisites: ART 130, 131, 181, 261; AH 111A, 111B.

Historical, theoretical and technical emphasis on a range of approaches to observation-based art. Emphasis on figurative traditions, interpretive abstraction, in addition to considering the role of observational study in science and the broader social field. Non-medium specific.

Course fee may be required. (6 hours lab) Letter grade only (A-F).

363A. Sculpture/4D: Fabrication Lab A (3)

Prerequisites/Corequisites: ART 131; AH 111A or 111B, or consent of instructor.

Introduction to basic fabrication techniques, tools, building concepts and design principles using wood, metal and construction materials.

(6 hrs. lab.) Letter grade only (A-F). Not open for credit for students with credit in ART 363.

363B. Sculpture/4D: Fabrication Lab B (3)

Prerequisite: ART 363A or consent of instructor.

Exploration of advanced techniques in dimensional fabrication, from building in architectural scale to model making. Emphasis is on complex structures, installation building and formal issues related to traditional and construction materials.

Letter grade only (A-F) (6 hrs. lab)

363C. Sculpture/4D: Fabrication Lab C (3)

Prerequisite: ART 363A or consent of instructor.

Exploration of advanced fabrication processes with plastics, subtractive tooling and Computer Aided Manufacturing. Synthesis of a broad range of techniques and technologies of manufacturing with emphasis on the production of art works.

Letter grade only (A-F) (6 hrs. Lab)

364. Sculpture/4D: Electronics, Mechanics, Kinetics (3)

Prerequisites: ART 130, 131; AH 111A or 111B, or consent of instructor.

Exploration of basic electronics, mechanics, microcontroller interface, and simple software coding for the creation of works of art. Consideration of form, movement, light, sound, behavior, and interactivity.

(6 hours lab) Letter grade only (A-F).

Art Courses (ART)

365. Media Design: Motion Graphics (3)

Prerequisites: ART 318 and 327, or consent of instructor.

Learning the essentials of theory, practice, visual and verbal vocabulary of moving forms. Time, space, image and audio will be emphasized within the context of concept development and design aesthetics.

Not open for credit to students with credit in ART 386A. Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

366. Media Design: Web and Interactive Design (3)

Prerequisites: ART 318 and 327, or consent of instructor.

Develop skills and principles to design for non-linear environments. Students learn how to, conceptually, theoretically, and aesthetically, design for web standards, information progression, usability, and accessibility.

Not open for credit to students with credit in ART 386B. Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

367A. Sculpture/4D: Mold Making Lab (3)

Prerequisites: ART 130, 131; AH 111A or 111B.

Technical and historical introduction to all forms of mold making: rubber molds, rigid molds, vacuum forming, life casting, in addition to covering a broad range of casting materials such as resins, foams and composites.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

367B. Sculpture/4D: Foundry Lab (3)

Prerequisites: ART 130, 131; AH 111A or 111B, or consent of instructor.

Exploration of modeling positive forms, creating ceramic-shell molds and sand molds, and casting, finishing and patinating works in metal.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

370. Printmaking (3)

Prerequisites: ART 130, 181; 3 units from AH 111A, 111B.

Studio course exploring a range of printmaking techniques and imagery, selected from the areas of etching, lithography, silkscreen, relief and monoprinting.

(6 hrs. lab.) Letter grade only (A-F).

371A,B. Illustration (3,3)

For ART 371A: Prerequisites/Corequisites: ART 130, 131, 181, 184, 287; AH 111A, 111B.

For ART 371B: Prerequisite: 371A. Prerequisites/Corequisites: ART 223 and 271.

Editorial and advertising drawing, professional media, skills and techniques survey.

(6 hrs. lab.) Letter grade only (A-F). Course fee may be required.

372. Anatomy for Artists (3)

Prerequisites: ART 130, 131, 181, 184; AH 111A, 111B.

Skeletal and muscle structure emphasizing the development of skill in depicting the human figure.

Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

373. Costumed Figure Drawing (3)

Prerequisites: ART 371A, 372; AH 111A, 111B.

Drawing from costumed models with props and controlled lighting. Emphasis on development of "staging." Manipulation of composition, light, shadow, value, color, proportion, and scale are explored to achieve mood, gesture, drama, and attitudes related to human reactions, situations and character.

(6 hrs. lab.) Course fee may be required. Letter grade only (A-F).

374A,B. Biomedical Rendering (3,3)

Prerequisites: ART 130, 184, 287; AH 111A, 111B; or consent of instructor.

Introduction to and practice in techniques of descriptive drawing and press reproduction of drawing. Emphasis on skill.

(6 hrs. lab.) Letter grade only (A-F).

375. Art and Social Action: A Global Perspective (3)

Prerequisite: Upper-division standing.

Examines the interconnections among global processes and global social problems from the perspectives of art and sociology. Analyzes historical, geographical, class and status components of these problems, and the role of art to promote social change.

Same course as SOC 375. Not open for credit to students with credit in SOC 375.

376. Printmaking: Relief Printing (3)

Prerequisites: ART 130, 181; 3 units from AH 111A, 111B.

Instruction in relief printing techniques and image development, including woodcut, wood engraving, linocut, collagraphs and alternative print surfaces. In black and white and color.

(6 hrs. lab.) Letter grade only (A-F).

377. Printmaking: Silkscreen (3)

Prerequisites: ART 130, 181; 3 units from AH 111A, 111B.

Instruction in fine art screen printing techniques and image development, including resist, paper, film, emulsion and alternative stencil methods.

(6 hrs. lab.) Letter grade only (A-F).

378. Printmaking: Etching (3)

Prerequisites: ART 130, 181; 3 units from AH 111A, 111B.

Instruction in intaglio printing techniques and image development, including etching, engraving, dry-point, aquatint and alternative platemaking methods. In black and white and color.

(6 hrs. lab.) Letter grade only (A-F).

379. Printmaking: Lithography (3)

Prerequisites: ART 130, 181; 3 units from AH 111A, 111B.

Instruction in stone lithography techniques and image development, including crayon drawing, flats, washes, transfers and alternative drawing methods. In black and white and color.

(6 hrs. lab.) Letter grade only (A-F).

381. Intermediate Drawing (3)

Prerequisites: ART 130, 181, 184; AH 111A, 111B.

Problems and concepts in drawing using a variety of media.

(6 hrs. lab.) Letter grade only (A-F).

382. Production for Fine Art (3)

Prerequisites: ART 223 or consent of instructor.

Exploration of printing and reproduction process related to needs of artist, illustrator, and museum professional. Introduction to skills and vocabulary necessary for preparation of art for print and electronic media. Emphasis on interaction with various commercial production professionals.

(6 hrs. lab.) Letter grade only (A-F). Course fee may be required.

383. Life Painting (3)

Prerequisites: ART 130, 181, 184, 287; AH 111A, 111B.

Painting from the human figure with emphasis on representing form in space, structure, color, value, and composition.

Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

384. Intermediate Life Drawing (3)

Prerequisites: ART 130, 181, 184; AH 111A, 111B.

Continued study in drawing from the human figure from direct observation.

Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

385. Watercolor Painting (3)

Prerequisites: ART 130, 181, 184, 287; AH 111A, 111B.

Nature and use of the watercolor media.

(6 hrs. lab.) Letter grade only (A-F).

387. Painting (3)

Prerequisites: ART 130, 181, 184, 287; AH 111A, 111B.

Problems and concepts in space, form, structure, color and content in studio painting.

(6 hrs. lab.) Letter grade only (A-F).

388. Color Theory and Composition (3)

Prerequisites/Corequisites: ART 130, ART 287, and 6 units selected from AH 111A, 111B.

Focuses on visual and aesthetic interactions of color as pertains to painting. Utilizes theories of colorists such as Itten, Albers, Hofmann to study distinct color properties and functions. Combines lecture, demonstration, and critique with hands-on exploration, problem solving.

Not open for credit to students with credit in ART 182. Letter grade only (A-F). (6 hours lab)

389. Materials and Techniques of Drawing and Painting (3)

Prerequisites: ART 130, 181, 184, 287; AH 111A, 111B.

Theory and practice in the craft of drawing and painting.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (6 hrs. lab.)

390. Drawing: Figures in Context (3)

Prerequisites: ART 371A or consent of instructor

Drawing from life based on the nude and draped human form and animal forms. Focus on short pose gestural drawing, emphasizing dramatic exaggeration of form and shape, movement, body language and character.

(6 hours lab) Course fee may be required. Letter grade only (A-F).

391. Animation 1 (3)

Prerequisites/Corequisites: ART 130, 131, 181, 184, 287; AH 111A, 111B.

Introduction to basic principles of traditional hand-drawn animation and creation of basic movement cycles using specific coordinating computer software. Focus on elements of weight, movement, timing and exaggeration. Provides an overview of alternative approaches to animation.

Not open to students with credit in ART 391A. Letter grade only (A-F). (6 hours lab) Course fee may be required.

392. Animation 2 (3)

Prerequisite/Corequisite: ART 371A.

Continued study of basic principles of traditional hand drawn animation and alternative approaches learned in ART 391. Focus on weight, movement, timing, exaggeration, dramatic staging, and narrative structure. Provides further development of animating skills. Specific coordinating computer software is used.

Not open for credit to students with credit in ART 391B. Letter grade only (A-F). (6 hours lab) Course fee may be required.

393. Character Design (3)

Prerequisites: ART 371A or consent of instructor

Introduction to basic principles of character design. Overview of stylistic approaches for commercial and alternative applications. Focus on creating original and believable characters with drawing and use of relevant computer software.

(6 hours lab) Course fee may be required. Letter grade only (A-F).

401./501. Cross-cultural and Community-based Practices in Art (3)

Prerequisites: Completion of 12 units of Art Foundation.

Study of theory and practice in art within a cross-cultural and

social justice framework. Applies pedagogical and experiential methodologies to art education practices in a community-based setting. A minimum of 15 hours of community service learning required.

Letter grade only (A-F). (6 hrs. lab.)

406A./506A. Digital Imagery for the Arts (3)

Prerequisites: ART 149, 340, or consent of instructor.

Examination of digital imaging through Adobe Photoshop software. Emphasis on relationship of digital imaging to photography. Exercises to develop skills, strategies and fluency for working in digital media. Concentration on theory of media and representation as well as individual projects.

(6 hrs lab.) Letter grade only (A-F). Course fee may be required.

406B./506B. Advanced Digital Imagery for the Arts (3)

Prerequisites: ART 406A or 506A, 444.

Exploration of theory and practice of digital imaging and advanced techniques. Emphasis on multimedia and individual projects.

(6 hrs. lab.) Letter grade only (A-F). Course fee may be required.

407. Art Practicum (3)

Prerequisite: Completion of 12 units of Art Foundation.

Attitude and skill development for production, evaluation, and appreciation of visual arts. Consideration for art processes and product in ethnically diverse societies. Inquiry methods of artists, critics, historians, and aestheticians examined for active learning. Art Education Bound Portfolio addressed.

Course fee may be required. (6 hrs lab) Letter grade only (A-F).

408./508. Perspectives in Contemporary Art Education (3)

Examines historical and philosophical foundations of art education globally from antiquity to the present, emphasizing developments in America. Social, political, and economic factors; theoretical developments; notable theoreticians are explored in relation to contemporary art educational practice.

Letter grade only (A-F). May be repeated for a maximum of 6 units in different semesters.

412./512. Aesthetic Theories and Art Education (3)

Prerequisites: Completion of 12 units of Art Foundation.

Past and current philosophical writings of aestheticians, critics, artists, and art educators will be investigated with theoretical, practical, and cross-cultural implications for the arts educator.

Letter grade only (A-F).

414./514. Documentary Photography (3)

Prerequisites: ART 340, 444, or consent of instructor.

History, theory, practice, and production of still documentary photographic works with emphasis on the photograph as an instrument for social influence and change.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

415. On-Site Studies in Art Education (3)

Prerequisites: Completion of 12 units of Art Foundation.

Theory generated and practiced during study and participation at approved sites including The Art Workshop for Youth and Art to Schools Program. Consideration to state and national standards involving multifaceted, cross-cultural, and interdisciplinary experiences with art.

(6 hrs lab) Letter grade only (A-F).

416./516. Animation 3 (3)

Prerequisites: ART 392.

Pursuit of advanced skills in traditional hand-drawn 2D animation principles and techniques that allow students to develop towards professional standards. Emphasis will be on character performance and acting, directing and film making, and creating a professional reel.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

Art Courses (ART)

417./517. Animation 4 (3)

Prerequisites: ART 416.

Further development in advanced traditional hand-drawn 2D animation principles and techniques that allow students to continue towards professional standards. Focus will be on completion of short animated projects for inclusion on a professional animation reel.

Letter grade only (A-F). (6 hrs. lab.)

419./519. Media Design: 5D; Designing the Future (3)

BFA Graphic Design Major of consent of instructor.

Advanced Media Design Course, emphasizing the invention of new design paradigms in the evolving landscape of immersive technologies.

Letter grade only (A-F). (6 hours lab)

420. Graphic Design Workshop (3)

Prerequisite: Consent of instructor and portfolio review; majors only.

On-campus design studio experience oriented toward development of printed portfolio-quality design work. Professional designer/art director environment with involvement in actual projects with clients, budgets and deadlines. Students responsible for all project phases from design to production, print supervision and completion. May be repeated to a maximum of 9 units. (6 hrs. lab.) Letter grade only (A-F).

421. Advanced Typography (3)

Prerequisites: ART 223 and 318, or consent of instructor.

Emphasis on advanced/highly-detailed informational layout, traditional and experimental typeface design and exploration of historical and contemporary typographic forms.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

423. Graphic Design VI: Advanced Topics (3)

Prerequisites: ART 334, 335, 336, 337

Advanced projects in areas such as branding, design systems development and cross-media work.

Letter grade only (A-F). (6 hrs. lab.) Student-owned laptop computer is required. See Department website for current hardware and software specifications.

424. Advertising III: Advanced Topics (3)

Prerequisites: ART 335, 423

Advanced advertising course allowing students to produce work based on their area of interest. It is public service oriented.

Letter grade only (A-F). (6 hrs. lab.) Student-owned laptop computer is required. See department website for current hardware/software specifications.

426./526. Computer Animation 1 (3)

Prerequisites: ART 391 or 476 or consent of instructor.

Introduction to animating with 3D computer animation software. Explores basic three-dimensional computer generated animation, including modeling, rigging, lighting, texturing and camera set-up with emphasis on character animation. Integration of elements within the animation process will be investigated.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

427./527. Computer Animation 2 (3)

Prerequisite: For 427: ART 426. For 527: ART 526

Continued investigation of 3D computer generated animation using industry standard computer software. Focus will be on advanced character animation with an emphasis on character performance and advanced computer animation techniques.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

428A. Fiber: Weaving, Dyeing, Woven Structures (3)

Prerequisites: ART 130, 131; AH 111A, 111B.

Exploration of weaving and dyeing methods using a wide variety of techniques and materials. Emphasis on personal expression within the contemporary idiom.

Letter grade only (A-F). (6 hrs. lab.)

428B. Fiber: Weaving, Dyeing, Woven Structures (3)

Prerequisites: ART 428A.

Focus on woven structural textiles of greater complexity. Includes dyed and woven Ikat, multi-layered construction, and use of the Compu-doby loom.

Letter grade only (A-F). (6 hrs. lab.)

430. Fiber: Artist Books and Papermaking (3)

Prerequisites: ART 130, 131; AH 111A, 111B.

Basic materials and techniques of papermaking and handmade artist books with an emphasis on concept and form development.

May be repeated to a maximum of 6 units in different semesters. Letter grade only (A-F). (6 hrs. lab.)

432. Fiber and Mixed Media: Advanced (3)

Prerequisites: ART 130, 131, 181; ART 132 or 287; ART 317 or 328A; ART 428A or 430.

Designed for the advanced Fiber students. Conceptual assignments use materials and media from a wide range of fiber processes. Reading assignments and group discussions.

May be repeated to a maximum of 6 units in different semesters. Letter grade only (A-F). (6 hrs. lab.)

436A./536A. Sculpture/4D: Video Art (3)

Prerequisites: ART 130 or 131; AH 111A or 111B, or consent of instructor.

Historical/theoretical and practical/technical introduction to digital video and other art practices involving digital media.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required.

436B./536B. Sculpture/4D: Video Art (3)

Prerequisite: ART 436A.

Continuation of ART 436A with more advanced projects, introduction of more specialized software and equipment, and alternative modes of display.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required.

440./540. Art in Public Places: Theory and Practice (3)

Prerequisites: ART 130, 131, and 6 units selected from AH 111A, 111B, or consent of instructor.

Exploration of theory and practice of developing, proposing and producing artist-initiated and commissioned temporary and permanent works for the public sphere. Historical overview of the field of public art. Consideration of viewpoints influencing evaluation, production, selection, and commissioning of works.

(6 hrs. lab.) Letter grade only (A-F).

442. Internship in Graphic Design (3)

Prerequisite: Graphic Design Major or consent of instructor.

Student internship experience in selected studios, advertising agencies and in-house creative departments. Opportunity to work under supervision of professionals in the field for 6 hrs. per week. (6 hrs. lab.)

444./544. Advanced Black and White Photography (3)

Prerequisite: ART 340.

Presentation of advanced printing techniques and darkroom skills. Including printing chemistry, refined negative making, printing materials and supports. Extensive exploration of the view camera.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

447. Photography Studio Specialties (3)

Prerequisites: ART 340, 444.

Designed to explore camera, laboratory techniques and professional practices as applied to studio work in photography. Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

449. Experimental Practices in Photography (3)

Prerequisites: ART 340.

Course work to generate experimental solutions to conceptual problems. Emphasis placed on contemporary approaches to the photograph and the exploration of new ideas for the development of photographic art.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

450A. Sculpture/4D: Intermedia/New Genres (3)

Prerequisites: ART 241 or 263, or consent of instructor.

Exploration of media and strategies including performance, installation, video, electronic and other time-based practice with emphasis on participatory, relational, installation and presentational concerns.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

450B. Sculpture/4D: Intermedia/New Media (3)

Prerequisite: ART 450A or consent of instructor.

Continuation of ART 450A. Exploration of media and strategies including performance, installation, video, electronic and other time-based practice with emphasis on newly developed and emergent media.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

451A-B. Advanced Ceramics (3-3)

Prerequisite: A: ART 343A or 343B. B: ART 451A.

Individual problems in ceramics.

(6 hrs. lab.) Letter grade only (A-F).

453. Seminar in Ceramic Arts (3)

Prerequisite: Senior Ceramics major or consent of instructor.

Critical analysis of work of historical and contemporary ceramic artists; the changing role of ceramic art as it becomes part of the contemporary art mainstream.

May be repeated to a maximum of 6 units with different artists in different semesters. Letter grade only (A-F).

454A,B. Advanced Wood (3,3)

Prerequisites: ART 354A and 354B.

Development of individual problems and expression in creation of wooden art/craft structures. Emphasis on exploring personal expression through focused study of chosen techniques and discussion of related wood issues and aesthetics.

(6 hrs. lab) Letter grade only (A-F).

458A,B. Advanced Metalsmithing/ Jewelry and Enameling (3,3)

Prerequisites: ART 357B, 358B or consent of instructor.

Individual problems in metalsmithing, jewelry, enameling and architectural metalwork and blacksmithing.

Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

460A. Sculpture/4D: Advanced (3)

Prerequisite: ART 360A or consent of instructor.

Within problem-solving assignments, students work with media and content of choice, exploring new material. Utilizes strategies such as installations, site work, time-based art, and includes some theory and discussions on art-related issues.

(6 hrs. lab) Letter grade only (A-F).

460B. Sculpture/4D: Advanced (3)

Prerequisite: ART 460A or consent of instructor.

Within problem-solving assignments, students work with media and

content of choice, exploring new materia. Utilize strategies such as installations, site work, time-based art, includes some theory and discussions on art-related issues.

(6 hrs. lab) Letter grade only (A-F).

461. Sculpture/4D: Advanced Sculpture from Observation (3)

Prerequisites: ART 361 or consent of instructor.

Historical, theoretical and technical emphasis on a wide array of approaches in observational study: from figurative traditions, to interpretive abstraction, as well as observational study as an exploration of the social field. Non-medium specific.

Letter grade only (A-F) Course fee may be required. (6 hrs. lab.)

471A,B. Advanced Illustration (3,3)

Prerequisites: For ART 471A: ART 371B: For ART 471B: ART 471A. Illustration in part from live models.

ART 471B is open only to students in the Illustration option. Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

472./572. Storyboarding for Film and Television (3)

Prerequisites: ART 130, 181, 184, 271 or consent of instructor.

Storyboarding for television and feature films application. Focus on sequential structure of film including pacing and continuity related to storytelling. Discussion of camera movement, uses of storyboards. Emphasis on drawing skills needed to visually communicate ideas for entertainment industry.

(6 hrs. lab.) Letter grade only (A-F). Course fee may be required.

473./573. Seminar in Photo-Based Art (3)

Prerequisite: for 473: ART 406A, or 444, or consent of instructor.

Critical analysis of work by contemporary photo-based artists and investigation of relevant theoretical issues.

May be repeated to a maximum of 6 units with rotating topics in different semesters. Letter grade only (A-F).

474./574. Seminar in Sculpture and Time-Based Art (3)

Prerequisites: ART 261 or 263, or consent of instructor.

Critical analysis of contemporary sculpture and time-based art practice, and investigation of key theoretical, historical and contemporary issues.

Letter grade only. May be repeated to a maximum of 6 units in different semesters.

475./575. Printmaking: Photo and Digital Processes (3)

Prerequisites: ART 130, 181; 3 units from AH 111A, 111B.

Instruction in the photo printmaking processes for lithography, etching, and silkscreen using digital and analog techniques to explore photographic and non-photographic imagery.

(6 hrs. lab.) Letter grade only (A-F).

476./576. Experimental Animation 1 (3)

Prerequisites: For 476: ART 130, 131, 181, 184. For 576: graduate student in Art or consent of instructor.

Investigation of a variety of basic animation techniques as alternatives to traditional hand-drawn character animation with emphasis on understanding movement, weight, timing, and sequential aesthetics.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

478./578. Experimental Animation 2 (3)

Prerequisite: For ART 478: ART 476. For ART 578: ART 576.

Further investigation of principles and techniques of alternative approaches to traditional hand-drawn character animation learned in Art 476. Focus on weight, movement, timing, and time-based aesthetic strategies. Provides continued development of animating skills. Specific coordinating computer software is used.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

Art Courses (ART)

480./580. Printmaking: Monotype/Monoprint (3)

Prerequisites: ART 130, 181; 3 units from AH 111A, 111B.

Instruction in all aspects of monotype and monoprint form of printmaking as expansive medium capable of diverse applications and linkages with other procedures and disciplines. Emphasis on extension and refinement of individual expression. Black and white and color.

(6 hrs. lab.) Letter grade only (A-F).

481. Advanced Drawing (3)

Prerequisite: ART 381.

Advanced problems and concepts in drawing designed to explore modes of representation and issues pertaining to contemporary drawing.

(6 hrs. lab.) Letter grade only (A-F).

482./582. Sequential Imagery (3)

Prerequisites: ART 223 or consent of instructor

Focuses on the book or magazine (electronic or print) as an art form and the image/word relationship within the context of sequential aesthetics. Addresses the editorial and visual issues of pacing, continuity, and closure.

Letter grade only (A-F). Course fee may be required. (6 hrs lab.)

483. Advanced Life Painting (3)

Prerequisite: ART 383.

Continued study in painting from the human figure with emphasis on pictorial structure, color and individual expression.

Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

484. Advanced Life Drawing (3)

Prerequisites: ART 384 or consent of instructor.

Continued study in drawing the human figure from observation with emphasis on structure, form and composition, as well as individual expression.

Course fee may be required. (6 hrs. lab.) Letter grade only (A-F).

486. Media Design: Advanced Topics (3)

Prerequisites: ART 365 or 366 or equivalent, or consent of instructor.

Advanced course developing student's ability to create interactive experiences. Students start building smart interactions within non-linear environments and/or narrative structures.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

487. Advanced Painting (3)

Prerequisite: ART 387.

Continued study in studio painting, exploring advanced modes of pictorial structure with emphasis on individual expression.

(6 hrs. lab.) Letter grade only (A-F).

489. Selected Topics in Visual Art (1-3)

Prerequisite: Consent of instructor.

Topics of current interest in the visual arts selected for intensive study.

May be repeated to a maximum of 12 units with different topics. Topics announced in the *Schedule of Classes*.

490. Selected Topics in Studio Art (1-3)

Prerequisites: Consent of instructor.

Topics of current interest in the visual arts selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 12 units with different topics. Topics announced in the *Schedule of Classes*. (6 hrs. lab.)

491A. Ceramics: Senior Project (1)

Prerequisite: ART 451A or 451B or consent of instructor.

Planning, preparation, completion, and photographic slide documentation of a creative exhibition and written thesis as approved by faculty.

Should be taken in last semester before graduation. Required of all BFA ceramics majors. Letter grade only (A-F). May be repeated to a maximum of 2 units.

491B. 3-D Media-Senior Project (1)

Prerequisite: 3-D Media major or consent of instructor.

Organizing, completing, and photographing (35mm slides) a creative exhibition of their work. Exhibition culminates with written thesis with faculty approval.

Should be taken in the last semester before graduation. Required of all 3-D Fiber, Wood, Metal and Integrated Media majors. Credit/No Credit grading only. May be repeated to a maximum of 2 units in the same semester.

491C. Photography – Senior Project (1) F,S

Planning, preparation, completion, and photographic slide documentation of a creative exhibition and written thesis as approved by faculty.

Should be taken in the last semester before graduation. Required of all Photography majors. Credit/No Credit grading only. May be repeated to a maximum of 2 units.

491E. Illustration/Animation Senior Project (1)

Prerequisites: Senior Illustration/Animation Major.

Planning, preparation, and participation in program group exhibition. Submission of digital files of artwork from exhibition to program head. Required by all Illustration/Animation majors. Should be taken in the final semester of student's BFA program. Credit/No Credit grading only. (2 hrs. lab)

491F. Sculpture/4D Senior Project (1)

Prerequisites: Senior Sculpture major; consent of instructor.

Students complete work, organize exhibition and write an Artist's Statement.

Required by all Sculpture majors. Should be taken in the final semester of a student's BFA program. Credit/No Credit grading only.

491G. Drawing and Painting: Senior Project (1)

Prerequisite: ART 496A. Corequisite: ART 496B.

Planning and installation of a public exhibition of creative work completed in ART 496 A-B.

Credit/No credit grading only. (2 hours lab.)

491P. Printmaking: Senior Project (1)

Planning, preparation, completion, and photographic slide documentation of a creative exhibition and a written expanded artist's statement as approved by faculty.

Should be taken in the last semester before graduation. Required of all Printmaking majors. Credit/No Credit grading only. May be repeated to a maximum of 2 units.

492F. Concentrated Studies in Life Drawing (3)

Prerequisites/Corequisites: ART 384 or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in life drawing.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. Course fee may be required. (6 hrs. lab.)

492G. Concentrated Studies in Abstract Painting (3)

Prerequisites/Corequisites: ART 387 or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in abstract and nonobjective painting and drawing.

May be repeated to a maximum of 3 units in the same semester and 9 units in different semesters. (6 hrs. lab.) Letter grade only (A-F).

492Z./592Z. Concentrated Studies in Life Painting (3)

Prerequisite: ART 383 or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in painting the human figure. A more open relationship in attitudes and processes of working from the figure in class and total self-direction on work done outside the class.

Letter grade only (A-F). May be repeated to a maximum of 3 units in the same semester and 9 units in different semesters. Course fee may be required. (6 hrs. lab.)

495. Field Studies in Art (1-6)

Independent work with an instructor of student's choice, usually outside area of specialization.

Department Chair or Undergraduate Advisor/Graduate Advisor approval, restricted to undergraduate and graduate art majors. (2-12 hrs. lab.) Letter grade only (A-F).

496A. BFA Capstone: Drawing and Painting (3)

Prerequisites: Drawing and Painting major. Completion of 6 to 12 units of required 400 level classes in Drawing and Painting including (but not limited to) ART 481 or 487 and ART 483 or 484.

Extensive work with faculty supervision on individual problems in drawing and/or painting. First of two sequential semesters, limited to three units each semester, totaling 6 units as the culmination of a student's BFA degree program in Drawing and Painting. Letter grade only (A-F) (6 hours lab.)

496B. BFA Capstone: Drawing and Painting (3)

Prerequisite: ART 496A. Corequisite: ART 491G.

Extensive work with faculty supervision on individual problems in drawing and/or painting. Second of two sequential semesters, limited to three units each semester, totaling 6 units as the culmination of a student's BFA degree program in Drawing and Painting.

Letter grade only. (6 hours lab.)

499A. Special Studies in Ceramics (3)

Prerequisite: Ceramics major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in ceramics.

May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. (6 hrs. lab.) Letter grade only (A-F).

499B. Special Studies in Wood (3)

Prerequisite: ART 354B or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems using wood as the media.

May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. (6 hrs. lab.)

499D. Special Studies in Drawing (3)

Prerequisite: ART 381; Drawing and Painting Major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in drawing.

May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. (6 hrs. lab.)

499E. Special Studies in Animation (3)

Prerequisite: Illustration /Animation Major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems related to animation.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. (6 hrs. lab.)

499F. Special Studies in Illustration (3)

Prerequisite: Illustration major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in illustration or biomedical art.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. (6 hrs. lab.)

499J. Special Studies in Metalsmithing and Jewelry (3)

Prerequisite: ART 458A or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in metalsmithing and jewelry.

Letter grade only (A-F). Course fee may be required. May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. (6 hrs. lab.)

499K. Special Studies in Painting (3)

Prerequisites: ART 387, Drawing and Painting Major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in drawing and/or painting.

Letter grade only (A-F). May be taken for a maximum of 3 units in the same semester and a maximum of 9 units in different semesters. 6 hours lab.)

499M. Special Studies in Life Sculpture (3)

Prerequisite: Sculpture major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in sculpture.

Letter grade only (A-F). May be repeated to a maximum of 3 units in the same semester and 9 units in different semesters. (6 hrs. lab.) Course fee may be required.

499N. Special Studies in Fiber and Mixed Media (3)

Prerequisite: 3-D Media major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in textile design.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. (6 hrs. lab.)

499O. Special Studies in Sculpture/4D (3)

Prerequisites: Sculpture major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in sculpture.

May be repeated to a maximum of 6 units in the same semester and a total of 9 units in different semesters. Letter grade only (A-F). (6 hours lab.)

499P. Special Studies in Art Education (3)

Prerequisite: Art Education major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in art education.

May be repeated to a maximum of 6 units in the same semester and a total of 9 units in different semesters. Letter grade only (A-F). (6 hrs. lab.)

499R. Special Studies in Printmaking (3)

Prerequisite: Printmaking major or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in printmaking.

May be repeated to a maximum of 6 units in the same semester and a total of 9 units in different semesters. Letter grade only (A-F). (6 hrs. lab.)

499S. Special Studies in Graphic Design (3)

Prerequisite: Graphic Design major or consent of instructor.

Opportunity for extensive contract work with faculty supervision on problems in visual communications design.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and a total of 9 units in different semesters. (6 hrs. lab.)

Art Courses (ART)

499V. Special Studies in Art Photography (3)

Prerequisites: ART 406A, or 444, or consent of instructor.

Opportunity for extensive work, with faculty supervision, on individual problems in photography as an art form.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and a total of 9 units in different semesters. Course fee may be required. (6 hrs. lab.)

GRADUATE LEVEL

501./401. Cross-cultural and Community-based Practices in Art (3)

Study of theory and practice in art within a cross-cultural and social justice framework. Applies pedagogical and experiential methodologies to art education practices in a community-based setting. A minimum of 15 hours of community service learning required.

Letter grade only (A-F). (6 hrs. lab.)

506A./406A. Digital Imagery for the Arts (3)

Prerequisites: ART 149, 340, or consent of instructor.

Examination of digital imaging through Adobe Photoshop software. Emphasis on relationship of digital imaging to photography. Exercises to develop skills, strategies and fluency for working in digital media. Concentration on theory of media and representation as well as individual projects.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required. May be repeated to a maximum of 9 units in different semesters.

506B./406B. Advanced Digital Imagery for the Arts (3)

Prerequisites: ART 406A, 444, or consent of instructor.

Exploration of theory and practice of digital imaging and advanced techniques. Emphasis on multimedia and individual projects.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required. May be repeated to a maximum of 9 units in different semesters.

508./408. Perspectives in Contemporary Art Education (3)

Examines historical and philosophical foundations of art education globally from antiquity to the present, emphasizing developments in America. Social, political, and economic factors; theoretical developments; notable theoreticians are explored in relation to contemporary art educational practice.

Letter grade only (A-F). May be repeated for a maximum of 6 units in different semesters.

509A-B. Research in Art Education (2-2)

Prerequisite: Art Education major or consent of instructor.

Advanced individual graduate problems in art education with projects related to specific learning situations.

Letter grade only (A-F) May be repeated to a maximum of 9 units in different semesters.

512./412. Aesthetic Theories and Art Education (3)

Past and current philosophical writings of aestheticians, critics, artists, and art educators will be investigated with theoretical, practical, and cross-cultural implications for the arts educator.

Letter grade only (A-F).

514./414. Documentary Photography (3)

Prerequisites: ART 340, 444, or consent of instructor.

History, theory, practice, and production of still documentary photographic works with emphasis on the photograph as an instrument for social influence and change.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.) May be repeated to a maximum of 9 units in different semesters.

516./416. Animation 3 (3)

Prerequisites: ART 392 or consent of instructor.

Pursuit of advanced skills in traditional hand-drawn 2D animation principles and techniques that allow students to develop towards professional standards. Emphasis will be on character performance and acting, directing and film making, and creating a professional reel.

Letter grade only (A-F). Course fee may be required. (6 hrs. lab.)

519./419 Media Design: 5D; Designing the Future (3)

Advanced Media Design Course, emphasizing the invention of new design paradigms in the evolving landscape of immersive technologies.

Letter grade only (A-F). (6 hours lab)

517./417. Animation 4 (3)

Prerequisites: ART 516 or consent of instructor.

Further development in advanced traditional hand-drawn 2D animation principles and techniques that allow students to continue towards professional standards. Focus will be on completion of short animated projects for inclusion on a professional animation reel.

Letter grade only (A-F). (6 hrs. lab.)

526./426. Computer Animation 1 (3)

Prerequisites: ART 391 or 476 or consent of instructor.

Introduction to animating with 3D computer animation software. Explore basic three-dimensional computer generated animation, including modeling, rigging, lighting, texturing and camera set-up with emphasis on character animation. Integration of elements within the animation process will be investigated.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

527./427. Computer Animation 2 (3)

Prerequisite: ART 526

Continued investigation of 3D computer generated animation using industry standard computer software. Focus will be on advanced character animation with an emphasis on character performance and advanced computer animation techniques.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

536A./436A. Sculpture/4D: Video Art (3)

Prerequisite: Graduate M.F.A student or consent of instructor.

Historical/theoretical and practical/technical introduction to digital video and other art practices involving digital media.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required.

536B./436B. Sculpture/4D: Video Art (3)

Prerequisite: ART 436A or 536A.

Continuation of ART 536A with more advanced projects, introduction of more specialized software and equipment, and alternative modes of display.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required. May be repeated to a maximum of 9 units in different semesters.

540./440. Art in Public Places: Theory and Practice (3)

Prerequisites: ART 130, 131, and 6 units selected from AH 111A, 111B, or consent of instructor.

Exploration of theory and practice of developing, proposing and producing artist-initiated and commissioned temporary and permanent works for the public sphere. Historical overview of the field of public art. Consideration of viewpoints influencing evaluation, production, selection, and commissioning of works.

Letter grade only (A-F). (6 Hrs. Lab.) May be repeated to a maximum of 9 units in different semesters.

544./444. Fine Print Photography (3)

Prerequisite: ART 340.

Presentation of advanced printing techniques and darkroom skills. Including printing chemistry, refined negative making, printing

materials and supports. Extensive exploration of the view camera.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required. May be repeated to a maximum of 9 units in different semesters.

547./447. Photo Studio Specialties (3)

Prerequisite: ART 340.

Designed to give exploration of camera and laboratory techniques as applied to studio work in photography. Related photo assignments of studio and location problems will be given

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required. May be repeated to a maximum of 9 units in different semesters.

549./449. Experimental/Alternative Practices in Photography (3)

Prerequisite: ART 340.

Experimental solutions to conceptual problems. Emphasis on Alternative Processes, non-traditional photographic processes, exploration of new ideas and procedures for the development of art work and meaning significant to each individual student.

Letter grade only (A-F). (6 hrs. lab.) Course fee may be required. May be repeated to a maximum of 9 units in different semesters.

550. Sculpture/4D: Intermedia/New Genres/New Media (3)

Prerequisites: Graduate M.F.A student or consent of instructor.

Exploration of media and strategies including performance, installation, video, electronic and other time-based practice with emphasis on participatory, relational, installational and presentational concerns and newly developed and emergent media.

Letter grade only (A-F). May be repeated to a maximum of 9 units in different semesters. Course fee may be required. (6 hours lab)

551A. Advanced Ceramics – Graduate (3)

Prerequisite: ART 451B.

Opportunity for beginning graduate students to do research employing various ceramics materials, processes and visual solutions in preparation for a more narrow and concentrated study.

Letter grade only (A-F).(6 hrs. lab.) May be repeated to a maximum of 9 units in different semesters.

551B. Advanced Ceramics – Graduate (3)

Prerequisite: ART 551A.

Selection of a specific area of concentration in ceramics, limiting the materials and processes to develop a project which will reflect a predetermined statement.

Letter grade only (A-F). (6 hrs. lab.) May be repeated to a maximum of 9 units in different semesters.

554A,B. Wood – Graduate (3,3)

Prerequisites: ART 454B or consent of instructor.

Development of individual problems and expression in the creation of wooden art/craft structures. Emphasis on exploring personal expression through focused study of chosen techniques and the discussion of related wood issues and aesthetics.

Letter grade only (A-F). (6 hrs. lab) May be repeated to a maximum of 9 units in different semesters.

558A. Metalsmithing, Jewelry and Enameling (3)

Prerequisite: 3-D Media major or consent of instructor.

Individual graduate level studio projects involving investigation of materials, processes and visual solutions in preparation for more concentrated study in metalsmithing, jewelry, enameling, or architectural metalwork and blacksmithing.

Letter grade only (A-F). Course fee may be required. May be repeated to a maximum of 9 units in different semesters. (6 hrs. lab.)

558B. Metalsmithing, Jewelry and Enameling (3)

Prerequisite: 3-D Media major or consent of instructor.

Selection of a specific area of concentration in metalsmithing and jewelry, enameling, or architectural metalwork and blacksmithing; focus on creative objectives based on a projected theme.

Letter grade only (A-F). Course fee may be required. May be repeated to a maximum of 9 units in different semesters. (6 hrs. lab.)

564A,B. Advanced Wood Studio – Graduate (3,3)

Prerequisites: ART 354B or consent of instructor.

Development of individual skill, technique, and concept through the exploration of a unique and personal language in wood. Creation of body of work supported by research projects on related work and concepts in the field.

Letter grade only (A-F). (6 hrs. lab) May be repeated to a maximum of 9 units in different semesters.

572./472. Storyboarding for Film and Television (3)

Prerequisites: ART 130, 181, 184, 271 or consent of instructor.

Storyboarding for television and feature films application. Focus on sequential structure of film including pacing and continuity related to storytelling. Discussion of camera movement, uses of storyboards. Emphasis on drawing skills needed to visually communicate ideas for entertainment industry.

Letter grade only (A-F). May be repeated to a maximum of 9 units in different semesters. Course fee may be required. (6 hrs. lab.)

573./473. Seminar in Photo-Based Art (3)

Prerequisite: Graduate student in Art.

Critical analysis of work by contemporary photo-based artists and investigation of relevant theoretical issues.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different artists in different semesters.

574./474. Seminar in Sculpture and Time-Based Art (3)

Critical Analysis of contemporary sculpture and time-based art practice, and investigation of key theoretical, historical and contemporary issues.

Letter grade only (A-F).

575./475. Printmaking: Photo and Digital Processes (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Instruction in the photo printmaking processes for lithography, etching, and silkscreen using digital and analog techniques to explore photographic and non-photographic imagery.

Letter grade only (A-F). (6 hrs. lab.) May be repeated to a maximum of 9 units in different semesters.

576./476. Experimental Animation 1 (3)

Prerequisites: Graduate student in Art or consent of instructor.

Investigation of a variety of basic animation techniques as alternatives to traditional hand-drawn character animation with emphasis on understanding movement, weight, timing, and sequential aesthetics.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

578./478. Experimental Animation 2 (3)

Prerequisite: ART 576.

Further investigation of principles and techniques of alternative approaches to traditional hand-drawn character animation learned in Art 576. Focus on weight, movement, timing, and time-based aesthetic strategies. Provides continued development of animating skills. Specific coordinating computer software is used.

Letter grade only (A-F). Course fee may be required. (6 hours lab)

580./480. Printmaking: Monotype/Monoprint (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Instruction in all the aspects of the monotype and monoprint form of printmaking as an expansive medium capable of diverse applications and linkages with other procedures and disciplines. Emphasis will be on the extension and refinement of individual expression. In black and white and color.

Letter grade only (A-F). (6 hrs. lab.) May be repeated to a maximum of 9 units in different semesters.

Art Courses (ART)

582./482. Sequential Imagery (3)

Prerequisites: ART 223 or consent of instructor.

Focuses on the book or magazine (electronic or print) as an art form and the image/word relationship within the context of sequential aesthetics. Addresses the editorial and visual issues of pacing, continuity, and closure.

Letter grade only (A-F). (6 hrs lab) May be repeated to a maximum of 9 units in different semesters. Course fee may be required.

583. Advanced Life Graduate Painting (3)

Prerequisite: Graduate M.F.A. student or consent of instructor.

An intensive studio course in painting from the model for graduate students.

Letter grade only (A-F). Course fee may be required. May be repeated to a maximum of 9 units in different semesters. (6 hrs. lab.)

589. Selected Topics in Visual Art (1-3)

Prerequisites: Consent of instructor.

Topics of current interest in the visual arts selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 12 units with different topics. Topics announced in the *Schedule of Classes*.

590. Selected Topics in Studio Art (1-3)

Prerequisites: Consent of instructor.

Special topics of current interest in studio art will be selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 12 units with different topics. Topics announced in the *Schedule of Classes*. (2-6 hrs. lab.)

A. Visiting Artists

592Z./492Z. Graduate Concentrated Studies in Life Painting (3)

Prerequisite: Graduate M.F.A. student or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in painting the human figure. A more open relationship in attitudes and processes of working from the figure in class and total self-direction on work done outside class.

Letter grade only (A-F). May be repeated to a maximum of 3 units in the same semester and 9 units in different semesters. Course fee may be required. (6 hrs. lab.)

597A. Graduate Studies: Ceramics (3)

Prerequisites: Graduate M.F.A student or consent of instructor.

Variable topics course within discipline of Ceramics. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597B. Graduate Studies: Wood (3)

Prerequisites: Graduate M.F.A student or consent of instructor.

Variable topics course within discipline of Wood. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597D. Graduate Studies: Drawing (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Drawing. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597F. Graduate Studies: Illustration/Animation (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Illustration/Animation. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597J. Graduate Studies: Metal (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Metal. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597K. Graduate Studies: Painting (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Painting. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6hrs. lab)

597L. Graduate Studies: Life Drawing and Painting (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Life Drawing and Painting. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. Course fee may be required. (6 hrs. lab)

597M. Graduate Studies: Life Sculpture (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Life Sculpture. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597N. Graduate Studies: Fiber (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Fiber. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597O. Graduate Studies: Sculpture/4D (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Sculpture/4D. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597R. Graduate Studies: Printmaking (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Printmaking. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597S. Graduate Studies: Visual Communication Design (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Variable topics course within discipline of Visual Communication Design. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

597V. Graduate Studies: Photography (3)

Prerequisites: Graduate M.F.A student or consent of instructor.

Variable topics course within discipline of Photography. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598A. Graduate Studies: Advanced Ceramics (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597A.

Variable topics course for advanced graduate study within discipline of Ceramics. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598B. Graduate Studies: Advanced Wood (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597B.

Variable topics course for advanced graduate study within discipline of Wood. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598D. Graduate Studies: Advanced Drawing (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597D.

Variable topics course for advanced graduate study within discipline of Drawing. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598F. Graduate Studies: Advanced Illustration/Animation (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597F.

Variable topics course for advanced graduate study within discipline of Illustration/Animation. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598J. Graduate Studies: Advanced Metal (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597J.

Variable topics course for advanced graduate study within discipline of Metal. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598K. Graduate Studies: Advanced Painting (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597K.

Variable topics course for advanced graduate study within discipline of Painting. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598L. Graduate Studies: Advanced Life Drawing and Painting (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597L.

Variable topics course for advanced graduate study within discipline of Life Drawing and Painting. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. Course fee may be required. (6 hrs. lab)

598M. Graduate Studies: Advanced Life Sculpture (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597M.

Variable topics course for advanced graduate study within discipline of Life Sculpture. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598N. Graduate Studies: Advanced Fiber (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597N.

Variable topics course for advanced graduate study within discipline of Fiber. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598O. Graduate Studies: Advanced Sculpture/4D (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597O.

Variable topics course for advanced graduate study within discipline of Sculpture/4D. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6hrs. lab)

598R. Graduate Studies: Advanced Printmaking (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597R.

Variable topics course for advanced graduate study within discipline of Printmaking. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6hrs. lab)

598S. Graduate Studies: Advanced Visual Communication Design (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597S.

Variable topics course for advanced graduate study within discipline of Visual Communication Design. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

598V. Graduate Studies: Advanced Photography (3)

Prerequisites: Graduate M.F.A. student and 12 units ART 597V.

Variable topics course for advanced graduate study within discipline of Photography. Studio, activity, critique, and discussion course with focus and assignments changing each semester.

Letter grade only (A-F). May be repeated to a maximum of 12 units; 9 units in the same semester with different instructors. (6 hrs. lab)

599. Graduate Studies: Special Studio (3)

Prerequisites: Graduate MFA Student and consent of Instructor and consent of Department of Art Graduate Advisor

Specialized graduate studio projects, with faculty supervision, in a specific discipline.

Letter grade only (A-F). May be repeated to a maximum of 9 units with same topic in the same semester. Area will be designated by letter at time of registration. (6 hrs lab)

- A. Ceramics
- B. Wood
- D. Drawing
- F. Illustration/Animation
- J. Metal
- K. Painting
- L. Life Drawing and Painting (course fee may be required)
- M. Life Sculpture
- N. Fiber
- O. Sculpture/4D
- R. Printmaking
- S. Visual Communication Design
- V. Photography

Art Courses (ART)

601A-B. Seminar in Art Education (3-3)

Prerequisite: Graduate student in Art Education or consent of instructor.

Special studies, research and evaluation of the role of the art teacher.

ART 601A is required for the M.A. in Art Education; ART 601B may be required by the student's M.A. committee. Letter grade only (A-F).

651. Seminar in Ceramic Art (3)

Prerequisite: Graduate student in Ceramics or consent of instructor.

Critical analysis of work of historical and contemporary ceramic artists; the changing role of ceramic art as it becomes part of the contemporary art mainstream.

May be repeated to a maximum of 12 units with different artists in different semester. Letter grade only (A-F).

680. Graduate Interdisciplinary Critique (3)

Critique and discussion forum for graduate students in all areas of studio practice, and from all Department of Art programs. Emphasis on development of critical discussion and writing skills. Group meetings and individual meetings with instructor.

Letter grade only (A-F). May be repeated to a maximum of 9 units in different semesters. Not open for credit to students with credit in ART 591.

681. Graduate Studies: Art Theory/Criticism (3)

Prerequisite: Graduate M.F.A. student or consent of instructor

Seminar involving selected reading and writing concerning topics relevant to student's specific disciplines on the visual arts with an opportunity for interdisciplinary discussion.

Letter grade only (A-F). Not open for credit to students with credit in ART 690A. May be repeated to a maximum of 6 units in different semesters.

682. Graduate Studies: Professional Practices for Studio Art (3)

Prerequisite: Graduate M.F.A. student or consent of instructor.

Seminar involving professional preparation for studio artists stressing practical concerns as well as current trends in art practices, theory and criticism.

Letter grade only (A-F). Not open for credit to students with credit in ART 690B.

683. Graduate Studies: Image as Text (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Seminar focusing on issues of readability, signification meaning and ramifications of the construction and organization of visual imagery with emphasis on visual communications applications.

Letter grade only (A-F).

684. Graduate Studies: Professional Practices for Visual Communication (3)

Prerequisites: Graduate M.F.A. student or consent of instructor.

Seminar involving professional preparation for illustrators, graphic designers, and individuals interested in entering visual communications fields.

Letter grade only (A-F).

690M. 3-D Graduate Seminar (3)

Graduate seminar for 3D students. Examination of media, concerns, strategies relevant to the spectrum of contemporary three-dimensional art production. Includes critique of student work, readings, discussion and written assignments.

May be repeated to a maximum of 3 units in one semester and 9 units in different semesters. Letter grade only (A-F).

692. Project Exhibition (3)

Prerequisite: Advancement to Candidacy and a registration in ART 698 or 699. Open only to M.A. and M.F.A. candidates with Project Statement approval, consent of their graduate committee and an assigned exhibition date.

Planning, preparation, and installation of a public exhibition of creative work done for ART 698 or 699.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

693. Teaching Internship (3)

Opportunity to work with full-time Art faculty mentor on course preparation and instruction. Required for eligibility for Graduate Teaching Associate positions.

Restricted to graduate art majors. Letter grade only (A-F). May be repeated to a maximum 6 units. (6 hrs. lab.)

694. Graduate Studies: Directed Studio (1)

Independent studies in creative studio.

Department Chair or Graduate Advisor approval, restricted to graduate art majors. Student must enroll in three sections concurrently. Nine units required for MFA degree. No more than 9 units may be applied to MFA degree.

Letter grade only (A-F). May be repeated to a maximum of 12 units in the same semester.

695. Graduate Studies: Field Problems (1-6)

Opportunity to study artistic monuments, objects, theories, techniques or literature at appropriate off campus locations.

Department Chair or Graduate Advisor approval, restricted to graduate art majors. Letter grade only (A-F). May be repeated to a maximum of 12 units in different semesters. (2-12 hrs. lab.)

697. Graduate Studies: Directed (1-3)

Independent studies in technical and/or historical aspects of art.

Department Chair or Graduate Advisor approval, restricted to graduate art majors. Letter grade only (A-F). May be repeated to a maximum of 12 units in the same semester. (2-6) hrs. lab.

698A. Art Education Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and an approved Thesis or Project Statement.

Execution and completion of an approved thesis, or project, project report, documentation, orals and comprehensive exam. Open only to Art Education students. Required of all candidates for the MA in Art, specialization in Art Education.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester.

698B. Studio Project (1-6)

Prerequisite: Advancement to Candidacy and an approved project statement. Execution and completion of an approved Studio Project and Project Report for the MA degree. Open only to Studio Art students. Required of all candidates for the MA in Art, specialization in Studio Art. Letter grade only (A-F).

May be repeated to a maximum of 6 units in the same semester.

699. Graduate Studies: MFA Project (2)

Prerequisite: MFA Art Student, Advancement to Candidacy and an approved Project Statement.

Execution and completion of a Studio Project and Project Report for the M.F.A. degree. Student must enroll in three sections concurrently. To be taken with each of three M.F.A. committee members for a total of 6 units in the final semester of study. No more than 6 units may be applied to the M.F.A. degree.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester.

Art History Courses (AH)

LOWER DIVISION

111A. Foundation Art History I (3)

Prerequisites: One GE Foundation course.

Chronological survey of art as an integral part of Western Culture from pre-History through the Middle Ages.

Not open for credit to students with credit in AH 115B.

111B. Foundation Art History II (3)

Prerequisite: One GE Foundation course.

Chronological survey of art as an integral part of Western Culture from Proto-Renaissance to contemporary.

Not open for credit to students with credit in AH 115C.

112. Foundation Art History: Latin American Arts and Architecture (3)

Survey of arts and architecture of Mexico, Central America, and South America from 1200 BC to the late 20th century.

Letter grade only (A-F).

113A. Survey Asian Art: Early Sacred Cultures (3)

Prerequisite/Corequisite: One GE Foundation course.

Survey of art as an integral part of Asian culture: India and SE Asia, China, and Japan from earliest times to c. 1000.

Not open for credit to students with credit in ART 113A.

113B. Survey Asian Art: Later Traditions (3)

Prerequisite/Corequisite: One GE Foundation course.

Survey of art as an integral part of Asian culture: India and SE Asia, China, and Japan from earliest times from c. 1000 to 1900.

Not open for credit to students with credit in ART 113B.

114. Foundation Art History: Arts of Africa, Oceania, and Indigenous North America (3)

Survey of architecture, urban planning, art, and other aspects of visual culture in Africa, Oceania, and indigenous North America.

Letter grade only (A-F).

116. Foundation Art History: Arts of Islamic Regions (3)

Survey of architecture and visual culture in Islamic cultures from the 7th century to the present in North Africa, Spain, Southeast Asia, and the Islamic diaspora.

Letter grade only (A-F).

UPPER DIVISION

364. History of Ceramics 1900 to Present (3)

Survey of ceramic art in the United States from 1900 to the present. Consideration of American ceramic art within the context of contemporary art history, and of significant ceramic works in relation to modern and postmodern movements in art.

Letter grade only (A-F). Course fee may be required.

365. History of Prints and Drawings (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Historical survey of prints and drawings, with emphasis on technical and stylistic developments and on the role played by these media in relation to other arts through the 20th century.

Not open for credit to students with credit in ART 365. Letter grade only (A-F).

400./500. 19th Century Photography (3)

Prerequisite: AH 111B or consent of instructor.

Examination of 19th century photography.

Letter grade only (A-F).

401./501. American Art to 1900 (3)

Prerequisites: AH 111A, 111B or consent of instructor.

Survey of American art from the time of European settlement to roughly 1900 with special focus on cultural, political, and historical contexts. Combines slide lecture with discussion of primary and secondary readings.

Letter grade only (A-F).

402. The Rise of Landscape Painting (3)

Prerequisites: AH 111A, 111B or consent of instructor.

Examination of emergence and transformation of landscape painting in Europe and America between 1750 and 1850 with special focus on cultural, political, and historical contexts. Combines slide lecture with discussion of primary and secondary readings.

Letter grade only (A-F).

408./508. Early Christian and Byzantine Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Architecture, mosaics and sculpture of Rome, Ravenna and Constantinople from the decline of the Roman Empire to the end of the Byzantine era.

Not open for credit to students with credit in ART 408 or 598B.

Letter grade only (A-F).

409./509. Romanesque Art (3)

Prerequisites: AH 111A, or consent of instructor.

Arts of Northern Europe from Merovingian through the Romanesque periods.

Not open for credit to students with credit in ART 409 or 598C.

Letter grade only (A-F).

410./510. Gothic Art (3)

Architecture, sculpture, and painting in western Europe from the 12th through the 14th centuries, with special attention to the construction and decoration of the great cathedrals, and to the development of new approaches to style and content in the figural art of the 14th-century Italy.

Not open for credit to students with credit in ART 410 or 598D.

Letter grade only (A-F).

411./511. 20th Century Photography to the Present (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

History of 20th and 21st c. photography. Emphasis on critical issues ranging from the fine art print to photo-based arts, from the "truth" of documentary to constructed realities. Study of the camera's impact on modern and postmodern visual culture.

Not open for credit to students with credit in ART 411 or 511. Letter grade only (A-F).

415./515. Issues in Art History: Theory and Practice (3)

Prerequisites: AH 111A or 111B, Art Major or consent of instructor

Theoretical and practical considerations in the discipline of art history, specifically issues relating to art interpretation, classification, valuation, and circulation.

Letter grade only (A-F).

416./516. Greek Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Survey of Greek Art from beginnings in Aegean period through late Hellenistic period. Key monuments of architecture, sculpture, painting, vase-painting, and so-called minor arts discussed relative to contemporary theories, criticism, and history. Focus on techniques and materials of various arts.

Not open for credit to students with credit in ART 416 or 598E.

Letter grade only (A-F).

Art History Courses (AH)

417./517. Roman Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Survey of Italian arts before the Romans, including indigenous art of the Italic peoples and the Etruscans, and Roman Art from early Republic to Age of Constantine. Discussion of major art forms of architecture, painting, sculpture and so-called minor arts.

Not open for credit to students with credit in ART 417 or 598L. Letter grade only (A-F).

423./523. Early Renaissance Art in Italy (3)

Examination of stylistic and technical developments of fifteenth-century Italian painting, sculpture, and architecture, as well as interaction of cultural, social, and religious developments with visual arts. Special attention to the revival of classicism, and influence of private patrons.

Not open for credit to students with credit in ART 423 or 598F. Letter grade only (A-F). Course fee may be required.

424./524. High Renaissance Art in Italy (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of sixteenth-century Italian painting, sculpture, and architecture, emphasizing that of Florence, Venice, and Rome. Historical, cultural, religious, and theoretical framework. Special attention to works by a handful of major artists (Leonardo da Vinci, Michelangelo, Raphael, Titian, and the Mannerists).

Not open for credit to students with credit in ART 424 or 598G. Letter grade only (A-F).

425./525. Northern Renaissance Painting (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of artistic developments in Northern Europe, particularly Flanders, France, and Germany, from the 14th century through 16th century. Historical, cultural, and religious and theoretical framework. Special attention to iconography, and the changing role of the artist in society.

Not open for credit to students with credit in ART 425 or 598H. Letter grade only (A-F).

426./526. Baroque Art in Spain, the Netherlands, and England (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of intertwined political and artistic situations in Netherlands (Flanders and Holland), England and Spain during seventeenth and early eighteenth centuries. Emphasis on relationship between Rubens and Velasquez, contrast between Rubens and Rembrandt, and Flemish influence in England.

Not open for credit to students with credit in ART 426 or 598J. Letter grade only (A-F).

427./527. Baroque Art in Italy, France, and Germany (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Explores birth of Baroque in Rome, and role of Counter-Reformation in shaping artistic genres in Italy and France in early 17th century. Covers influence of Versailles court of "Sun King," Louis XIV, in late 17th and early 18th centuries, especially in independent Teutonic states.

Not open for credit to students with credit in ART 427 or 598K. Letter grade only (A-F).

430./530. Introduction to Curatorial Practices (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Study of contemporary art display theory/practice including exhibition typologies, curatorial models, and recent transformations in museums, galleries and the art market. Designed for Museum and Curatorial Studies Certificate students and others interested in studying museum practices within a broader context. Not open for credit to students with credit in AH 435B/535B.

Letter grade only (A-F).

431./531. History of Museums and Exhibitions (3)

Prerequisites: AH 111A, 111B or consent of advisor and instructor.

Study of history of art museums and how displays reflect social and cultural conditions and political ideologies. Attention to controversial exhibitions, and recent transformations in the field.

Class is required of students seeking Museum Studies Certificate and those pursuing MA with emphasis in Museum Studies. Not open for credit to students with credit in ART 435; AH 435, 435A, or 535A. Letter grade only (A-F).

436./536. Neo-Classicism to Romanticism, 1789-1850 (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of Neo-Classicism, Realism, Romanticism, photography and the academic tradition in art and culture of Europe from 1789-1850.

Not open for credit to students with credit in ART 436 or 598M. Letter grade only (A-F).

437./537. Impressionism to Post-Impressionism, 1850-1900 (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Analysis of the development of Impressionism and Post-Impressionism in France from 1850 to 1900.

Not open for credit to students with credit in ART 437 or 598N. Letter grade only (A-F).

438./538. Art of Early to Mid Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of key developments, trends, movements of the period including Abstraction, Non-Objective art, Expressionism, Dada, and Surrealism.

Letter grade only (A-F). Not open for credit to students with credit in ART 438 or 598P.

439./539. Art of Mid to Late Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of key developments, trends, movements of the period including Pop Art, Happenings, Minimal Art, Art and Technology, Environmental, Concept, Performance and Video Art.

Letter grade only (A-F). Not open for credit to students with credit in ART 439 or 598Q.

441./541. Contemporary Art in Context (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

International survey focusing on developments in art from late twentieth century to present. Examination of precedents, traditions, legacies behind current art. Consideration of critical/theoretical issues and factors influencing production and reception of current art.

Letter grade only (A-F).

444./544. History of Graphic Design (3)

Prerequisites: AH 111A and 111B, or consent of instructor.

Thematic approach to Graphic Design history, with consideration of pioneering designers, movements, and cultural, social, political and technological influences in the evolution of graphic design.

Not open for credit to students with credit in AH 366. Letter grade only (A-F).

446./546. Art History Methodologies and Writing (3)

Prerequisites: Undergraduate Art History major with senior standing or consent of instructor.

Practice in writing and conducting research in art history, and introduction to various methodologies and debates within the discipline, including biography, formalism, semiotics, gender studies, psychoanalysis, Marxism, post-colonialism, and visual culture studies.

Letter grade only (A-F).

447./547. Historiography of Art History (3)

Prerequisites: Undergraduate Art History major with senior standing or consent of instructor.

Study of the history of art history as intellectual discipline. Reading- and writing-intensive seminar designed specifically for undergraduate art history majors in final year of study and for graduate students in M.A. in Art History program.

Letter grade only (A-F). Not open for credit to students with credit in ART 307 or AH 307.

448./548. Western Art Theory and Criticism to the Mid-Nineteenth Century (3)

Prerequisites: Undergraduate Department of Art major and 111A and 111B, or consent of instructor.

A text-based examination of western art theory and criticism up to the mid-nineteenth century.

Letter grade only (A-F). Not open for credit to students with credit in AH 308.

449./549. Western Art Theory and Criticism Mid-Nineteenth to Mid-Twentieth Century (3)

Prerequisites: Undergraduate Department of Art major and 111A and 111B, or consent of instructor.

A text-based examination of western art theory and criticism from the mid-nineteenth to mid-twentieth centuries. Not open for credit to students with credit in AH 309.

Letter grade only (A-F).

450./550. Western Art Theory and Criticism Mid-Twentieth Century to Present (3)

Prerequisites: Undergraduate Department of Art major and 111A and 111B, or consent of instructor.

A text-based examination of western art theory and criticism from the mid-twentieth century to the present.

Letter grade only (A-F). Not open for credit to students with credit in AH 310.

455./555. Traditional Art of Africa: A Thematic Approach (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Exploration from a Western perspective of the conceptual, expressive, and aesthetic aspects of traditional African art as related to its cultural context and to Western concepts of art. Focus on West Africa.

Not open for credit to students with credit in ART 455 or 598R. Letter grade only (A-F).

456./556. American Indian Art: Western Perspectives (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Exploration from a Western perspective of the historically various and changing frames of reference surrounding perception, interpretation, and consideration of Native American art through focus on selected traditions.

Not open for credit to students with credit in ART 456 or 598S. Letter grade only (A-F).

457A./557A. Pre-Columbian Art: Mesoamerica (3)

Prerequisites: AH 112 or consent of instructor.

Art, architecture, and urban planning in Mesoamerica from 1200 BCE to the Spanish conquest of 1519-1521, with emphasis on religious, political, and economic functions, as well as interpretive assumptions and methods of scholars in the field.

Letter grade only (A-F).

457B./557B. Pre-Columbian Art: The Andes (3)

Prerequisites: AH 112 or consent of instructor.

Art, architecture, and urban planning in the Andean region from 1200 BCE to the Spanish conquest of 1532, with emphasis on religious, political, and economic functions, as well as interpretive assumptions and research methods of scholars in the field.

Letter grade only (A-F).

457C./557C. Pre-Columbian Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

A survey of art and architecture in Mesoamerica and the Andean region of South America from about 1000 BC to the Spanish conquest. Special attention will be focused on the social, political and economic contexts of objects and architecture from this period, as well as on the research methods and theoretical assumptions of scholars investigating this field.

Letter grade only (A-F). Not open for credit to students with credit in: AH 457.

458./558. Art of Latin America: 1800-1940 (3)

Prerequisites: AH 111B or consent of instructor.

Investigation of developments in visual culture in Latin America from the late-18th century to the mid-20th century, with special emphasis on artists in Argentina, Brazil, Colombia, Mexico, Uruguay, and Venezuela.

Letter grade only (A-F).

459./559. Art of Latin America: 1940–Present (3)

Prerequisites: AH 111B or consent of instructor.

Investigation of developments in visual culture in Latin America from the mid-20th century to the present, with special emphasis on artists in Argentina, Brazil, Chile, Colombia, Cuba, Mexico, and Venezuela, as well as Latino/Latina artists.

Letter grade only (A-F).

460./560. Art of Mexico: 1780 to Present (3)

Prerequisites: AH 111A, AH 111B, AH 112, or consent of instructor.

Fine art, graphic art, photography, popular art, and architecture produced by artists of/in Mexico from 1780 to the present, with emphasis on historical contexts, the varied functions objects were made to serve, and debates concerning production, circulation, and/or reception.

Letter grade only (A-F).

465./565. Ancient Art of the Near East (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Near Eastern, Egyptian and Aegean art.

Not open for credit to students with credit in ART 465 or 598U. Letter grade only (A-F).

466./566. Buddhist Art of India and S.E. Asia (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Formation and development of Buddhist art in India and subsequent metamorphoses in Cambodia, Thailand and Indonesia examined.

Not open for credit to students with credit in ART 466 or 598V. Letter grade only (A-F).

467./567. Hindu and Islamic Art of India (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Formation and development of Hindu art in India and the genesis, as well as transformation, of Islamic art of India compared to pan-Islamic characteristics will be examined.

Not open for credit to students with credit in ART 467 or 598W. Letter grade only (A-F).

468./568. Early Chinese Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Formation and development of Chinese art from third millennium to 10th century A.D.

Not open for credit to students with credit in ART 468 or 598X. Letter grade only (A-F).

469./569. Later Chinese Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Development of Chinese art from the 11th century A.D. through the culmination of the tradition and its transformation in the 20th century will be explored.

Not open for credit to students with credit in ART 469 or 598Y. Letter grade only (A-F).

Art History Courses (AH)

470A./570A. Japanese Buddhist Art to 1500 (3)

Prerequisite: One of the following: AH 113A, 113B, 111A, 111B, A/ST 393, 451, consent of instructor.

Survey of sacred architecture, sculpture, painting, gardens and decorative art from neolithic culture through Zen Buddhism, reading images in regard to religious, political and social values.

Not open for credit to students with credit in AH 470. Letter grade only (A-F).

470B./570B. Japanese Art 1500-1868 (3)

Prerequisite(s): AH 113A, 113B, 111A, 111B, A/ST 393, 451, or consent of instructor.

Analysis of secular painting, architecture, ceramics and garden design in the Momoyama and Edo periods, linking the wide variety of subjects and styles to the competing values of samurai, priest, aristocrat or merchant class patrons.

Not open for credit to students with credit in AH 470. Letter grade only (A-F).

471A./571A. Modern Japanese Graphic Art (3)

Prerequisite: One of the following: AH 113A, 113B, 111A, 111B, A/ST 393, 451, or consent of instructor.

Examination of painting, prints, photography and graphic design in regard to the issues of individual and national identity in an era when being modern was often linked to being Western. We also consider manga in regard to earlier modern adaptations of traditional design.

Not open for credit to students with credit in AH 471. Letter grade only (A-F).

471B./571B. Modern Japanese Plastic Art (3)

Prerequisite: One of the following: AH 113A, 113B, 111A, 111B, A/ST 393, 451, or consent of the instructor.

Investigation of architecture, gardens, sculpture and ceramics in light of debates over internationalism or nationalism, modernity or tradition. The political and economic implications of design choices will be highlighted.

Not open for credit to students with credit in AH 471. Letter grade only (A-F).

471C./571C. Modern Japanese Architecture (3)

Prerequisites: AH 113A or 113B or 111A; AH 111B.

Analysis of "Japaneseness" and "foreign-ness" in Japan between 1868 and 1970. Examination of Japanese creations of and reactions to "modernity" in regard to national identity as expressed in architecture and gardens. Related consideration of urbanism and nationalism.

Letter grade only (A-F).

495. Independent Study In Art History (1-6)

Independent research conducted under supervision of faculty member. Student and instructor must have on file in Department of Art office signed written agreement, established at beginning of course, outlining description of work, specific tasks required, nature of final report, and basis for determining final grade.

Letter grade only (A-F).

496. Special Studies in Art History (3)

Prerequisite: AH 447 or consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in art history.

Topics announced in the *Schedule of Classes*. May be repeated to a maximum of 9 units. Not open for credit to students with credit in ART 496. Letter grade only (A-F).

497./597. Seminar in Art History (3)

Prerequisite: Consent of instructor.

Directed individual research and group discussion concerning a topic

in art history.

Topics announced in the *Schedule of Classes*. May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. Not open for credit to students with credit in ART 497 or 611 beyond combined maximum units. Letter grade only (A-F).

498. Selected Topics in Art History (3)

Prerequisite: Consent of instructor.

Topics from selected areas of Art History. Content may vary each semester.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and a total of 12 units in different semesters. Topics announced in the *Schedule of Classes*.

499Q. Special Studies in Museum Studies (3)

Prerequisites: AH 431 or consent of instructor.

Opportunity for extensive individual work with faculty supervision on problems in museum studies, including utilizing the resources of The Center for Southern California Studies in the Visual Arts.

Letter grade only (A-F). May be repeated to a maximum of 3 units in the same semester and 9 units in different semesters. (6 hrs. lab.) Not open for credit to students with credit in ART 499Q.

500./400. 19th Century Photography (3)

Prerequisites: AH or ART graduate student, or consent of instructor.

Examination of 19th century photography.

Letter grade only (A-F).

501./401. American Art to 1900 (3)

Prerequisites: AH 111A, 111B or consent of instructor.

Survey of American art from the time of European settlement to roughly 1900 with special focus on cultural, political, and historical contexts. Combines slide lecture with discussion of primary and secondary readings.

Letter grade only (A-F).

502. The Rise of Landscape Painting (3)

Prerequisite(s): AH 111A, 111B or consent of instructor.

Examination of emergence and transformation of landscape painting in Europe and America between 1750 and 1850 with special focus on cultural, political, and historical contexts. Combines slide lecture with discussion of primary and secondary readings.

Letter grade only (A-F).

508./408. Early Christian and Byzantine Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Architecture, mosaics and sculpture of Rome, Ravenna and Constantinople from the decline of the Roman Empire to the end of the Byzantine era.

Not open for credit to students with credit in ART 408 or 598B.

Letter grade only (A-F).

509./409. Romanesque Art (3)

Prerequisites: AH 111A, or consent of instructor.

Arts of Northern Europe from Merovingian through the Romanesque periods.

Not open for credit to students with credit in ART 409 or 598C.

Letter grade only (A-F).

510./410. Gothic Art (3)

Architecture, sculpture, and painting in western Europe from the 12th through the 14th centuries, with special attention to the construction and decoration of the great cathedrals, and to the development of new approaches to style and content in the figural art of the 14th-century Italy.

Not open for credit to students with credit in ART 410 or 598D.

Letter grade only (A-F).

511./411. 20th Century Photography to the Present (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

History of 20th and 21st c. photography. Emphasis on critical issues ranging from the fine art print to photo-based arts, from the "truth" of documentary to constructed realities. Study of the camera's impact on modern and postmodern visual culture.

Not open for credit to students with credit in ART 411 or 511. Letter grade only (A-F).

515./415. Issues in Art History: Theory and Practice (3)

Prerequisites: Graduate standing in Art History, Art Studio, or Art Education or consent of instructor

Theoretical and practical considerations in the discipline of art history, specifically issues relating to art interpretation, classification, valuation, and circulation.

Letter grade only (A-F).

516./416. Greek Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Survey of Greek Art from beginnings in Aegean period through late Hellenistic period. Key monuments of architecture, sculpture, painting, vase-painting, and so-called minor arts discussed relative to contemporary theories, criticism, and history. Focus on techniques and materials of various arts.

Not open for credit to students with credit in ART 416 or 598E. Letter grade only (A-F).

517./417. Roman Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Survey of Italian arts before the Romans, including indigenous art of the Italic peoples and the Etruscans, and Roman Art from early Republic to Age of Constantine. Discussion of major art forms of architecture, painting, sculpture and so-called minor arts.

Not open for credit to students with credit in ART 417 or 598L. Letter grade only (A-F).

523./423. Early Renaissance Art in Italy (3)

Examination of stylistic and technical developments of fifteenth-century Italian painting, sculpture, and architecture, as well as interaction of cultural, social, and religious developments with visual arts. Special attention to the revival of classicism, and influence of private patrons.

Not open for credit to students with credit in ART 423 or 598F. Letter grade only (A-F). Course fee may be required.

524./424. High Renaissance Art in Italy (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of sixteenth-century Italian painting, sculpture, and architecture, emphasizing that of Florence, Venice, and Rome. Historical, cultural, religious, and theoretical framework. Special attention to works by a handful of major artists (Leonardo da Vinci, Michelangelo, Raphael, Titian, and the Mannerists).

Not open for credit to students with credit in ART 424 or 598G. Letter grade only (A-F).

525./425. Northern Renaissance Painting (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of artistic developments in Northern Europe, particularly Flanders, France, and Germany, from the 14th century through 16th century. Historical, cultural, and religious and theoretical framework. Special attention to iconography, and the changing role of the artist in society.

Not open for credit to students with credit in ART 425 or 598H. Letter grade only (A-F).

526./426. Baroque Art in Spain, the Netherlands, and England (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examines the closely intertwined political and artistic situations in the Netherlands (Flanders and Holland), England and Spain during

the 17th and early 18th centuries. Emphasis on the relationship between Rubens and Velasquez, and the contrast between Rubens and Rembrandt; also Flemish influence in England, due especially to Anthony van Dyck.

Not open for credit to students with credit in ART 426 or 598J. Letter grade only (A-F).

527./427. Baroque Art in Italy, France, and Germany (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Explores the birth of the Baroque in Rome, and the role of the Counter-Reformation in shaping artistic genres in Italy and France in the early 17th century. Also covers the influence of the Versailles court of the "Sun King," Louis XIV, in the late 17th and early 18th centuries, especially in the independent Teutonic states.

Not open for credit to students with credit in ART 427 or 598K. Letter grade only (A-F).

530./430. Introduction to Curatorial Practices (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Study of contemporary art display theory/practice including exhibition typologies, curatorial models, and recent transformations in museums, galleries and the art market. Designed for Museum and Curatorial Studies Certificate students and others interested in studying museum practices within a broader context.

Letter grade only (A-F). Not open for credit to students with credit in AH 435B./535B.

531./431. History of Museums and Exhibitions (3)

Prerequisites: AH 111A, 111B or consent of advisor and instructor.

Study of history of art museums and how displays reflect social and cultural conditions and political ideologies. Attention to controversial exhibitions, and recent transformations in the field.

Letter grade only (A-F). Not open for credit to students with credit in ART 435, AH 435, 435A, or 535A.

536./436. Neo-Classicism to Romanticism, 1789-1850 (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of Neo-Classicism, Realism, Romanticism, photography and the academic tradition in art and culture of Europe from 1789-1850.

Not open for credit to students with credit in ART 436 or 598M. Letter grade only (A-F).

537./437. Impressionism to Post-Impressionism, 1850-1900 (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Analysis of the development of Impressionism and Post-Impressionism in France from 1850 to 1900.

Not open for credit to students with credit in ART 437 or 598N. Letter grade only (A-F).

538./438. Art of Early to Mid Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of key developments, trends, movements of the period including Abstraction, Non-Objective art, Expressionism, Dada, and Surrealism.

Letter grade only (A-F). Not open for credit to students with credit in ART 438 or 598P.

539./439. Art of Mid to Late Twentieth Century (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of key developments, trends, movements of the period including Pop Art, Happenings, Minimal Art, Art and Technology, Environmental, Concept, Performance and Video Art.

Letter grade only (A-F). Not open for credit to students with credit in ART 439 or 598Q.

Art History Courses (AH)

541./441. Contemporary Art in Context (3)

Prerequisites: Graduate standing in Art History or consent of instructor.

International survey focusing on developments in art from late twentieth century to present. Examination of precedents, traditions, legacies behind current art. Consideration of critical/theoretical issues and factors influencing production and reception of current art.

Letter grade only (A-F)

542. Internship in Museum Studies (3)

Prerequisites: AH 430/530 or consent of instructor.

Supervised internship in selected museums, college and community art centers appropriate to student's particular academic interest. Opportunity to work with museum professionals in the field to expand student understanding of the complexities, discipline and challenges in the profession.

Letter grade only (A-F). May be repeated to a maximum of 3 units in the same semester and 9 units in different semesters. (6 hrs. lab.) Not open for credit to students with credit in ART 542.

544./444. History of Graphic Design (3)

Prerequisites: Graduate standing in Department of Art, or consent of instructor.

Thematic approach to Graphic Design history, with consideration of pioneering designers, movements, and cultural, social, political and technological influences in the evolution of graphic design.

Not open for credit to students with credit in AH 366. Letter grade only (A-F).

545A. Museum-Gallery Practices (3)

Prerequisites: AH 431 or AH 531 or consent of instructor. First in a four-course sequence.

Pre-professional training in museum-gallery practices: administration, curating, exhibition planning and design, budgeting, public relations, project completion, documentation, publication. University Art Museum and other venues serve as labs for practical experience in developing and realizing exhibitions.

Letter grade only (A-F).

545B. Museum-Gallery Practices (3)

Prerequisites: AH 545A or consent of instructor.

Second in a four-course sequence. Pre-professional training in museum-gallery practices: administration, curating, exhibition planning and design, budgeting, public relations, project completion, documentation, publication. University Art Museum and other venues serve as labs for practical experience in developing and realizing exhibitions.

Letter grade only (A-F).

545C. Museum-Gallery Practices (3)

Prerequisites: AH 545B or consent of instructor. Third in a four-course sequence.

Pre-professional training in museum-gallery practices: administration, curating, exhibition planning and design, budgeting, public relations, project completion, documentation, publication. University Art Museum and other venues serve as labs for practical experience in developing and realizing exhibitions.

Letter grade only (A-F).

545D. Museum-Gallery Practices (3)

Prerequisites: AH 545C or consent of instructor. Fourth in a four-course sequence.

Pre-professional training in museum-gallery practices: administration, curating, exhibition planning and design,

budgeting, public relations, project completion, documentation, publication. University Art Museum and other venues serve as labs for practical experience in developing and realizing exhibitions.

Letter grade only (A-F).

546./446. Art History Methodologies and Writing (3)

Prerequisites: Graduate standing in Art History or consent of instructor.

Practice in writing and conducting research in art history, and introduction to various methodologies and debates within the discipline, including biography, formalism, semiotics, gender studies, psychoanalysis, Marxism, post-colonialism, and visual culture studies.

Letter grade only (A-F).

547./447. Historiography of Art History (3)

Prerequisites: Graduate student in Art History or consent of instructor.

Study of the history of art history as intellectual discipline. Reading- and writing-intensive seminar designed specifically for undergraduate art history majors in final year of study and for graduate students in M.A. in Art History program.

Letter grade only (A-F). Not open for credit to students with credit in ART 307 or AH 307.

548./448. Western Art Theory and Criticism to the Mid-Nineteenth Century (3)

Prerequisites: Graduate student in Art History or consent of instructor.

A text-based examination of western art theory and criticism up to the mid-nineteenth century.

Letter grade only (A-F). Not open for credit to students with credit in AH 308.

549./449. Western Art Theory and Criticism Mid-Nineteenth to Mid-Twentieth Century (3)

Prerequisites: Graduate student in Art History or consent of instructor.

A text-based examination of western art theory and criticism from the mid-nineteenth to mid-twentieth centuries.

Letter grade only (A-F). Not open for credit to students with credit in AH 309.

550./450. Western Art Theory and Criticism Mid-Twentieth Century to Present (3)

Prerequisites: Graduate Student in Art or Art History or consent of instructor.

A text-based examination of western art theory and criticism from the mid-twentieth century to the present.

Letter grade only (A-F).

555./455. Traditional Art of Africa: A Thematic Approach (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Exploration from a Western perspective of the conceptual, expressive, and aesthetic aspects of traditional African art as related to its cultural context and to Western concepts of art. Focus on West Africa.

Not open for credit to students with credit in ART 455 or 598R.

Letter grade only (A-F).

556./456. American Indian Art: Western Perspectives (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Exploration from a Western perspective of the historically various and changing frames of reference surrounding perception, interpretation, and consideration of Native American art through focus on selected traditions.

Not open for credit to students with credit in ART 456 or 598S.

Letter grade only (A-F).

557A./457A. Pre-Columbian Art: Mesoamerica (3)

Prerequisites: Graduate Standing in Art or Art History or consent of instructor.

Art, architecture, and urban planning in Mesoamerica from 1200 BCE to the Spanish conquest of 1519-1521, with emphasis on religious, political, and economic functions, as well as interpretive assumptions and methods of scholars in the field.

Letter grade only (A-F).

557B./457B. Pre-Columbian Art: The Andes (3)

Prerequisites: Graduate Standing in Art or Art History or consent of instructor.

Art, architecture, and urban planning in the Andean region from 1200 BCE to the Spanish conquest of 1532, with emphasis on religious, political, and economic functions, as well as interpretive assumptions and research methods of scholars in the field.

Letter grade only (A-F).

557C./457C. Pre-Columbian Art (3)

Prerequisites: AH 111A, 111B or consent of instructor.

Survey of art and architecture in Mesoamerica and Andean region of South America from 1000BC to Spanish conquest. Special attention to social, political and economic contexts, as well as research methods and theoretical assumptions of scholars investigating this field.

Letter grade only (A-F). Not open for credit to students with credit in AH 557.

558./458. Art of Latin America: 1800-1940 (3)

Prerequisites: AH 111B or consent of instructor.

An investigation of developments in visual culture in Latin America from the late-18th century to the mid-20th century, with special emphasis on artists in Argentina, Brazil, Colombia, Mexico, Uruguay, and Venezuela.

Letter grade only (A-F).

559./459. Art of Latin America: 1940–Present (3)

Prerequisites: AH 111B or consent of instructor.

An investigation of developments in visual culture in Latin America from the mid-20th century to the present, with special emphasis on artists in Argentina, Brazil, Chile, Colombia, Cuba, Mexico, and Venezuela, as well as Latino/Latina artists.

Letter grade only (A-F).

560./460. Art of Mexico: 1780 to Present (3)

Prerequisites: Graduate Standing in Art or Art History or consent of instructor.

Fine art, graphic art, photography, popular art, and architecture produced by artists of/in Mexico from 1780 to the present, with emphasis on historical contexts, the varied functions objects were made to serve, and debates concerning production, circulation, and/or reception.

Letter grade only (A-F).

565./465. Ancient Art of the Near East (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Prehistoric, Near Eastern, Egyptian and Aegean art.

Not open for credit to students with credit in ART 465 or 598U. Letter grade only (A-F).

566./466. Buddhist Art of India and S.E. Asia (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of formation and development of Buddhist art in India and its subsequent metamorphoses in Cambodia, Thailand and Indonesia.

Not open for credit to students with credit in ART 466 or 598V. Letter grade only (A-F).

567./467. Hindu and Islamic Art of India (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Examination of formation and development of Hindu art in India and the genesis; transformation, of Islamic art of India compared to pan-Islamic characteristics.

Not open for credit to students with credit in ART 467 or 598W. Letter grade only (A-F).

568./468. Early Chinese Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

The formation and development of Chinese art from the third millennium to the 10th century A.D.

Not open for credit to students with credit in ART 468 or 598X. Letter grade only (A-F).

569./469. Later Chinese Art (3)

Prerequisites: AH 111A, 111B, or consent of instructor.

Development of Chinese art from the 11th century A.D. through the culmination of the tradition and its transformation in the 20th century will be explored.

Not open for credit to students with credit in ART 469 or 598Y. Letter grade only (A-F).

570A./470A. Japanese Buddhist Art to 1500 (3)

Prerequisite: One of the following: AH 113A, 113B, 111A, 111B, A/ST 393, 451, or consent of instructor.

Survey of sacred architecture, sculpture, painting, gardens and decorative art from neolithic culture through Zen Buddhism, reading images in regard to religious, political and social values.

Not open for credit to students with credit in AH 470. Letter grade only (A-F).

570B./470B. Japanese Art 1500-1868 (3)

Prerequisite: Graduate student in Art or Art History or consent of instructor.

Analysis of secular painting, architecture, ceramics and garden design in the Momoyama and Edo periods, linking the wide variety of subjects and styles to the competing values of samurai, priest, aristocrat or merchant class patrons.

Not open for credit to students with credit in AH 470. Letter grade only (A-F).

571A./471A. Modern Japanese Graphic Art (3)

Prerequisite: Graduate student in Art or Art History or consent of instructor.

Examination of painting, prints, photography and graphic design in regard to the issues of individual and national identity in an era when being modern was often linked to being Western. We also consider manga in regard to earlier modern adaptations of traditional design.

Not open for credit to students with credit in AH 471. Letter grade only (A-F).

571B./471B. Modern Japanese Plastic Art (3)

Prerequisite: Graduate student in Art or Art History or consent of instructor.

Investigation of architecture, gardens, sculpture and ceramics in light of debates over internationalism or nationalism, modernity or tradition. The political and economic implications of design choices will be highlighted.

Not open for credit to students with credit in AH 471. Letter grade only (A-F).

571C./471C. Modern Japanese Architecture (3)

Prerequisites: Graduate standing in Art History.

Analysis of "Japaneseness" and "foreign-ness" in Japan between 1868 and 1970. Examination of Japanese creations of and reactions to "modernity" in regard to national identity as expressed in architecture and gardens. Related consideration of urbanism and nationalism.

Letter grade only (A-F).

Art History Courses (AH)

595. Independent Study in Art History (1-6)

Independent, in-depth research projects to be conducted by students under the supervision of a faculty member.

As per university policy on independent studies courses, students enrolled in this course must have an agreement, or contract on file in the department office. Agreement is made between student and instructor at the beginning of course, and must include: a description of work to be accomplished, specific information on tasks required; nature of final report, and basis for determining final grade. Agreement must be signed by both instructor and student.

Letter grade only (A-F). May be repeated to maximum of 12 units in the same semester.

596. Special Studies in Art History (3)

Graduate level variable directed study projects providing a way for students to independently pursue special research topics in art history under instructor supervision.

Letter grade only (A-F). Topics announced in the *Schedule of Classes*. May be repeated to a maximum of 12 units in the same semester.

597./497. Seminar in Art History (3)

Prerequisite: Consent of instructor.

Directed individual research and group discussion concerning a topic in art history.

Letter grade only (A-F). Topics announced in the *Schedule of Classes*. May be repeated to a maximum of 6 units in the same semester and 9 units in different semesters. Not open for credit to students with credit in ART 497 or 611 beyond combined maximum units.

598. Selected Topics in Art History (3)

Prerequisite: Consent of instructor.

Topics from selected areas of Art History. Content may vary each semester.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester and a total of 12 units in different semesters. Topics announced in the *Schedule of Classes*.

599Q. Special Studies in Museum Studies (3)

Prerequisite: Consent of instructor.

Advanced individual graduate projects, with faculty supervision, in museum studies.

Letter grade only (A-F). May be repeated to a maximum of 6 units in same semester and a total of 12 units in different semesters. (6 hrs. lab.)

693. Teaching Internship (3)

Opportunity to work with a full time faculty mentor on course preparation and

instruction. Required for eligibility for Graduate Teaching Associate positions.

Restricted to graduate art history majors.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

698. Thesis (1)

Prerequisite: Art History MA student, advancement to Candidacy and an approved Thesis Statement.

Execution and completion of an approved thesis. Student must enroll in three sections concurrently. To be taken with each of student's three MA Thesis Committee members over two semesters for a total of 6 units.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester.

ARTS, COLLEGE OF THE

Dean: Raymond Torres-Santos

Interim Associate Dean: Cyrus Parker-Jeannette

Executive Assistant to the Deans: Aimee Castillo

Reception: Kevin O'Grady

Director, University Art Museum: Christopher Scoates

Executive Director, Carpenter Performing Arts Center:
Michele Roberge

College Office: Academic Services 115
Telephone / FAX: (562) 985-4364 / 985-7883

Departments

Art: Christopher Miles, Chair (562) 985-4376

Dance: Andy Vaca, Interim Chair (562) 985-4747

Design: Dorothy Ottolia, Chair (562) 985-5089

Film and Electronic Arts: Micheal C. Pounds, Chair (562) 985-5404

Music: Carolyn Bremer, Chair (562) 985-4781;
John A. Carnahan, Director (562) 985-4781

Theatre Arts: Joanne Gordon, Chair (562) 985-7891

Introduction

The mission of the College of the Arts is to provide a dynamic, contemporary learning environment that honors tradition, embraces diversity, inspires innovation, and strives for excellence. Our faculty of artists, educators, and scholars is committed to challenging students intellectually, creatively, and professionally, while encouraging them to find their individual artistic voices. The College produces and brings the highest level of art, teaching, and scholarship to our community in the form of concerts, exhibitions and installations, films, performances, publications, and emerging media.

Programs at a Glance

Bachelor of Arts:

Art

Options in: Studio Art, Art History, Art Education

Dance

Dance

Option in Dance Science

Design

Film and Electronic Arts

Options in: Film and Electronic Media, Film and Video
Production

Music

Theatre Arts

Options in: Performance, Technical Theatre

Bachelor of Fine Arts:

Art

Options in: Art Photography, Ceramics, Drawing and
Painting, Graphic Design, Illustration, 3-D Media (Fiber,
Metal or Wood), Printmaking, Sculpture

Dance

Interior Design

Bachelor of Music:

Options in: Choral-Voice Music, Composition, History
and Literature, Instrumental Music, Performance

Bachelor of Science:

Industrial Design

Certificates:

Biomedical Illustration (undergraduate) (Art)

Museum Studies (graduate) (Art)

Minors:

Dance

Film and Electronic Arts

Music

Theatre Arts

Single Subject Teaching Credentials:

Art

Music

Master of Arts:

Art

Dance

Music

Master of Fine Arts:

Art

Dance

Theatre Arts

Options in: Theatre Management, Technical Theatre, Acting

Master of Music

MBA/MFA in Theatre Management

Accreditation

The following departments are accredited by the specialized accrediting agencies for their disciplines: Art (The National Association of Schools of Art and Design); Dance (The National Association of Schools of Dance); Design (The National Association of Schools of Art and Design); The Bob Cole Conservatory of Music (The National Association of Schools of Music); and Theatre (The National Association of Schools of Theatre).

Exhibitions and Performances

Major performance and exhibition facilities include the University Art Museum (the only accredited museum in the CSU system), five Art Department Galleries, the University Theatre, performances by the California Repertory Company (the Theatre Arts Department's graduate and professional theatre program), the Studio Theatre, the Royal Theatre at the Queen Mary, the Gerald R. Daniel Recital Hall, the Martha B. Knoebel Dance Theater, and the Richard and Karen Carpenter Performing Arts Center. In these and other venues, the College of the Arts hosts over 500 exhibitions, performances, and other special events each year.

College of the Arts Courses (COTA)

UPPER DIVISION

300. Writing in the Arts (3)

Prerequisites: Must have attempted and failed the WPE once, major in a COTA department, junior standing, and consent of instructor.

Multi-disciplinary elective that may be used to fulfill the GVAR. Analysis and practice of writing for and about the arts, including the visual arts, dance, design, film, music and theatre. Exploration of critical thought in the arts while practicing writing skills.

Credit/No Credit grading only. May be used to satisfy the GVAR.

ASIAN AND ASIAN AMERICAN STUDIES

College of Liberal Arts

Department Chair: John N. Tsuchida

Vice Chair: Teri Yamada

Department Office: Faculty Offices FO3-340

Telephone: (562) 985-4645

FAX: (562) 985-1535

Center: Center for Asian Pacific American Studies

Website: <http://www.csulb.edu/dept/as>

Faculty: Ruixi Ai, Kiyomi Chinen, Masako O. Douglas, Linda N. España-Maram, Hiroko Kataoka, Hsin-sheng C. Kao (Emerita), Barbara W. Kim, Yoko Pusavant (Emerita), San-Pao Li (Emeritus), Dean S. Toji, John N. Tsuchida, Tianwei Xie, Teri Yamada

Advisors:

Graduate: Tim Xie

Undergraduate: Teri Yamada

Undergraduate: Dean Toji (Asian American Studies)

Undergraduate: Teri Yamada (Asian Studies)

Undergraduate: Ruixi Ai (Chinese Studies)

Undergraduate: Masako O. Douglas (Japanese)

Associate Faculty: Bipasha Baruah (International Studies), Christine Bhat (Educational Psychology, Administration and Counseling), Jeffrey Broughton (Religious Studies), Kendall Brown (Art History), Chi-Ah Chun (Psychology), Frank Gossette (Geography), Lisa Grobar (Economics), Jack W. Hou (Economics), Margaret Kuo (History), Tomotaka Ishimine (Economics), Guotong Li (History), Jyotsna Pattnaik (Teacher Education), Xiaoping Liang (Linguistics), William Mulligan (Journalism), Kim Oanh Nguyen-Lam (CLMER), Karen Quintiliani (Anthropology), George Scott (Anthropology), Michiko Takeuchi (History), Teresa Wright (Political Science), Oliver Wang (Sociology), R. Scott Wilson (Anthropology)

Administrative Support Coordinator: Michelle Seales-Kaestner

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Social Scientist • Archivist • Social Worker • Journalist • Counselor • Teacher • Public Relations Consultant • Mass Media • Foreign Business and Trade • Community Organizer • School Administrator • Linguist • Parole Officer • Probation Officer • Editor • Writer • Urban/Regional Planner • Public Policy Administrator • Foreign Policy Officer • NSA, FBI Interpreter • Researcher (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Department of Asian and Asian American Studies fosters multi-ethnic and cross-cultural understanding from a global, multi-disciplinary perspective and pursues an active language education program to promote cross-cultural awareness and intercultural understanding.

Through courses of its own and those of cooperating departments, the Department of Asian and Asian American Studies offers B.A. in Asian American Studies, B.A. and M.A. in Asian Studies, B.A. in Chinese Studies, Single Subject Teaching Credential in Japanese, B.A. in Japanese, Minor in Asian American Studies, Certificate in Asian Studies, and Certificate in Asian American Studies. Information and advice relative to the programs are available through the department office, FO3-340.

Undergraduate Programs

Bachelor of Arts in Asian Studies (120 units)

Asian Studies is an interdisciplinary program and students majoring in Asian Studies choose an area of studies, concentrating on one or more specific Asian societies, such as China, Japan, India, or Southeast Asia, and a concentrated study of one specific topic.

Requirements

Take one of the following courses:

ASAM 120 Asian American History (3)

Prerequisite/Corequisite: One GE Foundation course.

ASAM 200 Asian American Interethnic Relations (3)

Prerequisites: GE Foundation requirements.

ASAM 221 Contemporary Issues in Asian America (3)

Prerequisites: GE Foundation requirements.

Take all of the following courses:

ASAM 305 Theories and Methods in Asian Studies and Asian American Studies (3)

Prerequisites: Upper-division standing or consent of instructor, GE Foundation requirements; ASAM 120 or 200.

A/ST 306I Traditional Asia (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

A/ST 307I Modern Asia (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

A/ST 492 Proseminar in Asian Studies (3)

Prerequisites: Consent of instructor.

Take four semesters (or the equivalent) of a single Asian language, chosen from courses in Chinese, Japanese, or an Asian language approved by the undergraduate advisor.

Majors must take a minimum of 49 units.

For the upper-division courses, a minimum of 21 units, including the required courses and additional courses selected in consultation with the undergraduate advisor with the following provisions:

1. No more than 9 units shall be counted in a single concentration of a specific topic;
2. No more than 9 units shall be credited that concentrate upon any one area of Asia like China, India, Japan, or Southeast Asia. No more than 9 units of courses on the Americas can be applied toward this requirement.

N.B. In the case of seminar, thematic, or variable topic courses, the assignment of a disciplinary and/or geographic category will be made by the undergraduate advisor in consultation with the appropriate faculty member.

Certificate in Asian Studies

A student may earn a Certificate in Asian Studies with a concentration on China, Japan, India, or Southeast Asia. Where applicable, courses used to meet the certificate requirements also may be used to satisfy the General

Education requirement and the major and teaching minor requirements of the cooperating departments. Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

1. A bachelor's degree, with a major in a discipline other than Asian Studies. May be completed concurrently;
2. A minimum of two semesters or its equivalent of an approved Asian language which is to be selected in accordance with the area of concentration;
3. Take all of the following:

A/ST 306I Traditional Asia (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

A/ST307I Modern Asia (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Take 12 units of upper-division work divided among two or more disciplines. These are to be selected in accordance with the area of concentration and in consultation with the student's advisor. No more than 6 units in any one discipline shall apply towards the Certificate.

Bachelor of Arts in Asian American Studies (120 units)

This program provides an interdisciplinary approach to explore the diverse histories, cultures, communities, and contemporary realities in Asian America. Admission to the program requires completion of the GE Foundation courses.

Requirements

A major in Asian American Studies requires a minimum of 34 units, with at least 18 units earned in residence at CSULB.

Lower-Division Core Courses (6 units):

Take all of the following:

ASAM 120 Asian American History (3)

Prerequisite/Corequisite: One GE Foundation course.

ASAM 221 Contemporary Issues in Asian America (3)

Prerequisites: GE Foundation requirements

Upper-Division Core Courses (16 units):

Take one of the following courses:

A/ST 306I, 307I, 310

Take all of the following:

ASAM 305 Theories and Methods in Asian Studies and Asian American Studies (3)

Prerequisites: Upper-division standing or consent of instructor, GE Foundation requirements; ASAM 120 or 200

ASAM 345 Asian American Community Analysis (4)

Prerequisites: None

ASAM 346 Asian Americans and the Law (3)

Prerequisites: None

ASAM 495 Seminar in Asian American Studies (3)

Prerequisites: None

Upper-Division Electives (12 units) selected from at least two of the following groups:

Group 1. Specific Ethnic Group Focus:

ASAM 330, 331, 332, 333, 334, 352, 353, 354

Group 2. Gender Studies:

ASAM 340, 370, 381

Group 3. Asian Americans in Comparative Perspectives:

ASAM 319, 321, 335I, 341, 342

Group 4. Explorations in Asian America:

ASAM 310, 347, 350, 360, 380, 490, 499

Minor in Asian American Studies

Requirements

The Minor in Asian American Studies is available to all majors. A minimum of 22 units which must include:

1. Take all of the following courses:

ASAM 120 Asian American History (3)

Prerequisite/Corequisite: One GE Foundation course.

ASAM 221 Contemporary Issues in Asian America (3)

Prerequisites: GE Foundation requirements

ASAM 305 Theories and Methods in Asian Studies and Asian American Studies (3)

Prerequisites: Upper-division standing or consent of instructor, GE Foundation requirements; ASAM 120 or 200

ASAM 345 Asian American Community Analysis (4)

Prerequisites: None

Take one of the following courses:

ASAM 200 Asian American Interethnic Relations (3)

Prerequisites: GE Foundation requirements.

ASAM 319 The Ethnic Experience in the U.S. (3)

Prerequisite: GE Foundation requirements.

2. Six units selected from among the following:

ASAM 260, 310, 321, 330, 331, 332, 333, 334, 335I,

340, 341, 342, 346, 347, 350, 352, 353, 360, 370, 381, 490, 495.

Graduate Programs

Master of Arts in Asian Studies

This is an interdisciplinary degree offered by the Asian Studies faculty of its cooperating departments. Students applying for the M.A. Program in Asian Studies must apply for admission to the University and simultaneously provide official transcripts, two letters of recommendation, and a statement of purpose to the graduate advisor of the department.

Prerequisites

1. A Bachelor's degree with a major in Asian Studies; or
2. A Certificate in Asian Studies, awarded at CSULB, or its equivalent as evaluated by the Graduate Advisor of the Department of Asian and Asian American Studies. Equivalency will, normally, be granted for work in Asia-related studies at CSULB and/or at other academic institutions, including a minimum of 18 units in no more than four disciplines with a minimum of six units in each of two disciplines of concentration plus two semesters of an approved Asian language. Only courses with a substantive Asia-related content are acceptable; or
3. A bachelor's degree in one of the fields in social science, humanities, or fine arts with 24 units of upper-division Asia-related courses. These courses must be comparable to those required of a major in Asian Studies at this University. Deficiencies will be determined by the graduate advisor after consultation with the student and after evaluation of transcript records. Students whose undergraduate prerequisites are inadequate will be required to fulfill these deficiencies before advancement to candidacy and will receive unclassified graduate standing until all deficiencies are removed.

Advancement to Candidacy

1. Satisfaction of the general University requirements for advancement to candidacy;
2. Completion of 6 or more of the required units (not including language) with a minimum 3.0 overall GPA;
3. Approval of proposed program of study;
4. Satisfactory fulfillment of the Graduation Writing Assessment Requirement (GWAR).

Requirements

1. A minimum of 30 units of approved upper-division and graduate courses including the following:
 - A/ST 592 Proseminar in Asian Studies (3)
Prerequisites: Consent of instructor.
 - A/ST 610 Seminar in Asian Studies (3)
Prerequisites: NoneAt least 18 units must be in the 500-600 series composed of units earned at this University in graduate courses, graduate seminars, Directed Studies/Research or Thesis. All seminars and independent study courses may be repeated to a total of six (6) units, provided the topic is different. Directed Studies, Readings and Research, in any combination, may not exceed a total of six units: A/ST 698 (thesis) must be taken for a minimum of four and a maximum of six units will be given for A/ST 698 for those taking the thesis option.
2. A minimum of three upper-division units in each of two disciplines of concentration must be taken preparatory to seminar work. Students should take at least six units of 500/600 level work in each of the two disciplines or concentrations.

(N.B. Determination of the disciplinary status of any Asian Studies or any other courses taken at CSULB or other academic institutions shall be at the discretion of the Graduate Advisor in consultation with faculty, review of syllabi and reading lists, assessment of transcripts, etc.)
3. Comprehensive written examination in each of the two disciplines of concentration or a thesis. Students must have received permission of the Graduate Advisor, faculty advisor and prospective committee members before being allowed to file for the thesis option. Once selected, a student may not change his/her option.
4. Six units (beyond the B.A. level) in Chinese or Japanese or an Asian language approved by the Graduate Advisor. Waiver of this requirement, either by transfer of credits from another institution or by assessment of proficiency by resident faculty, is at the discretion of the Graduate Advisor of the Department of Asian and Asian American Studies.

Upper-Division Courses Acceptable

A/ST 320, 406AB, 490, 492, 499; ANTH 332, 333, 335, *416, *417, *419, 427, *490; AH 466, 467, 468, 469, 470A/B, 471A/B, *497, *498; CWL 403, *448, *499; CHIN 380, 390, 410, 430ABC, 451, 490, 492, 499; GEOG *494, *497; HIST 384, 385, 386, 405, 406A, 406B, 409, *495, *498; JAPN 350, 451, 471, 490, 497; *PHIL 499; POSC 362, 455, 469*, *489, *497, *499; R/ST *490, *499; *WGSS 406, 406A, 490, *499

* course must be an approved Asia-related topic.

Certificate in Asian American Studies

This certification is being considered for discontinuance.

Requirements

1. A bachelor's degree with a major other than Asian American Studies. May be completed concurrently;
2. A minimum of 30 units distributed as follows:
 - A. Take all of the following courses:
 - ASAM 120 Asian American History (3)
 - ASAM 221 Contemporary Issues in Asian America (3)
 - ASAM 305 Theories and Methods in Asian Studies and Asian American Studies (3)
 - ASAM 345 Asian American Community Analysis (4)
 - ASAM 360 Studies in Asian American Literature (3)
 - ASAM 495 Seminar in Asian American Studies (3)Take one of the following:
 - ASAM 200 Asian American Inter-Ethnic Relations (3)
 - ASAM 319 The Ethnic Experience in the U.S. (3)
 - B. Take additional courses selected from the following:
 - ASAM 260, 310, 321, 330, 331, 332, 333, 334, 335I, 340, 341, 342, 346, 347, 352, 353, 370, 381, 490, 495, 499.

Asian Studies Courses (A/ST)

LOWER DIVISION

190. The Tao Primer of Basic Reasoning (3)

Prerequisites/Corequisite: ENGL 100 or its equivalent.

Natural language of Tao aphorisms used for informal and formal types of reasoning; learning Yin and Yang basic analytic steps; applying Tao principles and processes of reasoning to contemporary, common-place, and intercultural issues and problems logically and practically.

290. Selected Topics in Asian Studies (3)

Prerequisite: Consent of instructor.

Topics of special interest in Asian Studies selected for intensive study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

299. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special research interest.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

UPPER DIVISION

General Education Category A must be completed prior to taking any upper-division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

306I. Traditional Asia (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary examination of traditional civilizations of Asia. This team-taught course focuses on two Asian civilizations, examining topics related to Asian cultures to illustrate the richness and diversity of Asia.

Not open to students with credit in Asian Studies 300I.

307I. Modern Asia (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Emphasis on development of Asia since the 18th century and its role in the modern world; some attention to the experience of Asians in the U.S. Continuity and change, reform and revolution in culture, politics and the economy will be included.

Not open to students with credit in Asian Studies 301I.

310. United States and Asia (3)

Prerequisite: GE Foundation requirements.

Examines themes including key religious, social and political movements, patterns of migrations, transnational cultural productions, and Asian-U.S. global economic relations since 1945.

320. Asia in Fiction and Film (3)

Focuses on Asian-Western interactions and particularly on Asian-Western perspectives of these interactions as manifested in film and works of fiction. Focus on China, Japan and/or India; consideration given to Asian experience in America.

334. Introduction to East Asian Literatures and Cultures (3)

Prerequisite: GE Foundation requirements.

Comprehensive introduction to the comparative study of East Asian cultures through the reading of representative selections from the literatures of China, Korea, and Japan in historical context. Focus is on the modern period.

Same course as CWL 334. Not open for credit to students with credit in CWL 334.

336. Introduction to Southeast Asian Literatures and Cultures (3)

Prerequisite: GE Foundation requirements.

Survey of the traditional and modern literatures and cultures of Southeast Asia with a focus on the modern period.

Not open for credit to student with credit in CWL 336.

393. Japan's Heritage (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Cultural heritage of Japanese civilization emphasizing history, philosophy, religion, literature and fine arts from prehistory to the present.

Letter grade only (A-F).

406A. Asian Women: East and Northeast Asia (3)

Prerequisite: Upper-division standing.

Exploration of the histories of women in China, Japan and Korea from prehistory to the present. Major themes include women's contributions to social, cultural and political change, and the complex relationship between feminism and nationalism in the modern period.

Same course as HIST 406A and WGSS 406A. Not open for credit to student with credit in HIST 406A, W/ST 406A or WGSS 406A.

406B. Asian Women: South and Southeast Asia (3)

Emphasis on modern period; exploration of complexities of women's roles in multicultural, multilingual societies in South and Southeast Asia, including gender as continuing site of contention in nationalist discourse.

Same courses as HIST 406B and WGSS 406B. Not open for credit to students with credit in HIST 406B, W/ST 406B or WGSS 406B. Letter grade only (A-F).

490. Selected Topics in Asian Studies (3)

Topics of special interest in Asian Studies selected for intensive study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

D. Filipino Language, Literature and Culture

492./592. Proseminar in Asian Studies (3)

Prerequisites: Consent of instructor.

Introduction to research methods. Intensive study of selected conceptual and theoretical issues in Asian Studies or Asian American Studies. Area and discipline of emphasis will vary from year to year.

May be repeated to a maximum of 6 units.

495I. China Heritage (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses; upper-division standing.

Cultural heritage explored through history, philosophy, religion and science, side by side with the fine arts; seen as the totality of a people's humanistic experience. (Lecture, discussion and film) (Lecture, discussion, film.)

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special research interest.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

GRADUATE LEVEL

Graduate course descriptions are found in the departmental listings in which they are offered. Graduate courses applicable for the degree (only when the focus is on Asia) are: AH 566, 567, 568, 569, 570, 571, *596, *597; A/ST 544, 592, 610, 695, 697, 698; ANTH 516, 517, 519, 597, 697; ART 611; ASAM 595; CHIN 530A,B,C, 551, 590, 592; CWL 503, 522, 548, 550; ECON 690; GEOG 650, 697; HIST 505, 509, 510(G), 682, 695, 697; JAPN 551, 562, 581, 592, 695, 697; PHIL 697; POSC 590, 599, 600, 610, 670, 697; R/ST 646, *690, *697.

544. Religions of Japan (3)

The transmission of continental civilization to Japan; Shinto, Buddhism and Tokugawa Neo-Confucianism; Genroku culture; and the New Religions. Emphasis on original texts in translations.

Not open for credit to students with credit in R/ST 344. Letter grade only (A-F).

592./492. Proseminar in Asian Studies (3)

Prerequisites: Consent of instructor.

Introduction to research methods. Intensive study of selected conceptual and theoretical issues in Asian Studies or Asian American Studies. Area and discipline of emphasis will vary from year to year.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

610. Seminar in Asian Studies (3)

Selected topics in Asian Studies. Area and discipline of emphasis will vary from year to year. Open to graduate students of Asian Studies. Graduate students in other disciplines may enroll with consent of instructor.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

695. Directed Readings (3)

Prerequisites: A/ST 592 or 610, or consent of graduate advisor and faculty member supervising the readings.

Directed studies to permit individual students to pursue topics of special interest in Asian Studies.

Letter grade only (A-F). May be repeated for a maximum of 6 units with different topics in different semesters.

697. Directed Research (1-3)

Prerequisites: Consent of graduate advisor.

Research in Asian Studies on an individual basis.

Letter grade only (A-F).

698. Thesis (3)

Prerequisite: Advancement to candidacy, consent of graduate advisor and faculty member supervising the thesis.

Planning, preparation, and completion of a thesis in Asian Studies.

May be repeated for a maximum of 6 units with same topic in different semesters.

Asian American Studies Courses (ASAM)

LOWER DIVISION

100S. Composition I (3)

Prerequisites: Students who score 146 or below on the English Placement Test and who have not taken equivalent courses in another department are eligible for enrollment in this course.

Composition I does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA. Must have a "C" or better to earn credit.

Basic course in writing, offering intensive practice in every stage of writing process from generating ideas to final proofreading, as well as to the developing stronger reading comprehension for specific writing tasks.

Same course as AFRS 100S, CHLS 104S, ENGL 100S. Not open for credit to students with credit in ENGL 1, ASAM 1, AFRS 1, CHLS 1, AFRS 100S, CHLS 104S, ENGL 100S.

100. Composition II (3)

Prerequisites: Students who score 147 or above on the English Placement Test, credit in ASAM 100S (or its equivalent), are exempt from the EPT, or consent of the instructor.

Composition II does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA.

An expository writing course designed for first-year students. Satisfies one of the writing requirements for general education at CSULB. It emphasizes academic writing, focusing primarily on analytical reading and thesis-driven writing.

Same course as ENGL 100, AFRS 100, CHLS 104. Not open for credit to students with credit in: ENGL 100, AFRS 100, CHLS 104, ENGL 100, AFRS 100, CHLS 104.

120. Asian American History (3)

Prerequisite/Corequisite: One GE Foundation course.

Overview of experiences of people of Asian ancestry in the United States. Major themes include: immigration (labor migration and refugee resettlement), racism and economic conflict, resistance to discrimination, and community building.

Not open for credit to students with credit in ASAM 220.

200. Asian American Interethnic Relations (3)

Prerequisites: GE Foundation requirements.

Introduction to a comparative survey of racial/ethnic experiences in the U.S., with a focus on Asian Americans.

Not open for credit to students with credit in AFRS 319, AIS 319, ASAM 319, B/ST 319, CHLS 319, C/LA 319, WGSS 319, W/ST 319. Letter grade only (A-F).

215. U.S. Diversity and the Ethnic Experience (3)

Prerequisites: Open only to Integrated Teacher Education Program students.

Survey of four major ethnic groups (American Indians, African American, Latino American, and Asian American) in American society from the colonial era to the present. Special attention to the formation and transformation of each ethnic group and their individual and collective roles in the development of the United States.

Letter grade only (A-F). Same course as AIS 215, AFRS 215, CHLS 215. Not open for credit to student with credit in AFRS 215, AIS 215, B/ST 215, CHLS 215. Departments take turns offering the course in the Fall semester.

221. Contemporary Issues in Asian America (3)

Prerequisites: GE Foundation requirements.

Examination of contemporary issues, including immigration, labor, family, public policy, popular culture, the media, and political

activism in Asian America. Focuses on the U.S. in the context of the global economy and Asian diasporas.

Letter grade only (A-F).

260. Introduction to Asian American Literature (3)

Prerequisites: GE Foundation requirements.

Introduction to representative works by Asian Pacific American authors. Emphasizes interpretation of historical and contemporary Asian American experiences in various literary genres.

Letter grade only (A-F).

290. Selected Topics in Asian American Studies (3)

Prerequisite: Consent of instructor.

Topics of current interest in Asian American Studies selected for intensive development.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

299. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special research interest.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

UPPER DIVISION

General Education Category A must be completed prior to taking any upper-division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

305. Theories and Methods in Asian Studies and Asian American Studies (3)

Prerequisites: Upper-division standing or consent of instructor, GE Foundation requirements; ASAM 120 or 200.

Explores theories and interdisciplinary methodologies employed in Asian Studies and Asian American Studies. Students will have opportunities to conduct research on topics of their interest.

Letter grade only (A-F).

310. Asian Americans and Education (3)

Examines issues and potential of a multi-ethnic classroom for the understanding of, and relating to students of, diverse cultural backgrounds, with an emphasis on Asian Americans.

319. The Ethnic Experience in the U.S. (3)

Prerequisite: GE Foundation requirements.

Examines the dynamics of our multicultural society, emphasizing ways in which Asian American, Black American, Mexican American, and American Indian experiences have shaped cultural diversity in the U.S.

Same course as AIS 319, AFRS 319, CHLS 319, WGSS 319. Not open for credit to student with credit in AFRS 319, AIS 319, CHLS 319, WGSS 319. (Lecture/Discussion.)

321. Asian and Pacific American Film (3)

Prerequisites: Completion of the Foundation requirements, and upper division status.

Employs films as cultural "texts" in exploring issues including race, gender, sexuality, migrations, and the politics of representation in Asian and Pacific American communities.

330. Japanese American Experience (3)

A study of the culture, history, and literature of Japanese in America, emphasizing immigrant experience, agricultural contributions, World War II, generational issues, women in transition and family.

331. Chinese American Experience (3)

A study of the culture, history, and literature of Chinese in America, emphasizing immigrant experience, generational issues, women in transition and family.

332. Korean American Experience (3)

Examines major historical, social, political, and cultural themes that have shaped Korean American experiences, with attention to intersections of race, ethnicity, gender, and class in the U.S. Emphasizes contemporary issues in local communities and transnational connections in the Korean diaspora.

333. Vietnamese American Experience (3)

A study of the culture, history, and literature of Vietnamese in America, emphasizing refugee and immigrant experience, generational issues, women in transition and family.

334. Cambodian American Experience (3)

A study of the culture, history, and literature of Cambodians in America, emphasizing refugee and immigrant experiences, generational issues, women in transition and family.

335I. Asian and Latino Immigration Since World War II (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines the causes of massive Asian and Latino immigration as well as major contemporary issues in the Asian and Latino communities.

Same course as CHLS 335I. Not open for credit to student with credit in CHLS 335I. (Lecture and discussion, 3 hours)

340. Asian American Family (3)

Prerequisites: GE Foundation requirements and upper-division standing.

Provides perspectives on the varieties of Asian American families by examining the social, economic, political, and cultural factors crucial in the development of conventional as well as alternative familial units.

341. Asian American/Chicano and Latino Cinema (3)

Prerequisites: GE Foundation requirements.

A team-taught course that explores connections between Asian American and Chicano/Latino cinema, with emphases given to grounding issues presented in films within historical, literary, and cultural studies frameworks.

Same course as CHLS 341. Not open for credit to students with credit in ASAM 403 or CHLS 403.

342. Chicanos, Filipinos, and Popular Cultures (3)

Prerequisites: GE Foundation requirements and upper-division standing.

This course is a team-taught seminar that explores the historical roots of politics of expressive and cultural practices among Chicanos and Filipinos. Special attention will be paid to themes of resistance, gender, migrations, imperialism, hybridity, and post-colonial identities and transformations.

Same course as CHLS 342. Not open for credit to student with credit in CHLS 342.

345. Asian American Community Analysis (4)

Examines socioeconomic, political and cultural profile of Asian American communities, as well as role and function of community organizations. Training in community surveys and service.

(Lecture, activity)

346. Asian Americans and the Law (3)

Examines how laws have been used to restrict Asian Americans' social, political, educational, and economic activities, as well as how this ethnic group has utilized the legal system to fight discrimination and seek justice.

347. Asian Americans and Public Policy Issues (3)

Examines public policy issues, including racial and ethnic discrimination, civil rights violations, disparities in employment opportunities, and political, cultural and media representation, affecting Asian Americans and other minorities as well as members of the dominant society.

350. Environmental Justice (3)

Prerequisite: Completion of GE Foundation

Examines social justice aspects of environmental issues (e.g., exposure to environmental hazards and burdens), and the ability and opportunities to cope with and mitigate such problems, as influenced by race, ethnicity, gender, and class.

Letter grade only (A-F).

352. Filipino/a American Experiences (3)

Focusing on social, economic, political, and cultural dimensions of Filipino/a experiences in the United States, this course examines major issues, including legacies of imperialism, transnational patterns of capital and labor, colonial and post-colonial identities, resistance to oppression, and literary expressions.

353. Contemporary Issues in Filipino/a American Experiences (3)

Prerequisite: Upper-division standing. Recommended: ASAM 352

Interdisciplinary approach used to examine the social, economic, political, and cultural dimensions of Filipino/a experiences in the United States from 1965 to the contemporary period. Emphases on issues of post-colonial identities, the Philippine Diaspora, patterns of labor, strategies of resistance, and cultural practices.

354. Transnational Filipino Communities (3)

Prerequisite: Upper-division standing. Recommended: ASAM 352.

Examines the social, economic, political, and cultural realities in the Philippines and their relationship with the formation of transnational Filipino/a communities.

360. Studies in Asian American Literature (3)

Provides theoretical foundation for the analysis of Asian Pacific American literature. Addresses various issues in contemporary Asian Pacific American literary criticism including transnationalism, historical memory, gender relations, sexuality, and the development of Asian Pacific American literary "aesthetics."

370. Gender and Sexuality in Asian America (3)

Prerequisites: GE Foundation requirements and upper-division standing.

Explores the diverse historical and contemporary experiences of Asian Americans with respect to gender roles and relationships, family, expressions of desire, as well as the relationships among gender, sexuality, and racial/ethnic identity.

380. Asian Philosophies and Religions in America (3)

Prerequisite: GE Foundation requirements.

Influence of and changes in Asian philosophies and religions in the American environment. Emphasis on Confucianism, Taoism, Hinduism, Buddhism and Shintoism in relation to individual and social values in America.

381. Asian American Women (3)

Reconstructs and examines Asian American women's history and contemporary experiences. Assesses the complexities of intersecting social categories of oppression and Asian American women's active pursuit of equality and dignity.

Same course as WGSS 381. Not open for credit to student with credit in HIST 381, WGSS 381 or W/ST 381. (Lecture)

407. Asians in Latin America (3)

Prerequisites: Upper-division standing or consent of instructor. Recommended: HIST 161

Examines the diverse histories and experiences of Asians in Latin America. Emphases placed on patterns of labor and settlement, socio-economic development of local and transnational communities, formation of ethnic identities, and expressive cultures.

Letter grade only (A-F).

490. Selected Topics in Asian American Studies (3)

Prerequisite: Consent of instructor.

Topics of current interest in Asian American Studies selected for intensive development.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

495./595. Seminar in Asian American Studies (3)

Selected topics in Asian American Studies. Area and topics of emphasis will vary from year to year.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special research interest.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL

595./495. Seminar in Asian American Studies (3)

Selected topics in Asian American Studies. Area and topics of emphasis will vary from year to year.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

599. Directed Studies (1-3)

Prerequisite: Consent of instructor

Directed studies to permit individual students to pursue topics of special research interest.

May be repeated to a maximum of 6 units in different semesters.
Letter grade only (A-F).

ASIAN LANGUAGES

College of Liberal Arts
Department of Asian and Asian American Studies

Department Chair: John N. Tsuchida

Vice Chair: Teri Yamada

Department Office: Faculty Offices FO3-340

Telephone: (562) 985-4645

FAX: (562) 985-1535

Center: Center for Asian Pacific American Studies

Website: <http://www.csulb.edu/dept/as>

Faculty: Ruixi Ai, Kiyomi Chinen, Masako O. Douglas, Linda N. España-Maram, Hiroko Kataoka, Hsin-sheng C. Kao (Emerita), Barbara W. Kim, Yoko Pusavant (Emerita), San-Pao Li (Emeritus), Dean S. Toji, John N. Tsuchida, Tianwei Xie, Teri Yamada

Advisors:

Graduate: Tim Xie

Undergraduate: Teri Yamada

Undergraduate: Dean Toji (Asian American Studies)

Undergraduate: Teri Yamada (Asian Studies)

Undergraduate: Ruixi Ai (Chinese Studies)

Undergraduate: Masako O. Douglas (Japanese)

Associate Faculty: Bipasha Baruah (International Studies), Christine Bhat (Educational Psychology, Administration and Counseling), Jeffrey Broughton (Religious Studies), Kendall Brown (Art History), Chi-Ah Chun (Psychology), Frank Gossette (Geography), Lisa Grobar (Economics), Jack W. Hou (Economics), Margaret Kuo (History), Tomotaka Ishimine (Economics), Guotong Li (History), Jyotsna Pattnaik (Teacher Education), Xiaoping Liang (Linguistics), William Mulligan (Journalism), Kim Oanh Nguyen-Lam (CLMER), Karen Quintiliani (Anthropology), George Scott (Anthropology), Michiko Takeuchi (History), Teresa Wright (Political Science), Oliver Wang (Sociology), R. Scott Wilson (Anthropology)

Administrative Support Coordinator: Michelle Seales-Kaestner

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Customs Inspector • Immigration Officer • Importer/Exporter • Foreign Service Officer • International Marketing Representative • Travel Guide • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Translator • Foreign Business and Trade • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Department of Asian and Asian American Studies fosters multi-ethnic and cross-cultural understanding from a global, multi-disciplinary perspective and pursues an active language education program to promote cross-cultural awareness and intercultural understanding.

Through courses of its own and those of cooperating

departments, the Department of Asian and Asian American Studies offers B.A. in Asian American Studies, B.A. and M.A. in Asian Studies, B.A. in Chinese Studies, Single Subject Teaching Credential in Japanese, B.A. in Japanese, Minor in Asian American Studies, Certificate in Asian Studies, Certificate in Asian American Studies, and Certificate in Japanese. Information and advice relative to the programs are available through the department office, FO3-340.

Cambodian Courses (KHMR)

LOWER DIVISION

111. Accelerated Study of Khmer for Heritage Speakers I (4)

Prerequisites: Linguistic competency equivalent of a beginning Khmer speaker; one GE Foundation course that may be taken concurrently.

Linguistic and cultural aspects of Khmer language for heritage speakers. Oral and written communication skills in Khmer. Intensive study of literary, historical, social, and aesthetic traditions of Cambodia as seen through Khmer language and literary texts.

Letter grade only (A-F).

211. Accelerated Study of Khmer for Heritage Speakers II (4)

Prerequisites: KHMR 111 linguistic competency or equivalent.

Intermediate level linguistic study and cultural aspects of Khmer for heritage speakers. Oral and written communication skills and intensive study of literary, historical, social, and aesthetic traditions of Cambodia through the Khmer language and literary texts.

Letter grade only (A-F).

Korean Courses (KOR)

101. Fundamentals of Korean (4)

Prerequisite/Corequisite: One GE Foundation course.

Introduction to the writing system, pronunciation, vocabulary, and grammar of the Korean language and Korean culture.

Students with previous training or native speakers of Korean may not enroll.

102. Fundamentals of Korean (4)

Prerequisites/Corequisites: One GE Foundation course. Completion of KOR 101 or competency equivalent to KOR 101.

Introduction to the Korean grammar, reading, writing, and conversation and Korean culture.

Students with previous training or native speakers of Korean may not enroll.

Tagalog (Filipino Language) Courses (TGLG)

LOWER DIVISION

101. Fundamentals of Tagalog (4)

Prerequisite/Corequisite: One GE Foundation course.

Introduction to the pronunciation, grammar, essential vocabulary, reading, and conversation of modern standard Tagalog (Filipino).

102. Fundamentals of Tagalog (4)

Prerequisites: One GE Foundation course which may be taken concurrently, and competency equivalent for TGLG 101.

Introduction to the pronunciation, grammar, essential vocabulary, reading, and conversation of modern standard Tagalog (Filipino).

Vietnamese Courses (VIET)

LOWER DIVISION

111. Accelerated Vietnamese for Heritage Students I (4)

Prerequisites: One GE Foundation course that may be taken concurrently. Conversational ability of Vietnamese.

Designed for students who have listening and speaking ability of Vietnamese. Focuses on Vietnamese literacy and culture, including developing reading and writing skills in context.

Letter grade only (A-F).

211. Accelerated Vietnamese for Heritage Students II (4)

Prerequisites: VIET 111. Ability to speak and comprehend Vietnamese oral and written language at the interpersonal communicative level.

Designed for students who have intermediate listening and speaking ability of Vietnamese and the ability to comprehend simple written Vietnamese texts. Focuses on Vietnamese literacy and culture, including developing reading and writing skills in context.

Letter grade only (A-F).

ATHLETICS

University Programs

Director

Victor Cegles

Telephone

(562) 985-4655

Introduction

The University sponsors a diverse program of 18 intercollegiate athletic teams and is supervised by the Department of Athletics.

The teams compete under the rules of the National Collegiate Athletic Association, the Big West Conference, and the Mountain Pacific Sports Federation, maintaining membership in each organization. Women's varsity sports are basketball, golf, cross-country, soccer, tennis, indoor/outdoor track and field, volleyball, water polo and softball. Men's varsity sports are basketball, baseball, indoor/outdoor track and field, cross-country, water polo, volleyball, and golf. Students enrolling in intercollegiate athletic programs must meet all NCAA eligibility requirements. Information concerning athletic opportunities available to male and female students and the financial resources and personnel that CSULB dedicates to its men's and women's teams may be obtained from Cindy Masner, Department of Athletics, (562) 985-7751.

Students may apply no more than four (4) semester units of lower-division ATHL courses toward the baccalaureate degree within the 20-unit maximum on activity units generally, except that the combined total of lower-division ATHL activity units must not exceed four (4) units and the total of lower-division KIN activity units must not exceed eight (8) units. Upper-division ATHL courses, with the exception of ATHL 325, may be taken one time only and not in conjunction with the lower-division ATHL courses. ATHL 325 may be repeated to a maximum of four (4) semester units and may be taken in conjunction with any other ATHL course.

The California State University is committed to providing equal opportunities to men and women CSU students in all campus programs, including intercollegiate athletics.

Athletics Courses (ATHL)

LOWER DIVISION

Intercollegiate Sports (1)

Enrollment subject to approval of the coach of the sport.

Competition in NCAA-regulated sports. Athletes enrolled who fail to qualify for squad must withdraw from course.

May be repeated to a maximum of 4 units, including previously earned credits from SAR 1. Credit/No Credit grading only.

- 261. Women's Softball
- 262. Men's Baseball
- 263. Women's Basketball
- 264. Men's Basketball
- 265. Women's Track and Field
- 266. Men's Track and Field
- 269. Women's Volleyball
- 270. Women's Water Polo
- 271. Men's Water Polo
- 272. Men's Volleyball
- 275. Women's Golf
- 276. Men's Golf
- 277. Women's Tennis
- 281. Women's Cross-Country
- 282. Men's Cross-Country
- 284. Women's Soccer

UPPER DIVISION

319. Theory and Practice of Minor Intercollegiate Sports (2)

Repeatable credits include previous credits from SAR 319.

320. Theory and Practice of Major Intercollegiate Sports (2)

Repeatable credits include previous credits from SAR 320. Credit/No Credit grading only.

325. Student-Athlete Leadership Development and University Service (1)

Prerequisites: Upper-division division standing, consent of instructor. Must be an official member of an NCAA Intercollegiate team at CSULB.

Juniors/seniors hone communication and facilitation abilities to better function within groups, community, and careers. Emphasis on experiential learning component with people dynamic and group process skills, academic and athletic information, and how a peer mentor can positively impact that development.

May be repeated to a maximum of 4 units, including previously earned credits from SAR 325. May be taken in conjunction with any other ATHL course. Credit/No Credit grading only.

BIOLOGICAL SCIENCES

College of Natural Sciences and Mathematics

Department Chair: Brian T. Livingston

Department Office: Hall of Science (HSCI) 104

Telephone / FAX: (562) 985-4806 / (562) 985-8878

Website: www.csulb.edu/depts/biology

Faculty: Bengt J. Allen, James W. Archie, Flora Banuett, Judith A. Bruslan, Ashley Carter, Jesse G. Dillon, Elizabeth D. Eldon, L.K. (Vern) Eveland, Deborah Fraser, Henry C. Fung, Editte Gharakhanian, Gwen Goodmanlowe, Eric J. Haas-Stapleton, David G. Huckaby, Kevin M. Kelley, Balwant S. Khatra, Laura Kingsford, Lisa S. Klig, Kay K. Lee-Fruman, Brian T. Livingston, Christopher G. Lowe, Simon Malcomber, Steven L. Manley, Andrew Z. Mason, Jacqueline Pal, Bruno G. Pernet, Shenaz Rehmat, Bryan C. Rourke, Gary Shin, Kevin Sinchak, Houg-Wei Tsai, Dessie L. A. Underwood, Christine Whitcraft, Raymond R. Wilson, Jr., Kelly A. Young, Mason X. Zhang

Administrative Support Coordinator: Susan Suetsugu

Advisors:

Credential: James Kisiel, Tim Williamson

Undergraduate:

General Biology, Biology Education, Botany, Ecology, and Zoology – David G. Huckaby

Cell and Molecular Biology – Kay K. Lee-Fruman

Marine Biology – Gwen Goodmanlowe

Microbiology – L.K. (Vern) Eveland

Physiology – Balwant S. Khatra

Graduate: Editte Gharakhanian

Honors in the Major Advisor: Andrew Z. Mason

Health Professions Advising Office (HSCI 164):

Clinical Laboratory Scientist/Medical Technology Advisor:

Biotechnology Certificate Advisor: Lisa S. Klig

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Biologist • Lab Technician • Biological Aide • Technical Writer • Biological Illustrator • Forester • Quality Control Technician • Biomedical Engineer • Pharmaceutical Sales Representative • Fish and Wildlife Biologist • Food Technologist • Microbiologist • Criminologist • Dietitian • Medical Technologist • Health Planner • Physician's Assistant • Medical Librarian • Respiratory Therapist • Curator • Ecologist • Environmental Specialist • Sanitarian (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.) Various entry-level trainee positions in business and industry are available for graduates regardless of academic discipline.

Introduction

The biological sciences include all of the areas of scientific endeavor centered around the general question of the nature of life. Such diverse areas as biochemistry, ecology, paleontology, and animal behavior are all part of the biological sciences. The discipline of biochemistry is located in the department of Chemistry and Biochemistry and the discipline of paleontology is located in the department of Geological Sciences. For information about the programs in these disciplines, consult the

appropriate section of this catalog. The remaining disciplines of the biological sciences represented in the College of Natural Sciences and Mathematics are located in the Department of Biological Sciences, which offers five degrees: a Bachelor of Science in Biology, a Bachelor of Science in Marine Biology, a Bachelor of Science in Microbiology, a Master of Science in Biology, and a Master of Science in Microbiology. The B.S. in Biology has, in addition to a general option, six specialized options in Biology Education, Botany, Cell and Molecular Biology, Ecology, Physiology, and Zoology. See below for the specific requirements for each of these degrees and options. The Department of Biological Sciences also participates in the Desert Studies Consortium and the Ocean Studies Institute. Information on the latter program is listed in this catalog under Ocean Studies Institute.

Academic Advising and Facilitated Enrollment into Classes

All entering students who declare a major in a degree program offered by this department need to contact the College of Natural Sciences and Mathematics' Academic Advising Center (HSCI 164) and participate in the College's Science Safari to Success (for first time freshmen) or EONS (Enrollment and Orientation in the Natural Sciences and Mathematics for transfer students) Program. These programs are held in July for those starting in the Fall Semester and in January for those starting in the Spring Semester. Department advisors will be available to provide an overview of the students' chosen baccalaureate degree program, to assist with academic advisement, to provide information on the many career opportunities available, and to aid students in enrolling in classes. Contact the Jensen Student Access to Sciences and Mathematics Center (HSCI 164) or department office for additional information.

The Richard B. Loomis Research Award

This annual departmental award provides supply and travel support for thesis research projects. Graduate students submit research proposals to the department's Graduate Studies Committee, which grants funding to the more meritorious proposals.

Handloser Graduate Student Tuition Grant

The Handloser Graduate Student Tuition Grant is offered to an outstanding M.S. Biology applicant interested in pursuing master's thesis research in the area of marine biology.

Frank Schatzlein Scholarship Award

The Frank Schatzlein Scholarship Award is available to an outstanding undergraduate student in biological sciences, with upper division standing, studying in the area of cellular physiology. Applications can be obtained from the Biological Sciences Department Office during the month of March.

Linda Warren Graham Medical Technology Scholarship

The Linda Warren Graham Medical Technology Scholarship is available to senior microbiology majors who have been accepted into a Clinical Laboratory Scientist (or a Medical Technology)

Internship program. Scholarship applications can be obtained from the Biological Sciences Department Office during the month of March prior to graduation.

Target Speciality Products Scholarship

The Target Speciality Products Scholarship is designed to reward a hardworking, well-rounded undergraduate majoring in natural sciences or mathematics, with sophomore, junior or senior class standing. Students applying for this scholarship should be involved in school and community activities, be working either full or part-time, and must be interested in exploring future careers that combine science and business. Application forms and information are available in the Department of Biological Sciences office beginning the month of February.

Financial Support, Assistantships

The Department of Biological Sciences offers to graduate students a limited number of teaching associate and graduate assistant appointments. Forms requesting consideration for these appointments are available in the department's Graduate Office. Duties consist of approximately 20 hours per week devoted to preparation and/or instruction in general undergraduate laboratory classes. These appointments are limited to a maximum of six semesters per individual.

The department also has a limited number of technical assistant positions as well as some hourly employment. Several members of the faculty have grants that provide for research assistantships. A number of scholarships are available through the university.

Graduate and Health Professional Preparation

The department provides preparation for advanced study at the graduate level and for entry into various health professional schools. Students should consider the degree requirements listed in the catalog as minimal; some graduate schools, professional schools, or careers may require additional coursework in mathematics, physics, chemistry, or biological sciences.

Students desiring entrance into a graduate school to obtain a master's or doctoral degree in some area of the biological sciences should determine the entrance requirements for the school(s) of interest early in their undergraduate years. Specifically, students contemplating graduate work in mathematically oriented areas of the biological sciences should consider taking more calculus (MATH 122, 123, 224, and 364A or 370A will substitute for MATH 119A and 119B) and those contemplating graduate work in chemically oriented areas should consider taking additional chemistry (CHEM 251; 320A,B; 377A,B; 441A,B).

Students desiring entrance into one of the various health-related professional schools should consult with the Health Professions Advising Office in the College of Natural Sciences and Mathematics' Jensen Student Access to Science and Mathematics (SAS) Center (HSCI 164) for more information. Most of these schools do not require students to major in any particular discipline but favor holders of a bachelor's degree; and want students who have done well in their major and who also took the prerequisite courses required by that particular school.

Undergraduate Programs

Bachelor of Science in Biology

This degree includes a general option in biology and six additional options for those desiring a more specialized program.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Biology (120 units)

This degree major is designed for students pursuing careers that involve the study of life; it is especially appropriate for those contemplating graduate work in the biological sciences. Students may not combine this option with any other in the B.S. in Biology nor with the B.S. in Marine Biology or Microbiology as part of a dual major. This option requires approximately 82-84 units in the major, of which 39-41 are in lower division and 43 are in upper division. All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Lower Division:

Take all of the following courses:

BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Intro to Ecology and Physiology (4)
Prerequisites: BIOL 211, 212, CHEM 111B each with a grade of "C" or better.

BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take one course from the following:

MATH 119A Survey of Calculus I (3)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 122 Calculus (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one course from the following:

MATH 119B Survey of Calculus II (3)
Prerequisite: MATH 119A or 122.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

Take one of the following courses:

PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

PHYS 100B General Physics (4)
Prerequisites: PHYS 100A.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Upper Division:

Take all of the following courses:

CHEM 322A Organic Chemistry (3)
Prerequisite: CHEM 111B with a grade of "C" or better.
Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)
Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)
Prerequisite: CHEM 111B with a grade of "C" or better.
Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)
Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

Take at least 35 units in biological science including:

All of the following courses:

BIOL 312 Evolutionary Biology (3)
Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.

BIOL 340 Molecular Cell Biology (3)
Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

BIOL 345 Comparative Animal Physiology (3)
Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

BIOL 345L Lab in Comparative Animal Physiology (1)
Prerequisite/Corequisite: BIOL 345 with a grade of "C" or better.

BIOL 350 General Ecology (3)
Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

BIOL 370 General Genetics (4)
Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

BIOL 480 Seminars (1)
Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

One of the following courses in animal diversity:

BIOL 313 Invertebrate Zoology (4)
Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better.

BIOL 316 General Entomology (4)
Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

BIOL 324 Vertebrate Zoology (4)
Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

One of the following courses in plant diversity:

BIOL 427 Vascular Plant Systematics (4)
Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

BIOL 439 Plant Morphology (4)
Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

Nine additional units selected from upper division courses in the Department of Biological Sciences. At least two of the courses selected to fulfill these additional units must have numbers between 410-499. Either CHEM 441A,B or 448 will count toward these additional 9 units. Up to 6 of these additional units may be substituted from courses in other departments in the College of Natural Sciences and Mathematics upon approval by the undergraduate advisor. Students may use from 1-3 units of BIOL or MICR 496 towards the 9 additional units of upper division course work but only with prior permission of the advisor for this option.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308, MICR 300I, NSCI 492.

Option in Biology Education (120 units)

This option is designed solely for students who wish to become secondary school Biology teachers. This option requires 82-92 units in the major, of which 50-52 are lower division and 32-40 are upper division. Prospective students should consult the Single Subject Science Education Advisor in the Department of Science Education early to plan their program.

All students must achieve at least a 2.0 grade-point average in each of the following: (1) the entire college record, (2) all units attempted at CSULB, (3) all courses in the major, and (4) all upper division courses in the major completed at CSULB.

Lower Division:

Take all of the following:

BIOL 153 Introduction to Marine Biology (3)
Prerequisites/Corequisites: Courses that fulfill the A.1 and B.2 GE requirements.

BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A all with a grade of "C" or better.

BIOL 213 Intro to Ecology and Physiology (4)
Prerequisites: BIOL 211, 212, CHEM 111B with a grade of "C" or better.

BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

ASTR 100 Astronomy (3)
Corequisites: One course from General Education Category B.2 and ASTR 100L.

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Choose either:

GEOL 106 Earth Science for Teachers (4)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics, including algebra, geometry, and intermediate algebra or the equivalent.

or both of the following:

GEOL 102 General Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 104 Geology Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

Take one of the following courses:

MATH 119A Survey of Calculus I (3)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following courses:

MICR 200 General Microbiology for Health

Professionals (4)

Prerequisites: CHEM 111A or 140 with a grade of "C" or better and GE Foundation requirements.

MICR 211 General Microbiology (5)

Prerequisites: BIOL 211, 212; CHEM 111B, all with a grade of "C" or better.

Take one of the following courses:

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 200, 200L, 205, 205L, 207, 208; MICR 101.

Upper Division:

Take either:

CHEM 327 Organic Chemistry (3)

Prerequisite: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

or all four of the following courses:

CHEM 322A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)

Prerequisite: CHEM 111B with a grade of "C" or better.

Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

Take the following course:

SCED 404 The Nature of Science and Scientific

Reasoning for Teachers (3)

Prerequisites: Completion of at least three-fourths of the credential specialization courses for Single Subject Teaching Credential in science and consent of instructor. Enrollment limited to students who intend to pursue a Single Subject Credential in Science.

Take at least nine courses totaling at least 26-29 units in the biological sciences including:

All of the following courses:

BIOL 312 Evolutionary Biology (3)

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.

BIOL 340 Molecular Cell Biology (3)

Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

BIOL 370 General Genetics (4)

Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

BIOL 480 Seminars (1)

Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

One of the following courses in physiology:

BIOL 345 Comparative Animal Physiology (3)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

BIOL 447 Molecular Plant Physiology (3)

Prerequisites: BIOL 340, 370, both with grade of "C" or better. (Undergraduates enroll in BIOL 447; graduates enroll in BIOL 547.)

One of the following courses in plant diversity:

BIOL 427 Vascular Plant Systematics (4)

Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

BIOL 439 Plant Morphology (4)

Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

One of the following courses in animal diversity:

BIOL 313 Invertebrate Zoology (4)

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better.

BIOL 316 General Entomology (4)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

BIOL 324 Vertebrate Zoology (4)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

The remaining biological sciences course should be chosen in consultation with an advisor; BIOL 495/MICR 495 is highly recommended. Either CHEM 441A, B or 448 will count toward this additional required course. Students may use BIOL or MICR 496 as one of the nine required upper division courses but only with prior permission of the advisor for this option.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308; MICR 300I; and NSCI 492.

Although SCED 403 and EDSS 300C are not required in the major, the credential does require these courses. Students may want to take some or all of them prior to graduation.

Single Subject Teaching Credential in Biology

The Biological Sciences Concentration meets the subject matter competence requirement for the Single Subject Teaching Credential in Biology. In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective Biology teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete many of the credential program courses as an undergraduate. Courses may also be started as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

The Biological Sciences Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

Option in Botany (120 units)

This option is designed primarily for those interested in careers involving the biology of plants and is particularly appropriate for those contemplating graduate work in this field. This option requires approximately 86-88 units in the major, of which 39-41 are in lower division and 47 are in upper division.

All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Lower Division:

Take all of the following:

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Intro to Ecology and Physiology (4)

Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.

BIOL 260 Biostatistics (3)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take one of the following courses:

MATH 119A Survey of Calculus I (3)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following courses:

MATH 119B Survey of Calculus II (3)

Prerequisite: MATH 119A or 122.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

Take one of the following courses:

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Upper Division:

Take 47 units including:

All of the following courses:

CHEM 322A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

BIOL 312 Evolutionary Biology (3)

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.

BIOL 340 Molecular Cell Biology (3)

Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

BIOL 370 General Genetics (4)

Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

BIOL 427 Vascular Plant Systematics (4)
Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

BIOL 439 Plant Morphology (4)
Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

BIOL 480 Seminars (1)
Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

Take at least two courses from the following:

BIOL 425, 447, 450, or 451

Take at least 11 additional units with advisor consultation. CHEM 441A,B or 448 will count toward these 11 units. Students may use 1-3 units of BIOL 496 toward the remaining 11 units but only with prior permission of the advisor for this option.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308, 309I; MICR 300I; and NSCI 492.

Option in Cell and Molecular Biology (120 units)

This option is designed primarily for those interested in careers that involve biology at the cell and molecular levels and is particularly appropriate for those contemplating graduate work in these fields. This option requires 82-86 units in the major, of which 39-41 are in lower division and 43-45 are in upper division. Students in this option might also want to pursue the Certificate in Biotechnology described elsewhere in this catalog.

All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Lower Division:

Take all of the following courses:

BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Intro to Ecology and Physiology (4)
Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.

BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take one of the following courses:

MATH 119A Survey of Calculus I (3)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following courses:

MATH 119B Survey of Calculus II (3)
Prerequisite: MATH 119A or 122.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

Take one of the following courses:

PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

PHYS 100B General Physics (4)
Prerequisites: PHYS 100A.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Upper Division:

Take all of the following courses:

CHEM 322A Organic Chemistry (3)
Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)
Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)
Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)
Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

CHEM 441A Biological Chemistry (3)
Prerequisite: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

CHEM 441B Biological Chemistry (3)
Prerequisite: CHEM 441A with a grade of "C" or better.

BIOL 340 Molecular Cell Biology (3)
Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

BIOL 370 General Genetics (4)
Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

BIOL 440L Molecular Cell Biology Laboratory (3)
Prerequisites: BIOL 340, 370, both with a grade of "C" or better, and consent of instructor. (Preference given to students in the Bachelor of Science in Biology, Option in Cell and Molecular Biology.)

BIOL 480 Seminars (1)
Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

Take one of the following two courses:

BIOL 312 Evolutionary Biology (3)

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

Take five courses totaling at least 15 units selected from the following:

MICR 211; BIOL 431, 433, 443, 445, 447, 472, 473, 477; CHEM 547; BIOL/MICR 416, 430.

Students contemplating graduate school should consider taking 1-3 units of BIOL 496 in addition to the above requirements. In exceptional cases, students may use 3 units of BIOL 496 towards these five courses but only with prior permission of the advisor for this option.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308, 309I; MICR 300I; and NSCI 492.

Option in Ecology (120 units)

This option is designed for students interested in careers involving the study of organisms in relation to their environment, either in private industry or government service, as well as those students contemplating graduate work in this field. This option requires approximately 84-88 units in the major, of which 43-45 are in lower division and 41-43 are in upper division.

All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Lower Division:

Take all of the following:

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Intro to Ecology and Physiology (4)

Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.

BIOL 260 Biostatistics (3)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take the following course:

GEOL 102 General Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

and one of the following courses:

GEOL 104 Geology Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

GEOL 105 Geology Field Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

Take one of the following courses:

MATH 119A Survey of Calculus I (3)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following courses:

MATH 119B Survey of Calculus II (3)

Prerequisite: MATH 119A or 122.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

Take one of the following courses:

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200

Upper Division:

Take either both:

CHEM 327 Fundamentals of Organic Chemistry (3)

Prerequisite: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

CHEM 448 Fundamentals of Biological Chemistry (3)

Prerequisites: CHEM 327 or 322B either with a grade of "C" or better.

or all four:

CHEM 322A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously

earned a "C" or better in CHEM 322B.

Take all of the following courses:

- BIOL 312 Evolutionary Biology (3)
Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.
- BIOL 340 Molecular Cell Biology (3)
Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.
- BIOL 345 Comparative Animal Physiology (3)
Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.
- BIOL 345L Lab in Comparative Animal Physiology (1)
Prerequisite/Corequisite: BIOL 345 with a grade of "C" or better.
- BIOL 350 General Ecology (3)
Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.
- BIOL 370 General Genetics (4)
Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.
- BIOL 427 Vascular Plant Systematics (4)
Prerequisite: BIOL 312 or 370 with a grade of "C" or better.
- BIOL 456 Population Ecology (3)
Prerequisites: BIOL 350, MATH 119B or 123 all with a grade of "C" or better.
- BIOL 480 Seminars (1)
Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

Take one of the following courses in animal diversity:

- BIOL 313 Invertebrate Zoology (4)
Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better.
- BIOL 316 General Entomology (4)
Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.
- BIOL 324 Vertebrate Zoology (4)
Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

Take one of the following courses in ecology and environmental science:

BIOL 450, 451, 452, 454A, 454B, 457, 459

Take at least one additional course in biological or geological sciences or geography totaling at least three units chosen in consultation with a faculty advisor. Ecology students are strongly encouraged to take GEOG 481 or an additional field oriented ecology, organismic, or quantitative biology course. Students may use 1-3 units of BIOL 496 toward these three units but only with prior permission of the advisor for this option.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308, 309I; MICR 300I; and NSCI 492.

Few, if any, health-related professional schools (e.g. veterinary medicine) will accept CHEM 327. Some graduate programs with masters or doctorates in biology and/or ecology may also not accept CHEM 327. Students interested in these programs might consider taking CHEM 322A,B and 323A,B. CHEM 327 is not acceptable as a prerequisite for CHEM 441A. CHEM 327 is acceptable toward the Minor in Chemistry.

Option in Physiology (120 units)

This option is designed primarily for those interested in careers involving the study of function in animals, including humans, and is particularly appropriate for those contemplating graduate work in this field or entering one of the health professions. This option requires 80-82 units in the major, of which 39-41 are in lower division and 41 are in upper division.

All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Lower Division:

Take all of the following courses:

- BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.
- BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.
- BIOL 213 Intro to Ecology and Physiology (4)
Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.
- BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take one of the following courses:

- MATH 119A Survey of Calculus I (3)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following courses:

- MATH 119B Survey of Calculus II (3)
Prerequisite: MATH 119A or 122.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

Take one of the following courses:

- PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.
- PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

- PHYS 100B General Physics (4)
Prerequisites: PHYS 100A.
- PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Upper Division:

Take all the following:

CHEM 322A Organic Chemistry (3)

Prerequisites: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

CHEM 441A Biological Chemistry (3)

Prerequisite: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

CHEM 441B Biological Chemistry (3)

Prerequisite: CHEM 441A with a grade of "C" or better.

BIOL 340 Molecular Cell Biology (3)

Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

BIOL 370 General Genetics (4)

Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

BIOL 480 Seminars (1)

Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

Take one of the following two courses:

BIOL 312 Evolutionary Biology (3)

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

Take four units selected from the following pairs:

BIOL 342 Mammalian Physiology (3)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better. Recommended: PHYS 100A,B.

BIOL 342L Laboratory in Physiology (1)

Prerequisite/Corequisite: BIOL 342 with a grade of "C" or better.

or

BIOL 345 Comparative Animal Physiology (3)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

BIOL 345L Lab in Comparative Animal Physiology (1)

Prerequisite/Corequisite: BIOL 345 with a grade of "C" or better.

Take twelve additional units from the following:

BIOL 342, 345, 431, 433, 442, 443, 444, 445, 447, 448, 449; MICR 423, 430.

Students contemplating graduate school should consider taking 1-3 units of BIOL 496 in addition to the above requirements. In exceptional cases, students may use 3 units of BIOL 496 towards the twelve additional units but only with

prior permission of the advisor for this option.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308, 309I; MICR 300I; and NSCI 492.

Option in Zoology (120 units)

This option is designed primarily for those interested in careers that involve the biology of animals and is particularly appropriate for those contemplating graduate work in this field. This option requires approximately 83-86 units in the major, of which 39-41 are in lower division and 44-45 are in upper division.

All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Lower Division:

Take all of the following courses:

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Intro to Ecology and Physiology (4)

Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.

BIOL 260 Biostatistics (3)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take one of the following courses:

MATH 119A Survey of Calculus I (3)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following courses:

MATH 119B Survey of Calculus II (3)

Prerequisite: MATH 119A or 122.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

Take one of the following courses:

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Upper Division:

Take all the following courses:

CHEM 322A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

BIOL 312 Evolutionary Biology (3)

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.

BIOL 340 Molecular Cell Biology (3)

Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

BIOL 345 Comparative Animal Physiology (3)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

BIOL 345L Lab in Comparative Animal Physiology (1)

Prerequisite/Corequisite: BIOL 345 with a grade of "C" or better.

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

BIOL 370 General Genetics (4)

Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

BIOL 480 Seminars (1)

Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

Take one of the following courses in invertebrate zoology:

BIOL 313 Invertebrate Zoology (4)

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better.

BIOL 316 General Entomology (4)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

Take at least two courses from the following courses in vertebrate zoology:

BIOL 324, 411, 419, 421, 424

Take at least two additional courses in biological science totaling at least eight units chosen in consultation with a faculty advisor. Either CHEM 441A,B or 448 will count toward these eight units. Students may use 1-3 units of BIOL 496 towards the remaining eight units but only with prior permission of the advisor for this option.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308 309I; MICR 300I; and NSCI 492.

Bachelor of Science in Marine Biology (120 units)

This degree program requires approximately 86-93 units in the major, of which 42-44 are in lower division and 44-49 are in upper division. The number of units and particular blend of science and mathematics makes this a very challenging learning experience. However, the depth and strength of this degree provides a strong and flexible base to pursue a variety of careers. Obtaining a minor in another discipline, such as chemistry, microbiology, engineering, business, or computer science, may enhance one's marketability. All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

Lower Division:

Take all of the following courses:

BIOL 153 Introduction to Marine Biology (3)

Prerequisites/Corequisites: Courses that fulfill the A.1 and B.2 GE requirements.

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Intro to Ecology and Physiology (4)

Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.

BIOL 260 Biostatistics (3)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take one of the following courses:

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Take one of the following courses:

MATH 119A Survey of Calculus I (3)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following courses:

MATH 119B Survey of Calculus II (3)

Prerequisite: MATH 119A or 122.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200

Upper Division:

Take either:

CHEM 327 Organic Chemistry (3)

Prerequisite: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

or all four of the following courses:

CHEM 322A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

Take all of the following courses:

BIOL 313 Invertebrate Zoology (4)

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better.

BIOL 340 Molecular Cell Biology (3)

Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

BIOL 345 Comparative Animal Physiology (3)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

BIOL 345L Lab in Comparative Animal Physiology (1)

Prerequisite/Corequisite: BIOL 345 with a grade of "C" or better.

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

BIOL 353 Marine Biology (3)

Prerequisites: BIOL 153, 211, 212, 213, 260 all with grade of "C" or better.

BIOL 370 General Genetics (4)

Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

BIOL 419 Ichthyology (3)

Prerequisites: BIOL 211, 212, 213, 260 and at least 6 additional units of upper division biological science, all with a grade of "C" or better. Recommended: BIOL 350, 353, and 370.

BIOL 425 Phycology (4)

Prerequisite: BIOL 353 with a grade of "C" or better.

BIOL 480 Seminars (1)

Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

GEOL 465 Physical and Chemical Oceanography (3)

Prerequisites: CHEM 111B; PHYS 100B, and upper division standing in the College of Natural Sciences and Mathematics or Engineering. (Undergraduates enroll in GEOL 465; graduates enroll in GEOL 565.)

GEOL 466 Oceanography Lab & Ocean Studies (1)

Prerequisite/Corequisite: GEOL 465.

Take a minimum of three courses from the following:

BIOL 411, 420, 449, 451, 454A, 455, 457, 464; BIOL/MICR 415; and, with prior permission of marine biology advisor for both BIOL 490, and 3 units of BIOL 496

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308; MICR 300I; and NSCI 492.

Few, if any, health-related professional schools (e.g. veterinary medicine) will accept CHEM 327. Some graduate programs with masters or doctorates in biology and/or marine biology may also not accept CHEM 327. Students interested in these programs might consider taking CHEM 322A,B and 323A,B. CHEM 327 is not acceptable as a prerequisite for CHEM 441A. CHEM 327 is acceptable toward the Minor in Chemistry.

Bachelor of Science in Microbiology (120 units)

Microbiology is the study of microorganisms and their interactions with humans, other organisms, and the environment. This degree, with the inclusion of appropriate classes, may be utilized by pre-professional students who are preparing for medical, dental, pharmacy, and veterinary school. There is a core of courses and specific programs can be arranged by counseling with microbiology advisors. This undergraduate major is recognized by the American Society for Microbiology as meeting their core curriculum for the baccalaureate degree program in microbiology. This major requires 83-84 units, of which 37-38 are in the lower division and 46 are in upper division. All students must achieve at least a 2.0 grade-point average in each of the following: 1. the entire college record, 2. all units attempted at CSULB, 3. all courses in the major, and 4. all upper division courses in the major completed at CSULB.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

Lower Division:

Take all of the following courses:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

- CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.
- BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.
- BIOL 212 Introduction to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A each with grades of "C" or better.
- BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.
- MICR 211 General Microbiology (5)
Prerequisites: BIOL 211, 212; CHEM 111B, all with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Take one of the following courses:

- PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.
- PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

- PHYS 100B General Physics (4)
Prerequisites: PHYS 100A.
- PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Take one of the following courses:

- MATH 119A Survey of Calculus I (3)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.
- MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

The following courses do not meet any specific or elective requirements for this major: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Upper Division:

Take all of the following courses:

- CHEM 322A Organic Chemistry (3)
Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.
- CHEM 322B Organic Chemistry (3)
Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.
- CHEM 323A Organic Chemistry Laboratory (1)
Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.
- CHEM 323B Organic Chemistry Laboratory (1)
Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.
- CHEM 441A Biological Chemistry (3)
Prerequisite: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.
- CHEM 441B Biological Chemistry (3)
Prerequisite: CHEM 441A with a grade of "C" or better.

- BIOL 340 Molecular Cell Biology (3)
Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

- BIOL 480 Seminars (1)
Prerequisites: Consent of undergraduate [graduate] advisor. Undergraduates must have filed for graduation and be in their last semester. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

- MICR 320 Bacterial Pathogenesis (3)
Prerequisite: MICR 211 with a grade of "C" or better.

- MICR 355 Microbial Ecology (3)
Prerequisites: MICR 211 or BIOL 211, 212, 213 all with a grade of "C" or better.

- MICR 371 Microbial Genetics (3)
Prerequisite: MICR 211 with a grade of "C" or better.

- MICR 372 Methods in Microbial Genetics (2)
Prerequisite: MICR 211 with a grade of "C" or better. Recommended: MICR 371.

- MICR 430 Immunology (3)
Prerequisite: BIOL 340 with a grade of "C" or better.

- MICR 471 Bacterial Physiology (3)
Prerequisites: MICR 320, CHEM 441A; both with a grade of "C" or better.

Take a minimum of 11 elective units chosen from the following:

BIOL 473, 477; MICR 320L, 322, 325, 355L, 416, 423, 429, 430L, 473, 490, and 495. Students may use MICR 496 towards the additional units but only with prior permission of the advisor for this degree. Those students seeking a career as a Clinical Laboratory Scientist/Medical Technologist are encouraged to take MICR 320L, 416, 423 and 430L.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308; MICR 300I; and NSCI 492.

Bachelor of Science Degree with Honors in Biology, Marine Biology, or Microbiology

Students majoring in the B. S. in Biology (all options), B. S. in Marine Biology, or B. S. in Microbiology who would like an enriched academic program, including an intensive research experience, may be eligible to graduate with Honors in the Major through the University Honors Program. Students may also complete General Honors through the University Honors Program, in which case the General Honors thesis requirement is met through Honors in the Major (see University Honors in this catalog).

Students interested in graduating with Honors in the Major should participate in a series of courses designed to introduce central concepts in biology, develop critical thinking and communication skills (special section of UHP 100), and introduce the newly emerging field of bioinformatics. In addition, they may join a learning community of students with similar interests and benefit from mentoring by faculty members.

This Honors in the Major program was created with the support of a grant from the Howard Hughes Medical Institute. Students admitted to Honors in the Major may be eligible to receive monetary support from a variety of sources for completion of their honors research and thesis.

Students who have successfully completed the lower division Honors in the Major curriculum will receive priority

for research fellowship support to the extent that it is available.

Additional details about this program, including availability of fellowship support, are available from the Honors in the Major Program Advisor.

Requirements for Admission

1. Junior or senior standing with at least one year remaining before graduation.
2. Declared major of B. S. in Biology (any option), B. S. in Marine Biology, or B. S. in Microbiology.
3. Complete BIOL 211, 212, and 213 (BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11) (or BIOL 211A,B), 260; CHEM 322A,B and 323A,B (or CHEM 320A,B) at time of entry with grades of at least a "C" in each course. Students may apply during the semester in which they expect to complete these courses.
4. GPAs of at least 3.000 in all courses in the major and in all upper division courses in the major at the time of application.
5. Submission of an application describing the student's academic background, reasons for applying (including a description of any previous research experience), and willingness to commit to a year-long research experience.
6. Letter of recommendation from a CSULB faculty member familiar with the student's work and abilities.

Requirements for Graduation

1. GPA of at least 3.300 in all upper division courses in the major and in Honors courses.
2. Complete all requirements for the chosen degree in the Biological Sciences.
3. Complete BIOL 466, Research Design and Methods - Honors (3)
4. Complete BIOL 496 Undergraduate Directed Research (3)
5. Completion of BIOL 498H, Thesis - Honors (3)
6. Presentation of research results in a public forum. This requirement may be met by presentation at a scientific conference or at a local venue; consult the Program Director for additional information

Substitutions to this program must be approved by the Honors in the Major Program Advisor.

Minor in Biology

This minor may be combined with any major at CSULB except the B.S. in Biology (all options), B.S. in Microbiology, and B.S. in Marine Biology.

A minimum of 21 units is required for this minor.

Lower Division:

Take all of the following courses:

- BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.
- BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.
- BIOL 213 Intro to Ecology and Physiology (4)
Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.

CHEM 111A and 111B are required if the courses are taken at CSULB.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

The following courses do not meet any specific or elective requirements for this minor: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Upper Division:

Take a minimum of nine units selected from upper division biology courses with at least one course selected from the 400 series. The nine units must include at least one course chosen from BIOL 312, 340, 350, and 370. Many of the upper division courses in biology also require either BIOL 260 or organic chemistry.

The following courses do not meet any specific or elective requirements for this minor: BIOL 301, 304, 305, 308, MICR 300I, 429, and NSCI 492.

Minor in Physiology

This minor may be combined with any major at CSULB except the B.S. in Biology, Option in Physiology.

A minimum of 18 upper division units.

Twelve units must be selected from the following:

BIOL 341, 342, 342L, 345, 345L, 443, 445, 448, 490.

Six units must be selected from other courses in the above list or from the following:

BIOL 473; CHEM 441A,B, 443, or 448.

At least one of the upper division courses taken for this minor must have a laboratory. Most of these upper-division courses require CHEM 111A,B and BIOL 211, 212, 213 as prerequisites; some have other prerequisites in addition.

The following courses do not meet any specific or elective requirements for this minor: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

The following courses do not meet any specific or elective requirements for this minor: BIOL 301, 304, 305, 308, 309I; MICR 300I; and NSCI 492.

Minor in Microbiology

This minor may be combined with any major at CSULB except the B.S. in Microbiology.

A minimum of 19 units which must include:

Lower Division:

MICR 211 General Microbiology (5)

Prerequisites: BIOL 211, 212; CHEM 111B, all with a grade of "C" or better.

Upper Division:

Take all of the following courses:

MICR 320 Bacterial Pathogenesis (3)

Prerequisite: MICR 211 with a grade of "C" or better.

MICR 416 Virology (3)

Prerequisite: MICR 320 or BIOL 340 with a grade of "C" or better.

MICR 430 Immunology (3)

Prerequisite: BIOL 340 with a grade of "C" or better.

Take a minimum of five units from the following:

MICR 322, 371, 471, 473

The following courses do not meet any specific or elective requirements for this minor: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

The following courses do not meet any specific or elective requirements for this major: BIOL 301, 304, 305, 308, MICR 300I, and NSCI 492

Certificate Program in Biomedical Art

This is an interdisciplinary program sponsored by the Art and Biological Sciences departments. For requirements, see the Art section of this catalog.

Certificate in Biotechnology

Biotechnology refers to a process which ultimately yields a product that can be loosely subdivided into five categories; biological organisms with novel traits, DNAs, RNAs, proteins, and compounds. The certificate may be earned in conjunction with or subsequent to a baccalaureate degree. Courses offered for the certificate may be used to satisfy, as appropriate, major or minor requirements.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Prerequisites for Admission

Completion of the following courses with a grade of "C" or better (or consent of the biotechnology certificate program director): CHEM 111A,B; CHEM 320A,B or CHEM 322A,B and 323A,B; CHEM 441A,B; BIOL 340; BIOL 370; MICR 211.

The following courses do not meet any specific or elective requirements for this certificate: BIOL 100, 153, 153L, 200, 200L, 205, 205L, 207, 208; MICR 101 and 200.

Requirements

1. A baccalaureate degree (can be concurrent);
 2. Completion of prerequisites;
 3. Approval by the program director;
 4. Completion of the core curriculum:
 - BIOL 473/573 Molecular Genetics (3)
Prerequisites: BIOL 370 or MICR 371; CHEM 320A,B or 322A,B and 323A,B, or 327, all with a grade of "C" or better. (Undergraduates enroll in BIOL 473; graduates enroll in BIOL 573.)
 - BIOL 477/577 Biotechnology: Applications of Molecular Techniques and Bioinformatics (4)
Prerequisite: BIOL 340 or 370 or CHEM 441A,B; all with a grade of "C" or better. (Undergraduates enroll in BIOL 477; graduates enroll in BIOL 577.)
 - BIOL 480/580 Seminars (1)
Prerequisites: Consent of undergraduate [graduate] advisor. (Undergraduates and classified post-baccalaureates enroll in BIOL 480; graduates enroll in BIOL 580). Undergraduates must have filed for graduation and be in their last semester. Graduates must have been admitted to the department as a graduate student. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.
 - NSCI 492 Internships In Natural Science (3)
Prerequisites: Major in the College of Natural Sciences and Mathematics, completion of 9 units of upper division science coursework, a 2.5 GPA overall or 2.75 GPA in the student's major, and consent of instructor prior to registration.
- Take an additional 3 units selected in consultation with program director;
5. Completion of 3 units consisting of an approved research project in biotechnology to be taken from one or more of the following:
BIOL 496; CHEM 496; or MICR 496 (undergraduate students); BIOL 697; CHEM 697; or MICR 697 (graduate students);
 6. BIOL 301, 304, 308 and MICR 300I do not meet any specific or elective requirements for this certificate.
 7. Total 17 units required .

Concurrent and/or Summer Enrollment in Another College

Students who wish to take coursework in a community or another college to meet curricular requirements while enrolled as undergraduates in the College of Natural Sciences and Mathematics must petition the appropriate department for prior approval to enroll in specific courses. This policy applies to concurrent enrollment or summer enrollment. University policy must also be met; see 'Concurrent Enrollment' and 'Transfer of Undergraduate Credit' in this catalog. Courses not receiving prior approval will not be accepted for credit by the department.

GRADUATE PROGRAMS

Master of Science in Biology

This degree requires a thesis based on original scientific research; a list of research areas with the names of faculty specializing in these areas can be obtained from the department's graduate office.

Admission to the Department

Prerequisites

In addition to the prerequisites for entrance into CSULB as a graduate student, stated previously in this catalog under Graduate Degrees and Post Baccalaureate Studies, the Department of Biological Sciences requires:

1. The student is to find a faculty member in the department who agrees to serve as the thesis advisor of the student prior to her/his acceptance into the M.S. program;
 2. A bachelor's degree in the biological or related sciences from an accredited institution. Students with alternative undergraduate degrees will be considered, but they will likely be assigned deficiency courses by the Thesis Advisor in consultation with the Graduate Advisor;
 3. An undergraduate GPA in all completed science and mathematics courses of at least 2.70 OR a GPA of at least 3.00 in the last 40 semester (or 60 quarter) units of science and mathematics courses completed;
 4. The GRE General Test (and, if required, the GRE Subject Test in Biology or in Biochemistry, Cell and Molecular Biology) must have been taken prior to applying to the Department. Scores are utilized as indicators for accrued knowledge and potential success in the M.S. program in Biology. The GREs must have been taken within five years prior to the intended admission date. Applicants without a degree in biological sciences must take the GRE Biology or Biochemistry, Cell and Molecular Biology Subject Test.
- Students who do not meet the minimum required criteria for acceptance are encouraged to take post-baccalaureate courses to bring up their GPA or GRE scores.

Application

Prospective graduate students in M.S. in Biology, including CSULB graduates, must formally apply for admission to CSULB as described previously in this catalog and must also apply directly to the Department of

Biological Sciences. All applicants must submit the following documents directly to the Department no later than 1 February for the fall semester to receive consideration for admission:

1. Departmental Application Form (PDF), also available from the Department's Graduate Office;
2. A one page essay describing why the applicant wishes to obtain an M.S. degree in Biology at CSULB and how this relates to her/his career objectives;
3. Unofficial transcripts of all college level academic work, including those completed at CSULB (these are in addition to those transcripts required for general graduate admission to CSULB);
4. Three letters of recommendation from persons familiar with the applicant's academic performance and research potential (if also applying for a Teaching Associate position, the letters must refer to the applicant's potential to teach laboratory sections in the biological sciences); and
5. Official report of the GRE General Test scores. The applicant should have taken this examination prior to applying to the Department, because the official scores must reach the Department by the deadline above.

These materials must be submitted to the Graduate Office, Department of Biological Sciences, California State University, Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840-9502.

Review by the Graduate Studies Committee

The Graduate Studies Committee will review all completed applications received by the deadlines. Admission into the M.S. Program in Biology is competitive, with an applicant's college GPA, GRE Test scores, one-page essay, and letters of recommendation weighed in the decision to accept or decline. Applicants who are admitted into the program will enter as either a Classified or Conditionally Classified Graduate Student, as described below. All admitted students must contact the Graduate Advisor prior to their first semester for counsel and orientation.

Admission to the Department of Biological Sciences as a Classified Graduate Student

The Department of Biological Sciences may admit as a Classified Graduate Student applicant who:

1. has met all prerequisites,
2. has a complete application folder, and
3. has obtained acceptance by a faculty member to serve as her/his Thesis Advisor.

Admission to the Department as a Conditionally Classified Graduate Student

An applicant who fails to meet the above criteria for Classified Graduate Student may be considered by the Graduate Studies Committee for admission as Conditionally Classified Graduate Student:

An applicant with course deficiencies: The Graduate Advisor and student's Thesis Advisor will determine whether academic deficiencies exist for the particular field of study to be undertaken. The courses to be taken to make up deficiencies will be indicated on the back of the department application form. Such courses are in addition to the

minimum 30 units on the student's Program of Study (see below). The applicant must make up all deficiencies before attaining Classified status.

The Thesis Proposal

After admission to the Department as a Classified or Conditionally Classified graduate student, the student in consultation with the Thesis Advisor, must prepare her/his Thesis Proposal and Program of Study, which includes all coursework to be taken. The Thesis Proposal must include a thorough review of relevant primary literature that demonstrates the context of the proposed research, it must clearly define the experiments proposed for the research to be undertaken, and should include preliminary data, if available. The student and her/his Thesis Advisor will select at least two additional members to serve on the Thesis Committee. In most cases, the Thesis Advisor will serve as Chair of the Thesis Committee. However, if the Thesis Advisor is not eligible, another member of the Thesis Committee will serve as Thesis Committee Chair. The student will then have a formal meeting with the Thesis Committee, at which the student's Thesis Proposal and Program of Study will be presented and evaluated. At this meeting, the Thesis Committee will question the student about her/his Thesis Proposal. At the completion of this meeting, the Thesis Committee will meet briefly, without the student present, to evaluate the Thesis Proposal. Approval is based on whether the student has demonstrated a solid understanding of her/his thesis project. The Thesis Proposal must be prepared, presented to, and approved by the Thesis Committee before the end of the second semester after admission to the Department. Failure to meet this requirement will result in dismissal from the M.S. in Biology program.

The Program of Study

The Program of Study must include six units of Thesis (BIOL 698), one to three units of Directed Research (BIOL 697), two units of Experimental Design (BIOL 696A), two units of Scientific Communication (BIOL 696B), one unit of Seminar (BIOL 580), and four units from: BIOL 663, 664, 665, 666; MICR 661; OR CHEM 595A; BIOL 663-666 and MICR 661 topics must be different. Of the minimum 30 units, no more than six may come from BIOL 663-666 and no more than two units of CHEM 595A; no more than six may come from transfer credit; and no more than one 300-level course may be included. Any 300-level course on a graduate program of study must be approved by the Thesis Advisor and the Graduate Advisor. BIOL 696A will be taken during the student's initial fall semester; the course will cover experimental design, statistics, and literature research, and help students in preparing their Thesis Proposal. BIOL 696B will be taken during the first spring semester in the program, and will cover both oral and written scientific presentation. BIOL 696B is intended to facilitate manuscript and thesis writing and to help students learn to articulate their findings for their thesis defense. The Program of Study must be prepared, presented to, and approved by the Thesis Committee before the end of the second semester after admission to the Department. Failure to meet this requirement will result in dismissal from the M.S. in Biology program.

Advancement to Candidacy

In addition to the general University requirements stated previously under Post-Baccalaureate and Graduate Degrees in this catalog, the student must complete the following steps before receiving Master's Candidate status in the Department of Biological Sciences:

1. Admission to the Master's Degree program in Biology as a Classified graduate student (see above);
2. Acceptance of the Thesis Proposal and Program of Study by the Thesis Committee;
3. Satisfactory academic progress;
4. Satisfactory fulfillment of the Graduation Writing Assessment Requirement (GWAR).

The Thesis Committee will recommend the student for advancement to candidacy by forwarding its recommendation to the Department Graduate Advisor. This should occur at end of second semester after admission. Upon approval by the College's Associate Dean, the student will attain Master's Candidate status.

Requirements for the Master of Science in Biology

The regulations governing the master's degree are those in effect at the time of advancement to candidacy. In addition to the general University requirements stated previously in this catalog, the student must meet the following requirements before receiving the degree of Master of Science in Biology. The requirements are:

1. Advancement to Master's Candidate status (see above);
2. Maintenance of a 3.00 ("B" average) or better, overall GPA (includes all upper-division and graduate level courses taken since admission to this University and after completion of the baccalaureate degree) and graduate program GPA. If either GPA falls below 3.00, it must be elevated to a 3.00 by the end of the following semester or the student will be dismissed from the M.S. program in Biology;
3. Successful completion of the following: written thesis and public defense followed by a private defense with the Thesis Committee; and
4. Service as a Teaching Associate or Graduate Assistant. Requests to graduate must be received by Enrollment Services approximately 6 months in advance of the expected graduation date (Check the *Schedule of Classes* for the date).

These degree requirements must be completed within 6 years from when the first course on the Program of Study was completed, including academic leaves, or the student's degree program will be terminated.

Master of Science in Microbiology

This degree is available to qualified students preparing for professional careers in industry and government and for further studies at the doctoral level. In addition, a master's degree in microbiology, combined with appropriate courses in education, can be utilized for a community college teaching credential.

Admission to the Department

Prerequisites

In addition to the prerequisites for entrance into CSULB as a graduate student, stated previously in this catalog under Graduate Degrees and Post Baccalaureate Studies, the Department of Biological Sciences requires:

1. The student is required to find a faculty member in the department who agrees to serve as the thesis advisor of the student prior to her/his acceptance into the M.S. program;
2. A bachelor's degree in the biological or related sciences from an accredited institution. Students with alternative undergraduate degrees will be considered, but they will likely be assigned deficiency courses by the Thesis Advisor in consultation with the Graduate Advisor;
3. An undergraduate GPA in all completed science and mathematics courses of at least 2.70 OR a GPA of at least 3.00 in the last 40 semester (60 quarter) units of science and mathematics courses completed;
4. The GRE General Test (and, if required, the GRE Subject Test in Biology or in Biochemistry, Cell and Molecular Biology) must have been taken prior to applying to the Department. Scores are utilized as indicators for accrued knowledge and potential success in the M.S. program in Microbiology. The GREs must have been taken within five years prior to the intended admission date. Applicants without a degree in biological sciences must take the GRE Biology or Biochemistry, Cell and Molecular Biology Subject Test.

Students who do not meet the minimum required criteria for acceptance are encouraged to take post-baccalaureate courses to bring up their GPA or GRE scores.

Application

Prospective graduate students in M.S. in Microbiology, including CSULB graduates, must formally apply for admission to CSULB as described previously in this catalog and must also apply directly to the Department of Biological Sciences. All applicants must submit the following documents directly to the Department no later than 1 February for the fall semester to receive consideration for admission:

1. Departmental Application Form (PDF), also available from the Department's Graduate Office;
2. A one page essay describing why the applicant wishes to obtain an M.S. degree in Microbiology at CSULB and how this relates to her/his career objectives;
3. Unofficial transcripts of all college level academic work, including those completed at CSULB (these are in addition to those transcripts required for general graduate admission to CSULB);
4. Three letters of recommendation from persons familiar with the applicant's academic performance and research potential (if also applying for a Teaching Associate position, the letters must refer to the applicant's potential to teach laboratory sections in the biological sciences); and
5. Official report of the GRE General Test scores. The applicant should have taken this examination prior to applying to the Department, because the official scores must reach the Department by the deadline above.

These materials must be submitted to the Graduate Office, Department of Biological Sciences, California State University, Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840-9502.

Review by the Graduate Studies Committee

The Graduate Studies Committee will review all completed applications received by the deadlines and either accept the applicant as a Classified or Conditionally Classified graduate

student or deny admission. Acceptance is competitive and the GPA, the GRE Test scores, one-page essay, and the letters of recommendation will be weighed in the decision to accept or deny. All admitted applicants must contact the Graduate Advisor prior to their initial semester for counsel and orientation.

Admission to the Department of Biological Sciences as a Classified Graduate Student

The Department of Biological Sciences may admit as a Classified Graduate Student any applicant who:

1. has met all prerequisites,
2. has a complete application folder, and
3. has obtained acceptance by a faculty member to serve as her/his Thesis Advisor.

Admission to the Department of Biological Sciences as a Conditionally Classified Graduate Student

An applicant who fails to meet the above criteria for Classified Graduate Student admission may be considered by the Graduate Studies Committee for admission as Conditionally Classified graduate student:

An applicant with course deficiencies: The Graduate Advisor and student's Thesis Advisor will determine whether academic deficiencies exist for the particular field of study to be undertaken. The courses to be taken to make up deficiencies will be indicated on the back of the department application form. Such courses must be taken in addition to the minimum 30 units on the student's Program of Study (see below). The applicant must make up all deficiencies before attaining Classified status.

The Thesis Proposal

After admission to the Department as a Classified or Conditionally Classified graduate student, the student in consultation with the Thesis Chair must prepare her/his Thesis Proposal and Program of Study, which includes all coursework to be taken. The Thesis Proposal must include a thorough review of relevant primary literature that demonstrates the context of the proposed research, it must clearly define the experiments proposed for the research to be undertaken, and should include preliminary data, if available. The student and her/his Thesis Chair will select at least two additional members to serve on the Thesis Committee. In most cases, the Thesis Advisor will serve as Chair of the Thesis Committee. However, if the Thesis Advisor is not eligible, another member of the Thesis Committee will serve as Thesis Committee Chair. The student will then have a formal meeting with the Thesis Committee, at which the student's Thesis Proposal and Program of Study will be presented and evaluated. At this meeting, the Thesis Committee will question the student about her/his Thesis Proposal. At the completion of this meeting, the Thesis Committee will meet briefly, without the student present, to evaluate the Thesis Proposal. Approval is based on whether the student has demonstrated a solid understanding of her/his thesis project. The Thesis Proposal must be prepared, presented to, and approved by the Thesis Committee before the end of the second semester after admission to the Department. Failure to meet this requirement will result in dismissal from the M.S. in Biology program.

The Program of Study

The Program of Study must include completion of a minimum of 30 semester units. At least 20 of these units must be in the 500-600 level courses of which a minimum of 16 units must be in the Microbiology 500-600 series. Required courses, if not taken previously, include MICR 371 or an upper division/graduate course in genetics; MICR 471 or an upper division/graduate course in cell physiology; MICR 661 (two enrollments with different topics for a total of 4 units is required), or MICR 661 and BIOL 663; BIOL 696A (2 units), BIOL 696B (2 units), MICR 697 (maximum 3 units); and MICR 698 (6 units). Other elective units included in the graduate program must be 400-600 level courses acceptable to the University and microbiology degree program. Up to 5 units of 300-level courses may be included with an approval from the Thesis Chair and Graduate Advisor. BIOL 696A will be taken during the student's initial fall semester; the course will cover experimental design, statistics, and literature research, and help students in preparing their Thesis Proposal. BIOL 696B will be taken during the first spring semester in the program, and will cover both oral and written scientific presentation. BIOL 696B is intended to facilitate manuscript and thesis writing and to help students learn to articulate their findings for their thesis defense.

Advancement to Candidacy

The regulations governing the master's degree are those in effect at the time of advancement to candidacy. In addition to the general university requirements stated previously under Post-Baccalaureate and Graduate Degrees in this catalog, the student must complete the following steps before receiving Candidate status in the Department of Biological Sciences:

1. Admission to the Department of Biological Sciences' Master's Degree program as a Classified graduate student (see above);
2. Acceptance of the Thesis Proposal and Program of Study by the Thesis Committee;
3. Satisfactory academic progress;
4. Satisfactory fulfillment of the Graduate Writing Assessment Requirement (GWAR).

The Thesis Committee will recommend the student for advancement to candidacy by forwarding its recommendation to the department Graduate Advisor. This should occur at end of second semester after admission. Upon approval by the College's Associate Dean, the student will attain Master's Candidate status.

Requirements for the Master of Science in Microbiology

In addition to the general University requirements stated previously in this catalog, the student must meet the following requirements before receiving the degree of Master of Science in Microbiology.

1. Advancement to candidacy (see above);
2. Maintenance of a 3.00 ("B" average) or better, overall graduate grade point average (includes all upper-division and graduate level courses taken since admission to this University and after completion of the baccalaureate degree) and graduate program GPA. If either GPA falls below 3.00, it must be elevated to a 3.00 by the end of the following semester or the student will be dropped from the M.S. in Microbiology program;

3. Successful completion of the following: written thesis and public defense followed by a private defense with the Thesis Committee; and
4. Serve as a teaching associate or graduate assistant. Under some circumstances, this requirement may be waived.

Requests to graduate must be received by Enrollment Services approximately 6 months in advance of the expected graduation date (check the *Schedule of Classes* for the date).

These requirements must be completed within 6 years from when the first course on the Program of Study was completed, including academic leaves, or the student's degree program will be terminated.

Single Subject Teaching Credential in Biology

For information, refer to the undergraduate section in this department..

Biology Courses (BIOL)

Students pursuing a major and/or a minor in this department may receive unit credit for courses marked with the symbol '##' as a general elective but may not apply the units toward the specific or elective requirements for any degree or option in this department. Majors in this department may, however, take, for general education purposes, interdisciplinary courses offered by this department. All other courses in this department are open to majors and minors but by letter grade only (A-F).

LOWER DIVISION

100.## Biology of the Human Environment (3) F,S

Prerequisite/Corequisite: One GE Foundation course.

Biological perspective on the interaction between humans and their environment. Specifically designed for non-science majors. (Lecture 3 hrs.)

153. Introduction to Marine Biology (3) F,S

Prerequisites/Corequisites: Courses that fulfill the A.1 and B.2 GE requirements.

Scientific approach to the study of marine organisms and their relationships to the environment. Emphasis on human interaction with marine ecosystems.

(Lecture 2 hrs., laboratory and field 3 hrs.) Field trips may be required outside of scheduled class time. Not open for credit to students with credit in BIOL 201.

153L. Introduction to Marine Biology Laboratory (1) F,S

Prerequisite: Open only to students who have successfully completed the equivalent of the lecture portion of BIOL 153 at another accredited institution and have consent of the Department of Biological Sciences.

Identical to the laboratory portion of BIOL 153. Students enrolled in BIOL 153L will take it in the same room and at the same time as students enrolled in BIOL 153. Not open for credit to students with credit in BIOL 153. (Laboratory 3 hrs.)

200.## General Biology (4) F,S

Prerequisite: GE Foundation requirements.

Brief survey of major areas of biology including cell biology, genetics, evolution, phylogeny, plant and animal anatomy and physiology, ecology, and behavior. Specially designed for non-science majors.

(Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

200L.## General Biology Laboratory (1) F,S

Prerequisite: Open only to students who have successfully completed the equivalent of the lecture portion of BIOL 200 at another accredited institution and have consent of the Department of Biological Sciences.

BIOL 200L is identical to the laboratory component of BIOL 200. Students enrolled in BIOL 200L will take it in the same room and at the same time as students enrolled in BIOL 200.

Not open for credit to students with credit in BIOL 200. Course fee may be required. (Laboratory 3 hrs.)

205.## Human Biology (4) F,S

Prerequisites: GE Foundation requirements.

Brief survey of human biology focusing on anatomy, physiology, and development of cells, tissues, organs, and organ systems; including molecular biology, genetics, ecology, evolution, and diversity. Specially designed for non-science majors.

Not open for credit to students with credit in A/P 107 or 205. (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

205L.## Human Biology Laboratory (1) F,S

Prerequisite: Open only to students who have successfully completed the equivalent of the lecture portion of BIOL 205 at another accredited institution and have consent of the Department of Biological Sciences. Identical to the laboratory portion of BIOL 205. Students enrolled in BIOL 205L will take it in the same room and at the same time as students enrolled in BIOL 205.

Not open for credit to students with credit in BIOL 205. Course fee may be required. (Laboratory 3 hrs.)

207.## Human Physiology (4) F,S

Prerequisites: GE Foundation requirements.

General introduction to the functional integration of human body systems. Designed for majors in biomedical engineering, physical education, and the allied health fields.

Not open for credit to students with credit in A/P 207 or 209. (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

208.## Human Anatomy (4) F,S

Prerequisites: GE Foundation requirements.

Gross anatomy of humans from the cellular to the systemic levels. Intensive laboratory experience including the use of human cadavers. Designed for majors in kinesiology and the allied health fields.

Not open for credit to students with credit in A/P 202 or 208. (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

211. Introduction to Evolution and Diversity (4) F,S

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

Intended for natural science majors. First of three semester introductory sequence. Evolution as a process responsible for biological diversity at all levels: molecular, cellular, organismal, population, and community. Phylogenetic and taxonomic survey of life. Science as method of inquiry. Failure of either the lecture or the laboratory component will result in a failing grade for the entire course.

Not open to students with credit in BIOL 111. Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

211L. Introduction to Evolution and Diversity Laboratory (1) F,S

Prerequisites: Open only to students who have successfully completed the equivalent of the lecture component of BIOL 211 at another accredited institution and have consent of the Department of Biological Sciences.

Phylogenetic and taxonomic survey of life emphasizing the principles of evolution and science as a method of inquiry. Identical to the laboratory component of BIOL 211. Students enrolled in BIOL 211L will take it in the same room and at the same time as students enrolled in BIOL 211.

Not open to students with credit in BIOL 111L. Letter grade only (A-F). (Laboratory 3 hrs.) Course fee may be required.

Biology Courses (BIOL)

212. Introduction to Cell and Molecular Biology (4) F,S

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

The second of a three semester introductory sequence. Introduction to macromolecular and cellular structure and function and to fundamental genetic principles. Failure of either the lecture or laboratory component will result in a failing grade for the entire course.

Not open to students with credit in BIOL 211A. Letter grade only (A-F). (Lecture 3 hrs., laboratory 3hrs.) Course fee may be required.

212L. Introduction to Cell and Molecular Biology Laboratory (1) F,S

Prerequisites: Open only to students who have successfully completed the equivalent of the lecture component of BIOL 212 at another institution and have consent of the Department of Biological Sciences.

An introduction to methods for studying macromolecular and cellular structure and function and fundamental genetic analyses. Identical to the laboratory component of BIOL 212. Students enrolled in BIOL 212L will take it in the same room and at the same time as students enrolled in BIOL 212.

Letter grade only (A-F). Not open to students with credit in BIOL 211A or 211C. (Laboratory 3 hrs.) Course fee may be required.

213. Introduction to Ecology and Physiology (4) F,S

Prerequisites: BIOL 211, 212, CHEM 111B, each with a grade of "C" or better.

The third of a three semester introductory sequence. Introduction to the functional biology of plants and the abiotic and biotic factors that affect their distribution and abundance. Failure of either the lecture or the laboratory component will result in failing grade for the entire course.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.) Not open to students with credit in BIOL 211B. Course fee may be required.

213L. Introduction to Ecology and Physiology Laboratory (1) F,S

Prerequisites: Open only to students who have successfully completed the equivalent of the lecture component of BIOL 213 at another institution and have consent of the Department of Biological Sciences.

Introduction to methods for studying plant and animal structure and function and the interactions among organisms and their environments. Identical to the laboratory component of BIOL 213. Students enrolled in BIOL 213L will take it in the same room and at the same time as students enrolled in BIOL 213.

Letter grade only (A-F). Not open to students with credit in BIOL 211B or 211D. (Laboratory 3 hrs.) Course fee may be required.

260. Biostatistics (3) F,S

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

Probability and statistics used in the description and analysis of biological data.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.) Course fee may be required.

296. Introduction to Undergraduate Directed Research (1) F,S

Prerequisites: Consent of instructor.

Introduction to research in biology approved and directed by a faculty member in the Department of Biological Sciences. Designed primarily to introduce lower division students to research before taking MICR/BIOL 496.

Credit/No Credit only. May be repeated to a maximum of 3 units in

different semesters. Same course as MICR 296. Not open for credit to students with credit in MICR 296. Students who have completed one or more units of MICR/BIOL 496 may not enroll in this course. (Conference 1 hr., laboratory 3 hrs.)

UPPER DIVISION

301.## Biology of Human Aging (3)

Prerequisite: BIOL 200 or 205 or 207 all with a grade of "C" or better.

Biological processes associated with aging in humans. Emphasis on both cellular and organ aging.

Specifically designed for the gerontology program. Not open to students with "C" or better in BIOL 401. (Lecture 3 hrs.)

304.## Pathophysiology (3) F,S

Prerequisites: BIOL 207, 208; CHEM 140; MICR 200, all with a grade of "C" or better.

Pathogenesis and pathophysiology of common disorders of human nervous, musculoskeletal, endocrine, cardiovascular, respiratory, excretory, digestive, and reproductive systems with emphasis on the physiological basis of the disease process and clinical correlations.

Not designed for majors in the College of Natural Sciences and Mathematics. Priority registration given to students who have been accepted into CSULB nursing programs.

(Lecture 3 hrs.)

305.## Pharmacology (2) F,S

Prerequisite/Corequisite: BIOL 304, with a grade of "C" or better.

Systematic study of drugs, their classification, methods and routes of administration, therapeutic and toxic effects with emphasis on nursing implications.

Not designed for majors in the College of Natural Sciences and Mathematics. Not open for credit to students with a "C" or better in BIOL 204. Priority registration given to students who have been accepted into CSULB nursing programs. (Lecture 2 hrs.)

308.## Issues in Women's Health (3)

Prerequisites: Upper division standing; ENGL 100; and WGSS 101, BIOL 205, BIOL 207, or BIOL 213.

Fundamentals of anatomy and physiology relevant to the cause/prevention/treatment of various health issues, including reproductive organ dysfunction, sexually-transmitted disease, infertility, contraception, pregnancy, osteoporosis, cancer, and cardiovascular disease. Lifestyle habits (diet, exercise, stress, etc.) will be emphasized throughout.

(Lecture 3 hrs.)

312. Evolutionary Biology (3) F,S

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better.

Survey of evolutionary biology including population genetics, speciation, origin of life, and phylogenetic analysis. Main emphasis is evolutionary mechanisms and methods of analysis on specific of the evolutionary history of life.

Letter grade only (A-F). (Lecture 3 hrs.)

313. Invertebrate Zoology (4) F,S

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better.

Systematics, morphology, and natural history of invertebrate animals, with emphasis on local marine forms.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.; weekend field trips may be required.) Course fee may be required.

316. General Entomology (4) F,S

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

Characteristics, structure, habits, and life cycles of insects; importance of insects to humans and other organisms.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 6 hrs.) Course fee may be required.

324. Vertebrate Zoology (4) F,S

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

Phylogenetic survey of vertebrates (craniates). Lecture concentrates on origin and radiation of vertebrates and their functional morphology.

Laboratory concentrates on skeletal and internal anatomy and taxonomy to the ordinal and familial level of living vertebrates. Letter grade only (A-F). (Lecture 2 hrs., laboratory 6 hrs.) Course fee may be required.

340. Molecular Cell Biology (3) F,S

Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

Detailed study of the organization and functioning of cells and cellular organelles at the molecular level; emphasis on experimental approaches and structural/functional relationships.

Letter grade only (A-F). (Lecture 3 hrs.)

341. Physiology for Therapists I (4) F,S

Prerequisites: BIOL 211, 212, 213; CHEM 111A,B; PHYS 100A,B all with grade of "C" or better; 100 hours of documented exposure to the practice of physical therapy in a variety of settings; and consent of instructor.

Mechanisms of action and interaction of physiological body systems with emphasis on nervous and endocrine systems and skeletal and smooth muscle. Pathological and clinical considerations presented.

Letter grade only (A-F). Course fee may be required. (Lecture 3 hrs., laboratory 3 hrs.)

342. Human/Mammalian Physiology (3) F,S

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better. Recommended: PHYS 100A,B.

Function of various mammalian body systems, primarily of humans. Emphasis on integration of homeostatic mechanisms of nervous, muscular, endocrine, cardiovascular, respiratory, renal, digestive, and reproductive systems.

Letter grade only (A-F). (Lecture 3 hrs.)

342L. Laboratory in Human/Mammalian Physiology (1) F,S

Prerequisite/Corequisite: BIOL 342 with a grade of "C" or better.

Experiments and exercises designed to provide experience in, and illustration of, physiological principles and mechanisms of interaction among various body systems.

Letter grade only (A-F). Course fee may be required. (Laboratory 3 hrs.)

345. Comparative Animal Physiology (3) F,S

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better.

Comparison of fundamental physiological processes of major animal phyla.

Not open for credit to students with credit in A/P 340. Letter grade only (A-F). (Lecture 3 hrs.)

345L. Laboratory in Comparative Animal Physiology (1) F,S

Prerequisite/Corequisite: BIOL 345 with a grade of "C" or better.

Laboratory course acquaints students with direct observation and measurement of physiological processes in various animal groups, both invertebrate and vertebrate.

Letter grade only (A-F). Course fee may be required. (Laboratory 3 hrs.)

350. General Ecology (3) F,S

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

Relationships of plants and animals to their physical and biological environment; structure and function of populations, communities and ecosystems.

Letter grade only (A-F). (Lecture 3 hrs., and two required Saturday field trips.)

353. Marine Biology (3) S

Prerequisites: BIOL 153, 211, 212, 213, 260 all with grade of "C" or better.

Study of pelagic and benthic marine ecosystems, including food resources, mariculture, and pollution. Weekend field trips may be required.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.) Course fee may be required.

355. Microbial Ecology (3) S

Prerequisites: MICR 211 or BIOL 211, 212, 213 all with a grade of "C" or better.

Explores relationships of microorganisms to their environment. Emphasis placed on ecological basis for diversity of prokaryotic forms, metabolic functions and community interactions.

Letter grade only (A-F). Same course as MICR 355. Not open for credit to student with credit in MICR 355. (Lecture 3 hrs.)

355L. Microbial Ecology Laboratory (1) S

Prerequisite: BIOL 355 or MICR 355 with a grade of "C" or better.

Provides an understanding of microbes in the environment. Sample and analyze microbes from field trips to different habitats. Analytical techniques learned include enrichment culture methods and modern molecular biology methods to study the diversity and community dynamics of microbes.

Letter grade only (A-F). Course fee may be required. Same course as MICR 355L. Not open for credit to student with credit in MICR 355L. (Laboratory 3 hrs.)

370. General Genetics (4) F,S

Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

Detailed study of classical transmission genetics and introduction to modern molecular genetics. Includes current observations and concepts of nature, organization, function, and regulation of genetic expression.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

411./511. Marine Mammalogy (3) S, odd years

Prerequisite(s): BIOL 345, 350, and 353, all with grade of "C" or better, and consent of instructor. (Undergraduates enroll in BIOL 411; graduates enroll in BIOL 511.)

Fundamental biological, ecological, and physiological concepts of marine mammals, including cetaceans, pinnipeds, walrus, sirenians, and polar bears. Information concerning taxonomy, distribution, morphology, physiology, reproduction, and feeding through readings and scientific literature.

Fieldtrips may include weekends and spring recess. Letter grade only (A-F). (Lecture 2 hrs., laboratory and fieldtrips 3 hrs.)

412./512. Advanced Evolutionary Biology (3)

Prerequisite: BIOL 312 with a grade of "C" or better. (Undergraduates enroll in BIOL 412; graduates enroll in BIOL 512.)

An advanced survey of topics in evolutionary biology including but not limited to population and quantitative genetics, allometry, game theory, evolutionary psychology, and evolutionary-developmental biology. Main emphasis on the development of conceptual and mathematical models of evolutionary processes.

Letter grade only (A-F). (Lecture 3 hrs.)

415./515. Marine Microbiology (3) F, odd years

Prerequisite: BIOL 353 or MICR 355 or BIOL 355 with a grade of "C" or better. (Undergraduates enroll in BIOL 415; graduates enroll in BIOL 515.)

Designed to familiarize microbiology and marine biology students with the role of microorganisms in the marine environment. Topics will include ecology, physiology, biogeochemistry and diversity of marine microbes. Laboratory/field component will emphasize examination and cultivation of local marine microbes.

Letter grade only (A-F). Same course as MICR 415. Not open for credit to students with credit in MICR 415. Course fee may be required. (Lecture 2 hrs., laboratory and field 3 hrs., weekend field trip may be required.)

Biology Courses (BIOL)

416./516. Virology (3) F,S

Prerequisite: MICR 320 or BIOL 340 with a grade of "C" or better. (Undergraduates enroll in BIOL 416; graduates enroll in BIOL 516.)

Virology at molecular level including viral replication and molecular basis for viral pathogenesis; survey of human, animal, and plant viral diseases. Current trends for prevention and treatment of viral diseases.

Letter grade only (A-F). Same course as MICR 416. Not open for credit to students with credit in MICR 416. (Lecture 3 hrs.)

419. Ichthyology (3) F

Prerequisites: BIOL 211, 212, 213, 260 and at least 6 additional units of upper division biological science, all with a grade of "C" or better. Recommended: BIOL 350, 353, and 370.

Systematics, morphology, genetics, and ecology of fishes. Emphasis on local marine forms.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs., weekend field trips may be required.) Course fee may be required.

420./520. Fisheries Ecology and Conservation (3) F

Prerequisite(s): BIOL 260, 350, 353, and 419, all with grade of "C" or better. (Undergraduates enroll in BIOL 420; graduates enroll in BIOL 520.)

Advanced aspects of fish and invertebrate biology and behavior; fisheries economics and conservation; emphasis on state-of-art field/laboratory techniques and contemporary concepts and their application in fishery management.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

421. Herpetology (3) S, odd years

Prerequisites: BIOL 260, 350, and one additional upper division biology course, all with a grade of "C" or better. Recommended: BIOL 312, 324, or 370.

Taxonomy, natural history, ecology and distribution of amphibians and reptiles, emphasis on local forms. Weekend field trip required.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

423. Mammalogy (3)

Prerequisites: BIOL 260, 324, and one of 312, 350, all with grades of "C" or better. Phylogenetic survey world's living mammals.

Lecture emphasizes radiation of orders; families; their morphology, physiology, and behavior.

Laboratory emphasizes external and skeletal morphology of these same taxa and identification of California species.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

424./524. Ornithology (3) S

Prerequisites: BIOL 211, 212, 213, 2260 and three units of upper division BIOL, all with a grade of "C" or better. Recommended: BIOL 350. (Undergraduates enroll in BIOL 424; graduates enroll in BIOL 524.)

Ecology, morphology, physiology, behavior, and taxonomy of birds from an evolutionary perspective, also factors influencing recent increase in their extinction risk. Species identification techniques (emphasis on the local avifauna) and methods of surveying avian populations.

Letter grade only (A-F). (Lecture 2 hrs., laboratory/field 3 hrs.) Course fee may be required.

425. Phycology (4) F,S

Prerequisite: BIOL 353 with a grade of "C" or better.

Taxonomy, phylogeny, and physiology of algae, including the physiological ecology of marine macroalgae; emphasis on local marine forms.

Letter grade only (A-F). (Lecture 3 hrs., laboratory and field 3 hrs.)

427. Vascular Plant Systematics (4) S

Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

Principles and methods of plant systematics, including phylogenetics, different types of systematic data, evolutionary history and diversification of vascular plants. Laboratory emphasizes retrieving and analyzing systematic data, using phylogenetic methods, and identifying vascular plants of Southern California.

Letter grade only (A-F). Course fee may be required. (Lecture 2 hrs., laboratory and field 6 hrs.)

430. Immunology (3) F,S

Prerequisite: BIOL 340 with a grade of "C" or better.

Study of cellular and molecular components of immune system, including how immune system recognizes pathogens, how it functions in various types of immune responses, mechanisms of vaccines, immunodeficiencies, transplantation, allergy, and autoimmunity.

Letter grade only (A-F). Same course as MICR 430. Not open for credit to students with credit in MICR 430. (Lecture 3 hrs.)

431./531. Biology of Cancer (3) F,S

Prerequisites: BIOL 340, 370 with a grade of "C" or better. (Undergraduates enroll in BIOL 431, graduates enroll in BIOL 531.)

Examination of cancer, tumor progression, and treatment at the cellular, molecular, and genetic levels.

Letter grade only (A-F). (Lecture 3 hrs.)

432./532. Stem Cell Biology (3) S

Prerequisites: BIOL 433 or 533 with a grade of "C" or better. (Undergraduates enroll in BIOL 432; graduates enroll in BIOL 532.)

Current literature on advances in stem cell research, translational research, and clinical applications of stem cells to alleviate human disease.

Letter grade only (A-F). (Lecture 3 hrs.)

432L./532L. Advanced Stem Cell Laboratory (4) SS

Prerequisites: BIOL 432/532, 440L, 462/562, 473/573, 477/577, all with a grade of "C" or better, and consent of the director of the CSULB Biotechnology Certificate Program. (Undergraduates enroll in BIOL 432L; graduates enroll in BIOL 532L.)

Intensive laboratory, offered during a 6-week summer session. Students learn basic and advanced stem cell culture techniques. The sixth week is 40 hours at the Children's Hospital of Orange County Research Institute (CHOC).

Letter grade only (A-F). (Lecture 1 hr., laboratory 9 hrs.)

433./533. Developmental Biology (3) F,S

Prerequisites: BIOL 340, and either BIOL 370 or MICR 371, both with a grade of "C" or better. (Undergraduates enroll in BIOL 433; graduates enroll in BIOL 533.)

Experimental approaches to development in model organisms, mostly animal, at the molecular, genetic, cellular, and tissue levels. Topics include gametogenesis, fertilization, early cleavage, gastrulation, pattern formation, and organogenesis.

Letter grade only (A-F). (Lecture/discussion 3 hrs.)

439. Plant Morphology (4) F

Prerequisite: BIOL 312 or 370 with a grade of "C" or better.

A phylogenetic survey of green plant morphological diversity and analysis of the developmental and genetic mechanisms affecting this diversity. Emphasis in the laboratory is on documenting green plant morphological evolution, bioinformatics, and studying the developmental mechanisms driving morphological diversification.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

440L. Molecular Cell Biology Laboratory (3) F

Prerequisites: BIOL 340, 370, both with a grade of "C" or better, and consent of instructor. (Preference given to students in the Bachelor of Science in Biology, Option in Cell and Molecular Biology.)

Intensive course of modern laboratory techniques used in both cell and molecular biology. Topics include genomics, subcellular structure and transport, and purification and functional characterization of recombinant proteins. Provides extensive laboratory experience for students.

Letter grade only (A-F). (Lecture 1 hr., laboratory 6 hrs.) Course fee may be required. Not open for credit to students with credit in BIOL 340L.

441. Physiology for Therapists II (3) F,S

Prerequisite: BIOL 341 with a grade of "C" or better.

Mechanisms of action and interaction of physiological body systems with emphasis on cardiovascular, renal, and respiratory systems. Pathological and clinical considerations will be presented.

Letter grade only (A-F). (Lecture 3 hrs.)

442./542. Physiology at the Limit (3)

Prerequisites: BIOL 342 or 345 with a grade of "C" or better. (Undergraduates enroll in BIOL 442; graduates enroll in BIOL 542.)

Survey of physiological adaptations of animals in conditions of extreme performance and environmental limitations. Topics include individual and evolutionary responses to high-altitude, deep-sea diving, outer space and micro-gravity, exercise, flight, swimming, and extreme temperatures. Examples from vertebrates and invertebrates.

Letter grade only (A-F). (Lecture 3 hrs.)

443./543. Endocrinology (3) F,S

Prerequisites: BIOL 340 or CHEM 441B; CHEM 320A or 322A or 327; and one of BIOL 341, 342, 345, 445, 448; CHEM 441A or 448, all with a grade of "C" or better. (Undergraduates enroll in BIOL 443; graduates enroll in BIOL 543.)

Role of endocrines in vertebrate and invertebrate adjustment to changes in internal and external environment.

Letter grade only (A-F). (Lecture 3 hrs.)

444./544. Reproductive Biology (3) S

Prerequisite: BIOL 342 or 345 with a grade of "C" or better. (Undergraduates enroll in BIOL 444; graduates enroll in BIOL 544.)

Topics in comparative reproductive biology from molecular, cellular, organismal, and population levels. Hormones and reproduction, gamete/gonad biology, reproductive lifespan, mating system/strategies, environmental influence on reproductive capabilities, contraception/*in vitro* fertilization. Scientific communication discussed including scientific articles and scientific writing.

Letter grade only (A-F). (Lecture 3 hrs.)

445./545. Metabolic Regulation (3) F

Prerequisites: BIOL 340, 342 or 345; CHEM 441A with grade of "C" or better. (Undergraduates enroll in BIOL 445; graduates enroll in BIOL 545.)

Study of molecular mechanisms by which intermediary metabolism is regulated in various mammalian tissues with emphasis on mechanisms of hormone action and regulation of some key enzymes of carbohydrate, fat, and protein metabolism.

Letter grade only (A-F). (Lecture 3 hrs.)

447./547. Molecular Plant Physiology (3) S

Prerequisites: BIOL 340, 370, both with grade of "C" or better. (Undergraduates enroll in BIOL 447; graduates enroll in BIOL 547.)

Molecular approaches to classical topics including plant hormones, photosynthesis, resistance to plant pathogens, adaptation of plants to environmental stress, and development of plants.

Letter grade only (A-F). (Lecture 3 hrs.)

448./548. Principles of Neurobiology (3) F,S

Prerequisites: BIOL 340 or CHEM 441B and one of BIOL 341, 342, or 345 all with a grade of "C" or better. (Undergraduates enroll in BIOL 448; graduates enroll in BIOL 548.)

Study of the principles of anatomy, physiology, and function of the nervous system. Topics covered include neuroanatomy, physiology of neuronal signaling (excitable membranes and action potentials), synaptic transmission, neurotransmitters and their receptors, pain processing, special senses, reflexes, and neural circuits.

Letter grade only (A-F). (Lecture 3 hrs.)

449./549. Fish Physiology and Endocrinology (3)

Prerequisite: BIOL 345 with grade of "C" or better. (Undergraduates enroll in BIOL 449; graduates enroll in BIOL 549.)

Fundamentals of physiological systems and strategies in fishes, with emphasis on endocrine regulatory mechanisms. Adaptations in endocrine physiology of fishes considered from evolutionary and ecological perspectives. Impacts of human activities, particularly in context of Southern California's marine environment addressed.

Letter grade only (A-F). (Lecture 3 hrs.)

450./550. Plant Ecology (3) S, even years

Prerequisites: BIOL 260, 350 with a grade of "C" or better. Recommended: BIOL 427, 447. (Undergraduates enroll in BIOL 450; graduates enroll in BIOL 550.)

Relationship of plants to their environment and principles of plant distribution.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.) Course fee may be required.

451./551. Wetlands and Mangrove Ecology (3) S, odd years

Prerequisites: BIOL 260, 350 both with a grade of "C" or better. (Undergraduates enroll in BIOL 451; graduates enroll in BIOL 551.)

A comprehensive look at wetland ecology and management. Focuses on physical, biogeochemical, and ecological aspects of major wetland ecosystems with an emphasis on local urban wetlands. Also includes wetland management concepts and approaches worldwide.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

452./552. Behavioral Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better. Prerequisite/Corequisite: BIOL 312 or 350. (Undergraduates enroll in BIOL 452; graduates enroll in BIOL 552.)

Primary objectives are to understand how animal behavior affects survival and reproduction and introduce students to current methodologies to study behavior of animals in lab and field conditions. Emphasizes ecological and evolutionary consequences of behavior across taxa.

Letter grade only (A-F). (Lecture 2 hrs., laboratory/field 3 hrs.)

453./553. Insect Ecology (3) F, even years

Prerequisite: BIOL 350 with a grade of "C" or better. (Undergraduates enroll in BIOL 453; graduates enroll in BIOL 553.)

Field and experimental studies of abundance, dispersal, distribution, and behavior of insects.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

454A./554A. Research in Tropical Marine Ecology (3) S, even years

Prerequisite(s): BIOL 350, 353, and one of BIOL 313 or 419 or 425, all with grade of "C" or better, and consent of instructor. (Undergraduates enroll in BIOL 454A; graduates enroll in BIOL 554A.)

Field and laboratory studies, lectures, and individual research on tropical marine biological problems. Designed to engage students in experimental research, including: recognizing a problem, designing and carrying out a project, statistical data analysis, and oral and written report presentation.

Eight-day field trip to Hawaii required during spring recess at student expense. Enrollment is limited. Letter grade only (A-F). Course fee may be required. (Lecture 2 hrs., 8 day field trip.)

454B./554B. Research in Tropical Terrestrial Ecology (3) S, odd years

Prerequisites: BIOL 350; one of BIOL 316, 324, 421, 424, 427, or 439 all with a grade of "C" or better; and consent of instructor. (Undergraduates enroll in BIOL 454B; graduates enroll in BIOL 554B.)

Field-based comparison of tropical lowland deciduous forest and lowland rainforest incorporating basic ecology methodology. Forest structure and diversity of animals emphasized. Students maintain field notebook, submit final paper, and give oral presentation.

Nine-day fieldtrip to Costa Rica required during spring recess at student expense. Enrollment is limited. Letter grade only (A-F). Course fee may be required. (Lecture 2 hr., 9 day field trip.)

Biology Courses (BIOL)

455./555. Ecology of Marine Communities (3) F, even years

Prerequisites: BIOL 260, 350, 353 all with a grade of "C" or better. (Undergraduates enroll in BIOL 455; graduates enroll in BIOL 555.)

Field studies on ecological principles related to marine communities discussed. Includes individual field research project and two class projects.

Letter grade only (A-F). (Lecture 2 hrs., field 3 hrs.)

456./556. Population Ecology (3) S, even years

Prerequisites: BIOL 350, MATH 119B or 123 all with a grade of "C" or better. (Undergraduates enroll in BIOL 456; graduates in BIOL 556.)

Analysis of animal and plant populations characteristics: population growth and regulation, fluctuation and regulation, competition, predation, parasitism, and other intraspecific and interspecific interactions; spatial patterns.

Letter grade only (A-F). (Lecture 3 hrs.)

457./557. Field Methods in Ecology (3)

Prerequisites: BIOL 260, 350 both all with a grade of "C" or better. (Undergraduates enroll in BIOL 457; graduates in BIOL 557.)

Design of field research projects, collection, and data analysis, report writings and presentations. Field sampling techniques emphasized. Five weekend fieldtrips required.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

459./559. Conservation Biology (3) F

Prerequisites: BIOL 260, 350 both with a grade of "C" or better. Recommended: BIOL 370. (Undergraduates enroll in BIOL 459; graduates enroll in BIOL 559.)

Conservation biology concepts including population dynamics, extinction processes, population viability analyses, metapopulations, community-level interactions, island biogeography, biological diversity patterns, habitat fragmentation, reserve design, and landscape-level conservation. Lecture includes group discussions of case studies and relevant primary literature.

Letter grade only (A-F). (Lecture 3 hrs.) 20 hrs. per semester service learning for undergraduates, extra research paper for graduates.

462./562. Bioethics and Public Policy (3) S

Prerequisites: BIOL 340 with a grade of "C" or better. (Undergraduates enroll in BIOL 462; graduates enroll in BIOL 562.)

History of bioethics, scientific and medical bases of key bioethical issues, current legislation and appropriations, including legal, social, and ethical implications of stem cell research and other biotechnological advances.

Letter grade only (A-F). (Lecture 3 hrs.)

463./563. Computer Modeling in Biology (4)

Prerequisites: BIOL 260, 350 both with a grade of "C" or better. (Undergraduates enroll in BIOL 463; graduates enroll in BIOL 563.)

History, modeling theory, different modeling approaches, theoretical, empirical and quantitative modeling. Laboratory uses modeling software and focuses on model construction and quantitative simulation. Applicable to ecology, microbiology, physiology, environmental sciences, etc.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

464./564. Aquatic Toxicology (3)

Prerequisites: BIOL 211, 212, 213, 340; CHEM 320A or 322A or 327, all with a grade of "C" or better. Recommended: BIOL 353 and CHEM 448 or 441A,B. (Undergraduates enroll in BIOL 464; graduates enroll in BIOL 564.)

In depth study of interactions between anthropogenic chemicals and aquatic ecosystems, including origin, fate, chemical and biological detection, and quantification of pollutants and impact at molecular, biochemical, cellular, physiological, organismal, and community levels of organization. Individual research project required.

Letter grade only (A-F). (Lecture 3 hrs.)

465./565. Experimental Design and Regression Analysis (4) F, even years

Prerequisites: BIOL 260; MATH 119B or 123; 6 units of upper division biological science all with a grade of "C" or better. (Undergraduates enroll in BIOL 465; graduates enroll in BIOL 565.)

Experimental design and data analysis techniques applied to problems in biology including analysis of variance and covariance, bivariate and multiple regression, experimental design, bootstrapping and randomization tests, and nonparametric statistics. Experience in analyzing biological data using computerized statistical packages.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

466. Research Design and Methods (3) S

Prerequisites: BIOL 211, 212, 213, either BIOL 260 or CHEM 251, CHEM 320A,B or CHEM 322A,B and CHEM 323A,B all with a grade of "C" or better; GE Foundation requirements; a GPA of at least 3.0 in the major; and consent of the instructor. At least one unit of BIOL 496 or CHEM 496.

Corequisites: At least one unit of BIOL 496 or CHEM 496.

Introduction to hypothesis testing, experimental design, methodological and technical procedures for experimentation, grant writing, and techniques for written and oral presentation of research results. Research paper and oral presentation required.

Letter grade only (A-F). Same course as CHEM 466. Not open for credit to students with credit in BIOL 466H or CHEM 466H. (Lecture 3 hours.)

467./567. Multivariate Data Analysis (4) F, odd years

Prerequisites: BIOL 260; MATH 119B or 123; 6 units of upper division biological science; all with a grade of "C" or better. (Undergraduates enroll in BIOL 467; graduates enroll in BIOL 567.)

Multivariate data analysis techniques applied to biological data. Applied matrix algebra for analyzing and understanding multivariate analysis. Includes principal components analysis, factor analysis, discriminant analysis, cluster analysis and current modern phylogenetic analysis techniques. Analyzing multivariate biological data using computerized statistical packages.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

472./572. Molecular Evolution (3)

Prerequisite: BIOL 370 with a grade of "C" or better. Recommended: BIOL 312. (Undergraduates enroll in BIOL 472; graduates enroll in BIOL 572.)

Survey of molecular evolution including but not limited to the history of the field, protein and DNA evolution, neutral and nearly-neutral theory, molecular phylogenetics, molecular population genetics and DNA fingerprinting, genomics, and proteomics. Applicable to ecological, evolutionary, medical, forensic sciences.

Letter grade only (A-F). (Lecture 3 hrs.)

473./573. Molecular Genetics (3) S

Prerequisites: BIOL 370 or MICR 371; CHEM 320A,B or 322A,B and 323A,B, or 327, all with a grade of "C" or better. (Undergraduates enroll in BIOL 473; graduates enroll in BIOL 573.)

Contemporary molecular genetic analysis of model organisms (mouse, worm, flies, yeasts) used in study of human disease, basic biological processes, gene regulation, and global analysis of genomes and proteomes.

Letter grade only (A-F). (Lecture 3 hrs.)

477./577. Biotechnology: Applications of Molecular Techniques and Bioinformatics (4) F

Prerequisite: BIOL 340 or 370 or CHEM 441A,B; all with a grade of "C" or better. (Undergraduates enroll in BIOL 477; graduates enroll in BIOL 577.)

Theory and techniques for isolating, amplifying, and analyzing genes, genomes, transcripts, and proteins. Data-mining, the use of computers in experimental design and/or functional analysis, use of microarrays, and future of nanotechnology.

Letter grade only (A-F). Same course as MICR 477./577. Not open for credit to students with credit in MICR 477./577. (Lecture 3 hrs., activity 2 hrs.)

480./580. Seminars (1) F,S

Prerequisites: Consent of undergraduate [graduate] advisor. (Undergraduates and classified post-baccalaureates enroll in BIOL 480; graduates enroll in BIOL 580). Undergraduates must have filed for graduation and be in their last semester. Graduates must have been admitted to the department as a graduate student. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

Weekly meetings with professional biologists presenting results of their research. Requires participation in organization and critical evaluation of these presentations.

(Seminar 1 hr.) Letter grade only (A-F). May not be repeated for credit towards any single degree.

490./590. Selected Topics in Biology (1-3)

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better, and consent of instructor. (Undergraduates enroll in BIOL 490; graduates enroll in BIOL 590.)

Topics from selected areas of biology. Course content varies from section to section.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Lecture 1-3 hrs.)

490L./590L. Selected Topics in Biology, Laboratory (1-2)

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better, and consent of instructor. (Undergraduates enroll in BIOL 490L; graduates enroll in BIOL 590L.)

Topics from selected areas of biology. Course content varies from section to section.

Letter grade only (A-F). May be repeated to a maximum of 4 units with different topics. Topics announced in the *Schedule of Classes*. (Laboratory 3 or 6 hrs.)

492A./592A. Stem Cell Research Internship (12) F,S

Prerequisites: BIOL 432/532, 432L/532L, 440L, 462/562, 473/573, 477/577, all with a grade of "C" or better, and permission of the director of the CSULB Biotechnology Certificate Program, and acceptance in the Stem Cell Training Option within the Biotechnology Certificate. (Undergraduates enroll in BIOL 492A; graduates enroll in BIOL 592A.)

CIRM-approved institutions train interns in their stem cell research laboratories.

Must be repeated once for credit. Credit/No Credit grading only. (Laboratory 36 hrs.)

495. Instruction in Laboratory Teaching (1-2) F,S

Prerequisites: Consent of instructor, an "A" in the course in which the student elects to do MICR 495 (another course with laboratory may be substituted with consent of instructor), and an overall GPA of at least 3.0.

Individual instruction in organization and techniques of teaching a microbiology laboratory.

May be repeated to a maximum of 2 units in different semesters. Any units beyond the two taken for a letter grade in BIOL 495 or MICR 495 or any combination of the two will be taken credit/no credit. Same course as MICR 495. Not open for credit to students with credit in MICR 495. (Conference 1 hr., laboratory 3 hrs. per unit.)

496. Undergraduate Directed Research (1-3) F,S

Prerequisites: BIOL 211, 212; either BIOL 213 or MICR 211 or BIOL 296 or MICR 296; consent of instructor; and consent of appropriate undergraduate advisor.

Research in a specific topic in biological sciences approved and directed by a faculty member in Department of Biological Sciences.

May be repeated for a letter grade and degree credit to a maximum of three units for any single degree or option. Units beyond the three taken for a letter grade in MICR 496 or BIOL 496, or any combination of the two, will be taken credit/no credit. Same course as MICR 496. Not open for credit to student with credit in MICR 496. Students may only have a total of 3 units of BIOL 496 and MICR 496 combined. Not available to graduate students.

498H. Senior Thesis – Honors (3)

Prerequisites: BIOL 466; at least one unit of BIOL 496 with a grade of "A"; admission into the Honors in Biology program, and consent of instructor.

Planning, preparation, completion, and oral presentation of a written thesis based on a research project in biological sciences begun in BIOL/MICR 496. Not available to graduate students.

Letter grade only (A-F).

GRADUATE LEVEL

511./411. Marine Mammalogy (3) S, odd years

Prerequisite(s): BIOL 345, 350, and 353, all with grade of "C" or better, and consent of instructor. (Undergraduates enroll in BIOL 411; graduates enroll in BIOL 511.)

Fundamental biological, ecological, and physiological concepts of marine mammals, including cetaceans, pinnipeds, walrus, sirenians, and polar bears. Information concerning taxonomy, distribution, morphology, physiology, reproduction, and feeding through readings and scientific literature. Fieldtrips may include weekends and spring recess.

Letter grade only (A-F). (Lecture 2 hrs., lab and fieldtrips 3 hrs.)

512./412. Advanced Evolutionary Biology (3)

Prerequisite: BIOL 312 with a grade of "C" or better. (Undergraduates enroll in BIOL 412; graduates enroll in BIOL 512.)

Advanced survey of topics in evolutionary biology including but not limited to population and quantitative genetics, allometry, game theory, evolutionary psychology, and evolutionary-developmental biology. Main emphasis on the development of conceptual and mathematical models of evolutionary processes.

Letter grade only (A-F). (Lecture 3 hrs.)

515./415. Marine Microbiology (3) F, odd years

Prerequisite: BIOL 353 or MICR 355 or BIOL 355 with a grade of "C" or better. (Undergraduates enroll in BIOL 415; graduates enroll in BIOL 515.)

Designed to familiarize microbiology and marine biology students with the role of microorganisms in the marine environment. Topics will include ecology, physiology, biogeochemistry and diversity of marine microbes. Laboratory/field component will emphasize examination and cultivation of local marine microbes.

Letter grade only (A-F). Course fee may be required. Same course as MICR 515. Not open for credit to students with credit in MICR 515. (Lecture 2 hrs., laboratory and field 3 hrs., weekend field trip may be required.)

516./416. Virology (3) F,S

Prerequisite: MICR 320 or BIOL 340 with a grade of "C" or better. (Undergraduates enroll in BIOL 416; graduates enroll in BIOL 516.)

Virology at molecular level including viral replication and molecular basis for viral pathogenesis; survey of human, animal, and plant viral diseases. Current trends for prevention and treatment of viral diseases.

Letter grade only (A-F). Same course as MICR 516. Not open for credit to students with credit in MICR 516. (Lecture 3 hrs.)

Biology Courses (BIOL)

520./420. Fisheries Ecology and Conservation (3) F

Prerequisite(s): BIOL 260, 350, 353, and 419, all with grade of "C" or better. (Undergraduates enroll in BIOL 420; graduates enroll in BIOL 520.)

Advanced aspects of fish and invertebrate biology and behavior; fisheries economics and conservation; emphasis on state-of-art field/laboratory techniques and contemporary concepts and their application in fishery management.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

524./424. Ornithology (3) S

Prerequisites: BIOL 211, 212, 213, 260 and 3 units of upper division BIOL, all with a grade of "C" or better. Recommended: BIOL 350. (Undergraduates enroll in BIOL 424; graduates enroll in BIOL 524.)

Ecology, morphology, physiology, behavior, and taxonomy of birds from an evolutionary perspective, also factors influencing recent increase in their extinction risk. Species identification techniques (emphasis on the local avifauna) and methods of surveying avian populations.

Letter grade only (A-F). (Lecture 2 hrs., laboratory/field 3 hrs.)
Course fee may be required.

531./431. Biology of Cancer (3) F,S

Prerequisites: BIOL 340, 370 with a grade of "C" or better. (Undergraduates enroll in BIOL 431, graduates enroll in BIOL 531.)

An examination of cancer, tumor progression, and treatment at the cellular, molecular, and genetic levels.

Letter grade only (A-F). (Lecture 3 hrs.)

532./432. Stem Cell Biology (3) S

Prerequisites: BIOL 433 or 533 with a grade of "C" or better. (Undergraduates enroll in BIOL 432; graduates enroll in BIOL 532.)

Current literature on advances in stem cell research, translational research, and clinical applications of stem cells to alleviate human disease.

Letter grade only (A-F). (Lecture 3 hrs.)

532L./432L. Advanced Stem Cell Laboratory (4) SS

Prerequisites: BIOL 432/532, 440L, 462/562, 473/573, 477/577, all with a grade of "C" or better, and permission of the director of the CSULB Biotechnology Certificate Program. (Undergraduates enroll in BIOL 432L; graduates enroll in BIOL 532L.)

Intensive laboratory, offered during a 6-week summer session. Students learn basic and advanced stem cell culture techniques. The sixth week is 40 hours at the Children's Hospital of Orange County Research Institute (CHOC).

Letter grade only (A-F). (Lecture 1 hr., laboratory 9 hrs.)

533./433. Developmental Biology (3) F,S

Prerequisites: BIOL 340, and either BIOL 370 or MICR 371, both with a grade of "C" or better. (Undergraduates enroll in BIOL 433; graduates enroll in BIOL 533.)

Experimental approaches to development in model organisms, mostly animal, at the molecular, genetic, cellular, and tissue levels. Topics include gametogenesis, fertilization, early cleavage, gastrulation, pattern formation, and organogenesis.

Letter grade only (A-F). (Lecture/discussion 3 hrs.)

540. Advanced Molecular Cell Biology and Physiology (3) F

Prerequisites: Graduate standing and consent of instructor.

In depth discussion of cellular processes and their regulation and how they relate to organismal physiology. Includes critical reading and discussion of primary journal articles on pertinent topics.

Letter grade only (A-F). (Lecture 3 hrs.)

542./442. Physiology at the Limit (3)

Prerequisites: BIOL 342 or 345 with a grade of "C" or better. (Undergraduates enroll in BIOL 442; graduates enroll in BIOL 542.)

Survey of physiological adaptations of animals in conditions of extreme performance and environmental limitations. Topics include individual and evolutionary responses to high-altitude, deep-sea diving, outer space and micro-gravity, exercise, flight, swimming, and extreme temperatures. Examples from vertebrates and invertebrates.

Letter grade only (A-F). (Lecture 3 hrs.)

543./443. Endocrinology (3) F,S

Prerequisites: BIOL 340 or CHEM 441B; CHEM 320A or 322A or 327; and one of BIOL 341, 342, 345, 445, 448; CHEM 441A or 448, all with a grade of "C" or better. (Undergraduates enroll in BIOL 443; graduates enroll in BIOL 543.)

Role of endocrines in vertebrate and invertebrate adjustment to changes in internal and external environment.

Letter grade only (A-F). (Lecture 3 hrs.)

544./444. Reproductive Biology (3) S

Prerequisite: BIOL 342 or 345 with a grade of "C" or better. (Undergraduates enroll in BIOL 444; graduates enroll in BIOL 544.)

Topics in comparative reproductive biology from molecular, cellular, organismal, and population levels. Hormones and reproduction, gamete/gonad biology, reproductive lifespan, mating system/strategies, environmental influence on reproductive capabilities, contraception/*in vitro* fertilization. Scientific communication discussed including scientific articles and scientific writing.

Letter grade only (A-F). (Lecture 3 hrs.)

545./445. Metabolic Regulation (3) F

Prerequisites: BIOL 340, 342 or 345; CHEM 441A with grade of "C" or better. (Undergraduates enroll in BIOL 445; graduates enroll in BIOL 545.)

Study of molecular mechanisms by which intermediary metabolism is regulated in various mammalian tissues with emphasis on mechanisms of hormone action and regulation of some key enzymes of carbohydrate, fat, and protein metabolism.

Letter grade only (A-F). (Lecture 3 hrs.)

547./447. Molecular Plant Physiology (3) S

Prerequisites: BIOL 340, 370, both with grade of "C" or better. (Undergraduates enroll in BIOL 447; graduates enroll in BIOL 547.)

Molecular approaches to classical topics including plant hormones, photosynthesis, resistance to plant pathogens, adaptation of plants to environmental stress, and development of plants.

Letter grade only (A-F). (Lecture 3 hrs.)

548./448. Principles of Neurobiology (3) F,S

Prerequisites: BIOL 340 or CHEM 441B and one of BIOL 341, 342, or 345 all with a grade of "C" or better. (Undergraduates enroll in BIOL 448; graduates enroll in BIOL 548.)

Study of the principles of anatomy, physiology, and function of the nervous system. Topics covered include neuroanatomy, physiology of neuronal signaling (excitable membranes and action potentials), synaptic transmission, neurotransmitters and their receptors, pain processing, special senses, reflexes, and neural circuits.

Letter grade only (A-F). (Lecture 3 hrs.)

549./449. Fish Physiology and Endocrinology (3)

Prerequisite: BIOL 345 with a grade of "C" or better. (Undergraduates enroll in BIOL 449; graduates enroll in BIOL 549.)

Fundamentals of physiological systems and strategies in fishes, with emphasis on endocrine regulatory mechanisms. Adaptations in endocrine physiology of fishes considered from evolutionary and ecological perspectives. Impacts of human activities, particularly in context of Southern California's marine environment addressed.

Letter grade only (A-F). (Lecture 3 hrs.)

550./450. Plant Ecology (3) S, even years

Prerequisites: BIOL 260, 350 both with a grade of "C" or better.
Recommended: BIOL 427, 447. (Undergraduates enroll in BIOL 450; graduates enroll in BIOL 550.)

Relationship of plants to their environment and principles of plant distribution.

Letter grade only (A-F) (Lecture 2 hrs., laboratory and field 3 hrs.)
Course fee may be required.

551./451. Wetlands and Mangrove Ecology (3) S, odd years

Prerequisites: BIOL 260, 350 both with a grade of "C" or better.
(Undergraduates enroll in BIOL 451; graduates enroll in BIOL 551.)

Comprehensive look at wetland ecology and management.
Focuses on physical, biogeochemical, and ecological aspects of major wetland ecosystems with an emphasis on local urban wetlands. Includes wetland management concepts and approaches worldwide.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

552./452. Behavioral Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260 all with a grade of "C" or better. Prerequisite/Corequisite: BIOL 312 or 350. (Undergraduates enroll in BIOL 452; graduates enroll in BIOL 552.)

Primary objectives are to understand how animal behavior affects survival and reproduction and introduce students to current methodologies to study behavior of animals in lab and field conditions. Emphasizes ecological and evolutionary consequences of behavior across taxa.

Letter grade only (A-F). (Lecture 2 hrs., laboratory/field 3 hrs.)

553./453. Insect Ecology (3) F, even years

Prerequisites: BIOL 350 with a grade of "C" or better.
(Undergraduates enroll in BIOL 453; graduates enroll in BIOL 553.)

Field and experimental studies of abundance, dispersal, distribution, and behavior of insects.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

554A./454A. Research in Tropical Marine Ecology (3) S, even years

Prerequisite(s): BIOL 350, 353, and one of BIOL 313 or 419 or 425, all with grade of "C" or better, and consent of instructor.
(Undergraduates enroll in BIOL 454A; graduates enroll in BIOL 554A.)

Field and laboratory studies, lectures, and individual research on tropical marine biological problems. Designed to engage students in experimental research, including: recognizing a problem, designing and carrying out a project, statistical data analysis, and oral and written report presentation.

Eight-day field trip to Hawaii required during spring recess at student expense. Enrollment is limited. Letter grade only (A-F).
Course fee may be required. (Lecture 2 hrs., 8 day field trip.)

554B./454B. Research in Tropical Terrestrial Ecology (3) S, odd years

Prerequisites: BIOL 350; one of BIOL 316, 324, 421, 424, 427, or 439, all with a grade of "C" or better, and consent of instructor.
(Undergraduates enroll in BIOL 454B; graduates enroll in BIOL 554B.)

Field-based comparison of tropical lowland deciduous forest and lowland rainforest incorporating basic ecology methodology. Forest structure and diversity of animals emphasized. Students maintain field notebook, submit final paper, and give oral presentation.

Nine-day fieldtrip to Costa Rica required during spring recess at student expense. Enrollment is limited. Letter grade only (A-F).
Course fee may be required. (Lecture 2 hr., 9 day field trip.)

555./455. Ecology of Marine Communities (3) F, even years

Prerequisites: BIOL 260, 350, 353 all with a grade of "C" or better.
(Undergraduates enroll in BIOL 455; graduates enroll in BIOL 555.)

Field studies on ecological principles related to marine communities discussed. Includes individual field research project and two class projects.

Letter grade only (A-F). (Lecture 2 hrs., field 3 hrs.)

556./456. Population Ecology (3)

Prerequisites: BIOL 350; MATH 119B or 123; all with a grade of "C" or better. (Undergraduates enroll in BIOL 456; graduates enroll in BIOL 556.)

Analysis of animal and plant populations characteristics: population growth and regulation, fluctuation and regulation, competition, predation, parasitism, and other intraspecific and interspecific interactions; spatial patterns.

Letter grade only (A-F). (Lecture 3 hrs.)

557./457. Field Methods in Ecology (3)

Prerequisites: BIOL 260, 350 both with a grade of "C" or better.
(Undergraduates enroll in BIOL 457; graduates enroll in BIOL 557.)

Design of field research projects, collection, and data analysis, report writings and presentations. Field sampling techniques emphasized. Five weekend fieldtrips required.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 3 hrs.)

559./459. Conservation Biology (3) F

Prerequisite: BIOL 260, 350 both with a grade of "C" or better.
Recommended: BIOL 370. (Undergraduates enroll in BIOL 459; graduates enroll in BIOL 559.)

Conservation biology concepts including population dynamics, extinction processes, population viability analyses, metapopulations, community-level interactions, island biogeography, biological diversity patterns, habitat fragmentation, reserve design, and landscape-level conservation. Lecture includes group discussions of case studies and relevant primary literature.

Letter grade only (A-F). (Lecture 3 hrs.) 20 hrs. per semester service learning for undergraduates, extra research paper for graduates.

562./462. Bioethics and Public Policy (3) S

Prerequisites: BIOL 340 with a grade of "C" or better.
(Undergraduates enroll in BIOL 462; graduates enroll in BIOL 562.)

History of bioethics, scientific and medical bases of key bioethical issues, current legislation and appropriations, including legal, social, and ethical implications of stem cell research and other biotechnological advances.

Letter grade only (A-F). (Lecture 3 hrs.)

563./463. Computer Modelling in Biology (4)

Prerequisites: BIOL 260, 350 both with a grade of "C" or better.
(Undergraduates enroll in BIOL 463; graduates enroll in BIOL 563.)

History, modeling theory, different modeling approaches, theoretical, empirical and quantitative modeling. Laboratory uses modeling software and focuses on model construction and quantitative simulation. Applicable to ecology, microbiology, physiology, environmental sciences, etc.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

564./464. Aquatic Toxicology (3)

Prerequisites: BIOL 211, 212, 213, 340; CHEM 320A or 322A or 327, all with a grade of "C" or better. Recommended: BIOL 353 and CHEM 448 or 441A,B. (Undergraduates enroll in BIOL 464; graduates enroll in BIOL 564.)

In depth study of interactions between anthropogenic chemicals and aquatic ecosystems, including origin, fate, chemical and biological detection, and quantification of pollutants and impact at molecular, biochemical, cellular, physiological, organismal, and community levels of organization. Individual research project required.

Letter grade only (A-F). (Lecture 3 hrs.)

Biology Courses (BIOL)

565./465. Experimental Design and Regression Analysis (4) F, even years

Prerequisites: BIOL 260; MATH 119B or 123; 6 units of upper division biological science all with a grade of "C" or better. (Undergraduates enroll in BIOL 465; graduates enroll in BIOL 565.)

Experimental design and data analysis techniques applied to problems in biology including analysis of variance and covariance, bivariate and multiple regression, experimental design, bootstrapping and randomization tests, and nonparametric statistics. Experience in analyzing biological data using computerized statistical packages.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

567./467. Multivariate Data Analysis (4) F, odd years

Prerequisites: BIOL 260; MATH 119B or 123; 6 units of upper division biological science all with a grade of "C" or better. (Undergraduates enroll in BIOL 467; graduates enroll in BIOL 567.)

Multivariate data analysis techniques applied to biological data. Applied matrix algebra for analyzing and understanding multivariate analysis. Includes principal components analysis, factor analysis, discriminant analysis, cluster analysis and current modern phylogenetic analysis techniques. Analyzing multivariate biological data using computerized statistical packages.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

570. Advanced Genetics (3) S

Prerequisites: Graduate standing and consent of instructor.

In depth discussion of various advanced topics in genetics, which may include population genetics, molecular phylogeny, and microbial genetics. Includes critical reading and discussion of primary journal articles on pertinent topics.

Letter grade only (A-F). (Lecture 3 hrs.)

572./472. Molecular Evolution (3)

Prerequisite: BIOL 370 with a grade of "C" or better. Recommended: BIOL 312. (Undergraduates enroll in BIOL 472; graduates enroll in BIOL 572.)

Survey of molecular evolution including but not limited to the history of the field, protein and DNA evolution, neutral and nearly-neutral theory, molecular phylogenetics, molecular population genetics and DNA fingerprinting, genomics, and proteomics. Applicable to ecological, evolutionary, medical, forensic sciences.

Letter grade only (A-F). (Lecture 3 hrs.)

573./473. Molecular Genetics (3) S

Prerequisites: BIOL 370 or MICR 371; CHEM 320A,B or 322A,B and 323A,B, or 327, all with a grade of "C" or better. (Undergraduates enroll in BIOL 473; graduates enroll in BIOL 573.)

Contemporary molecular genetic analysis of model organisms (mouse, worm, flies, yeasts) used in study of human disease, basic biological processes, gene regulation, and global analysis of genomes and proteomes.

Letter grade only (A-F). (Lecture 3 hrs.)

577./477. Biotechnology: Applications of Molecular Techniques and Bioinformatics (4) F

Prerequisite: BIOL 340 or 370 or CHEM 441A,B; all with a grade of "C" or better. (Undergraduates enroll in BIOL 477; graduates enroll in BIOL 577.)

Theory and techniques for isolating, amplifying, and analyzing genes, genomes, transcripts, and proteins. Data-mining, the use of computers in experimental design and/or functional analysis, use of microarrays, and future of nanotechnology.

Letter grade only (A-F). Same course as MICR 577./477. Not open for credit to student with credit in MICR 577./477. (Lecture 3 hrs., activity 2 hrs.)

580./480. Seminars (1) F,S

Prerequisites: Consent of undergraduate [graduate] advisor. (Undergraduates and classified post-baccalaureates enroll in BIOL 480; graduates enroll in BIOL 580). Undergraduates must have filed for graduation and be in their last semester. Graduates must have been admitted to the department as a graduate student. Classified post-baccalaureates must have been admitted to a second baccalaureate or a certificate.

Weekly meetings with professional biologists presenting results of their research. Requires participation in organization and critical evaluation of these presentations.

(Seminar 1 hr.) Letter grade only (A-F). May not be repeated for credit towards any single degree.

590./490. Selected Topics in Biology (1-3)

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better, and consent of instructor. (Undergraduates enroll in BIOL 490; graduates enroll in BIOL 590.)

Topics from selected areas of biology. Course content varies from section to section.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Lecture 1-3 hrs.)

590L./490L. Selected Topics in Biology, Laboratory (1-2)

Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better, and consent of instructor. (Undergraduates enroll in BIOL 490L; graduates enroll in BIOL 590L.)

Topics from selected areas of biology. Course content varies from section to section.

Letter grade only (A-F). May be repeated to a maximum of 4 units with different topics. Topics announced in the *Schedule of Classes*. (Laboratory 3 or 6 hrs.)

592A./492A. Stem Cell Research Internship (12) F,S

Prerequisites: BIOL 432/532, 432L/532L, 440L, 462/562, 473/573, 477/577, all with a grade of "C" or better, and consent of the director of the CSULB Biotechnology Certificate Program, and acceptance in the Stem Cell Training Option within the Biotechnology Certificate. (Undergraduates enroll in BIOL 492A; graduates enroll in BIOL 592A.)

CIRM-approved institutions train interns in their stem cell research laboratories. Must be repeated once for credit.

Credit/No Credit grading only. (Laboratory 36 hrs.)

663. Seminar in Cell and Molecular Biology (2)

Critical evaluation of field's primary literature, including oral and/or written presentation of critiques.

May be repeated to a maximum of 4 units with different topics. Letter grade only (A-F) (Seminar 2 hrs.)

664. Seminar in Marine Biology (2)

Critical evaluation of field's primary literature, including oral and/or written presentation of critiques.

May be repeated to a maximum of 4 units with different topics. Letter grade only (A-F) (Seminar 2 hrs.)

665. Seminar in Ecology (2)

Critical evaluation of field's primary literature, including oral and/or written presentation of critiques.

May be repeated to a maximum of 4 units with different topics. Letter grade only (A-F) (Seminar 2 hrs.)

666. Seminar in Physiology (2)

Critical evaluation of field's primary literature, including oral and/or written presentation of critiques.

May be repeated to a maximum of 4 units with different topics. Letter grade only (A-F) (Seminar 2 hrs.)

696A. Research Design (2)

Prerequisites: Graduate standing in the Department of Biological Sciences and departmental permission.

Research design, statistics, literature searches, and thesis proposal writing, utilizing tools to initiate research projects. Laboratory utilizes computers for literature searches, sample size determination, data processing, statistical analyses, and bioinformatics. Required for all first/second semester graduate students.

Letter grade only (A-F). (Lecture 1 hr., laboratory 3 hrs.)

696B. Scientific Communication (2)

Prerequisite: BIOL 696A with a grade of "B" or better.

Presentation/publication skills for communicating biological research to professional and lay audiences: scientific writing, data presentation (posters and oral).

Letter grade only (A-F). (Lecture 1 hr., laboratory 3 hrs.) Course fee may be required.

697. Directed Research (1-3) F,S

Prerequisite: Consent of instructor.

Research on specific topic approved and directed by a faculty member in the biological sciences. Written report required.

May be repeated for a letter grade and degree credit to a maximum of three units. Any units beyond the three taken for a letter grade in BIOL 697 or MICR 697 or any combination of the two must be taken credit/no credit.

698. Thesis (1-6) F,S

Prerequisites: Advancement to Candidacy for the Master of Science in Biology, and consent of the chair of the thesis committee and the departmental graduate advisor.

Planning, preparation, writing, defense, oral presentation, and completion of a research thesis in the biological sciences.

Letter grade only (A-F).

Microbiology Courses (MICR)

Students pursuing a major and/or a minor in this department may receive unit credit for courses marked with the symbol '##' as a general elective but may not apply the units toward the specific or elective requirements for any degree or option in this department. Majors in this Department may, however, take, for general education purposes, interdisciplinary courses offered by this department. All other courses in this department are open to majors and minors but by letter grade only.

LOWER DIVISION

101. ## Introduction to Human Disease (3) F, S

Prerequisite/Corequisite: Course that fulfills the A.1 GE requirement.

Introduction to the study of human disease including moral/ethical and economic issues.

(Lecture 3 hrs.)

200. General Microbiology for Health Professionals (4) F, S

Prerequisites: CHEM 111A or 140 with a grade of "C" or better and GE Foundation requirements.

Microbiology for those planning careers in nursing, health care and education, and foods and nutrition. Introduction to microorganisms, including structure, function, metabolism, growth, genetics, diversity, and applied aspects. Special emphasis on human health.

Not open for credit to majors in the biological sciences. (Lecture 2 hrs., laboratory 6 hrs.) Course fee may be required.

211. General Microbiology (5) F,S

Prerequisites: BIOL 211, 212; CHEM 111B, all with a grade of "C" or better.

Introduction to biology of microorganisms, including structure, function, metabolism, growth, genetics, diversity, host-parasite relationships, and applied aspects.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 6 hrs.) Course fee may be required.

296. Introduction to Undergraduate Directed Research (1) F,S

Prerequisites: Consent of instructor.

Introduction to research in microbiology approved and directed by a faculty member in the Department of Biological Sciences. Designed primarily to introduce lower division students to research before taking MICR/BIOL 496.

May be repeated to a maximum of 3 units in different semesters. Students who have completed one or more units of MICR/BIOL 496 may not enroll in this course. Credit/No Credit grading only. (Conference 1 hr., laboratory 3 hrs.) Same course as BIOL 296.

UPPER DIVISION

300I. ## Human Immunology: In Self-Defense (3) F

Prerequisites: Completion of GE Foundation requirements, one or more Explorations courses, and upper-division standing; one laboratory course in a life science. Introductory psychology and a laboratory course in a physical science recommended.

Mechanisms and cells responsible for protecting human body from disease. Normal functions of immune system, diseases involving immune system, and psychological, endocrine and age factors affecting immune system included. Impact of immunology or organ transplantation, immunotherapy, and biotechnology discussed.

Not applicable for credit toward the major in Microbiology. (Lecture 3 hrs.)

320. Bacterial Pathogenesis (3) F,S

Prerequisite: MICR 211 with a grade of "C" or better.

Nature of host-pathogen interactions in health and disease. Emphasis upon pathogenic bacteria of humans and animals; topics include bacterial ultrastructure, epidemiology, and mechanisms of pathogenesis, host defense mechanisms, and antibiotic therapy.

Letter grade only (A-F). Course fee may be required. (Lecture 3 hrs.)

320L. Bacterial Pathogenesis Laboratory (2) F,S

Prerequisite or corequisite: MICR 320 with a grade of "C" or better.

Experiments using modern and classical techniques for the isolation, identification, and characterization of pathogenic bacteria. Molecular mechanisms of bacterial virulence are emphasized. Techniques used include PCR, SDS-PAGE, serotyping, and immunofluorescence microscopy.

Letter grade only (A-F). (Laboratory 6 hrs.)

322. Mycology/Parasitology (5) F,S

Prerequisites: BIOL 211, 212; MICR 320, all with a grade of "C" or better.

Second of a two-semester sequence (MICR 320/322) in medical microbiology for majors. Survey of parasitic protozoa, helminthes, and fungi of humans; emphasis on identification of fresh and preserved specimens, pathogenesis, host-parasite interactions, epidemiology, prevention, and control.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 6 hrs.) Course fee may be required.

325. Emerging Infectious Diseases (3)

Prerequisites: MICR 211 with a grade of "C" or better and consent of instructor.

Explores changes in technology, infectious disease organisms and other factors contributing to emerging and re-emerging infectious diseases, including immunodeficiency, antibiotic and insecticide abuses, climate change, travel and commerce, human demographic and behavioral changes, land use, and breakdown of public health.

Letter grade only (A-F). (Lecture 3 hrs.)

Microbiology Courses (MICR)

355. Microbial Ecology (3) S

Prerequisites: MICR 211 or BIOL 211, 212, 213 all with a grade of "C" or better.

Explores relationships of microorganisms to their environment. Emphasis placed on ecological basis for diversity of prokaryotic forms, metabolic functions and community interactions.

Letter grade only (A-F). Same course as BIOL 355. Not open for credit to students with credit in BIOL 355. (Lecture 3 hrs.)

355L. Microbial Ecology Laboratory (1) S

Prerequisite: MICR 355 or BIOL 355 with a grade of "C" or better.

Provides an understanding of microbes in the environment. Sample and analyze microbes from field trips to different habitats. Analytical techniques learned include enrichment culture methods and modern molecular biology methods to study the diversity and community dynamics of microbes.

Letter grade only (A-F). Course fee may be required. Same course as BIOL 355L. Not open for credit to students with credit in BIOL 355L. (Laboratory 3 hrs.)

371. Microbial Genetics (3) F

Prerequisite: MICR 211 with a grade of "C" or better.

Genetic analysis of biological processes in microbes. Includes gene structure, regulation, and function; isolation/analysis of mutations in haploid/diploid organisms; gene function from mutants; genetic exchange; regulation of host-pathogen interactions; bacteriophages; cloned genes; and genomics.

Letter grade only (A-F). (Lecture 3 hrs.)

372. Methods in Microbial Genetics (2) F

Prerequisite: MICR 211 with a grade of "C" or better. Recommended: MICR 371.

Laboratory study of microbial genetics, using classical (non-molecular) and contemporary (molecular) approaches. Includes genetic engineering techniques; microbial genomics.

Not open for credit to students with credit in MICR 451. Letter grade only (A-F). (Laboratory 6 hrs.) Course fee may be required.

415./515. Marine Microbiology (3) F, odd years

Prerequisite: MICR 355 or BIOL 355 or BIOL 353 with a grade of "C" or better. (Undergraduates enroll in MICR 415; graduates enroll in MICR 515.)

Designed to familiarize microbiology and marine biology students with the role of microorganisms in the marine environment. Topics will include ecology, physiology, biogeochemistry, and diversity of marine microbes. Laboratory/field component will emphasize examination and cultivation of local marine microbes.

Letter grade only (A-F). Course fee may be required. Same course as BIOL 415. Not open for credit to students with credit in BIOL 415. (Lecture 2 hrs., laboratory and field 3 hrs., weekend field trip may be required.)

416./516. Virology (3) F,S

Prerequisite: MICR 320 or BIOL 340 with a grade of "C" or better. (Undergraduates enroll in MICR 416; graduates enroll in MICR 516.)

Virology at molecular level including viral replication and molecular basis for viral pathogenesis; survey of human, animal, and plant viral diseases. Current trends for prevention and treatment of viral diseases.

Letter grade only (A-F). Same course as BIOL 416. Not open for credit to students with credit in BIOL 416. (Lecture 3 hrs.)

423./523. Hematology (4) F

Prerequisite: BIOL 340 with a grade of "C" or better. (Undergraduates enroll in MICR 423; graduates enroll in MICR 523.)

Study of blood and coagulation system. Normal cell structure and function and physiological and morphological changes in inflammation, leukemias, and anemias discussed. Clinical,

diagnostic, and research techniques for observing blood and pathologic case-studies included.

Useful for student interested in medical professions. Required for clinical laboratory science (medical technology) internship. Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

429./529. Epidemiology of Infectious Diseases (3)

Prerequisites: BIOL 260; MICR 320, 322; all of a grade of "C" or better. (Undergraduates enroll in MICR 429; graduates enroll in MICR 529.)

Principles of epidemiology and application to health; fundamentals of biomedical statistics; basic factors in classic epidemiological studies and prevention and control of infectious diseases.

Letter grade only (A-F). (Lecture 3 hrs.)

430. Immunology (3) F,S

Prerequisite: BIOL 340 with a grade of "C" or better.

Study of cellular and molecular components of immune system, including how immune system recognizes pathogens, how it functions in various types of immune responses, mechanisms of vaccines, immunodeficiencies, transplantation, allergy, and autoimmunity.

Letter grade only (A-F). Same course as BIOL 430. Not open for credit to students with credit in BIOL 430. (Lecture 3 hrs.)

430L. Immunology Laboratory (2)

Prerequisite: BIOL 340 with a grade of "C" or better. Prerequisite/Corequisite: MICR 430.

Modern and classical techniques in cellular and molecular immunology. Experimental techniques have broader applications to other fields and include mammalian cell culture, antibody purification, SDS-PAGE, western blots, and assays of apoptosis, cell proliferation, cellular activation, and antibody-antigen interactions.

Letter grade only (A-F). (Laboratory 6 hrs.) Course fee may be required.

471./571. Bacterial Physiology (3) S

Prerequisites: MICR 320, CHEM 441A; both with a grade of "C" or better. (Undergraduates enroll in MICR 471; graduates enroll in MICR 571.)

Cellular physiology at molecular level as related to bacterial growth, reproduction, nutrition, metabolism, and ecology.

Letter grade only (A-F). (Lecture 3 hrs.)

473. Food and Industrial Microbiology (3) F

Prerequisites: MICR 200 or 211; CHEM 441A or 448; both with a grade of "C" or better.

Role of microorganisms in food and other industrial processes; emphasis on bacteria, yeasts and molds.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.) Course fee may be required.

477./577. Biotechnology: Applications of Molecular Techniques and Bioinformatics (4) F

Prerequisite: BIOL 340 or 370 or CHEM 441A,B; all with a grade of "C" or better. (Undergraduates enroll in MICR 477; graduates enroll in MICR 577.)

Theory and techniques for isolating, amplifying, and analyzing genes, genomes, transcripts, and proteins. Data-mining, the use of computers in experimental design and/or functional analysis, use of microarrays, and future of nanotechnology.

Letter grade only (A-F). (Lecture 3 hrs., activity 2 hrs.)

490./590. Selected Topics in Microbiology (1-3)

Prerequisites: MICR 211 with grade of "C" or better, and consent of instructor. (Undergraduates enroll in MICR 490; graduates enroll in MICR 590.)

Topics from selected areas of microbiology.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Lecture 1-3 hrs.)

495. Instruction in Laboratory Teaching (1-2) F,S

Prerequisites: Consent of instructor, an "A" in the course in which the student elects to do MICR 495 (another course with laboratory may be substituted with consent of instructor), and an overall GPA of at least 3.0.

Individual instruction in organization and techniques of teaching a microbiology laboratory.

May be repeated to a maximum of 2 units in different semesters. Any units beyond the two taken for a letter grade in BIOL 495 or MICR 495 or any combination of the two will be taken credit/no credit. Same course as BIOL 495. Not open for credit to students with credit in BIOL 495. (Conference 1 hr., laboratory 3 hrs. per unit.)

496. Undergraduate Directed Research (1-3) F,S

Prerequisites: BIOL 211, 212; either BIOL 213 or MICR 211 or BIOL 296 or MICR 296; consent of instructor; and consent of appropriate undergraduate advisor.

Research in a specific topic in biological sciences approved and directed by a faculty member in Department of Biological Sciences.

May be repeated for a letter grade and degree credit to a maximum of three units for any single degree or option. Units beyond the three taken for a letter grade in MICR 496 or BIOL 496, or any combination of the two, will be taken credit/no credit. Same course as BIOL 496. Not open for credit to student with credit in BIOL 496. Students may only have a total of 3 units of BIOL 496 and MICR 496 combined. Not available to graduate students.

GRADUATE LEVEL

515./415. Marine Microbiology (3) F, odd years

Prerequisite: MICR 355 or BIOL 355 or BIOL 353 with a grade of "C" or better. (Undergraduates enroll in MICR 415; graduates enroll in MICR 515.)

Designed to familiarize microbiology and marine biology students with the role of microorganisms in the marine environment. Topics will include ecology, physiology, biogeochemistry, and diversity of marine microbes. Laboratory/field component will emphasize examination and cultivation of local marine microbes.

Letter grade only (A-F). Course fee may be required. Same course as BIOL 515. Not open for credit to student with credit in BIOL 515. (Lecture 2 hrs., laboratory and field 3 hrs., weekend field trip may be required.)

516./416. Virology (3) F,S

Prerequisite: MICR 320 or BIOL 340 with a grade of "C" or better. (Undergraduates enroll in MICR 416; graduates enroll in MICR 516.)

Virology at molecular level including viral replication and molecular basis for viral pathogenesis; survey of human, animal, and plant viral diseases. Current trends for prevention and treatment of viral diseases.

Letter grade only (A-F). Same course as BIOL 516. Not open for credit to students with credit in BIOL 516. (Lecture 3 hrs.)

523./423. Hematology (4) F

Prerequisite: BIOL 340 with a grade of "C" or better. (Undergraduates enroll in MICR 423; graduates enroll in MICR 523.)

Study of blood and coagulation system. Normal cell structure and function and physiological and morphological changes in inflammation, leukemias, and anemias discussed. Clinical, diagnostic, and research techniques for observing blood and pathological case-studies included.

Useful for student interested in medical professions. Required for clinical laboratory science (medical technology) internship. Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

529./429. Epidemiology of Infectious Diseases (3)

Prerequisites: BIOL 260; MICR 320, 322; all of a grade of "C" or better. (Undergraduates enroll in MICR 429; graduates enroll in MICR 529.)

Principles of epidemiology and application to health; fundamentals of biomedical statistics; basic factors in classic epidemiological studies and prevention and control of infectious diseases.

Letter grade only (A-F). (Lecture 3 hrs.)

571./471. Bacterial Physiology (3)

Prerequisites: MICR 320, CHEM 441A; both with a grade of "C" or better. (Undergraduates enroll in MICR 471; graduates enroll in MICR 571.)

Cellular physiology at molecular level as related to bacterial growth, reproduction, nutrition, metabolism, and ecology.

Letter grade only (A-F). (Lecture 3 hrs.)

577./477. Biotechnology: Applications of Molecular Techniques and Bioinformatics (4) F

Prerequisite: BIOL 340 or 370 or CHEM 441A,B; all with a grade of "C" or better. (Undergraduates enroll in MICR 477; graduates enroll in MICR 577.)

Theory and techniques for isolating, amplifying, and analyzing genes, genomes, transcripts, and proteins. Data-mining, the use of computers in experimental design and/or functional analysis, use of microarrays, and future of nanotechnology.

Letter grade only (A-F). Same course as BIOL 577. Not open for credit to students with credit in BIOL 577. (Lecture 3 hrs., activity 2 hrs.)

590./490. Selected Topics in Microbiology (1-3)

Prerequisites: MICR 211 with grade of "C" or better, and consent of instructor. (Undergraduates enroll in MICR 490; graduates enroll in MICR 590.)

Topics from selected areas of microbiology.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Lecture 1-3 hrs.)

661. Seminar in Microbiology (2)

Prerequisite: Consent of instructor.

Critical evaluation of literature in this field, including oral and/or written presentation of critiques.

May be repeated to a maximum of 4 units with different topics. Letter grade only (A-F). (Seminar 2 hours)

697. Directed Research (1-3) F,S

Prerequisite: Consent of instructor.

Research on specific topic approved and directed by faculty member in the biological sciences. Written report required.

May be repeated for a letter grade and degree credit to a maximum of 3 units. Any units beyond the 3 units taken for a letter grade in BIOL 697 or MICR 697 or any combination of the two must be taken credit/no credit.

698. Thesis (1-6) F,S

Prerequisites: Advancement to Candidacy for the Master of Science in Microbiology, consent of the chair of the thesis committee and the departmental graduate advisor.

Planning, preparation, writing, defense, oral presentation, and completion of a research thesis in the biological sciences.

Letter grade only (A-F).

BUSINESS ADMINISTRATION, COLLEGE OF

Dean: Michael E. Solt

Executive Assistant to the Dean: Margaret Williams
(562) 985-5307

Associate Dean for Administration: Omer S. Benli

Associate Dean for Accreditation: Robert Chi

College Office: College of Business Administration - 200

Telephone: (562) 985-5306, FAX: (562) 985-5742

Website: www.csulb.edu/colleges/cba/

Student Services: Jeane Caveness, Assistant Dean of Students
(562) 985-5297

Graduate Programs and Executive Education:

David Horne, Director (562) 985-4776

Departments

Accountancy: Steve Fisher, Chair (562) 985-4653

Finance: S.V. Le, Chair (562) 985-4569

Management and Human Resources Management:
Judy Strauss, Chair (562) 985-4753

Information Systems: C. Sophie Lee, Chair (562) 985-1940

Marketing: Ingrid Martin, Chair (562) 985-4769

International Business Program: Terrence H. Witkowski, Director
(562) 985-4766

Legal Studies in Business Program: Kathleen A. Lacey, Director
(562) 985-5668

Programs at a Glance

Bachelor of Science in Business Administration

Options in: Accountancy; Finance; Human Resources
Management; International Business; Management;
Management Information Systems; Marketing;
Operations and Supply Chain Management

Minors in Business Administration

Finance, Management Information Systems, Human
Resources Management, Marketing, Entrepreneurship

Master of Business Administration

Specialization in: Finance, Health Care Management,
Human Resources Management, Information Systems,
Management, Marketing

Accreditation

Undergraduate and graduate programs are nationally accredited by the Association to Advance Collegiate Schools of Business (AACSB International), 777 South Harbour Island Blvd., Suite 750, Tampa, FL 33602-5730, phone: (813) 769-6500.

Academic Advising

The College of Business Administration maintains an advising and admissions office for undergraduate students in CBA 100, 562-985-4514, and an office for graduate students in CBA 363, 562-985-5565. Advisors are available in these offices throughout the semester to assist students with admission, registration, and degree requirement information.

Student Center for Professional Development

The Student Center for Professional Development (SCPD) provides resources in support of student learning under its umbrella program Passport to Success (Passport). SCPD also encourages students to join business student organizations to assist them in connecting to college resources and networking opportunities. Under the Passport umbrella SCPD offers the following resources:

Professional development workshops provide a progression of learning experiences that teach students non-academic skills and attributes employers want to see in new employees.

Community Scholars is a community service program that pairs CBA students with Jordan High School sophomores and juniors in a mentoring relationship that encourages academic success and pursuit of a college education. CBA students make a positive impact on the high school students' lives while performing a community service that employers highly value in a prospective employee.

Corporate Mentoring Program pairs mentors from the corporate world with individual students in a year-long one-on-one relationship. The mentors coach and guide the students, help them with decision making and manage their expectations for life after graduation. Students must complete certain prerequisites to participate in CMP.

For more information about SCPD programs, services and resources please contact SCPD at 562-985-2265 or www.csulb.edu/cba/scpd or scpd@csulb.edu.

Financial Assistance

Financial assistance is provided to business students through the University Financial Aid Office. That office administers funds made available through the federal and state governments and through certain private sources. Awards are made to students who demonstrate a need for assistance with educational expenses.

Achievement Awards

Additional information about the following awards and their requirements can be obtained from the CBA website.

Applications for Outstanding Undergraduate are usually due in early to mid-January. Each department may select up to three Outstanding Graduates. From among the chosen Outstanding Undergraduates, the Dean of the College selects the Dean's Medalist. These awards are reserved for graduating seniors and require a minimum GPA along with other considerations for applicants.

Beta Gamma Sigma is the international honor society recognizing the outstanding academic achievements of students enrolled in collegiate business and management programs accredited by AACSB International. Applications to membership are due online early April at: www.betagammastigma.org. Inductees will be installed at the CBA Annual Awards Banquet in mid-May.

The *Delta Sigma Pi Scholarship Key* winner is selected from among those graduating students with the highest GPA (graduates and undergraduates).

In addition, the college offers numerous scholarships. Further information is available on the CBA website: <http://www.csulb.edu/colleges/cba/>.

Student Organizations

The following organizations are available for business students: American Marketing Association, Beta Alpha Psi/Accounting Society, Black Business Students Association, Delta Sigma Pi, Financial Management Association, Hispanic Students Business Association, Human Resources Management Association, Information Systems Students Association, International Business Association, MBA Association, Society for the Advancement of Management, and Law Society. Student organizations typically host professionals representing business and industry at weekly meetings and also sponsor a variety of social, recreational and community service events.

The Associated Business Students Organization Council (ABSOC) is the coordinating council for all business student organizations. ABSOC and the Associated Students co-sponsor the annual "Meet the Industries Expo." This annual spring event includes morning professional workshops and an afternoon career expo which draws numerous companies and several hundred students. Other programs each semester include a business student organizations' fair and the student-faculty-staff mixer. ABSOC also co-sponsors the annual "Ethics at the Beach" seminar with the Ukleja Center for Ethical Leadership.

Beta Gamma Sigma, founded at the University of Wisconsin in 1907 as a business honor society, is the only honor society recognized by the AACSB - International. Membership is available to business students at California State University, Long Beach only because the College of Business Administration is accredited by AACSB.

Election to membership in Beta Gamma Sigma is the highest scholastic honor that a student in business administration can attain. To be eligible for membership at CSULB, students must rank in the upper three percent of their junior class or the upper seven percent of their senior class, or rank in the upper ten percent of those receiving masters degrees in business administration.

Computer and Information Technology

Students in the degree program develop basic understandings and competencies relating to information processing, the application of computers in business and government, management information systems concepts, and computer programming. A computer laboratory facility is maintained within the College to provide computer access for business students.

General Policies and Regulations

Specific University and College requirements are detailed in various sections of this *Catalog*. Every student must develop complete familiarity and understanding of the regulations and requirements by which successful

completion of a program will be determined. (Also see pertinent section regarding University General Regulations and Procedures).

Admission Under Impaction

Freshman applicants to the Bachelor of Science in Business Administration will be placed in the pre-major code for Business Administration. Transfer applicants must apply to the University during the initial filing period of October and November for the following fall semester or August for the following spring semester. They must indicate their choice of major on the application.

Continuing students seeking admission to the upper-division major in Business Administration must submit a supplemental application to the College of Business Administration Advising Center (CBA, Room 100). Although there is no specific deadline for filing, it usually takes a minimum of two weeks to complete the application process. Therefore, students should file their applications no later than two weeks before their next Early Registration access date.

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Special Enrollment Status

Enrollment through Open University (College of Continuing and Professional Education) is allowed only on a space available basis which is determined by the type of course and teaching method as well as classroom capacities. The student must otherwise be qualified.

CBA Policy on Course Transfers/Substitutions

The College of Business Administration has a strict policy on course transfers/substitutions. This is necessary to preserve the academic integrity of programs and to meet accreditation standards. No credit by examination will be allowed for any CBA course. The transfer/substitution policy has two separate components: prior to matriculation at CSULB and post matriculation at CSULB.

Prior to Matriculation at CSULB

Students may petition for major credit courses completed at another recognized institution prior to matriculation at CSULB.

Courses (with a grade of "C" or better) are transferred with the approval of the appropriate department chair and the associate dean.

Post Matriculation at CSULB

Students may not transfer for credit any upper division major courses taken at another school concurrently with or subsequent to their matriculation at CSULB. Exceptions are approved with verifiable proof and genuine needs according to the following requirements:

1. approvals must be secured prior to enrolling in courses in another institution;
2. no more than two courses may be transferred or substituted;
3. a grade of "B" or better is necessary for course transfers/substitutions.

Departments have the discretion to be more stringent with regard to these requirements. Students participating in Study Abroad Programs are exempt from rule #2.

Grading Policy

Business majors and minors may not exercise a Credit/No-Credit grading option for courses required by the College of Business Administration in their program. No course taken for Credit/No-Credit grading will be accepted to fulfill a Business requirement. Enrollment in a business course as an auditor is not permitted.

Undergraduate Programs

Honors Program in Business

For the past 8 years, the College of Business Administration (CBA) at California State University, Long Beach, offered the CBA Honors Program (CBAHP). This enriched, more demanding program was designed to be intellectually rewarding, and to provide a valuable experience that enhanced students' future careers. Special focus was on those students who wished to pursue an advanced degree and career in academia. The future of the CBAHP is being reconsidered and thus, the program is temporarily on hold.

Certificate in Transportation

This certificate is being considered for discontinuance.

Requirements

1. A bachelor of science degree in Business Administration which may be completed concurrently with the certificate requirements;
2. A minimum of 18 units of transportation and transportation-related course work at California State University, Long Beach to be selected with the approval of the Program Director;
3. A grade of "C" or higher will be required for every course;
4. The certificate program does not permit the use of the Credit/No Credit option.

Graduate Programs

The College of Business Administration offers graduate study leading to the Master of Business Administration (MBA). The degree offered by the College of Business Administration is accredited by the AACSB - International.

The MBA is designed to serve the community by providing graduate business education to persons who show promise of leadership and success in business or related fields. For this reason, the faculty of the College of Business Administration has established rigorous standards of admission and completion for the program.

Admission to Graduate Study

In addition to admission by the University Office of Admissions and Records, an applicant for graduate study in business must apply to and be admitted by the College of Business Administration.

Admission Procedures

1. Students interested in applying to the MBA program at CSULB should file a University application online at www.csumentor.edu and an MBA Application Packet from

the Graduate Program Office in the College of Business Administration. Students must complete and submit both applications in order to be considered for admission into the graduate program in business. Students applying for the MBA should mark "other masters" as the degree objective, and 05011 as the major code. Students should submit the MBA application with two letters of recommendation, current resume, statement of purpose and responses to five specific questions directly to the MBA office.

2. Two complete sets of official transcripts of all college work attempted are required. One set must be sent to: California State University, Long Beach, Office of Admissions and Records, 1250 Bellflower Blvd., Long Beach, CA 90840
The other set of official transcripts must be sent directly to the Graduate Programs Office at the following address: California State University, Long Beach, College of Business Administration, Graduate Programs and Executive Education Office, 1250 Bellflower Blvd., Long Beach, CA 90840
3. Graduate Management Admission Test (GMAT) scores must be forwarded directly from the GMAC to the College of Business Administration Graduate Programs Office. Test scores over 5 years old will not be considered.
4. Foreign students should first contact the Center for International Education on campus for special deadlines. Foreign students are required to take the TOEFL test and achieve a score of 550, in addition to the steps above required of all applicants to the MBA program.

Deadlines for International applications are:

- April 1 for Fall Semester
- October 30 for Spring Semester

Deadline for domestic applications are:

- November 15 for Spring Semester
- April 30 for Fall Semester

One official copy of all transcripts, the MBA Application Packet, GMAT score and TOEFL score (if applicable), must be filed in the Graduate Programs Office by:

- March 30 for Fall Semester
- October 30 for Spring Semester

Because of high demand for admission to the MBA program, it is advisable that students submit their application to the program early. No action can be taken on applications until all required documents are received. Application materials submitted after these dates will not be considered.

Criteria

Admission will be granted to students showing high promise of success in post-baccalaureate business study. Each applicant's potential for graduate management education is evaluated on the basis of six major criteria:

1. Past Academic Record, as reflected in undergraduate GPA or other Graduate programs.
2. Graduate Records Examination (GRE) or Graduate Management Admission Test (GMAT)
3. Managerial Experience: demonstration of increasing levels of responsibility.
4. Communication: ability to clearly identify the applicant's leadership potential, educational goals and academic strengths.

5. Two Letters of Recommendation
6. Statement of Purpose
7. Answer to 5 essay questions

Upon completion of evaluation by the College of Business Administration Graduate Programs office, the student is notified by mail of acceptance or rejection. If accepted to the MBA Program, student's transcripts are reviewed for completion of the necessary course work for mastery of the common body of knowledge. Generally, a grade of "B" or better within the last 3 years or an "A" in the last 4 years is required to meet the criteria.

Upon completion of evaluation by the College of Business Administration Graduate Programs office, the student is notified by mail of acceptance or rejection. If accepted, the letter includes an evaluation listing prerequisites met by the student in previous course work and those still requiring completion. Course work from a non-AACSB accredited school or over three years old and with a grade less than "B" at the time of acceptance will not be considered for satisfaction of First Year Core.

Enrollment

In order to be admitted into the University as an MBA student you must meet all of the MBA Admissions criteria.

Admission to Graduate Courses

Only students who have been admitted to the MBA program may take graduate courses in Business Administration. The only exception is that students who have been admitted to other Master's programs at CSULB may take select graduate courses in Business Administration to meet the requirements for their programs, with the permission of their major advisor and the Graduate Programs office.

Enrollment in graduate courses through the Open University will normally be permitted only for students in an AACSB-accredited graduate program elsewhere with a letter of permission from the Associate Dean/Dean of the student's home university, or to alumni of the CSULB MBA Program.

Continuous Enrollment

Once a student is accepted and enrolled in the MBA Program, he/she is expected to attend classes both semesters of the academic year. (Fall and Spring semesters are considered the regular semesters of the academic year; Summer attendance is optional.) Registration and completion of at least one course each semester satisfies the Continuous Enrollment requirement.

If a student is unable to satisfy the Continuous Enrollment requirement, he/she must complete the Educational Leave of Absence procedures detailed below. Continuous Enrollment status will only be preserved if the student's absence from a regular semester has been processed and approved through the Educational Leave of Absence procedures.

Students failing to maintain Continuous Enrollment status will be administratively removed from the MBA Program. Registration privileges will be revoked. Students planning to continue in the MBA Program who have been administratively removed due to the violation of the Continuous Enrollment condition will be required to re-apply to the MBA Program and to the University.

Leave of Absence

Any MBA student in good academic standing may request an Educational Leave. Students requesting an Educational Leave must complete an Educational Leave Form, in advance, including an explanation of their reasons for seeking the leave and a statement of when they intend to resume academic work. The completed form is to be submitted for approval to the Graduate Programs Office and the University Admission and Records Office in accordance with University Policy.

The minimum initial leave will be one full semester; the maximum will be one calendar year. A student may request, in writing, in advance, an extension of leave. Under no circumstances will the total number of approved educational leaves exceed two, nor will the duration of approved educational leaves extend beyond two calendar years.

Students returning from an approved one semester educational leave are not required to submit an application form. Students on leave longer than one semester must apply for re-admission to the university. Students returning from an absence for which an educational leave was appropriate but not approved in advance must complete the entire MBA admission process.

An Educational Leave of Absence, if properly requested and processed, allows a student to satisfy the Continuous Enrollment requirement and therefore does not affect their good standing status. Students on an approved education leave of absence will continue to receive registration information.

Graduate students who plan to enroll for credit at another institution of higher education during the leave period must obtain prior approval for the transfer of course credit to the student's program from the department chair in question and the Graduate Programs Director.

The period of an educational leave is counted in the calculation of elapsed time under the regulations governing the seven year maximum period for completion of the MBA degree requirements.

For the period of an educational leave the student's rights under the "Election of Regulation" rule are preserved, maintaining the right of the student to elect regulations as if he or she had maintained continuous attendance. See the CSULB *Catalog*, General Rules and Procedures section, for a complete explanation of the Election of Regulation - "Catalog Rights".

An educational leave presupposes no expenditure of University resources or faculty and staff time in behalf of the student during the period of the leave. In addition, no computer facilities, no library privileges, and no student services are available to a student on educational leave.

Transfer Credit

Assuming the Continuous Enrollment requirement has been satisfied, a maximum of six credits that closely complement the student's degree objectives may be applied toward the requirements for the MBA degree beyond the First Year Core under the following conditions:

1. the credits under consideration must be graduate credits,
2. the course work must be taken at an AACSB accredited graduate program,
3. prior approval must be obtained from the Graduate Programs Director,

4. prior approval must be obtained from the department chair of the course work being transferred.

The remaining units must be completed in courses at CSULB reserved exclusively for graduate students.

Scholastic Standards/Probation/Disqualification

A student who fails to maintain a cumulative GPA of 3.0 or higher in all work completed as a graduate student at this University or in all transferred work applied to the program will be placed on academic probation. The semester in which the student's GPA falls below 3.0 is the First Probationary Semester.

A student on probation, who at the end of the Third Probationary Semester (or summer, if classes are taken) fails to obtain a cumulative GPA of 3.0 or higher on all units attempted in post-baccalaureate work at CSULB, will be disqualified and removed from the graduate program. The student should note that the cumulative GPA is calculated by the University Admissions and Records Office and includes all upper division and graduate courses taken while enrolled in the graduate program.

A grade of "C" or better is required in any course taken to satisfy first or second year Core requirements. A grade of "B" or better is required in GBA 699. If either of these requirements is not met, a student must take the course a second time or withdraw from the program. A second failure to achieve the requirement grade will result in involuntary separation from the program. This requirement operates independently of the requirement for a cumulative GPA of 3.0 or better.

Master of Business Administration

The Master of Business Administration program develops competencies essential to functioning professionally in a complex and competitive business environment. The program prepares students for responsible administrative positions and provides the background essential for advancement in professional management careers. The Master of Business Administration degree encompasses a program of breadth which builds a wide range of competencies required for effective management while permitting students to specialize in a functional area.

The Master of Business Administration is normally a 48-unit program for the graduate without an undergraduate degree in Business.

General MBA

Requirements

The Master of Business Administration program requires completion of a minimum of 36 units of graduate course work as established and approved by the College of Business Administration MBA office. The MBA program must include:

I. First Year Core	0-12
II. Advancement to Candidacy	
III. Second Year Core	21
IV. Advanced Study	12
V. Capstone	3
Total units	36-48

Students who have not had an economics course prior to entering the MBA program must complete an economics course as a condition to obtaining an MBA degree.

MBA students should be guided by the following sequence of events as they progress through their graduate study in the College of Business Administration.

I. First Year Core: Common Body of Knowledge

The masters degree presupposes mastery of a common body of knowledge. Students with a recent bachelor's degree in business administration from this University or from other AACSB accredited business schools within the last 3 years will have met much of the First Year Core requirements depending on the grades they achieved in certain courses. Upon acceptance to the MBA Program, student's transcripts are reviewed for completion of the necessary course work for mastery of the common body of knowledge. Generally, a grade of "B" or better within the last 3 years or an "A" in the last 4 years is required to meet the criteria. More information about this requirement is available from the MBA Office.

Waivers of the First Year Core classes are based upon recent, satisfactory educational background at either a graduate or undergraduate level as described above. Students who have not met the entire common body of knowledge requirements prior to admission to the MBA Program will be required to enroll in the appropriate First Year Core Courses to make up any deficiency.

The First Year Core consists of at most four courses (up to 12 units):

- ACCT 500 Managerial and Financial Accounting (3 units)
- FIN 501 Financial Management Concepts (3 units)
- MGMT 500 Business Policies, Operations and Organizations (3 units)
- MKT 500 Marketing Concepts (3 units)

If an MBA student does not have exposure to business law and ethics, he/she would be required to acquire that knowledge by taking BLAW 520 or an equivalent course prior to graduation.

II. Advancement to Candidacy

Students admitted with all First Year Core requirements completed must file an application for Advancement to Candidacy for the degree after completion of their first six units. Other students must file the application during the semester in which the First Year Core requirements are to be completed. Prior to advancement to candidacy, a student must:

1. Be accepted into the MBA Program.
2. Maintain an overall minimum 3.0 cumulative GPA, including work transferred from other institutions, and a minimum 3.0 GPA in all work completed at this University.
3. Complete all First Year Core Requirements, with no grade lower than "C".
4. Fulfill the Graduation Writing Assessment Requirement (GWAR) or receive a 4.0 or better on the writing portion of the GMAT.
5. Prepare an official student program in consultation with the MBA Office. This program must include the Second-Year Core in effect at the time of Advancement to Candidacy, the 12 unit program for the area of Advanced Study and the Capstone Course, GBA 699, for a total of 36 units.
6. File the application for Advancement to Candidacy with the Graduate Program office for approval by the Graduate Program Director.

III. Second Year Core

Upon completion of the First Year Core, either by waiver or graduate course work, students move directly into the Second Year Core. (See section on Advancement to Candidacy). This core consists of seven courses (21 units) which provide the breadth requirements for the MBA degree at the advanced level.

Take all of the following courses:

ACCT 610 Advanced Cost Accounting, Budgeting and Control (3)

Prerequisite: ACCT 500 or equivalent with a grade of "C" or better.

FIN 600 Seminar in Business Finance (3)

Prerequisite: MBA standing required.

HRM 652 Seminar in Human Resources Management (3)

Prerequisite: None

IS 601 Quantitative Methods for Managerial Decision Making (3)

Prerequisite: MBA standing required.

IS 602 Management of Information Systems (3)

Prerequisite: MBA standing required.

MGMT 647 Seminar in Management Planning and Control Systems (3)

Prerequisites: MBA standing, and MGMT 500 or equivalent.

MKTG 661 Seminar in Marketing Policies (3)

Prerequisite: MKTG 500.

IV. Advanced Study

The General MBA is designed for students with an undergraduate business degree or any other student desiring a more broad-based MBA curriculum. The General MBA requires 12 units of graduate course work in three different areas within the College of Business Administration subject to approval by the Graduate Programs Office.

MBA Specializations

Specializations require 12 units with at least nine units of graduate course work in one area.

Finance

Requirements:

Take nine elective units selected from the following:

FIN 620, 630, 650, 690.

Health Care Management

Requirements:

Take the following course:

HCA 502 The Health Care System (3)

Take any two of the following courses:

HCA 536, 537, 538, 550, 552.

Human Resources Management

Requirements:

Take nine elective units selected from the following:

HRM 654, 655, 657.

Information Systems

Requirements:

Take nine elective units selected from the following:

IS 545, 550, 564, 580, 584.

Management

Requirements:

Take nine elective units selected from the following:

MGMT 542, 543, 646; HRM 657.

Marketing

Requirements:

Take nine elective units selected from the following:

MKTG 663, 665, 666, 668, 669, 695.

Any student may count three units of Directed Studies (697) toward Advanced Study requirements. See MBA office for more details.

Elective courses designed to fulfill specialization requirements must be approved by Graduate Programs Office through the completion and acceptance of student's Advancement to Candidacy form.

V. Capstone

Take following as the last or capstone course:

GBA 699 Integrated Analysis (3)

Prerequisites: Student shall have completed all 2nd year core classes. Classified MBA status in the last semester or within six units of completion of the 33-unit minimum graduate program and advancement to candidacy.

Students must complete the Second Year Core and Advance to Candidacy before enrolling in GBA 699. This critical course is given during the Fall and Spring semesters. In this comprehensive analysis, the student will integrate the knowledge obtained in the functional areas. This capstone course serves in place of either comprehensive examination or thesis as the required evaluation of candidate competency.

Students must obtain a grade of "B" or better in GBA 699 in order to receive an MBA degree. Application for acceptance into GBA 699 must be filed in the MBA Office before the end of the fourth week of instruction in the semester preceding enrollment in the course. Application forms and advisement relating to this important requirement are available in the Graduate Programs Office.

VI. Time Limitation

All courses on the official student program (Advancement to Candidacy) must be completed within seven years of commencement of the first class toward fulfillment of the Second Year Core requirement.

VII. Graduation Writing Assessment Requirement (GWAR)

As a requirement for advancement to candidacy, all graduate students must demonstrate writing competency by:

1. Passing an approved CSULB assessment of writing competence (GWAR),
2. Having already passed an assessment of writing competence (GWAR) while matriculated at another CSU campus, or
3. Earning a CSULB-approved passing score on the writing portion of an approved standardized graduate admissions test, such as the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT).

Assessments of writing competence from non-CSU campuses will be evaluated by the GWAR Coordinator as a fulfillment of the GWAR, on an articulation basis if possible or on a case-by-case basis if necessary.

Students with degrees from non-CSU campuses must either provide evidence of meeting the requirement with adequate scores on a CSULB-approved standardized test or attempt to satisfy the GWAR by the end of their first semester of matriculation at CSULB.

Master of Business Administration / Master of Fine Arts in Theatre Management

For requirements, see description in the Theatre Arts section of this catalog.

College of Business Administration Courses (CBA)

UPPER DIVISION

300. International Business (3)

Introduction to nature, dimensions, and environment of international business. Emphasis on business functions, practices, and decisions as influenced by cultural, political, economic, social, and institutional factors in various parts of world. Diffusion of information technology.

Letter grade only (A-F).

397. Junior Honors Seminar (3)

Prerequisite: Acceptance into the CBA Honors Program.

Empirical, theoretical, and applied research methodology: fundamentals and advanced topics. Visits by faculty and business professionals focus on current issues and methods for solving business problems. Literature review and written proposal required for Honors Thesis.

Letter grade only (A-F).

400I. Business Ethics (3)

Prerequisites: GE Foundation requirement, at least one Explorations course.

Various types of ethical dilemmas that take place in business organizations and acquire concepts and tools needed to manage these complex value conflicts for the well being of individuals, organizations, and society.

Same course as PHIL 400I. Not open for credit to students with credit in PHIL 400I. Letter grade only (A-F).

401A. Ethical Leadership (2)

Prerequisite: Consent of instructor required.

Explores ethical leadership challenges related to business, technology, values, relationships, and healthcare. Team-building retreat and networking with guest speakers are integral to the class. Students are required to complete both CBA 401A and CBA 401B within the same academic year.

Letter grade only (A-F).

401B. Ethical Leadership (2)

Prerequisite: CBA 401A with a grade of "C" or better in the immediately preceding fall semester and consent of instructor.

Continuation of CBA 401A. Explores ethical leadership challenges in media, education, government, and management. Community service and networking with guest speakers are integral to the class. Students required to complete CBA 401A and CBA 401B within the same academic year.

Letter grade only (A-F).

493. Business Internship (1-3)

Prerequisites: Classified business major, consent of instructor, IS 301.

Qualifying students placed in career-related paid assignments in

private or public agencies or businesses. Organized plan utilizing series of seminars and learning agreements required with selected reading and writing assignments.

Credit/No Credit grading only. May be repeated to a maximum of 6 units. A minimum of 120 hours paid experience per semester is required.

494. Selected Topics - Short-Term Study Abroad (3)

Prerequisite: Consent of instructor.

Topics of current interest in business administration selected for intensive study, linked to a group study abroad experience in a country such as China, France, Germany, Thailand and Vietnam.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics and study sites announced in the *Schedule of Classes*.

495. Selected Topics (3)

Prerequisite: Consent of instructor, IS 301.

Topics of current interest in business administration selected for intensive study.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*. Letter grade only (A-F).

497. Senior Honors Seminar I (3)

Prerequisites: CBA 397, IS 301.

Continuation of CBA 397, special emphasis on sampling, instrumentation, and data analysis. Topics covered may vary year-to-year. Perform majority of data collection and preliminary data analysis for honors thesis.

Letter grade only (A-F).

499. Senior Honors Seminar II (3)

Prerequisite: CBA 497, IS 301.

Completion of Honors Thesis. Data analysis completed, findings interpreted relative to research hypotheses; final report is submitted. Attention to preparing manuscripts for publication, academic review process, and making professional presentations. Learning by illustration and application. Visits by faculty and business leaders.

Letter grade only (A-F).

Graduate Business Administration Courses (GBA)

GRADUATE LEVEL

500. MBA Orientation (3)

Prerequisite: MBA standing.

Presents foundations in leadership, motivation, ethics and social responsibility, theory of the firm, foundations in communication and teamwork, spreadsheet analysis and modeling, case analysis and basic research methods.

Letter grade only (A-F).

600. Sustainability and the Business Organization I (4)

Prerequisite: ACCT 615, FIN 615, I S 615, MGMT/HRM 615, MKTG 615, Intermediate Microeconomics, completion of all relevant toolboxes.

Integrates skills from the various business functional areas to address the complexity of decision making for the organization and its stakeholders to meet the goal of sustainable development, where sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Letter grade only (A-F).

601. Sustainability and the Business Organization II (4)

Prerequisite: GBA 600, ACCT 615, FIN 615, I S 615, MGMT/HRM 615, MKTG 615, Intermediate Microeconomics, completion of all

relevant toolboxes.

Continuation of GBA 600. Integrated systems approach to managerial decision making with the goal of sustainable development that meets current business needs while simultaneously ensuring availability of resources for future generations.

Letter grade only (A-F).

602. Globalization Global Business I (3)

Prerequisites: MBA Standing and completion of first year core.

Examines globalization and global business from both societal and managerial perspectives. Includes lectures, case studies, projects, exercises, reports, and presentations.

Letter grade only (A-F).

603. Globalization Global Business II (3)

Prerequisites: MBA Standing and completion of first year core.

Examines globalization and global business from both societal and managerial perspectives. Includes lectures, case studies, projects, exercises, reports, and presentations.

Letter grade only (A-F).

604. Customer Relationship Management I (4)

Prerequisite: ACCT 615, FIN 615, IS 615, MGMT/HRM 615, MKTG 615, Intermediate Microeconomics, completion of all relevant toolboxes.

Explores the interrelated activities processes in supply chain management and customer relationships management. Customer privacy (accounting, information systems, management, and marketing) as pertains to CRM formulation, implementation, evaluation, and control.

Letter grade only (A-F).

605. Customer Relationship Management II (4)

Prerequisite: ACCT 615, FIN 615, IS 615, MGMT/HRM 615, MKTG 615, Intermediate Microeconomics, completion of all relevant toolboxes.

Continuation of GBA 604. Explores the interrelated activities processes in supply chain management and customer relationships management. Customer privacy (accounting, information systems, management, and marketing) as pertains to CRM formulation, implementation, evaluation, and control.

Letter grade only (A-F).

640. Electronic Commerce (4)

Prerequisites: ACCT 615, FIN 615, I S 615, MGMT/HRM, MKTG 615, Intermediate Microeconomics, completion of all relevant toolboxes.

E-commerce as an integrated subject; electronic commerce business models and concepts; technology infrastructure including data communications, e-commerce security and business transaction systems; internet marketing concepts, consumer behavior, and marketing communications; ethical, social, legal, and organizational issues; e-commerce strategy and implementation.

Letter grade only (A-F).

Graduate Business Administration Courses (GBA)

641. Mergers and Acquisitions (4)

Prerequisites: ACCT 615, FIN 615, I S 615, MGMT/HRM, MKTG 615, Intermediate Microeconomics, completion of all relevant toolboxes.

An integrated course on mergers and acquisitions. Students will develop an in-depth knowledge of corporate restructuring. Topics include valuation of companies, corporate acquisition financing, acquisition accounting, and short-term and long-term impact analysis of financial statements. Special topics include reverse mergers and spin-offs.

Letter grade only (A-F).

642. The Innovative Organization (4)

Prerequisites: ACCT 615, FIN 615, I S 615, MGMT/HRM 615, MKTG 615, Intermediate Microeconomics, completion of all relevant toolboxes.

Overview of innovation journey, including strategies and processes, models and methods for change, implementation, and new business-model creation; new product/service development processes, including marketing research, financial analysis, creating and managing brand identity, and strategic issues; development of an innovation plan.

Letter grade only (A-F).

643. Global Investments and Financial Modeling (4)

Prerequisites: ACCT 615, FIN 615, I S 615, MGMT/HRM 615, MKTG 615, Intermediate Microeconomics, completion of all relevant toolboxes.

Integration of international investment management and financial modeling. Investment management theories and concepts from a global perspective. Application of theory and concepts through hands-on modeling approaches using real-world data.

Letter grade only (A-F).

644. Financial Statement Analysis (4)

Prerequisites: ACCT 615, FIN 615, Intermediate Microeconomics, completion of all relevant toolboxes.

Focuses on the content and analysis of publicly available financial statement data. Students will learn analytical tools to assess a firm's profitability and risk and to value the firm's common stock using valuation models.

Letter grade only (A-F).

646. Understanding the Social Lives of Brands (3)

Prerequisites: MBA standing, MKTG 615.

Brand-centered marketing course intending to develop an integrated understanding of brands as cultural products and their relationship to consumers in product usage contexts. Consideration of the relationship between brand usage contexts and brand equity.

Letter grade only (A-F).

695. Selected Topics (1-3)

Prerequisite: MBA standing.

Topics change each offering and in the absence of significant duplication.

May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. Letter grade only (A-F).

698. Thesis (2-4)

Prerequisite: GBA 601. Planning, preparation, and completion of a thesis in business administration.

699. Integrated Analysis (3)

Prerequisites: Student shall have completed all 2nd year core classes. Classified MBA status in the last semester or within six units of completion of the 33-unit minimum graduate program and advancement to candidacy.

Study of wide range of business problems and formulation of solutions. Integration of knowledge from all functional areas of business and its application to complex business problems arising out of changing technology, competitive market conditions, social changes and governmental actions.

A grade of "B" or better is required for successful completion. Serves as required terminal examination for College of Business Administration graduate candidates. Project is required. Students must file application for entry into GBA 699 no later than the fourth week of instruction in the semester preceding the one in which GBA 699 will be taken. Application forms are available in the Graduate Programs Office. Letter grade only (A-F).

Business Law Courses (BLAW)

LOWER DIVISION

220. Introduction to Law and Business Transactions (3)

Law and the American legal system in today's business world. Contracts, sales, and commercial paper. Examination of the role and function of the judiciary, elements of civil and criminal lawsuits, and other emerging areas of the law, including alternative dispute resolution.

Not open for credit to students with credit in FIN 220. Letter grade only (A-F).

UPPER DIVISION

309I. The Consumer in the Legal and Economic Environment (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses; upper-division standing.

Incorporates an integrated coverage of the economic, legal, ethical and regulatory environment of consumers in avoiding and resolving disputes regarding fraudulent transactions, financial matters, personal and real property contracts, torts, credit and investment issues, and family relationships. Team taught.

(Lecture-Discussion 3 hours.) Same course as CAFF 309I and FIN 309I. Not open for credit to students with credit in CAFF 309I.

320. Legal and Regulatory Environment of Business (3)

Forms of business organizations, employment law, securities law, environmental law, anti-trust issues, and international transactions. Social, cultural and economic influences on domestic and multinational corporations. Exploration of relationship of government to business. Introduction to business ethics.

Not open for credit to students with credit in FIN 320. Letter grade only (A-F).

424. International Legal Environment of Business (3)

Prerequisite: BLAW 320, IS 301.

Subsidiaries, joint ventures and other forms of international business operations. Effects of treaties, laws and policies of governments on business operations. Resolution of business and investment disputes, protection of property rights, the financing and taxing of international operations, and ethical issues.

Not open for credit to students with credit in FIN 424. Letter grade only (A-F).

425. Legal Aspects of Real Estate (3)

Prerequisite: FIN 340, IS 301.

Basic principles of real estate law as related to conveyances, titles, private and public restrictions on the use of land, escrows, community property and financial transactions.

Not open for credit to students with credit in FIN 425. Letter grade only (A-F).

GRADUATE LEVEL

520. Legal, Regulatory, and Ethical Environment of Business (3)

Prerequisite: MBA standing required.

Legal and regulatory environment in which managers must operate. Constitutional and judicial structures for resolving disputes, effect of governmental and political policies, and liability encountered by business in various defined areas of substantive law. Ethical issues faced by business.

Not open for credit to students with credit in FIN 520. Letter grade only (A-F).

Department Graduate-Level Courses

Accountancy Courses (ACCT)

500. Managerial and Financial Accounting (3)

Prerequisite: MBA standing required.

Evaluation of accounting systems, preparation of financial statements, and computer information processes. Analysis and interpretation of accounting information as an aid to business decisions.

Laboratory and/or class computer applications required. Letter grade only (A-F).

610. Advanced Cost Accounting, Budgeting and Control (3)

Prerequisite: ACCT 500 or equivalent with a grade of "C" or better.

Problems in planning, budgeting and cost control of decision making using a quantitative analysis approach. Emphasis on evaluation of the accounting information system.

Laboratory and/or class computer applications required. Not open for credit to students with credit in ACCT 510. Letter grade only (A-F).

615. Accounting for Managers (4)

Prerequisite: MBA standing.

Presents essential accounting concepts for managers in organizations of all types. Reviews use of accounting information to plan, control, and evaluate performance and comply with regulatory requirements. Examines how accounting information facilitates management decision making.

Letter grade only (A-F).

640. Tax Research and Planning (3)

Understanding and researching income tax law. Application of research techniques to compliance and tax planning problems. Analysis of IRS procedures related to audits, tax collections, criminal prosecutions and federal tax litigation.

Letter grade only (A-F).

680. Financial Statement Analysis (3)

Understanding and using financial reporting to make investment and lending decisions.

Letter grade only (A-F).

695. Selected Topics in Accountancy (1-3)

Prerequisites: Consent of instructor.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

697. Directed Studies (1-3)

Prerequisite: MBA standing; consent of instructor.

Individual study under faculty direction.

Letter grade only (A-F).

Finance Courses (FIN)

501. Financial Management Concepts (3)

Prerequisite: MBA standing required.

Integration of computers, management information systems and cases to: (1) time value of money, risk, valuation, cost of capital, capital structure; (2) capital budgeting; (3) long-term financing decisions; (4) working capital policy and management; (5) financial analysis and planning.

Letter grade only (A-F).

600. Seminar in Business Finance (3)

Prerequisite: MBA standing required.

Financial theory and management: (1) time value of money, risk, valuation, cost of capital, capital structure; (2) capital budgeting; (3) long-term financing decisions; (4) working capital policy and management; (5) financial analysis and planning; (6) special topics.

May be repeated to a maximum of 3 units. Letter grade only (A-F).

615. Financial Management (4)

Prerequisite: Demonstrated basic knowledge of finance.

An overview of financial theory and management. Building from the wealth-maximization goal and agency theory, the course focuses on using financial statement information in a variety of ways to engage in effective financial management. Topics include: (1) financial analysis and planning; (2) time value of money, (3) risk and returns, (4) valuation, (5) cost of capital and capital structure; (6) capital budgeting; and (7) long-term financing decisions. While some topics are introduced in other courses, the discussion is extended and deepened in this course. Also provides finance fundamentals elaborated on later in the program.

Letter grade only (A-F).

620. Capital Budgeting (3)

Prerequisite: FIN 600.

Theory of capital budgeting within the framework of the firm. Cost of capital determination and logic of expansion vs. growth, and equity financing vs. debt financing. Computer applications required.

Letter grade only (A-F).

630. Seminar in Financial Forecasting (3)

Prerequisite: FIN 600.

Research projects in industry, individual company, product and commodity areas. Computer applications required.

Letter grade only (A-F).

650. Seminar in Investments (3)

Prerequisite: FIN 600.

Security analysis, portfolio planning, balance and adjustment as related to (1) individual circumstances of the investor, (2) specific market conditions, and (3) broader financial aspects of the economy. Presentation and interpretation of student reports on selected topics. Computer applications required.

Letter grade only (A-F). Course fee may be required.

690. Seminar in International Finance (3)

Prerequisite: FIN 600.

Real and monetary factors in the finance of international business, international capital markets, movement of funds and special problem areas.

Letter grade only (A-F).

695. Selected Topics in Finance (3)

Prerequisite: Consent of instructor.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in *Schedule of Classes*.

697. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Individual study under direction of faculty.

Letter grade only (A-F).

699A-B. Applied Portfolio Management (3-3)

Prerequisites: FIN 699A: FIN 520, 600, 650; consent of instructor and department chair; FIN 699B: FIN 699A; consent of instructor and department chair.

FIN 699A offered in Fall and accepted students must enroll in FIN 699B in Spring.

Participation in management of actual investment portfolio. Research, monitor, and analyze securities and make, buy and sell recommendations for a student-managed investment fund.

Contribute to publication of semi-annual fund report. Market, sector and firm analysis with presentations and outside research.

Letter grade only (A-F).

Human Resources Management Courses (HRM)

652. Seminar in Human Resources Management (3)

Decisions and actions that impact management. Problems of productivity, employee commitment, employee development, employment law, and compensation. Staffing, training and development, performance appraisal, counseling, leadership and motivation, reward systems, participation and delegation, and discipline. Discussion, cases, simulations, and presentations.

Letter grade only (A-F).

654. Seminar in Negotiation and Conflict Management (3)

Various forms of opposition interactions within organizations. Interpersonal, intragroup, and intergroup conflict. Distinguishing between functional and dysfunctional conflict, identifying sources and causes of conflict, and examining alternative styles and methods of conflict management. Discussion, cases, simulations, and presentations.

Letter grade only (A-F).

655. Seminar in Motivation and Organization Change (3)

Human motivation and organizational change. Traditional and modern theories of work motivation and change. Psychology and management of motivation, organizational change and development. Management skills, policies, and organizational characteristics that facilitate the creation of motivating, flexible organizations.

Letter grade only (A-F).

657. Seminar in Leadership Skills (3)

Development of leadership abilities. Effectiveness of numerous approaches to leadership from both managerial and psychological viewpoints. Understanding leadership styles and abilities of self and others through assessment. Personality, situational factors, group processes, followership, and implications for leadership training

Letter grade only (A-F).

697. Directed Studies (1-3)

Prerequisites: MBA standing, consent of instructor.

Individual study under the direction of the faculty.

Letter grade only (A-F).

Information Systems Courses (IS)

545./445. Internet Applications Development (3)

Prerequisites: IS 602 or equivalent and consent of instructor.

Theory and applications of the Internet. Applications development using tools such as HTML and FrontPage. Use and development of Intranet applications in the Client/Server environment. Issues such as Internet business opportunities, network security, home page maintenance, Internet database interface and cooperative computing.

Letter grade only (A-F).

550. Business Telecommunications Management (3)

Prerequisite: IS 602 or equivalent.

Introduction to the technologies and applications of telecommunications and networking. Infrastructure planning and operation of organizational telecommunication networks. Management and control of Internet servers and mobile systems. Telecommunication regulation and standards.

Letter grade only (A-F).

Information Systems Courses (IS)

564./464. Network Modeling and Simulation (3)

Prerequisites: IS 601.

Fundamentals of simulation methodology for performance and feasibility study of business models. Basic probability distributions, random number generation, model formulation, evaluating results, validations, waiting-line simulation, and computer network performance measurement via simulation and use of computer software simulation packages.

Letter grade only (A-F).

580. Management Support Systems and Database Management Systems (3)

Prerequisite: IS 602 or equivalent.

Use of information and database techniques to support management decision making. Decision support systems, groupware, expert systems, executive information systems, database management systems (DBMS), database analysis and design, database manipulation languages (SQL and QBE), and data warehousing.

Letter grade only (A-F).

584./484. Electronic Commerce (3)

Prerequisite: IS 602 or equivalent.

Theory and applications of electronic commerce including issues such as E-cash, E-banking, E-tailing, SCM, E-marketing, B2C, B2B, C2C, E-government, Internet business opportunities, Internet security homepage maintenance, Internet database interface and cooperative computing.

Letter grade only (A-F).

601. Quantitative Methods for Managerial Decision Making (3)

Prerequisite: MBA standing required.

Statistical analysis includes probability, estimation, hypothesis testing, forecasting and decision process. Management sciences include quantitative modeling, math programming, decision support systems and simulation applicable to various business functions. Use of computer software packages as analytical tools.

May be repeated to a maximum of 3 units. Letter grade only (A-F).

602. Management of Information Systems (3)

Prerequisite: MBA standing required.

Foundation and infrastructure of information technology applied to strengthen competitiveness. Effective utilization of strategic information systems, telecommunications, system development process, database concepts and electronic commerce to enhance organizations' operations.

Letter grade only (A-F).

615. Information and Decision Systems (4)

Prerequisite: MBA standing.

Information and decision technology systems used in managerial decision making. Data-related concepts and subjects. Role of information systems in business. Data analysis and interpretation using statistical and quantitative techniques. Use of appropriate software.

Letter grade only (A-F).

695. Selected Topics in Information Systems (3)

Prerequisites: Graduate standing and consent of instructor.

Letter grade only (A-F). Topics announced in the *Schedule of Classes*.

697. Directed Studies (1-3)

Prerequisites: Graduate standing and consent of instructor.

Individual study under the direction of the faculty.

Letter grade only (A-F).

Management Courses (MGMT)

500. Business Policies, Operations and Organizations (3)

Prerequisite: MBA standing. Recommended preparation: IS 310 or 410.

Theory and philosophies of administrative organizations systems, information systems, management functions, decision making, strategy and policy formulation, operations planning, and control systems.

Letter grade only (A-F).

541. Industrial Logistics (3)

Prerequisites: MBA standing, and MGMT 500 or equivalent.

Systems analysis and synthesis of the general logistics system containing the marketing, production, and transportation activities. Definition of system components of outputs, activities and inputs. Specification and quantification of the major functional relationships interrelating these components.

Letter grade only (A-F).

542. Enterprise Structure and Operation (3)

Prerequisites: MBA standing and MGMT 500 or equivalent.

General enterprise system composed of the logistics, money, information, talent and decision sub-systems. Components of each of the sub-systems and their interrelationships in the operation of the total enterprise. Analysis via systems approach of defining outputs, activities and inputs.

Letter grade only (A-F).

543. International Business Policy (3)

Prerequisites: MBA standing, and MGMT 500 or equivalent, 9 hours recommended of 500/600 level courses in the area of international business.

Current theory and principles of international business management pertaining to problems of formulating policy and developing strategies and tactics in the multinational corporation. Case studies, readings, logistic analysis and research report.

Letter grade only (A-F).

615. Fundamentals of Management, Organizational Behavior and Human Resources (4)

Prerequisite: MBA standing.

Functions of management, with emphasis on theory from human resource management and organizational behavior. Strategy formulation, managing change, managing performance, hiring, firing, and motivating employees. Case studies, readings, simulation exercises, diagnostic reports, and presentations.

Letter grade only (A-F).

646. Seminar in Managing Mergers and Acquisitions (3)

Prerequisites: MBA standing; MGMT 500 or equivalent.

Reasons for trend of mergers and acquisitions. Examination of the merger and acquisition process. Coordination and integration across business boundaries, exploiting synergies, strategic vs. operating focus, hierarchical structure of combined companies, learning transfer, and the rationalization of shared activities.

Letter grade only (A-F).

647. Seminar in Management Planning and Control Systems (3)

Prerequisites: MBA standing, and MGMT 500 or equivalent.

Analysis of planning and control systems in management. Use of case studies and problems.

Letter grade only (A-F).

695. Selected Topics in Management (3)

Prerequisites: MBA standing.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

697. Directed Studies (1-3)

Prerequisites: MBA standing, consent of instructor.
 Individual study under the direction of the faculty.
 Letter grade only (A-F).

Marketing Courses (MKTG)**500. Marketing Concepts (3)**

Prerequisite: MBA standing required.
 Overview of the decision process in marketing. Consideration of functional areas and interaction with total operations of the firm. Application of information technology to development of marketing strategy and planning.
 Letter grade only (A-F).

615. Marketing Management (3)

Prerequisite: MBA standing, basic Accounting, basic Finance, basic Statistics, Intermediate Microeconomics.
 Decision process in marketing, functional areas and interaction with the total operations of the firm. Solving of practical, domestic and international, profit- and non-profit-oriented marketing problems. Sophisticated strategic and tactical, qualitative and quantitative case analysis, simulation, and discussion. Marketing principles and technologies.
 Letter grade only (A-F).

661. Seminar in Marketing Policies (3)

Prerequisite: MKTG 500.
 Solving practical, profit-oriented problems in marketing. Sophisticated case analysis and discussion. Application of marketing principles and technologies, including information systems, databases, behavioral theories, and management techniques.
 Letter grade only (A-F).

663. Seminar in Advertising Policies (3)

Prerequisite: MKTG 500.
 Discussion and analysis of advertising situations, objective setting, creative strategies, media strategies and models, and evaluation. Applications of mass communication theories and marketing databases.
 Letter grade only (A-F).

665. Seminar in Marketing Research (3)

Prerequisites: MKTG 500 and IS 601.
 The role of research in the solution of marketing problems. Research methods in collecting, analyzing, and interpreting information for business use. Survey and experimental approaches included. Case studies and/or class projects required.
 Letter grade only (A-F).

666. Seminar in International Marketing (3)

Prerequisite: MKTG 500.
 Analysis of problems and opportunities in international marketing operations. Consideration of entry strategies, competitive strategies, domestication, and nationalization problems. Use of marketing information systems to evaluate opportunities and threats in foreign markets.
 Letter grade only (A-F).

668. Seminar in Consumer Behavior (3)

Prerequisite: MKTG 500.
 Topics in the behavioral sciences as they apply to marketing. Application of psychological, sociological, anthropological, and economic theories and models to the understanding of buyer behavior and the development of marketing strategy.
 Letter grade only (A-F).

669. Seminar in Strategic Planning (3)

Prerequisite: MKTG 661.
 The role and use of marketing research and information systems as the basis for development and implementation of marketing strategy. Case studies and/or class projects required.
 Letter grade only (A-F).

695. Selected Topics in Marketing (3)

Prerequisites: MBA standing, consent of instructor.
 Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

697. Directed Studies (1-3)

Prerequisites: MBA standing, consent of instructor and department chair.
 Individual study under the direction of the faculty.
 Letter grade only (A-F).

CHEMICAL ENGINEERING

College of Engineering

Department Chair: Larry K. Jang

Department Office: EN2 101

Telephone: (562) 985-4909

Website: <http://www.csulb.edu/coe/che>

Faculty: Larry K. Jang, Chih-Cheng Lo, Sergio Mendez, Sepideh Faraji

Undergraduate Advisor: Sepideh Faraji

Graduate Advisor: Chih-Cheng Lo

Environmental Technology Advisor: Sepideh Faraji

General Education Advising: Academic Advising - Horn Center

Career Possibilities

Chemical Engineer • Process Engineer • Automation Control Engineer • Chemical Research Engineer • Chemical Test Engineer • Biochemical Engineer • Biomedical Engineer • Technical Sales • Management • Technical Writer • Quality Control Specialist • Consultant • Safety Engineer • Environmental Engineer • (Some of these careers require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Chemical engineering is a major that opens the way for many career opportunities. As the name implies, chemical engineers must build a foundation on engineering, science, and math while specializing in the application of chemistry to engineering systems. This is a versatile major that also encourages students to take courses from the other engineering disciplines as well as the biological sciences. In general, chemical engineers integrate their broad knowledge and analytical skills to design, implement and optimize chemical processes that convert raw materials into valuable products in a sustainable manner. Chemical engineers ensure that processes are operated safely and economically with minimum energy consumption and waste emission. Many of our graduates find career opportunities in traditional industries such as petroleum refining, energy production, chemical manufacturing and pharmaceuticals. Because of their diverse technical skill set, our graduates are increasingly finding employment in emerging industries such as alternative energy, biomedical engineering, environmental engineering, semiconductors, materials, and nanotechnology.

Program Educational Objectives

The Chemical Engineering bachelor degree program's educational objective statement is directed towards the career accomplishments and expectations of the alumni. The objectives of the program are that recent alumni become successful in their professional careers, and that they continue on a path of professional development. Specific educational objectives of the program are to:

- Prepare graduates with broad knowledge in process design, simulation and optimization; and research and development for new chemical products.
- Prepare graduates who communicate effectively and work collaboratively in multidiscipline teams.

- Prepare graduates to be productive professionals in technical careers with the highest level of professional ethics.
- Prepare graduates with the ability to continue to learn and adapt to future changes in the technical work environment.

The faculty members of the Department of Chemical Engineering strive to continuously improve the program and the curriculum as well as laboratory facilities to ensure the professional career success of our recent graduates. The goal is to prepare students for a wide range of career routes that use chemical engineering principles with a solid foundation in engineering, math, science, and societal awareness. The scope of this program is broadened by courses from general education as well as specialized technical elective courses in chemical engineering and other engineering disciplines. Students develop teamwork skills and gain interdisciplinary experience particularly in laboratory courses, lecture courses with laboratory components, and the capstone design class that require team projects. This program provides ample opportunities for students to develop communication skills such as oral and poster presentations as well as written technical reports. Students are encouraged to participate in life-long learning activities such as professional meetings on or off campus and field trips. The goal is to have a comprehensive, student-centered program that can allow us to meet the educational objectives.

Chemical Engineering Advisory and Development Council

The Department of Chemical Engineering Advisory and Development Council, consisting of outstanding engineers and executives from industry and government in Southern California, provides guidance to our program. Its mission is to advise and assist in developing the Department and to support its efforts to serve students, the community, and industry. This liaison between the University and industry ensures that industry concerns are addressed in our curricula and provides career guidance for our graduates.

ABET Accreditation

The Bachelor of Science in Chemical Engineering is accredited by the EAC (Engineering Accreditation Commission) of ABET (Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202, website: www.abet.org).

Other Related Programs

Students interested in obtaining a Minor in Environmental Engineering should refer to the College of Engineering section of this catalog. Students who take required Chemistry courses are most likely eligible for Minor in Chemistry degree. See the College of Natural Science and Mathematics section of this catalog.

Students wishing to pursue advanced study may be interested in the College of Engineering's Master of Science in Engineering (MSE) degree. Thesis work may be

supervised by chemical engineering faculty. For detailed MSE requirements, see the College of Engineering section of this catalog.

Grade Requirements

In addition to other University requirements, all students must obtain a grade of "C" or better in each prerequisite for any chemical engineering course. Also, required Written English (GE A1), Speech (GE A2), and Interdisciplinary (IC) courses must be taken for a letter grade, not Credit/No Credit.

Undergraduate Programs

Bachelor of Science In Chemical Engineering (128 units)

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

A grade of "C" or better must be achieved in all required courses listed below.

Lower Division:

Take all the following courses:

CH E 200 Chemical Engineering Fundamentals (3)
Prerequisites: CHEM 111A, MATH 122, PHYS 151 all with a grade of "C" or better.
Corequisite: CHE 210.

CH E 210 Computer Methods in Chem Engineering (3)
Corequisite: CHE 200

CH E 220 Chemical Engineering Thermodynamics I (3)
Prerequisite: CH E 200 with a grade of "C" or better.

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.

C E 205 Analytical Mechanics I (Statics) (3)
Prerequisite: PHYS 151 with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

ENGR 101 Introduction to Engineering Profession (1)
Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122

ENGR 102 Academic Success Skills (1)
Prerequisite: ENGR 101 with a grade of "C" or better.

CH E 100 Introduction to Chemical Engineering (1)
Prerequisite: None.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following choices:

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

or both of the following:

EE 210 Electro-Magnetic Foundations in EE (3)
Prerequisite: PHYS 151 with a grade of "C" or better.
Corequisites: MATH 123, EE 210L.

EE 210L Electro-Magnetic Foundations in EE Lab (1)
Corequisite: EE 210.

Take one course from the following:

BIOL 200, CHEM 251, MICR 200

Upper Division:

Take all the following courses:

CH E 310 Chemical Engineering Thermodynamics II (3)
Prerequisites: CH E 210, 220 all with a grade of "C" or better.

CH E 320 Fluids (3)
Prerequisites: CH E 200, C E 205 all with a grade of "C" or better.

CH E 330 Separation Processes (4)
Prerequisite: CHE 310 all with a grade of "C" or better

CH E 420 Heat and Mass Transport (3)
Prerequisites: CHE 310, CHE 320 all with a grade of "C" or better.

CH E 430 Chemical Reactor Kinetics (3)
Prerequisites: CHEM 371A, (MATH 370A or CHE 480) all with a grade of "C" or better.
Corequisite: CHE 420

CH E 440 Chemical Engineering Laboratory I (2)
Prerequisites: CHE 320, CHE 330 all with a grade of "C" or better.

CH E 450 Chemical Engineering Laboratory II (2)
Prerequisites: CHE 420, 430, 440 all with a grade of "C" or better.
Corequisite: CHE 460

CH E 460 Chemical Process Control (3)
Prerequisites: CHE 420, CHE 430, and (MATH 370A or CHE 480) all with a grade of "C" or better

CH E 470 Chemical Engineering Design (4)
Prerequisites: CHE 330, CHE 420, CHE 430 all with a grade of "C" or better.
Corequisite: CHE 460

CHEM 371A Physical Chemistry: Thermodynamics and Kinetics (3)
Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), MATH 224 (may be taken concurrently).

MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123. Not open to Freshmen.

Take one of the following choices:

CHEM 320A and CHEM 320B

or

CHEM 322A and 323A and CHEM 322B and 323B
or

CHEM 327 and approved science laboratory

Take six units from the following courses:

CH E 300, 415, 431, 432, 433, 437, 445, 455, 465, 475,
480, 485, 490;

Take three units from the following courses:

EE 211, CE 406, approved ECON elective course, or
approved Engineering elective course.

All students must show evidence of having registered for the FE Exam (also known as EIT Exam) prior to graduation. Those who pass the FE Exam before graduation can waive 3 units of elective course.

Minor in Environmental Engineering

For requirements, see the description in the College of Engineering section of this catalog.

Certificate in Safety Operations

Not accepting new students as of Fall 2012.

This interdisciplinary certificate is designed to prepare students for safety positions that require a strong background in the technology of safe industrial environments.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

1. May be earned concurrently with or subsequent to the baccalaureate degree.
2. Open to all majors who have fulfilled the required prerequisites as stated below.
3. Requires a total of 24 units as specified below:
 - A. Completion of supporting technical courses chosen in consultation with an advisor.
 - B. 24 units are required from the following courses: ET 307, 309, 311, 319, 329, 329L, 409, 410.
4. Any deviation from this program requires the written permission of the program advisor.

Chemical Engineering Courses (CH E)

LOWER DIVISION

100. Introduction to Chemical Engineering (1)

Chemical engineering as a profession. Nature of profession and career opportunities. Emerging frontiers of chemical engineering. (Lecture 1 hour) Letter grade only (A-F).

200. Chemical Engineering Fundamentals (3) F

Prerequisites: CHEM 111A, MATH 122, PHYS 151 all with a grade of "C" or better.

Corequisite: CHE 210.

Dimensional analysis of units, steady and transient balances of mass, momentum and energy, the mathematical solution of chemical engineering problems.

(Lecture-problems 3 hrs) Letter grade only (A-F).

210. Computer Methods in Chemical Engineering (3) F

Corequisite: CHE 200

Beginning programming and techniques of numerical analysis applied to typical problems in chemical engineering.

(Lecture-problems 2 hours, lab 3 hours) Letter grade only (A-F).

220. Chemical Engineering Thermodynamics I (3) S

Prerequisite: CH E 200 with a grade of "C" or better.

Applications of the first and second laws of thermodynamics to chemical processes. Concepts of heat, work, and energy. Energy balances in batch and flow processes, with and without chemical reaction. Gas behavior, phase change, vapor pressure, humidity. (Lecture-problems 3 hours) Letter grade only (A-F).

UPPER DIVISION

300. The Chemical Industry (3)

Prerequisite: CH E 200 with a grade of "C" or better.

Survey of industrial chemical processing techniques and the activities of engineers in this area, illustrated by field trips, speakers, professional society meetings, films, readings, etc.

(Lecture 3 hours) Letter grade only (A-F).

310. Chemical Engineering Thermodynamics II (3) F

Prerequisites: CH E 210, 220 all with a grade of "C" or better.

Analysis and design of process equipment and systems using thermodynamics. Turbines, compressors, power plants, refrigeration cycles. Phase equilibria and nonideal solution behavior. Chemical reaction equilibria and heat effects.

(Lecture-problems 3 hours) Letter grade only (A-F). Not open for credit to students with credit in CHE 410.

320. Fluids (3) S

Prerequisites: CH E 200, C E 205 all with a grade of "C" or better.

Study of the deformation and flow of fluids, both liquids and gases, with applications to chemical engineering.

(Lecture-problems 3 hours) Letter grade only (A-F).

330. Separation Processes (4) F

Prerequisite: CHE 310 with a grade of "C" or better.

Computation methods for predicting the separation of materials by distillation, absorption, extraction and other methods.

(Lecture-problems 3 hours, lab 3 hrs) Letter grade only (A-F).

400./500. Chemical Processes (3)

Prerequisite: CH E 200 or 300 all with a grade of "C" or better or consent of instructor.

In depth study of chemicals and chemical manufacturing processes and related environmental problems and energy conservation issues.

Graduate students have additional assignments. (Lecture-problem 3 hours). Letter grade only (A-F).

415./515. Occupational and Environmental Safety Engineering and Management (3)

Prerequisite: CHEM 327 all with a grade of "C" or better or consent of instructor.

Safety analysis and management, legislation, regulations and standards; toxicology and personal protective equipment; fire hazards; noise control; electrical safety; container and spill management; statistical analysis. Extra requirements for graduate students.

(Lecture-problems 3 hours) Letter grade only (A-F).

420. Heat and Mass Transport (3) F

Prerequisites: CHE 310, CHE 320 all with a grade of "C" or better.

Heat exchange by conduction, convection and radiation. Diffusion in fluids and solids. Simultaneous heat and mass transport.

(Lecture-problems 2 hours, lab 3 hours) Letter grade only (A-F).

430. Chemical Reactor Kinetics (3) F

Prerequisites: CHEM 371A, (MATH 370A or CHE 480) all with a grade of "C" or better.

Corequisite: CHE 420

Homogeneous and heterogeneous reactions and application to reactor design, catalysts.

(Lecture-problems 2 hours, lab 3 hours) Letter grade only (A-F).

431./531. Heterogeneous Catalysts (3)

Prerequisite: CHE 430 with a grade of "C" or better or consent of instructor.

Basic principles of solid catalysts and solid catalyzed reactions. Proper choice of catalysts and how to solve catalyst-related problems in chemical engineering. Development of chemical processes that utilize innovative catalysts. Graduate students will need to do more assignments.

Letter grade only (A-F). (Lecture-problems 3 hours).

432./532. Microfabrication and Microfluidics Technology (3)

Prerequisites: CHE 320, CHEM 327, (MATH 370A or CHE 480) all with a grade of "C" or better or consent of instructor.

Fundamentals of major microfabrication techniques for device construction and microfluidics technology. Topics: photolithography, wet/dry etching, metal/dielectric deposition, soft lithography, diffusion/mixing/separation in microfluidic devices, and chip-to-world interfaces. Graduate students need to do more assignments.

Letter grade only (A-F). (Lecture-problems 3 hours).

433./533. Green Engineering I: Alternative Energy (3)

Prerequisites: CHE 220, CHE 330, CHE 310 all with a grade of "C" or better or consent of instructor.

Aspects of green engineering. Sustainable liquid fuels: ethanol and biodiesel from renewable sources. Photovoltaic solar devices: semiconductor- and polymer-based solar cells. Solar array collectors: power cycles to convert heat to electrical power. Hydrogen fuel cells: electrochemical cells, and proton exchange membranes. Graduate students will submit final written reports.

Letter grade only (A-F). (Lecture-Problems 3 hours).

437./537. Materials Purification Processes (3)

Prerequisite: CH E 330, 420 all with a grade of "C" or better or consent of instructor.

Rate-controlled separation processes such as membrane separations, pressure swing adsorption, molecular sieve separation, supercritical fluid extraction, reverse osmosis, and spray drying.

Additional projects required for CH E 537. (Lecture-problems 3 hours) Letter grade only (A-F).

440. Chemical Engineering Laboratory I (2) F

Prerequisites: CHE 320, CHE 330 all with a grade of "C" or better.

Laboratory study of fluid mechanics, separation processes and thermodynamics. Experimental design and analysis and preparation of engineering reports.

(Laboratory 6 hours) Letter grade only (A-F).

445./545. Pollution Prevention (3)

Prerequisite: CH E 330 with a grade of "C" or better.

Pollution prevention strategies in chemical industry. Hierarchical approach of waste minimization. Life cycle analyses of wastes. Identification of pollution source. Environmentally compatible materials. Unit operations for minimizing waste. Economics of pollution prevention. Extra requirement for graduate students.

(Lecture-problems 3 hours) Letter grade only (A-F).

450. Chemical Engineering Laboratory II (2) S

Prerequisites: CHE 420, 430, 440 all with a grade of "C" or better. Corequisite: CHE 460

Laboratory study of heat and mass transport, chemical kinetics and control theory. Experimental design and analysis and preparation of engineering reports.

(Laboratory 6 hours) Letter grade only (A-F).

455./555. Environmental Compliance (3)

Prerequisite: CHEM 327 with a grade of "C" or better or consent of instructor.

Physical and chemical properties of hazardous materials and wastes. Environmental hazards. An examination of environmental

laws, regulations and standards dealing with storage, transportation, treatment and disposal of hazardous wastes. Emergency planning and preparedness. Extra requirement for graduate students: term papers or projects.

(Lecture-problems 3 hours) Letter grade only (A-F).

460. Chemical Process Control (3) S

Prerequisites: CHE 420, CHE 430, and (MATH 370A or CHE 480) all with a grade of "C" or better.

Control theory and practice, instrumentation, system responses, transfer functions, feed-back control, and stability as applied to chemical engineering processes.

(Lecture-problems 2 hours, lab 3 hours) Letter grade only (A-F).

465./565. Biochemical Engineering (3)

Prerequisite: CH E 200, 330, 430 all with a grade of "C" or better and life science course(s) with instructor's approval.

Review of basic science. Kinetics of enzyme-catalyzed reactions. Kinetics of substrate utilization, product formation and biomass production. Design and analysis of bioreactors. Product recovery operations. Applications to natural systems.

Extra requirements for graduate students. (Lecture-problems 3 hrs) Letter grade only (A-F).

470. Chemical Engineering Design (4) S

Prerequisites: CHE 330, 420, 430 all with a grade of "C" or better. Corequisite: CHE 460

Design based upon economics and chemical engineering design and analysis.

(Lecture-problems 3 hours, problem-design session 3 hrs) Letter grade only (A-F).

475./575. Environmental Pollution (3)

Prerequisite: CHEM 320A or 327 all with a grade of "C" or better or consent of instructor.

Application of chemistry to the problems of pollution. Graduate students have additional assignments.

(Lecture-problem 3 hours) Letter grade only (A-F).

480./580. Theoretical Methods in Chemical Engineering (3)

Prerequisites: CH E 420, 430 all with a grade of "C" or better.

Simulation and optimization of chemical engineering processes by mathematical formulation and computer modeling.

Extra requirements for graduate students: term papers or projects. (Lecture-problems 3 hours) Letter grade only (A-F).

481./581. Advanced Theoretical Methods in Chemical Engineering (3)

Prerequisites: MATH 370A, CH E 480, or 580 all with a grade of "C" or better or consent of instructor.

Solutions of problems encountered in models of chemical processes: boundary value ordinary differential equations and partial differential equations.

Graduate students have additional assignments. (Lecture-problem 3 hours). Letter grade only (A-F).

485./585. Air Pollution (3)

Prerequisite: CH E 475 or CE 364 all with a grade of "C" or better or consent of instructor.

Air pollution chemistry; control strategies; origin of pollutants; meteorology; vapor dispersion models; control principles for particulates, sulfur dioxide, and nitrogen oxides.

Extra requirements for graduate students: term papers or projects. (Lecture-problems 3 hrs) Letter grade only (A-F).

490. Special Problems (1-3)

Prerequisite: Consent of instructor.

Assigned topics in technical literature or laboratory projects and reports on same.

Letter grade only (A-F).

GRADUATE LEVEL

500./400. Chemical Processes (3)

Prerequisite: CH E 200 or 300 all with a grade of "C" or better or consent of instructor.

In depth study of chemicals and chemical manufacturing processes and related environmental problems and energy conservation issues.

Graduate students have additional assignments. (Lecture-problem 3 hours). Letter grade only (A-F).

515./415. Occupational and Environmental Safety Engineering and Management (3)

Prerequisite: CHEM 327 all with a grade of "C" or better or consent of instructor.

Safety engineering and management, legislation, regulations and standards; toxicology and personal protective equipment; fire hazards; noise control; electrical safety; system safety analysis; container and spill management; use of computer systems and statistical methods.

Extra requirements for graduate students: term papers or projects. (Lecture-problems 3 hours) Letter grade only (A-F).

520. Advanced Transport Phenomena (3)

Prerequisites: CH E 320, 420, 430 all with a grade of "C" or better.

Application of differential and integral mass, momentum and energy balances to chemical engineering processes. Analysis of fluid flow, heat transfer, diffusion and chemical reaction in various unit operations.

(Lecture-Problems 3 hours) Letter grade only (A-F).

521. Advanced Mass Transfer Operations of Chemical Engineering (3)

Prerequisite: CH E 520 with a grade of "C" or better or consent of instructor.

Fundamental laws of diffusion and diffusion with chemical reaction in traditional and unconventional mass transfer operations.

(Lecture-problem 3 hours). Letter grade only (A-F).

530. Advanced Reactor Kinetics (3)

Prerequisite: CH E all with a grade of "C" or better.

Modeling of chemical reactors; effects of multiple phases, mixing, adsorption, diffusion and catalysts on reactor performance.

(Lecture-Problems 3 hrs) Letter grade only (A-F).

531./431. Heterogeneous Catalysts (3)

Prerequisite: CHE 430 with a grade of "C" or better or consent of instructor.

Basic principles of solid catalysts and solid catalyzed reactions. Proper choice of catalysts and how to solve catalyst-related problems in chemical engineering. Development of chemical processes that utilize innovative catalysts. Graduate students will need to do more assignments.

Letter grade only (A-F). (Lecture-Problems 3 hours).

532./432. Microfabrication and Microfluidics Technology (3)

Prerequisites: CHE 320, CHEM 327, MATH 370A or CHE 480 all with a grade of "C" or better or consent of instructor.

Fundamentals of major microfabrication techniques for device construction and microfluidics technology. Topics: photolithography, wet/dry etching, metal/dielectric deposition, soft lithography, diffusion/mixing/separation in microfluidic devices, and chip-to-world interfaces. Graduate students need to do more assignments.

Letter grade only (A-F). (Lecture-Problems 3 hours).

533./433. Green Engineering I: Alternative Energy (3)

Prerequisites: CHE 220. CHE 330, CHE 310 all with a grade of "C" or better or consent of instructor.

Aspects of green engineering. Sustainable liquid fuels: ethanol and biodiesel from renewable sources. Photovoltaic solar devices:

semiconductor- and polymer-based solar cells. Solar array collectors: power cycles to convert heat to electrical power. Hydrogen fuel cells: electrochemical cells, and proton exchange membranes. Graduate students will submit final written reports.

Letter grade only (A-F). (Lecture-Problems 3 hours).

537./437. Materials Purification Processes (3)

Prerequisites: CH E 330, 420 all with a grade of "C" or better. or consent of instructor.

Rate-controlled separation processes such as membrane separations, pressure swing adsorption, molecular sieve separation, supercritical fluid extraction, reverse osmosis, and spray drying.

Additional projects required for CH E 537. (Lecture-problems 3 hours) Letter grade only (A-F).

545./445. Pollution Prevention (3)

Prerequisite: CH E 330 with a grade of "C" or better.

Pollution prevention strategies in chemical industry; hierarchical approach waste minimization; life cycle analyses of wastes; identification of pollution source; environmentally compatible materials; unit operations for minimizing waste; economics of pollution prevention.

Extra requirement for graduate students. (Lecture-problems 3 hours) Letter grade only (A-F).

555./455. Environmental Compliance (3)

Prerequisite: CHEM 327 with a grade of "C" or better or consent of instructor.

Physical and chemical properties of hazardous materials and wastes. Environmental hazards. An examination of environmental laws, regulations and standards dealing with storage, transportation, treatment and disposal of hazardous wastes. Emergency planning and preparedness.

Extra requirement for graduate students: term papers or projects. (Lecture-problems 3 hours) Letter grade only (A-F).

560. Advanced Chemical Process Control (3)

Prerequisite: One of the following: CH E 460, E E 370/L, 411, 470, 471, 511, MAE 376, E T 492 all with a grade of "C" or better or consent of instructor.

Principles and practices of controller selection and tuning, advanced control loops, model predictive control, decoupling, hands-on experience of control loop design and implementation using Labview.

(Lecture-Problems 3 hours) Letter grade only (A-F).

565./465. Biochemical Engineering (3)

Prerequisites: CH E 200, 330, 430 all with a grade of "C" or better and life science course(s) with instructor's approval.

Review of basic science. Kinetics of enzyme-catalyzed reactions. Kinetics of substrate utilization, product formation and biomass production. Design and analysis of bioreactors. Product recovery operations. Applications to natural systems.

Extra requirements for graduate students. (Lecture-problems 3 hrs) Letter grade only (A-F).

575./475. Environmental Pollution (3)

Prerequisite: CHEM 320A or 327 all with a grade of "C" or better or consent of instructor.

Application of chemistry to the problems of pollution. Graduate students have additional assignments.

(Lecture-problem 3 hours). Letter grade only (A-F).

580./480. Theoretical Methods in Chemical Engineering (3)

Prerequisites: CH E 420, 430 all with a grade of "C" or better.

Simulation and optimization of chemical engineering processes by mathematical formulation and computer modeling.

Extra requirements for graduate students: term papers or projects. (Lecture-problems 3 hours) Letter grade only (A-F).

581./481. Advanced Theoretical Methods in Chemical Engineering (3)

Prerequisites: MATH 370A, CH E 480, or 580 all with a grade of "C" or better or consent of instructor.

Solutions of problems encountered in models of chemical processes: boundary value ordinary differential equations and partial differential equations.

Graduate students have additional assignments. (Lecture-problem 3 hours). Letter grade only (A-F).

585./485. Air Pollution (3)

Prerequisite: CH E 475 or CE 364 all with a grade of "C" or better or consent of instructor.

Air pollution chemistry; control strategies; origin of pollutants; meteorology; vapor dispersion models; control principles for particulates, sulfur dioxide, and nitrogen oxides.

Extra requirement for graduate students: term papers or projects. (Lecture-problems 3 hrs) Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Graduate standing.

Individual research or intensive study under the guidance of a faculty member on theoretical or experimental problems in chemical engineering.

(Independent Study) Letter grade only (A-F).

698. Thesis or Industrial Project (2-6)

Prerequisite: Advancement to Candidacy.

Preparation and completion of a thesis or industrial project in chemical engineering.

May be repeated to a maximum of 6 units.

CHEMISTRY AND BIOCHEMISTRY

College of Natural Sciences and Mathematics

Department Chair: Krzysztof Slowinski

Department Office: Hall of Science (HSCI) 370
Telephone/FAX: (562) 985-4941/(562) 985-8557
Website: <http://chemistry.csulb.edu>

Faculty

Roger A. Acey, Dennis M. Anjo (Emeritus), Stuart R. Berryhill, Christopher R. Brazier, Xianhui Bu, Paul T. Buonora, Jeffrey A. Cohlberg (Emeritus), Shahab Derakhshan, Lijuan Li, Marco A. Lopez, Eric Marinez, Douglas D. McAbee, Margaret L. Merryfield, Stephen P. Mezyk, Kensaku Nakayama, Vasanthi Narayanaswami, Patrick Pierce, Michael Schramm, Gary Shankweiler, Young Shon, Katarzyna Slowinska, Krzysztof Slowinski, Eric Sorin, Paul M. M. Weers

Administrative Support Coordinator: Irma Sanchez

Advisors:

Undergraduate: Roger A. Acey
Credential: James Kisiel, Tim Williamson
Graduate: Biochemistry: Douglas D. McAbee, Chemistry: Lijuan Li

Graduate Studies Committee:

Lijuan Li, Douglas D. McAbee, Kensaku Nakayama, Krzysztof Slowinski, Eric Sorin

Honors in the Major: Roger A. Acey

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Patent Agent • Chemist • Assayer • Water Purification Chemist • Chemical Lab Technician • Biochemist • Quality Control Coordinator • Pharmaceutical or Technical Sales Representative • Public Health Educator • Industrial Hygienist • Health Administrator • Teacher • Food / Drug Inspector • Materials Scientist • Medical Librarian • Environmental Scientist • Criminologist • Pharmacologist • Dentist • Physician • Geochemist • Chemical Oceanographer (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Department of Chemistry and Biochemistry offers three bachelor's degrees, the B.S. in Chemistry, the B.S. in Biochemistry, and the B.A. in Chemistry, and two master's degrees, the M.S. in Chemistry and the M.S. in Biochemistry. These programs combined serve over 500 majors. In addition, the Department offers a Minor in Chemistry.

Degree Programs

The programs in chemistry and biochemistry at the bachelor's degree level are planned to develop background in a specific science, to serve as preparation for graduate work in chemistry or biochemistry, and to provide a foundation for those students seeking careers in the chemical sciences, teaching, law, medicine, dentistry, pharmacy and other health-related professions, and in industrial and governmental scientific occupations. The B.S. degree in Chemistry is certified by the American Chemical Society (American Chemical Society, Committee on

Professional Training, 1155 Sixteenth St., NW, Washington, DC 20036, phone: 202-872-4589).

Transfer Students: A student who transfers to the University must take at least 16 units of upper division chemistry courses here. To receive credit towards the major for courses taken elsewhere in place of CHEM 320A,B and/or 371A,B and/or 377A,B, consent of the Department Chair is required. Satisfactory performance on appropriate proficiency examinations may also be required.

The Department of Chemistry and Biochemistry offers graduate study leading to research-based master of science degrees in chemistry and biochemistry.

Applicants for the master of science degree programs should apply online both to the university and to the departments. Links to the online application forms can be found on the department's web site (<http://chemistry.csulb.edu> – click on "Graduate Programs").

A limited number of teaching associate and graduate and research assistantships are available. Usually, these involve half-time work in the instructional program at the freshman and sophomore level or work in the laboratory. An applicant may apply for a teaching associate or graduate assistant position in the course of completing the online departmental application.

Academic Advising and Facilitated Enrollment into Classes

All entering students who declare a major in a degree program offered by this department need to contact the College of Natural Sciences and Mathematics' Academic Advising Center (HSCI 164) and participate in the College's Science Safari to Success (for first time freshmen) or EONS (Enrollment and Orientation in the Natural Sciences and Mathematics for transfer students) Program. These programs are held in July for those starting in the Fall Semester and in January for those starting in the Spring Semester. Department advisors will be available to provide an overview of the students' chosen baccalaureate degree program, to assist with academic advisement, to provide information on the many career opportunities available, and to aid students in enrolling in classes. Contact the Jensen Student Access to Sciences and Mathematics Center (HSCI 164) or department office for additional information.

Concurrent and/or Summer Enrollment in Another College

Students who wish to take course work in a community or other college to meet curricular requirements while enrolled as undergraduates in the College of Natural Sciences and Mathematics must petition the appropriate department for approval prior to enrolling in specific courses. This policy applies to concurrent enrollment or summer enrollment. University policy must also be complied with; see "Concurrent Enrollment" and "Transfer of Undergraduate Credit" in this catalog. Courses not receiving prior approval will not be accepted for credit by the Department.

Undergraduate Programs

Bachelor of Science in Chemistry (124 units)

Degree Progress

Chemistry and Biochemistry majors must complete the following requirements within the specified time of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. Students who have not met the requirements by the required semester must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete. Students required to enroll in pre-baccalaureate math may receive one additional semester to meet the requirements.

Freshmen: A grade "C" or better must be achieved in both MATH 122 and CHEM 111A within one calendar year. A grade "C" or better must be achieved in CHEM 111B and either CHEM 320A or CHEM 251 with two calendar years.

Transfer Students: A grade "C" or better must be achieved in MATH 123 and CHEM 111B within one calendar year. A grade of "C" or better must be achieved in both CHEM 320A and CHEM 251 within two calendar years.

In addition, all Chemistry and Biochemistry majors must maintain major and upper-division major GPAs of 2.0 or higher. A student whose GPA in the major or upper division GPA in the major falls below 2.0 will be advised that they are at risk of being dismissed from the major and granted one semester to raise their major GPA(s) to 2.0. Students who do not successfully raise their major GPA(s) must meet with an advisor to declare another major or submit an appeal to the Department of Chemistry and Biochemistry explaining why they need one additional semester. Students whose major GPAs remain below 2.0 after this additional semester must declare a new major.

Students Desiring Entrance into a Health Professions Program

Students desiring entrance into one of the various health-related professional schools should consult with the Health Professions Advising Office in the College of Natural Sciences and Mathematics, Jensen Student Access to Sciences and Mathematics Center (HSCI-164) for more information. Most of these schools do not require students to major in any particular discipline and many favor applicants who have earned a baccalaureate; rather, they want students who have done well in their major and who also took the prerequisite courses required by that particular school.

Requirements

Lower Division:

Either take all of the following:

BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L are required if courses were taken prior to catalog year 2010-11.

Or one of the following:

BIOL 200 General Biology (4)
Prerequisite: GE Foundation requirements.

BIOL 205 Human Biology (4)
Prerequisites: GE Foundation requirements.

BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.

Take all of the following courses:

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.

CHEM 251 Quantitative Analysis (4)
Prerequisite: CHEM 111B with a grade of "C" or better. It is strongly recommended that CHEM 251 be taken within one calendar year of CHEM 111B.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

PHYS 254 Applied Modern Physics (3)
Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

PHYS 255 Laboratory on Modern Physics (1)
Prerequisite/Corequisite: PHYS 254.

Upper Division:

Take all of the following courses:

CHEM 320A Organic Chemistry (3)
Prerequisite: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

CHEM 320B Organic Chemistry (5)
Prerequisite: CHEM 320A with a grade of "C" or better.

CHEM 331 Inorganic Chemistry (3)
Prerequisites: CHEM 111B, 251 both with a grade of "C" or better.

CHEM 332 Inorganic Chemistry Lab (2)
Prerequisite: CHEM 331 (may be taken concurrently).

CHEM 361 Chemical Communications (3)
Prerequisites: GE Foundation requirement, concurrent or previous enrollment in CHEM 320A.

CHEM 371A Physical Chemistry (3)
Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), MATH 224 (may be taken concurrently).

CHEM 371B Physical Chemistry (3)
Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), and MATH 224 (may be taken concurrently).

CHEM 373. Physical Chemistry Laboratory (3)
Prerequisites: CHEM 251, CHEM 371A or CHEM 377A or 377B, all with a grade of "C" or better. Corequisite: CHEM 371B.

CHEM 420 Advanced Organic Chemistry Lab (3)
Prerequisites: CHEM 251, 320B, and either CHEM 361 or 466.

CHEM 431 Advanced Inorganic Chemistry (3)
Prerequisites: CHEM 331, 371B, both with a grade of "C" or better.

CHEM 441A Biological Chemistry (3)
Prerequisite: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

CHEM 451 Instrumental Methods of Analysis (4)
Prerequisite(s): PHYS 152, CHEM 251; 361; 371B or 377B; all with a grade of "C" or better.

Take an additional 3 units of upper division chemistry electives including at least one unit of CHEM 496. CH E 330, 425, 430, or 475 may be used as chemistry electives.

Students are also advised to take one or more additional courses in mathematics, such as MATH 247, 364A, 370A, 380.

Bachelor of Arts in Chemistry (120 units)

Degree Progress

Chemistry and Biochemistry majors must complete the following requirements within the specified time of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. Students who have not met the requirements by the required semester must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete. Students required to enroll in pre-baccalaureate math may receive one additional semester to meet the requirements.

Freshmen: A grade "C" or better must be achieved in both MATH 122 and CHEM 111A within one calendar year. A grade "C" or better must be achieved in CHEM 111B and either CHEM 320A or CHEM 251 with two calendar years.

Transfer Students: A grade "C" or better must be achieved in MATH 123 and CHEM 111B within one calendar year. A grade of "C" or better must be achieved in both CHEM 320A and CHEM 251 within two calendar years.

In addition, all Chemistry and Biochemistry majors must maintain major and upper-division major GPAs of 2.0 or higher. A student whose GPA in the major or upper division GPA in the major falls below 2.0 will be advised that they are at risk of being dismissed from the major and granted one semester to raise their major GPA(s) to 2.0. Students who do not successfully raise their major GPA(s) must meet with an advisor to declare another major or submit an appeal to the Department or Chemistry and Biochemistry explaining why they need one additional semester. Students whose major GPAs remain below 2.0 after this additional semester must declare a new major.

Requirements

Lower Division:

Take all of the following courses:

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.

CHEM 251 Quantitative Analysis (4)
Prerequisite: CHEM 111B with a grade of "C" or better. It is

strongly recommended that CHEM 251 be taken within one calendar year of CHEM 111B.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Upper Division:

Take all of the following courses:

CHEM 320A Organic Chemistry (3)
Prerequisite: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

CHEM 320B Organic Chemistry (5)
Prerequisite: CHEM 320A with a grade of "C" or better.

CHEM 331 Inorganic Chemistry (3)
Prerequisites: CHEM 111B, 251 both with a grade of "C" or better.

CHEM 361 Chemical Communications (3)
Prerequisites: GE Foundation requirement, concurrent or previous enrollment in CHEM 320A.

CHEM 420 Advanced Organic Chemistry Lab (3)
Prerequisites: CHEM 251, 320B, and either CHEM 361 or 466.

CHEM 451 Instrumental Methods of Analysis (4)
Prerequisite(s): PHYS 152, CHEM 251; 361; 371B or 377B; all with a grade of "C" or better.

Select one pair from the following:

CHEM 371A Physical Chemistry (3)
Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), MATH 224 (may be taken concurrently).

CHEM 371B Physical Chemistry (3)
Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), and MATH 224 (may be taken concurrently).

or

CHEM 377A Fundamentals of Physical Chemistry (3)
Prerequisites: CHEM 251, MATH 123, and PHYS 100B or 152 (all with a grade of "C" or better).

CHEM 377B Fundamentals of Physical Chemistry (3)
Prerequisites: CHEM 251, MATH 122, PHYS 100B or 152 (all with a grade of "C" or better), MATH 123 (may be taken concurrently).

Take a minimum of 3 additional units chosen with advisor consultation from the following:

CHEM 332, 373, 421, 431, 441A,B, 480, 496

Students must consult an advisor to select additional courses to meet the student's individual goals and interests.

Bachelor of Science in Biochemistry (123 units)

Degree Progress

Chemistry and Biochemistry majors must complete the following requirements within the specified time of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. Students who have not met the requirements by the required semester must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete. Students

required to enroll in pre-baccalaureate math may receive one additional semester to meet the requirements.

Freshmen: A grade "C" or better must be achieved in both MATH 122 and CHEM 111A within one calendar year. A grade "C" or better must be achieved in CHEM 111B and either CHEM 320A or CHEM 251 with two calendar years.

Transfer Students: A grade "C" or better must be achieved in MATH 123 and CHEM 111B within one calendar year. A grade of "C" or better must be achieved in both CHEM 320A and CHEM 251 within two calendar years.

In addition, all Chemistry and Biochemistry majors must maintain major and upper-division major GPAs of 2.0 or higher. A student whose GPA in the major or upper division GPA in the major falls below 2.0 will be advised that they are at risk of being dismissed from the major and granted one semester to raise their major GPA(s) to 2.0. Students who do not successfully raise their major GPA(s) must meet with an advisor to declare another major or submit an appeal to the Department of Chemistry and Biochemistry explaining why they need one additional semester. Students whose major GPAs remain below 2.0 after this additional semester must declare a new major.

Requirements

Lower Division:

Take all of the following courses:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

CHEM 251 Quantitative Analysis (4)

Prerequisite: CHEM 111B with a grade of "C" or better. It is strongly recommended that CHEM 251 be taken within one calendar year of CHEM 111B.

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

NOTE: BIOL 111, 111L, 212, 212L are required if courses were taken prior to catalog year 2010-11.

Upper Division:

Take all of the following courses:

BIOL 340 Advanced Cell Biology (3)

Prerequisites: BIOL 211, 212; CHEM 320A or 322A or 327 all with a grade of "C" or better.

CHEM 320A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

CHEM 320B Organic Chemistry (5)

Prerequisite: CHEM 320A with a grade of "C" or better.

CHEM 361 Chemical Communications (3)

Prerequisites: GE Foundation requirement, concurrent or previous enrollment in CHEM 320A.

CHEM 441A Biological Chemistry (3)

Prerequisite: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

CHEM 441B Biological Chemistry (3)

Prerequisite: CHEM 441A with a grade of "C" or better.

CHEM 443 Biological Chemistry Laboratory (3)

Prerequisites: CHEM 251, 441B; and either CHEM 361 or 466; all with a grade of "C" or better.

Select one of the following:

CHEM 371A Physical Chemistry (3)

Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), MATH 224 (may be taken concurrently).

CHEM 377A Fundamentals of Physical Chemistry (3)

Prerequisites: CHEM 251, MATH 123, and PHYS 100B or 152 (all with a grade of "C" or better).

(371A,B is recommended as preparation for graduate studies in biochemistry)

Select one of the following:

CHEM 371B Physical Chemistry (3)

Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), and MATH 224 (may be taken concurrently).

CHEM 377B Fundamentals of Physical Chemistry (3)

Prerequisites: CHEM 251, MATH 122, PHYS 100B or 152 (all with a grade of "C" or better, MATH 123 (may be taken concurrently).

Select one course from the following:

CHEM 420 Advanced Organic Chemistry Lab (3)

Prerequisites: CHEM 251, 320B, and either CHEM 361 or 466.

CHEM 451 Instrumental Methods of Analysis (4)

Prerequisite(s): PHYS 152, CHEM 251; 361; 371B or 377B; all with a grade of "C" or better.

Select one of the following options:

MICR 371 Microbial Genetics (3)

Prerequisite: MICR 211 with a grade of "C" or better.

MICR 372 Microbial Genetics Laboratory (2)

Prerequisite: MICR 211 with a grade of "C" or better. Recommended: MICR 371.

or

BIOL 370 General Genetics (4)

Prerequisites: BIOL 211, 212 and either BIOL 260 or CHEM 251 all with a grade of "C" or better.

Take three additional units of elective chosen from:

BIOL 445, 448, 473 and BIOL 342 plus 342L; CHEM 331, 373, 420, 421, 431, 451, 480; MICR 452, 473

Chemistry Concentration

The Chemistry Concentration meets the subject matter competence requirement for the Single Subject Teaching Credential in Chemistry. Consult with an adviser in the Department of Science Education early to plan a program.

Requirements

Lower Division:

Take all of the following courses:

ASTR 100 Astronomy (3)

Corequisites: One course from General Education Category B.2 and ASTR 100L.

BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Introduction to Ecology and Physiology (4)
Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.

CHEM 251 Quantitative Analysis (4)
Prerequisite: CHEM 111B with a grade of "C" or better. It is strongly recommended that CHEM 251 be taken within one calendar year of CHEM 111B.

GEOL 102 General Geology (3)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 104 Geology Laboratory (1)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

GEOL 160 Introduction to Oceanography (3)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Select one pair from the following:

PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 100B General Physics (4)
Prerequisite: PHYS 100A.

or

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Select one pair from the following:

MATH 119A Survey of Calculus I (3)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 119B Survey of Calculus II (3)
Prerequisite: MATH 119A or 122.

or

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

Upper Division:

Take all of the following:

CHEM 320A Organic Chemistry (3)
Prerequisite: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

CHEM 320B Organic Chemistry (5)
Prerequisite: CHEM 320A with a grade of "C" or better.

CHEM 441A Biological Chemistry (3)
Prerequisite: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

CHEM 451 Instrumental Methods of Analysis (4)
Prerequisite(s): PHYS 152, CHEM 251; 361; 371B or 377B; all with a grade of "C" or better.

CHEM 496 Special Problems in Chemistry (1-3)
Prerequisite: Consent of instructor.

SCED 403 Integrated Science (3)
Prerequisites: Completion of all credential breadth requirements for the Single Subject Teaching Credential Program in Science, three-fourths of the credential specializations courses, and consent of instructor.

Take one of the following:

CHEM 431 Advanced Inorganic Chemistry (3)
Prerequisites: CHEM 331, 371B, both with a grade of "C" or better.

CHEM 441B Biological Chemistry (3)
Prerequisite: CHEM 441A with a grade of "C" or better.

Single Subject Teaching Credential in Chemistry

In addition, prospective Chemistry teachers are required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Professional preparation courses may be taken as early as the junior year. With careful planning, it is possible to complete many of the credential program courses, except for student teaching, as an undergraduate. Courses may also be started as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

The Chemistry Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

Honors in Biochemistry or Chemistry

Students majoring in the B.S. in Biochemistry, B.S. in Chemistry, or B.A. in Chemistry who would like an enriched academic program including an intensive research experience may be eligible to graduate with Honors in the Major through the University Honors Program. Students may complete General Honors through the University Honors Program as well; in such cases the General Honors thesis requirement is met through Honors in the Major (see University Honors in this catalog).

Chemistry majors must take additional coursework in biology beyond the minimum required for a chemistry degree.

The requirements for Honors in the Major also satisfies the requirements of a college-wide program, Honors in Biological Sciences, created with the support of a grant from the Howard Hughes Medical Institute. While Honors in the Major requires junior or senior standing, the college-wide program offers an enriched curriculum. Interested students should contact the Honors in the major director or the Jensen Student Access to Sciences and Mathematics Center.

Requirements for Admission to Honors in the Major

1. Junior or senior standing with at least one year remaining before graduation.
2. Declared major of B.S. in Biochemistry, B.S. in Chemistry, or B.A. in Chemistry.
3. Submission of an application detailing interest in the program and willingness to commit to a year-long research experience.
4. Letter of recommendation from a CSULB faculty member familiar with the student's work.
5. Completion of BIOL 211, 212, 213 (BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11) (or BIOL 211A,B); CHEM 251, 320A,B at time of entry with grades of at least "C" in each course. Students may apply during the semester in which they expect to complete these courses.
6. GPA of at least 3.00 in all courses in the major and in all upper division courses in the major.

Requirements for Graduation with Honors in the Major

1. GPA of at least 3.30 in all upper division courses in the major and in Honors courses.
2. Completion of all requirements for the B.S. in Biochemistry, B.S. in Chemistry, or B.A. in Chemistry.
3. Completion of BIOL/CHEM 466, Research Design and Methods - Honors (3 units).
4. Completion of 3 units CHEM 496, Undergraduate Directed Research.
5. Completion of 3 units of CHEM 498H, Senior Thesis - Honors.
6. Presentation of research results in a public forum. This requirement may be met by presentation at a scientific conference or at a local venue; consult the Honors in the Major advisor for additional information

Substitutions to this program must be approved by the Honors in the Major Advisor.

Minor in Chemistry

Requirements

The Minor in Chemistry is available to any non-Chemistry or non-Biochemistry major.

A minimum of 20 units of chemistry which must include:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

A minimum of nine units must be taken from upper division chemistry courses.

There are three Organic Chemistry paths. Students may use courses from only one of the paths to meet the requirements of the minor.

CHEM 327 Fundamentals of Organic Chemistry (3)

Prerequisite: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

or

CHEM 320A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

CHEM 320B Organic Chemistry (5)

Prerequisite: CHEM 320A with a grade of "C" or better.

or

CHEM 322A Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

CHEM 322B Organic Chemistry (3)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

CHEM 323A Organic Chemistry Laboratory (1)

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

CHEM 323B Organic Chemistry Laboratory (1)

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

The following are not acceptable towards the minor:
CHEM 100, 101, 105, 140, 302.

Graduate Credit Earned as an Undergraduate Chemistry or Biochemistry Major

Graduate credit usually may not be earned in advance of the baccalaureate degree. However, based upon the recommendation of the Department Chairman and the Chairman of the Department Graduate Studies Committee, academic performance (a grade point average of 3.00 overall and 3.00 in the major), and promise of academic achievement in postgraduate study, a student in his/her senior year may be granted approval to earn a maximum of 12 units of course work in the 400 and 500 level taken at this University toward his/her prospective graduate program, subject to the following conditions:

1. The course work must be in addition to that required by the Department for the B.A. or B.S. degree in Chemistry or the B.S. degree in Biochemistry.
2. The undergraduate student must have a "Petition to Earn Credit in the Senior Year" approved by the appropriate Department Graduate Advisor, the Associate Dean for Graduate Accountability in the College of Natural Sciences and Mathematics, and the Dean of Graduate Studies.

Graduate Programs

Master of Science in Chemistry

Prerequisites

1. Acceptance as a graduate student by the Department of Chemistry and Biochemistry;
2. A bachelor's degree with a major in chemistry; or a bachelor's degree with undergraduate preparation in chemistry, physics and mathematics equivalent to that required for the bachelor's degree with a major in chemistry at this University. A student deficient in any of these courses

must complete the course(s) as a graduate student. The courses that must be taken to make up those deficiencies will be determined by the Graduate Adviser in consultation with the Graduate Studies Committee. Students with majors in other areas may be considered for admission at the discretion of the Graduate Adviser.

3. Entering graduate students are required to take a minimum of two placement examinations (more exams may be required by Graduate Committee) as follows:
 - at the beginning of the first semester of the M.S. program: student chooses to take one placement examination in analytical, inorganic, organic, physical or biochemistry.
 - at the beginning of the second semester of the M.S. program, student takes any additional placement examination(s) required by the Thesis Committee to a minimum of two.

Under some circumstances with the approval of the Graduate Adviser, students may take 2 or more placement examinations at the beginning of the first semester.

Any student failing to pass a placement examination is required to complete with a minimum grade of "B" or better an appropriate course recommended by the Graduate Studies Committee. Usually the recommended courses are:

CHEM 251 and/or 451

if the subject is analytical chemistry;

CHEM 331 and/or 431

if the subject is inorganic chemistry;

CHEM 320A and/or CHEM 320B

if the subject is organic chemistry;

CHEM 371A and/or 371B

if the subject is physical chemistry;

CHEM 441A and/or 441B

if the subject is biochemistry.

4. The placement examinations are usually given on the Monday of the week preceding the first day of instruction. The Graduate Studies Committee evaluates the examination results and recommends appropriate courses to correct any deficiencies in chemistry.
5. Entering students must select a research advisor by the ninth week of the first semester. The thesis advisor will select two additional faculty members to serve on the Thesis Committee by the 13th week of the first semester. The Thesis Committee will prepare a degree program including the following: (1) additional placement examination(s) the student will take at the beginning of the second semester, (2) a list of graduate courses to be completed in the course of the program. The degree program must be finalized and forwarded to Graduate Advisor by the end of the first semester in residence. Any change in the approved degree program must be preauthorized by Graduate Advisor.
6. Each student shall prepare a thesis proposal in collaboration with the research advisor, stating the specific topic of the research and its significance, the specific objectives of the research, and the methods to be used. The thesis proposal must be approved by the Thesis Committee. The student must make a public

presentation of the proposal by the end of the second semester in the MS program. Any major change in direction during the course of the research shall be subject to the approval of the Thesis Committee.

Advancement to Candidacy

The regulations governing each student's master's degree are those in effect at the time of the student's advancement to candidacy. The Department Graduate Studies Committee recommends advancement to candidacy after the graduate student has:

1. Either passed all the required placement examinations including those recommended by the Thesis Committee or achieved a grade of "B" or better in each course recommended by the Graduate Studies Committee for correcting the deficiencies;
2. Completed at least 6 units of courses on the proposed Graduate Program;
3. While in residence as a graduate student at this University, earned at least a 3.0 ("B") average in all upper division and graduate work, a 3.0 gpa in all CHEM courses, and a 3.0 GPA in all courses on the graduate program.
4. Fulfilled the Graduation Writing Assessment Requirement (GWAR);
5. Obtained approval of a graduate degree program by the Thesis Committee, the Graduate Adviser, the Department Chair (in consultation with the Graduate Studies Committee), and the Associate Dean responsible for graduate studies in the College of Natural Sciences and Mathematics.
6. Make a public presentation of their thesis proposal and made appropriate progress in their proposed research as determined by the Thesis committee.

The criteria above should be met by the beginning of the third semester of graduate study. Deficient students may continue at the discretion of the Department Graduate Studies Committee. Students should be advanced to candidacy as soon as they are eligible.

Requirements

1. Advancement to candidacy;
2. Complete a minimum of 30 units including:
 - A. Take a minimum of 12 units in chemistry lecture courses in the 500 series (excluding CHEM 595);
 - B. Take CHEM 595 Colloquium for a total of 2 or 3 units
Prerequisite: Graduate standing or consent of instructor.
 - C. Take CHEM 660 Seminar in Chemistry (1-3)
Prerequisite: None
 - D. Take CHEM 697 Directed Research (4-6)
Prerequisite: Arrangement with instructor.
 - E. Take CHEM 698 Thesis (4-6)
Prerequisites: Advancement to candidacy for M.S. in Chemistry or M.S. in Biochemistry and arrangement with instructor.
 - F. Additional courses (excluding CHEM 595 and required courses in the BS Chemistry degree program) as approved by Thesis Committee with concurrence of Graduate Advisor.

Changes in the above pattern of course requirements may be made only by the Graduate Studies Committee and the Graduate Advisor subject to approval by the College's Associate Dean.

3. Completion of a written thesis, of publication quality, acceptable to the members of the thesis committee and a public presentation of the thesis research. The public presentation must be completed before the thesis is signed by the committee members.
4. A record of regular attendance at departmental seminars, poster sessions, thesis proposal presentations, and thesis defenses.
5. While not a requirement for the degree, students in the MS program normally gain experience teaching laboratory sections of Chemistry courses, as preparation for professionally related teaching activities in their future careers.

Master of Science in Biochemistry

Prerequisites

1. Acceptance as a graduate student by the Department of Chemistry and Biochemistry;
2. A bachelor's degree with a major in chemistry or biochemistry or one of the biological sciences. Students with majors in other areas may be considered for admission at the discretion of the Graduate Advisor. Prerequisite courses include CHEM 251, 320A,B or 322A,B, 377A,B, 441A,B, 443; MATH 122, 123; PHYS 100A,B or their equivalents and courses in general biology and cell/molecular biology. A student deficient in any of these courses must complete the course(s) as a graduate student.
3. Entering graduate students are required to take a placement examination in biochemistry at the beginning of the first semester of the MS program. A second placement examination in either organic chemistry or physical chemistry must be taken by the beginning of the second semester. Any student failing to pass a placement examination, is required to complete an appropriate course recommended by the Graduate Studies Committee with a minimum grade of "B" or better. Usually the recommended courses are:
 - CHEM 320A and/or CHEM 320B
if the subject is organic chemistry.
 - CHEM (371A or 377A) and/or (371B or 377B)
if the subject is physical chemistry.
 - CHEM 441A and/or 441B
if the subject is biochemistry.
 Under some circumstances, with the approval of the Graduate Advisor, students may take both placement examinations at the beginning of the first semester.
4. The placement examinations are usually given on the Monday of the week preceding the first day of instruction. The Graduate Studies Committee evaluates the examination results and recommends appropriate courses to correct any deficiencies in chemistry. 5. Entering students must select a research advisor by the ninth week of the first semester. The advisor will select two additional faculty members to serve on the Thesis Committee by the end of the 13th week of the first semester. The Thesis Committee will prepare a degree program including the following (1) the second placement examinations (in organic or physical chemistry) the student will take at the beginning of the second semester,

(2) a list of graduate courses to be completed in the course of the program. The degree program must be finalized and forwarded to the Graduate Advisor by the end of the first semester in residence. Any changes in the approved degree program must be preauthorized by the Graduate Advisor.

6. Each student shall prepare a thesis proposal in collaboration with the thesis advisor, stating the specific topic of the research and its significance, the specific objectives of the research, and the methods to be used. The thesis proposal must be approved by the Thesis Committee. The student must make a public presentation of the proposal by the end of the second semester in the MS program. Any major change in direction during the course of the research shall be subject to the approval of the Thesis Committee.

Advancement to Candidacy

The regulations governing each student's master's degree are those in effect at the time of the student's advancement to candidacy. The Department's Graduate Studies Committee recommends advancement to candidacy after the graduate student has:

1. Either passed all the required placement examinations including those recommended by the Thesis Committee or achieved a grade of B or better in courses recommended by the Graduate Studies Committee for correcting the deficiencies;
2. Completed at least 6 units of courses on the proposed Graduate Program;
3. While in residence as a graduate student at this University, earned at least a 3.0 ("B") average in all upper division and graduate work, a 3.0 gpa in all CHEM courses, and a 3.0 gpa in all courses on the graduate program.
4. Fulfilled the Graduation Writing Assessment Requirement (GWAR);
5. Obtained approval of a graduate degree program by the Thesis Committee, the Graduate Adviser, the Department Chair (in consultation with the Graduate Studies Committee), and the Associate Dean responsible for graduate studies in the College of Natural Sciences and Mathematics.
6. Made a public presentation of their thesis proposal and made appropriate progress in their proposed research as determined by the Thesis committee.

The criteria above should be met by the beginning of the third semester of graduate study. Deficient students may continue at the discretion of the Department Graduate Studies Committee. Students should be advanced to candidacy as soon as they are eligible.

Requirements

1. Advancement to candidacy;
2. Complete a minimum of 30 units including:
 - A. Take a minimum of 12 units in chemistry lecture courses in the 500 series that must include CHEM 541 (excluding CHEM 595);
 - B. Take BIOL 540. In some circumstances, 3 units of another 500-level biology lecture course may be substituted with the approval of the Graduate Advisor.

- C. Take CHEM 595 Colloquium for a total of 2 units
Prerequisite: Graduate standing or consent of instructor.
- D. Take CHEM 660 Seminar in Chemistry (1-3)
Prerequisite: None
- E. Take CHEM 697 Directed Research (4-6)
Prerequisite: Arrangement with instructor.
- F. Take CHEM 698 Thesis (4-6)
Prerequisites: Advancement to candidacy for M.S. in Chemistry or M.S. in Biochemistry and arrangement with instructor.
- G. Additional 400- and 500-level science courses (excluding CHEM 595 and required courses in the BS Biochemistry degree program) as recommended by the Thesis Committee and approved by the Graduate Advisor and the College's Associate Dean.
Changes in the above pattern of course requirements may be made only at the discretion of the Graduate Studies Committee and the Graduate Advisor subject to approval by the College's Associate Dean.
- Completion of a written thesis, of publication quality, acceptable to the members of the Thesis Committee and a public presentation of the thesis research. The public presentation must be completed before the thesis is signed by the committee members.
 - A record of regular attendance at departmental seminars, poster sessions, thesis proposal presentations and thesis defenses.
 - While not a requirement for the degree, students in the MS program normally gain experience teaching laboratory sections of Chemistry courses, as preparation for professionally related teaching activities in their future careers.

Single Subject Teaching Credential in Chemistry

For information, refer to the undergraduate section in this department.

Chemistry and Biochemistry Courses (CHEM)

LOWER DIVISION

100. Chemistry and Today's World (4)

Prerequisite: One GE Foundation course (GE categories A1, A2, A3, or B2).

Introduction to basic principles of chemistry and a consideration of the benefits and problems arising from applications of chemistry. Discussions of foods and food additives, drugs, plastics, and other materials of everyday life, fuel sources, the atmosphere, and fresh water. Suitable for general education credit.

Not open for credit to chemistry or biochemistry majors or students with credit in CHEM 111A or CHEM 140. (Lecture 3 hrs., laboratory 3 hrs.) Course fee may be required.

101. Introduction to General Chemistry (4) F,S

Prerequisite/Corequisites: MATH 113 or 117 or 119A or 122.

Preparatory course for CHEM 111A. Recommended for students who have not achieved a satisfactory score on the Chemistry Placement Examination. Credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination. Basic principles and concepts including atomic structure, nomenclature, and chemical calculations with emphasis on problem solving.

Does not count for General Education credit. Letter grade only (A-F). Course fee may be required. (Lecture 3 hrs., activity 2 hrs.)

105. Chemistry Explorations (1)

Prerequisite: A general education math class, which may be taken concurrently.

Central concepts of chemistry, including states of matter, atomic structure, periodic properties, chemical compounds and reaction energy, and equilibrium, illustrated with a series of experiments. Intended for students in the Integrated Teacher Education Program (ITEP).

Letter grade only (A-F). (Laboratory 3 hours). Course fee may be required.

111A. General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

First semester of a two-semester sequence (CHEM 111A and 111B). Introduction to principles of chemistry including chemical reactions, stoichiometry, thermochemistry, electronic structure, bonding, and properties of solids, liquids, gases, and solutions.

Letter grade only (A-F). (Lecture 3 hrs., laboratory and problem session 6 hrs.) Course fee may be required.

111B. General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

Second semester of a two-semester sequence (CHEM 111A and 111B). Continuation of chemical principles, applications of bonding theories of inorganic molecules, trends and reactivities of elements and their compounds, chemical equilibrium, kinetics and qualitative inorganic analysis. Solving aqueous equilibrium problems are emphasized.

Letter grade only (A-F). (Lecture 3 hrs., lab and problem solving sessions 6 hrs.) Course fee may be required.

140. General, Organic, and Biochemistry (5)

Prerequisites: A GE math course (may be taken concurrently); high school chemistry or equivalent.

This one-semester course encompasses general chemistry, organic chemistry, and biochemistry. Meets chemistry requirement for pre-nursing curriculum.

Letter grade only (A-F). (Lecture 3 hrs; problem solving session 1 hr., and laboratory 3 hrs.) Course fee may be required.

251. Quantitative Analysis (4)

Prerequisite: CHEM 111B with a grade of "C" or better. It is strongly recommended that CHEM 251 be taken within one calendar year of CHEM 111B.

Introduction to techniques and theory of gravimetric and volumetric analysis, spectrophotometry, potentiometry, and chromatography.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 6 hrs.) Course fee may be required.

UPPER DIVISION

302. Survey of Biochemistry (3) F,S

Prerequisites: A minimum of 3 units of university-level general and organic chemistry with grade of "C" or better.

Study of the chemistry, structures, metabolic reactions and functions of the major classes of biochemical compounds. Does not meet the requirements of medical or dental schools.

Letter grade only (A-F). Does not count for General Education credit. (Lecture 2 hrs., discussion 1 hr.)

320A. Organic Chemistry (3)

Prerequisite: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

First semester of two-semester sequence (CHEM 320A and 320B). Sequence meets requirements for medical and dental schools. Emphasis is upon application of modern principles of

structure, reactivity, methods of synthesis, physical properties and spectroscopy.

Letter grade only (A-F). (Lecture 3 hrs., discussion 1 hr.)

320B. Organic Chemistry (5)

Prerequisite: CHEM 320A with a grade of "C" or better.

Second semester of two-semester sequence (CHEM 320A and 320B). Continuation of study of organic chemistry including chemistry of compounds containing more than one functional group, bioorganic molecules, and special topics.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 6 hrs.) Course fee may be required.

320L. Organic Chemistry Laboratory (2) F,S

Prerequisites: Completion at an accredited institution of coursework equivalent to CHEM 322B, and consent of the Department.

CHEM 320L is identical to the laboratory component of CHEM 320B. Not open to students with credit in CHEM 320B. Letter grade only (A-F). (Laboratory 6 hrs.) Course fee may be required.

322A. Organic Chemistry (3) F,S

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 323A required except for students who have previously earned a "C" or better in CHEM 323A.

First of a two-semester sequence (CHEM 322A,B) for biological sciences majors. Sequence meets requirements for medical and dental schools. Emphasizes concepts of organic chemistry necessary to understand structures and transformations of biomolecules. Not applicable to a degree in chemistry.

Letter grade only (A-F). (Lecture 3 hrs.)

322B. Organic Chemistry (3) F,S

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 323B required except for students who have previously earned a "C" or better in CHEM 323B.

Second semester of two-semester sequence (CHEM 322A and 322B) for biological sciences majors. Continuation of the study of organic reactions with emphasis on the chemistry of metabolism. Not applicable to a degree in chemistry.

Letter grade only (A-F). (Lecture 3 hrs.)

323A. Organic Chemistry Laboratory (1) F,S

Prerequisite: CHEM 111B with a grade of "C" or better. Concurrent enrollment in CHEM 322A required except for students who have previously earned a "C" or better in CHEM 322A.

Introduction to organic laboratory techniques. Not applicable to a degree in chemistry.

Letter grade only (A-F). Course fee may be required. (Laboratory 3 hrs.)

323B. Organic Chemistry Laboratory (1) F,S

Prerequisites: CHEM 322A and CHEM 323A, both with a grade of "C" or better. Concurrent enrollment in CHEM 322B required except for students who have previously earned a "C" or better in CHEM 322B.

Synthesis and characterization of organic and bioorganic compounds. Not applicable to a degree in chemistry.

Letter grade only (A-F). (Laboratory 3 hrs.)

327. Fundamentals of Organic Chemistry (3) F,S

Prerequisite: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

Lecture course in chemistry of the carbon compounds.

Letter grade only (A-F). Not applicable to a degree in chemistry. (Lecture 3 hrs.)

331. Inorganic Chemistry (3)

Prerequisites: CHEM 111B, 251 both with a grade of "C" or better.

Introduction to coordination chemistry, solid-state chemistry, and reactions of transition metals.

Letter grade only (A-F). (Lecture 3 hrs.)

332. Inorganic Chemistry Laboratory (2)

Prerequisite: CHEM 331 (may be taken concurrently).

Synthesis, characterization, and manipulation of inorganic compounds and materials.

Letter grade only (A-F). (Laboratory 3 hrs.)

361. Chemical Communications (3)

Prerequisites: GE Foundation requirement, concurrent or previous enrollment in CHEM 320A.

Using the chemical literature. Writing technical reports for various purposes. Oral presentation of chemical information. Includes extensive writing.

Letter grade only (A-F). (Seminar 3 hrs.)

371A. Physical Chemistry: Thermodynamics and Kinetics (3) F

Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), MATH 224 (may be taken concurrently).

Half of the two semester physical chemistry package. The two courses, CHEM 371A,B, may be taken in either order. Principles and applications of classical thermodynamics; introduction to chemical kinetics.

Letter grade only (A-F). (Lecture 3 hrs.)

371B. Physical Chemistry: Quantum Mechanics and Spectroscopy (3) S

Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), and MATH 224 (may be taken concurrently).

Half of the two semester physical chemistry package. The two courses CHEM 371A,B may be taken in either order. Principles and applications of quantum chemistry, spectroscopy, and statistical thermodynamics.

Letter grade only (A-F). (Lecture 3 hrs.)

373. Physical Chemistry Laboratory (3) S

Prerequisites: CHEM 251, CHEM 371A or CHEM 377A or 377B, all with a grade of "C" or better. Corequisite: CHEM 371B.

Introduction to basic physico-chemical experimental techniques with applications to principles discussed in CHEM 371A,B and CHEM 377A,B.

Letter grade only (A-F). (Lecture 1 hr., laboratory 6 hrs.)

377A. Fundamentals of Physical Chemistry (3) F,S

Prerequisites: CHEM 251, MATH 123, and PHYS 100B or 152 (all with a grade of "C" or better).

Half of the two semester physical chemistry package with a biochemical emphasis. The two courses CHEM 377A,B may be taken in either order. Principles of physical chemistry emphasizing thermodynamics and chemical kinetics. Biological and environmental science examples used to illustrate principles.

Letter grade only (A-F). (Lecture 3 hrs.)

377B. Fundamentals of Physical Chemistry (3) F,S

Prerequisites: CHEM 251, MATH 123, PHYS 100B or 152 (all with a grade of "C" or better), MATH 123 (may be taken concurrently).

Half of the two semester physical chemistry package with a biochemical emphasis. The two courses CHEM 377 A,B may be taken in either order. Principles of physical chemistry with emphasis on molecular structure and spectroscopy.

Letter grade only (A-F). (Lecture 3 hrs.)

420. Advanced Organic Chemistry Laboratory (3)

Prerequisites: CHEM 251, 320B, and either CHEM 361 or 466.

Synthesis and characterization of organic compounds. Organic structures analyzed through interpretation of spectral data. Emphasis on use of high field NMR, mass spectrometry, IR, and UV. Applications of modern separation techniques.

In addition to regularly scheduled lectures, students are expected to attend three hours of lecture on use of chemical literature. Letter grade only (A-F). (Lecture 1 hr., laboratory 6 hrs.) Course fee may be required.

421./521. Physical Organic Chemistry (3) F

Prerequisites: CHEM 320B with a grade of "C" or better; CHEM 371B or 377B (may be taken concurrently). (Undergraduates enroll in CHEM 421; graduates enroll in CHEM 521.)

Theoretical interpretation of chemical and physical properties of organic compounds: mathematical derivations of rate equations from experimental results, quantitative comparison of organic compounds reactivities, mathematical correlations of structure and properties. Solving problems relating to reaction mechanisms to described factors.

Letter grade only (A-F). (Lecture 3 hrs.)

431. Advanced Inorganic Chemistry (3) F

Prerequisites: CHEM 331, 371B, both with a grade of "C" or better.

Quantitative study of chemical bonding in inorganic molecules emphasizing on molecular orbital theory. Transition metal chemistry including coordination chemistry, ligand field theory, spectroscopy applications to structural analysis of inorganic molecules, and review of properties and reactivities of elements and their compounds.

Letter grade only (A-F). (Lecture 3 hrs.)

441A. Biological Chemistry (3)

Prerequisite: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

First semester of a two-semester sequence (CHEM 441A and 441B) in biochemistry. Chemical and mathematical treatment of energetics and kinetics of reactions in living systems, including chemistry and metabolism of carbohydrates and chemistry of proteins.

Letter grade only (A-F). (Lecture 3 hours)

441B. Biological Chemistry (3)

Prerequisite: CHEM 441A with a grade of "C" or better.

Second semester of two-semester sequence (CHEM 441A and 441B) in biochemistry. Metabolism of lipids, proteins, and nucleic acids, and other advanced topics in metabolism.

Letter grade only (A-F). (Lecture 3 hours)

443. Biological Chemistry Laboratory (4)

Prerequisites: CHEM 251, 441A; and either CHEM 361 or 466; all with a grade of "C" or better.

Theory and practice of laboratory techniques used in biochemical research.

Letter grading only (A-F). (Lecture 1 hr., laboratory 9 hrs.) Course fee may be required.

448. Fundamentals of Biological Chemistry (3)

Prerequisites: CHEM 327 or 322B either with a grade of "C" or better.

Major principles of biochemistry including metabolic processes, biological control and regulatory processes, nutrition and chemical energetics and kinetics of animals, plants and microorganisms. Emphasis on major concepts and problem solving.

Not open to chemistry majors. Not open for credit to students with credit in CHEM 441A,B.

Letter grade only (A-F). (Lecture 3 hrs.)

449. Nutritional Biochemistry Laboratory (3)

Prerequisite: CHEM 448 with a grade of "C" or better.

Analytical and biochemical analyses of foodstuffs and other compounds of biochemical interest.

Letter grade only (A-F). (Lecture 1 hr., laboratory 6 hrs.) Course fee may be required.

451. Instrumental Methods of Analysis (5)

Prerequisite(s): PHYS 152, CHEM 251; 361; 371B or 377B; all with a grade of "C" or better.

Theory and application of instrumental methods to chemical problems. Includes measurement basics, atomic and molecular

spectroscopy, electroanalytical chemistry, separation methods, surface analysis, and statistical evaluation of analytical data.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 6 hrs.) Course fee may be required.

466. Research Design and Methods (3) S

Prerequisites: BIOL 211, 212, 213, either BIOL 260 or CHEM 251, CHEM 320A,B or CHEM 322A,B and CHEM 323A,B all with a grade of "C" or better; GE Foundation requirement; a GPA of at least 3.0 in the major; and consent of the instructor. At least one unit of BIOL 496 or CHEM 496.

Corequisites: At least one unit of BIOL 496 or CHEM 496.

Introduction to hypothesis testing, experimental design, methodological and technical procedures for experimentation, grant writing, and techniques for written and oral presentation of research results. Research paper and oral presentation required.

Letter grade only (A-F). Same course as BIOL 466. (Lecture 3 hours). Not open for credit to students with credit in BIOL 466, BIOL 466H or CHEM 466H.

480./580. Biomolecular Modeling and Simulation (3)

Prerequisites: CHEM 320A or 322A, MATH 123 (may be taken concurrently), and PHYS 100B or 152, all with a grade of "C" or better.

The study of biomolecular phenomena using computer-based modeling and simulation techniques with varying degrees of resolution, including development and validity of molecular models.

Letter grade only (A-F). (Lecture 3 hrs.)

496. Undergraduate Directed Research (1-3)

Prerequisite: Consent of instructor.

Research in a specific topic in chemistry or biochemistry approved and directed by faculty. Written report required.

May be repeated to a maximum of 6 units. May be repeated for a letter grade to a maximum of three units. Units beyond the three must be taken Credit/No Credit. (Independent Study)

498H. Senior Thesis – Honors (1-3)

Prerequisites: CHEM 466; at least one unit of CHEM 496 with a grade of "A"; admission into the Honors in Chemistry program, and consent of instructor.

Planning, preparation, and completion of thesis based on a research project in chemistry or biochemistry.

Letter grade only (A-F). Not available to graduate students.

499. Directed Reading (1)

Survey of chemical literature on some topic of current interest under supervision of a faculty member. Preparation of a written report based on readings.

Letter grade only (A-F). Not open for credit to graduate students.

GRADUATE LEVEL

521./421. Physical Organic Chemistry (3) F

Prerequisites: CHEM 320B with a grade of "C" or better; CHEM 371B or 377B (may be taken concurrently). (Undergraduates enroll in CHEM 421; graduates enroll in CHEM 521.)

Theoretical interpretation of chemical and physical properties of organic compounds: mathematical derivations of rate equations from experimental results, quantitative comparison of organic compounds reactivities, mathematical correlations of structure and properties. Solving problems relating to reaction mechanisms to described factors.

Letter grade only (A-F). (Lecture 3 hrs.)

522. Selected Topics in Organic Chemistry (3)

Prerequisite: CHEM 421 or 521 or consent of instructor.

Areas of current interest in organic chemistry.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Lecture 3 hrs.)

523. Synthetic Methods (3)

Prerequisites: CHEM 320B with a grade of "C" or better; CHEM 521 recommended

Introduction to current methods of synthetic transformations; topics may include, but not limited to the following: Retrosynthetic analysis, protecting groups, functional group transformations, enolate chemistry, organometallics, stereochemistry and conformational analysis, pericyclic reactions, alkene functionalization and reactions of carbon nucleophiles.

Letter grade only (A-F). (Lecture 3 hrs.)

524. Catalysis in Organic Chemistry (3)

A study of catalysis beginning with a general theory of catalysis. The course also covers catalysis in synthetic organic chemistry centered on metals and ligated metals and catalysis centered on organic molecules as the catalytic species.

Letter grade only (A-F). (Lecture 3 hrs.)

525. Introduction to Supramolecular Chemistry (3)

Prerequisites: Proficiency in any of the following as demonstrated by ACS placement exam: Organic, Biochemistry or Inorganic

Introduction to non-covalent interactions will be presented in the context of molecular recognition and self-assembly. Synthetic and biological examples will be used to understand these principles and how they can be applied to the preparation of new materials.

Letter grade only (A-F). (Lecture 3 hrs.)

531. Advances in Inorganic Chemistry (3)

Prerequisite: CHEM 431 or consent of instructor.

Current topics and advances in inorganic chemistry.

May be repeated to a maximum of 6 units with different topics.

Letter grade only (A-F). (Lecture 3 hrs.)

532. Inorganic Materials Chemistry (3)

Prerequisite: CHEM 431 or consent of instructor.

Advanced studies in bonding in solids, crystal structure variations, band theory and electronic structure, crystal structure-electronic structure-physical properties relationship, electron transport properties, magnetic materials, materials by design for technological applications.

Letter grade only (A-F). (Lecture 3 hrs.)

533. Physical Techniques in Inorganic Chemistry (3)

Prerequisite: CHEM 431 or consent of instructor.

An introduction to physical techniques commonly used in inorganic chemistry with focus on the magnetic resonance spectroscopic techniques: EPR and multinuclear NMR.

Letter grade only (A-F). (Lecture 3 hrs.)

534. Crystal Structure Analysis (3)

Prerequisite: CHEM 431 or consent of instructor.

An introduction to structural methods commonly used in inorganic chemistry with focus on single crystal and powder X-ray diffraction.

Letter grade only (A-F). (Lecture 3 hrs.)

541. Biochemistry Core for Graduate Study (3)

Prerequisites: CHEM 441A, B

The course is divided into three topics: (i) structure and evolution of proteins and their complexes with nucleic acids, lipids and carbohydrates, including structure determination methods; (ii) metabolic regulation from mechanistic and physiological viewpoints; (iii) applications of biochemical methodologies.

Letter grade only (A-F), (Lecture 3 hrs.)

542. Selected Topics in Biochemistry (3)

Prerequisite(s): CHEM 441B and 541 all with a grade of "C" or better; or consent of instructor.

Intensive discussion of a limited aspect of biochemistry with reference to current literature. Course content will vary from year to year.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*. (Lecture 3 hrs.) Letter grade only (A-F).

544. Physical Biochemistry (3)

Prerequisites: Either CHEM 371A,B or 377A,B; 441B; 541 all with the grade of "C" or better; or consent of instructor.

Physical chemical aspects of protein and nucleic acid chemistry and related analytical methods.

Letter grade only (A-F). (Lecture 3 hrs.)

546. Protein Structure and Function (3)

Prerequisites: Either CHEM 371B or 377B; and both 441A and 541 with the grade of "C" or better; or consent of instructor.

Principles of protein structure, folding, and function. Includes techniques used for the production, isolation and characterization of proteins.

Letter grade only (A-F). (Lecture 3 hrs)

547. Biochemistry of Nucleic Acids (3)

Prerequisites: CHEM 441B, 541 with the grade of "C" or better; or consent of instructor.

Gene expression with emphasis on regulatory mechanisms. Analytical techniques for isolation, purification, and characterization of nucleic acids.

Letter grade only (A-F). (Lecture 3 hrs.)

548. Cell Membranes (3)

Prerequisites: BIOL 340, 370, CHEM 441A, 541 with the grade of "C" or better; or consent of instructor.

Examination of modern membrane biochemistry. May include membrane structure and transport, phospholipids sorting, vesicular transport, membrane coat protein structure and function, and membrane-dependent signal transduction.

Letter grade only (A-F). (Lecture 3 hrs.)

552. Selected Topics in Analytical Chemistry (3)

Prerequisite: CHEM 451 or consent of instructor.

Including electrochemical measurements, chromatographic techniques, spectroscopic techniques, radiochemical analysis and basic electronic components of instrumentation. Emphasizing the chemical principles involved, utility and limitations of each method. Includes trace analysis of water and air.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Lecture 3 hrs.)

553. Fundamentals of Electroanalytical Chemistry (3)

In-depth description of electrochemical processes and research techniques. Voltammeteric, potentiometric, and impedance methods. Scanning probe techniques. Analysis of current research literature related to electroanalytical chemistry and surface science.

Letter grade only (A-F). (Lecture 3 hrs.)

572. Advanced Physical Chemistry (3)

Prerequisite: CHEM 371B or consent of instructor.

Special topics in physical chemistry.

May be repeated to a maximum of 6 units with different topics.

Letter grade only (A-F). (Lecture 3 hrs.)

573. Molecular Spectroscopy (3)

Prerequisite: CHEM 371B or consent of instructor.

The interaction of electromagnetic radiation with atoms and molecules. Symmetry properties of molecules and the Hamiltonian. Angular momentum and the spectra of atoms and molecules. Pure rotational, vibrational, Raman, and electronic spectra of molecules. Understanding and predicting molecular spectra.

Letter grade only (A-F). (Lecture 3 hrs.)

574. Kinetics and Dynamics (3)

Prerequisite: CHEM 371A or consent of instructor.

Reaction rates for chemical systems; dependence on concentration and temperature. Derivation of the mechanisms of chemical reactions. Kinetic theory and analysis of experimental results for different systems. Dynamics of chemical reactions; transition state theory, potential-energy surfaces, and reaction pathways.

Letter grade only (A-F). (Lecture 3 hrs.)

580./480. Biomolecular Modeling and Simulation (3)

Prerequisites: CHEM 320A or 322A; MATH 123 (may be taken concurrently); PHYS 100B or 152, all with a grade of "C" or better.

The study of biomolecular phenomena using computer-based modeling and simulation techniques with varying degrees of resolution, including development and validity of molecular models.

Letter grade only (A-F). (Lecture 3 hrs.)

581. Biological Performance of Materials (3)

Advance studies of the chemical and mechanical interactions between materials used in medical devices and implants and living organisms. The course content includes materials response to biological system and host response to biomaterials.

Letter grade only (A-F). (Lecture 3 hrs.)

595A. Colloquium in Biochemistry (1)**595B. Colloquium in Organic Chemistry (1)****595C. Colloquium in Analytical, Physical and Inorganic Chemistry (1)**

Prerequisite: Graduate standing or consent of instructor.

Discussion of advances as reported in recent literature. Provides experience in library use, organization, presentation, and critical evaluation of the chemical literature.

May be repeated to a maximum of 3 units (not more than a total of 3 units may be earned in any combination of CHEM 595 courses).

Letter grade only (A-F). (Seminar 1 hr.)

660. Seminar in Chemistry (1)

Weekly meetings for presentation and discussion of advanced work in special fields including original research by faculty and graduate students.

Credit/No Credit grading only. (Seminar 1 hr.) May be repeated to a maximum of 3 units.

695. Directed Reading (1)

Survey of information in chemical literature on a current research topic, under direction of a faculty member. Written report prepared from these readings.

Letter grade only (A-F).

697. Directed Research (1-6)

Prerequisite: Arrangement with instructor.

Laboratory work supervised on an individual basis. A written report will be required.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters.

698. Thesis (1-6)

Prerequisites: Advancement to candidacy for M.S. in Chemistry or M.S. in Biochemistry and arrangement with instructor.

Planning, preparation and completion of a thesis in chemistry or biochemistry.

Letter grade only (A-F).

CHICANO AND LATINO STUDIES

College of Liberal Arts

Department Chair: Jose F. Moreno

Department Office: Faculty Offices (FO) 3-300

Telephone: (562) 985-4644

Faculty: Luis Arroyo, Juan Benitez, Antonia Garcia-Orozco, Jose F. Moreno, Rigoberto Rodriguez, Victor Rodriguez, Clarissa Rojas, Anna Sandoval

Department Secretary: Esperanza Contreras

Students desiring information should contact the department office for referral to the academic advisor.

Academic Advisor: Griselda Suarez

Telephone: (562) 985-7531

Career Possibilities

Social Scientist • Archivist • Social Worker • Journalist • Counselor • Teacher • Public Relations Consultant • Law • Community Organizer • School Administrator • Linguist • Parole Officer • Probation Officer • Editor • Writer • Urban/Regional Planner • Public Policy Administrator • Foreign Policy Officer • Researcher (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Arts in Chicano and Latino Studies (120 units)

Requirements

Lower Division (6 units):

Take the following:

CHLS 105 Identity and Assimilation in Chicano Life (3)
Prerequisite/Corequisite: One course from GE category A2.

Take one of the following:

CHLS 100 Introduction to Chicano & Latino Studies (3)
Prerequisite/Corequisite: One course from GE category A2.

CHLS 101 Introduction to Chicano/a & Latino/a Life (3)
Prerequisite: None

Upper Division (33 units)

Take the following core:

CHLS 300 Chicano History (3)
Prerequisites: GE Foundation requirements.

CHLS 310 Chicano Thought (3)
Prerequisites: None

CHLS 350 The Latino Population in the U.S. (3)
Prerequisite: GE Foundation requirements.

CHLS 498 Senior Colloquium (3)
Prerequisite: Consent of the instructor.

Take 21 units of electives from the following:

Cultural Studies:

CHLS 315, 330, 341, 342, 380, 381, 390I, 420, 450A, 450B, 450I, 490, 499

Social Inquiry:

CHLS 319, 320, 335I, 340, 352, 362, 400, 415, 421, 430, 470I, 490, 499

Departmental Language Requirement:

Take one of the following options:

1. Two years of college Spanish;
2. Successful completion of the following course:
SPAN 250 Spanish for Bilinguals (6)
Prerequisite: Near native speaker oral skills and GE Foundation requirements (or concurrent enrollment in at least one Foundation course).
3. A score of 4 or above on the high school advanced placement exam in Spanish language or literature;
4. Successful completion of a proficiency exam.

Special Track

In addition to the general major in Chicano and Latino Studies, the department also offers a program for students who wish to complete a Special Track major in Chicano and Latino Studies. Within the Special Track, students may receive up to a maximum of 12 units of credit for upper division Chicano and Latino Studies related course work taken from other disciplines. Students wishing to pursue the Special Track major must develop an approved program of study in consultation with the Chicano and Latino Studies Department academic advisor.

The Special Track consists of 39 units total, 33 of which must be upper division, including the following:

Lower Division (6 units):

Take the following core:

CHLS 105 Identity and Assimilation in Chicano Life (3)
Prerequisite/Corequisite: One course from GE category A2.

Take one of the following:

CHLS 100 Introduction to Chicano & Latino Studies (3)
Prerequisite/Corequisite: One course from GE category A2.

CHLS 101 Introduction to Chicano/a & Latino/a Life (3)
Prerequisite: None

Upper Division (33 units)

Take the following core (12 units required):

CHLS 300 Chicano History (3)
Prerequisites: GE Foundation requirements.

CHLS 310 Chicano Thought (3)
Prerequisites: None

CHLS 350 The Latino Population in the U.S. (3)
Prerequisite: GE Foundation requirements.

CHLS 498 Senior Colloquium (3)
Prerequisite: Consent of the instructor.

Special Track: 21 units of upper division electives, with a maximum of 12 units of course work from other disciplines, selected with the approval of the Chicano and Latino Studies Department advisor.

Language Requirement: The language requirement may be met by one of the following options:

1. Two years of college Spanish;
2. Successful completion of the following:
SPAN 250 Spanish for Bilinguals (6)
Prerequisite: Near native speaker oral skills and GE Foundation requirements (or concurrent enrollment in at least one Foundation course).
3. A score of 4 or above on the high school advanced placement exam in Spanish language or literature;
4. Successful completion of a proficiency exam.

Minor in Chicano and Latino Studies

Prerequisite

Proficiency In Spanish which may be met by one of the following options:

1. Two years of college Spanish;
2. Successful completion of the following course:
SPAN 250 Spanish for Bilinguals (6)
Prerequisite: Near native speaker oral skills and GE Foundation requirements (or concurrent enrollment in at least one Foundation course).
3. A score of 4 or above on the high school advanced placement exam in Spanish language or literature;
4. Successful completion of a proficiency exam.

Requirements

Upper Division:

Take the following core:

CHLS 300 Chicano History (3)

Prerequisites: GE Foundation requirements.

CHLS 310 Chicano Thought (3)

Prerequisites: None

CHLS 350 The Latino Population in the U.S. (3)

Prerequisite: GE Foundation requirements.

CHLS 498 Senior Colloquium (3)

Prerequisite: Consent of the instructor.

Take 12 units selected from the following courses:

Cultural Studies:

CHLS 315, 330, 390I, 341, 342, 380, 381, 420, 490, 499

Social Inquiry:

CHLS 319, 320, 335I, 340, 352, 362, 400, 415, 421, 430, 470I, 490, 499

Certificate in Chicano and Latino Studies

Courses used to meet this certificate requirement may be counted also, where applicable, toward the General Education requirements and the degree or credential requirements of the cooperating departments.

Requirements

1. A bachelor's degree with a major in another discipline;
2. A minimum of 24 units distributed as follows:

Take the following core:

CHLS 300 Chicano History (3)

Prerequisites: GE Foundation requirements.

CHLS 310 Chicano Thought (3)

Prerequisites: None

CHLS 350 The Latino Population in the U.S. (3)

Prerequisite: GE Foundation requirements.

CHLS 498 Senior Colloquium (3)

Prerequisite: Consent of the instructor.

Take 12 units selected from the following:

Cultural Studies:

CHLS 390I, 341, 342, 380, 381, 420, 490, 499

Social Inquiry:

CHLS 315, 319, 320, 335I, 340, 352, 362, 400, 415, 421, 430, 470I, 490, 499.

Chicano and Latino Studies Courses (CHLS)

LOWER DIVISION

100. Introduction to Chicano and Latino Studies (3)

Prerequisite/Corequisite: One course from GE category A2.

An introductory-level course which acquaints students with the social, political, economic and historic aspects of the Latino experience and examines how they are reflected through various and diverse forms of cultural expression in the United States.

Letter grade only (A-F).

101. Introduction to Chicano/a and Latino/a Life (3)

Examination of four themes: 1) the cultural formation and transformation of Chicano/Latino communities; 2) the role of women in shaping Chicano/Latino culture; 3) Chicano/Latino music and visual art; 4) Mexican and Latino immigrants in American culture.

104S. Composition I (3)

Prerequisites: Students who score 146 or below on the English Placement Test and who have not taken equivalent courses in another department are eligible for enrollment in this course.

Composition I does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA. Must have a "C" or better to earn credit.

Basic course in writing, offering intensive practice in every stage of writing process from generating ideas to final proofreading, as well as to the developing stronger reading comprehension for specific writing tasks.

Same course as ASAM 100S, AFRS 100S, ENGL 100S. Not open for credit to students with credit in: ENGL 1, ASAM 1, AFRS 1, CHLS 1, ASAM 100S, AFRS 100S, ENGL 100S.

104. Composition II (3)

Prerequisites: Students who score 147 or above on the English Placement Test, credit in CHLS 104S (or its equivalent), are exempt from the EPT, or consent of the instructor.

Composition II does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA.

An expository writing course designed for first-year students. Satisfies one of the writing requirements for general education at CSULB. It emphasizes academic writing, focusing primarily on analytical reading and thesis-driven writing.

Multiple Offerings: ENGL 100, AFRS 100, ASAM 100. Not open for credit to students with credit in: ENGL 100, AFRS 100, ASAM 100, ENGL 100, AFRS 100, ASAM 100.

105. Identity and Assimilation in Chicano and Latino Life (3)

Prerequisite/Corequisite: One course from GE category A2.

Explores, comparatively, the development of Chicano-Latino identities through a survey of social scientific, historical and literary sources from Mexican American and Latino regional cultures, tracing the development of societal divisions based on gender, race, ethnicity and class categories.

150. Introduction to Chicano Literary Studies (3)

Prerequisite/Corequisite: One course from GE category A1.

Introductory survey course in Chicano and Latino literature covering traditional and contemporary literary styles and forms from selected translated Chicano and Latino readings.

Letter grade only (A-F). Not open for credit to students with credit in CHLS 205.

215. U.S. Diversity and the Ethnic Experience (3)

Prerequisites: Open only to Integrated Teacher Education Program students.

Survey of four major ethnic groups (American Indians, African American, Latino American, and Asian American) in American society from the colonial era to the present. Special attention to formation and transformation of each ethnic group and their individual and collective roles in the development of the United States.

Same course as AFRS 215, AIS 215, ASAM 215. Not open for credit to students with credit in AFRS 215, AIS 215, ASAM 215, B/ST 215. Departments take turns offering the course in the fall semester. Letter grade only (A-F).

224. Introduction to Mexican Culture through its Music (3)

Prerequisite: GE Foundation requirements.

Covers the development of Mexican culture through its music from pre-Hispanic time to the present. The scope of the class includes the development of the relationship between Mexico's political history, and its music.

Letter grade only (A-F).

230. Chicano Community Organization (3)

Analysis of Chicano community groups; emphasis on development of community organizational techniques.

258. Introduction to Cultures of Latin America and the Caribbean through Music (3)

Prerequisite: GE Foundation requirements.

Introduction to Latin America and Caribbean cultures through music from the pre-Hispanic era to the present. The course will focus on the historical, geographical, and political contexts of various Latin American and Caribbean musical genres.

Letter grade only (A-F).

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300. Chicano History (3)

Prerequisites: GE Foundation requirements.

Chicanos in the settlement and development of the Southwest and in contemporary U.S. society; Chicano experience as a U.S. minority group; emerging civil rights movement of La Raza.

Letter grade only (A-F). Same course as HIST 370. Not open for credit to students with credit in HIST 370.

310. Chicano Thought (3)

Study of the ideas, philosophies and events affecting Chicano life; identification and examination of the Chicano world view, of a Chicano reality.

315. Contemporary Indigenous Peoples of Aztlan and Latin America (3)

Contemporary Indigenous Nations Studies of Latin and US America focused on the Aztec, Pueblo, Taino, Maya, Pipil, Aymara, Chichano/Latino and Mauri in transnational contexts. Uses international indigenous film, literature, performance, history, economic, diasporic, gender, Chicano/Latino, and American Indian studies approaches.

Same course as AIS 315. Not open for credit to students with credit in AIS 315.

319. The Ethnic Experience in the U.S. (3)

Prerequisite: GE Foundation requirements.

Examination of the dynamics of the development of our multicultural society, emphasizing study of the four distinct ethnic

strands of American society (Asian American, Black American, Mexican American, and American Indian) and their role in the maintenance of cultural diversity in the United States.

Same course as AFRS 319, AIS 319, ASAM 319, WGSS 319. Not open for credit to students with credit in AFRS 319, AIS 319, ASAM 319, WGSS 319. (Lecture/Discussion.)

320. Wealth and Poverty in Latino Communities (3)

Introduction to the interlocking processes of creating wealth and producing poverty in the context of Latino communities in the United States. The focus will be comparative and will critically examine theories used to explain poverty and wealth.

Letter grade only (A-F).

330. Critical Issues in Chicana and Latina Studies (3)

Prerequisite: Upper division standing or consent of instructor.

Introduces students to four critical themes in contemporary Chicana and Latina feminist scholarship: 1) power and resistance; 2) construction of work, family, culture; 3) cultural representations/presentations; and 4) social and biological reproduction.

335I. Asian and Latino Immigration Since World War II (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines the causes of massive Asian and Latino immigration as well as major contemporary issues in the Asian and Latino communities.

Same course as ASAM 335I. Not open for credit to students with credit in ASAM 335I. (Lecture and discussion 3 hours)

340. Latino Education in the U.S. (3)

Survey of Latinos in the U.S., including topics such as immigration, settlement patterns, employment, family, language and culture. Emphasis is on racism and the intersections of class and gender and the heterogeneity of the Latino population.

Letter grade only (A-F).

341. Asian American and Chicano/Latino Cinema (3)

Prerequisites: GE Foundation requirements.

A team-taught course exploring connections between Asian American and Chicano/Latino cinema, with emphases given to grounding issues presented in films within historical, literary, and cultural studies frameworks.

Same course as ASAM 341. Not open for credit to students with credit in CHLS 403 or ASAM 341.

342. Chicano, Filipinos, and Popular Cultures (3)

Prerequisites: GE Foundation requirements and upper-division standing.

A team-taught seminar exploring historical roots of politics of expressive and cultural practices among Chicanos and Filipinos. Special attention paid to themes of resistance, gender, migrations, imperialism, hybridity, and post-colonial identities and transformations.

Same course as ASAM 342. Not open for credit to students with credit in ASAM 342.

350. The Latino Population in the United States (3)

Prerequisite: GE Foundation requirements.

Survey of the comparative historical, transnational, cultural and socio-economic experience (including class, gender, immigration and settlement patterns) of the various Latino sub-groups in the United States.

Letter grade only (A-F). Same course as SOC 340. Not open for credit to students with credit in SOC 340.

352. Central American and Caribbean Peoples in California (3)

Survey of the socioeconomic conditions and cultural life of the Central American and Spanish-speaking Caribbean communities

in California, such as Salvadoran, Guatemalan, Puerto Rican, and Cuban communities. Similarities and differences with the Mexican-American community will be examined.

Same course as SOC 341. Not open for credit to students with credit in SOC 341.

362. Chicanos and the Law (3)

Analysis of the relationship of the Chicano to the U.S. legal and judicial system. Topics include traditional sociological and criminological theories of Chicano criminality, the Pachuco image, and Chicano experiences with the police and correctional institutions.

Letter grade only (A-F).

380. Chicano/Latino Theatre (3)

Prerequisite: Upper-division standing

Explores evolution of Chicano/a-Latino/a Theatre within sexual/ethnic/cultural identity context. Comprehensive analysis of theatrical texts and performance arts developed from Pre-Cuauhtemoc to contemporary Chicano/a-Latino/a playwrights.

381. Chicano/Latino Studio (3)

Praxis of Chicano/Latino narrative, spoken-word and performance art within an intertextual context. Stresses application of performance techniques from Pre-Cuauhtemoc to contemporary Chicana/Latina playwrights and performance artists.

390I. The "Hispanic" Southwest: Historical and Literary Images (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Critical, interdisciplinary examination of the portrayals of Latinos in selected historical and literary texts by Euro-American authors.

400. Chicana/o and Latina/o Politics in the U.S. (3)

Prerequisites: Upper-division standing and GE Foundation requirements.

Interdisciplinary introduction to the history, theories, ideologies, strategies and public policy issues by which Chicanas/os and Latinas/os have struggled to achieve power and social mobility in the United States.

Letter grade only (A-F).

415. Latina Women in the United States (3)

Prerequisite: Junior standing or consent of instructor.

Examines cultural, political, economic, and sexual forces that mold Latina women. Focus on cultural stereotypes, class, gender, identity, sexuality, and politics of race.

Same course as WGSS 320. Not open for credit to students with credit in WGSS 320.

420. Chicano Heritage in the Arts of Mexico and the Southwest (3)

Historical and philosophical analysis of Indian Mestizo and Chicano plastic arts, music and dances as a way to understand the Chicano heritage.

421. Street Gangs in Comparative Perspective (3)

Analyzes the relationships of the Chicano gangs with African American, the South East Asian, and the White street gangs across the United States. Structural forces such as proletarian socialization, patriarchy traditions and problems revolving around gender identity are examined.

Letter grade only (A-F).

430. The Latino Transnational Experience in the Caribbean: Empire, Reform and Revolution (3)

Interdisciplinary introduction to political, economic and social processes since the Spanish American War in the Hispanic Caribbean. Focus on the relationship of imperialism, migration and diasporic communities in the United States.

Letter grade only (A-F).

450A. Latinas and Revolution: Central America and Late 20th Century Mexico (3)

Prerequisite/Corequisite: ENGL 100 and upper-division standing or consent of instructor.

Examines how war and struggles for democracy shape the social consciousness and political activism of Latinas. Uses literature, film, history, and political theory to examine the role of violence in women's lives, community organizing, and the conceptualization of a pan-Latina feminist movement.

Letter grade only (A-F). Same course as WGSS 445A. Not open for credit to students with credit in WGSS 445A

450B. Latinas and Revolution: Caribbean, U.S. and Early 20th Century Mexico (3)

Prerequisite/Corequisite: ENGL 100 and upper division standing or consent of instructor.

Examines how war, revolution, and struggles for democracy shape the social consciousness and political participation of Latinas. Uses film, literature, history, and political theory to identify differences in contexts of community struggle and points of intersection within Latina activism.

Letter grade only (A-F). Same course as WGSS 445B. Not open for credit to students with credit in WGSS 445B.

450I. 1492 and Beyond (3)

Prerequisites: GE Foundation requirements, completion of one or more Exploration courses and upper-division standing.

Explores cultural changes that resulted from contact among peoples of Europe, Africa, Asia, and the Americas from 1492 to the present. Incorporates art, literature, social sciences, history, architecture, and related fields.

Same course as RGR 450I. Not open for credit to students with credit in RGR 450I.

470I. Latinas/Latinos: Health Status and Health Care Access (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Interdisciplinary exploration of policies, epidemiologic, cultural factors influencing disease within Latino subpopulations, their impact upon efficient, equitable service delivery. (16 words)

Letter grade only (A-F). Same course as HCA 470I. Not open for credit to students with credit in HCA 470I.

490. Selected Topics in Chicano and Latino Studies (1-3)

Prerequisite: Consent of instructor.

Topics of current interest in Chicano and Latino Studies selected for intensive development.

May be repeated to a maximum of 6 units in different semesters. Topics announced in the *Schedule of Classes*.

498. Senior Colloquium (3)

Prerequisite: Consent of the instructor.

Analysis of issues and problems in Chicano and Latino studies. Designed as a seminar in research and methodology. The material discussed will center about a general theme selected by the instructor.

Letter grade only (A-F). May be repeated for a maximum of 6 units in different semesters with different topics but no more than three units may be used to satisfy the requirements for the major.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Preparation of research reports on selected topics relating to the Mexican-American.

May be repeated for a maximum of six units. Letter grade only (A-F).

CHILD DEVELOPMENT AND FAMILY STUDIES

College of Health and Human Services
Department of Family and Consumer Sciences

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001
Telephone / Fax: (562) 985-4484 / 985-4414
Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Career Possibilities

Child Care Administrator • Family Life Educator • Child Life Specialist • Teen Pregnancy Counselor • Early Care Educator (Infant and Toddler Care, Preschool Teaching, School-Age Programs) • Child Development Consultant • Community Resource and Referral Professional • Parent Educator • Corporate Human Service Consultant • Working with Military Families • Toy Research and Development • Family Life Educator

A credential or graduate degree would expand employment opportunities to include: Social Worker • Marriage and Family Counselor • Community College Instructor • Highschool Counselor • Teacher (For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Dietetics and Food Administration

This degree offers two options:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality, Foodservice and Hotel Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Child Development and Family Studies

The field of Child Development and Family Studies (CDFS) strives to improve the lives of children and families. As an integrative and interdisciplinary specialization, CDFS incorporates information from a variety of disciplines to provide a comprehensive academic and professional background for working with children and families. We use primary prevention to empower individuals and families in home and community settings.

Option in Child Development and Family Studies (120 units)

Take all of the following courses:

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

CAFF 321I Family and Consumer Resource

Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

CDFS 111 Preschool Child (3)

Prerequisites: None.

CDFS 211 Guiding Young Children (3)

Prerequisites: A grade of "C" or better in PSY 100 or SOC 100 or CDFS 111.

CDFS 312I Family and Personal Development (3)

Prerequisites: GE Foundation requirements; PSY 100 or SOC 100 or ANTH 120; upper division standing; or consent of instructor.

CDFS 411 Individual Child Study and Guidance (3)

Prerequisites: A grade of "C" or better in CDFS 311 or 314 or HDEV 307I or PSY 361; upper division standing; or consent of instructor.

CDFS 413 Child and Family in the Community (3)

Prerequisites: A grade of "C" or better in CDFS 312I; upper division standing; or consent of instructor.

FCSE 299 Intro to Family and Consumer Sciences (1)

Prerequisites: None.

FCSE 499 Professionalism and Leadership in FCS (2)

Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course work in Family and Consumer Sciences.

NUTR 132 Introductory Nutrition (3)

Prerequisites: Any GE Foundation course.

Take one of the following courses:

ANTH 120 Introduction to Cultural Anthropology (3)

Prerequisites: Any GE Foundation course.

Another approved Global Issues course (3)

Take one of the following pairs:

CDFS 214 Environments for Preschool Children (3)
Prerequisites: A grade of "C" or better in CDFS 111; or consent of instructor.

CDFS 414 Field Work with Preschool Children (3)
Prerequisites: A grade of "C" or better in CDFS 111, 211, 214; or consent of instructor.

or

CDFS 215 Environments for Infants and Toddlers (3)
Prerequisites: A grade of "C" or better in CDFS 111; or consent of instructor.

CDFS 415 Field Work with Infants/Toddlers (3)
Prerequisites: A grade of "C" or better in CDFS 111, 211, 215; or consent of instructor.

Take one of the following courses:

CDFS 311 Prenatal Development and Infancy (3)
Prerequisites: A grade of "C" or better in CDFS 111; upper division standing.

CDFS 314 The Older Child (3)
Prerequisites: A grade of "C" or better in CDFS 111; upper division standing; or consent of instructor.

Take one of the following courses:

CDFS 492A Internship in Child Development and Family Studies (3)
Prerequisites: Student must be a Family and Consumer Sciences: Child Development and Family Studies major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Child Development and Family Studies; and CDFS 411, 413, and 414 or 415. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

CDFS 414 (2nd semester) Fieldwork with Preschool Children (3)
Prerequisites: A grade of "C" or better in CDFS 111, 211, 214; or consent of instructor.

CDFS 415 (2nd semester) Fieldwork with Infants/Toddlers (3)
Prerequisites: A grade of "C" or better in CDFS 111, 211, 215; or consent of instructor.

FCSE 497 Directed Studies (3)
Prerequisites: Junior standing; consent of instructor.

Take 9 units of advisor-approved electives. Three of the 9 units must be upper division.

Take 15 units from the following with advisor's approval:

CDFS 319I, 402, 409, 410, 412, 416A, 416B, 417, 418, 419, or CDFS courses not taken above.

Each course on the student's program planner must be completed with a grade of "C" or higher. In addition, a course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with the approval of the Child Development and Family Studies Area Coordinator.

This degree option has been deemed "similar" to the Transfer Model Curriculum for Early Childhood Education under the Student Transfer Agreement Reform Act (SB 1440-Padilla). Students who

complete an approved A.A.-T or A.S.-T degree in Early Childhood Education at a California Community College can meet B.A. in FCS: Option in CDFS requirements with no more than 60 additional units. Contact a CDFS faculty advisor for assistance in program planning.

Minor in Child Development and Family Studies

The Child Development and Family Studies (CDFS) minor offers the opportunity to take a concentration of courses focusing on children and families. By providing students with an aggregate of CDFS courses students will be better prepared careers relating to children and families in an array of settings.

Requirements

Students seeking a minor in CDFS must meet all prerequisite course requirements. In addition, students must maintain a "C" or better in all courses required for the minor. The minor requires 21 total units.

The minor in Child Development and Family Studies is not available to Child Development and Family Studies majors.

Take 9 units of core courses from the following courses:

CDFS 111 Preschool Child (3)
Prerequisites: None.

CDFS 312I Family and Personal Development (3)
Prerequisites: GE Foundation requirements; PSY 100 or SOC 100 or ANTH 120; upper division standing; or consent of instructor.

CDFS 319I Family Stress and Coping (3)
Prerequisites: GE Foundation requirements; ANTH 120 or PSY 100 or SOC 100 or consent of instructor.

Take 12 units selected from the following courses:

CDFS 211, 214, 215, 311, 314, 409, 410, 411, 412, 413, 414, 415, 418.

Family Life Education

This option is available in the Department of Family and Consumer Sciences. It was introduced in response to a certification process developed by the National Council on Family Relations (NCFR). NCFR is the leading national organization for professionals concerned with promoting and enhancing the quality of family life. NCFR sponsors the only national program to certify family life educators.

After completing the recommended preparatory course work in this department, it is possible to get two types of certification from NCFR:

Provisional Certification from the National Council on

Family Relations (NCFR) is available to students who complete the approved courses that correspond to the ten substance areas from an approved program, but without the minimum two years of work experience.

Full Certification from the NCFR is available to students who graduate from an approved academic program and have completed at least two years of work experience as a family life educator. The work experience of the student has to be submitted, reviewed, and approved by an NCFR review committee.

Interested students should contact the Family Life Education Coordinator, Dr. Nilufer P. Medora, Family and Consumer Sciences (562) 985-4488 or at medora@csulb.edu

Option in Family Life Education (120 units)

This option provides an academic and professional background for work with children, adults, couples, and families. It offers an interdisciplinary foundation in several areas that influence and enhance the quality of life of children, adults, couples, and families based on education, enrichment and prevention. Fieldwork opportunities where students have direct experiences with individuals and families in the community are provided for qualified students.

Requirements

Take all of the following courses:

CDFS 111 Preschool Child (3)

Prerequisites: None.

CDFS 312I Family and Personal Development (3)

Prerequisites: GE Foundation requirements; PSY 100 or SOC 100 or ANTH 120; upper division standing; or consent of instructor.

CDFS 319I Family Stress and Coping (3)

Prerequisites: GE Foundation requirements; ANTH 120 or PSY 100 or SOC 100 or consent of instructor.

CDFS 402 Child and Family Law (3)

Prerequisites: A grade of "C" or better in CDFS 312I; upper division standing.

CDFS 410 International Families: Families in Cross-Cultural Perspectives (3)

Prerequisites: A grade of "C" or better in CDFS 312I; or consent of instructor.

CDFS 411 Individual Child Study and Guidance (3)

Prerequisites: A grade of "C" or better in CDFS 311 or 314 or HDEV 307I or PSY 361; upper division standing; or consent of instructor.

CDFS 413 Child and Family in the Community (3)

Prerequisites: A grade of "C" or better in CDFS 312I; upper division standing; or consent of instructor.

CDFS 418 Parent Education (3)

Prerequisites: Upper-division standing and at least 6 units of upper division child development and family studies or equivalent courses, or consent of instructor.

CDFS 419 Family Life Education (3)

Prerequisites: A grade of "C" or better in CDFS 413; upper division standing; or consent of instructor.

CDFS 492B Internship in Family Life Education (3)

Prerequisites: Student must be a major in Family and Consumer Sciences in the option of Family Life Education; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; have approval of a faculty advisor in Child Development and Family Studies; have completed CDFS 413 and 419 each with a grade of "C" or higher.

CAFF 321I Family and Consumer Resource Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

FCSE 299 Introduction to FCS (1)

Prerequisites: None.

FCSE 499 Professionalism and Leadership in Family and Consumer Sciences (2)

Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course work in Family and Consumer Sciences.

HSC 425I Human Sexuality and Sex Education (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing. Recommended: PSY 100.

NUTR 132 Introductory Nutrition (3)

Prerequisites: Any GE Foundation course.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

Take one the following courses:

ANTH 120 Introduction to Cultural Anthropology (3)

Prerequisites: Any GE Foundation course.

Another approved Global Issues course (3)

Take one of the following courses:

GERN 400I Perspectives on Gerontology (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

HDEV 357I Approaches to Adulthood Through Aging (3)

Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

Take one of the following courses:

CDFS 311 Prenatal Development and Infancy (3)

Prerequisites: A grade of "C" or better in CDFS 111, upper division standing.

CDFS 314 The Older Child (3)

Prerequisites: A grade of "C" or better in CDFS 111; upper division standing; or consent of instructor.

Take one of the following courses:

CDFS 412 Family Interaction (3)

Prerequisites: A grade of "C" or better in CDFS 312I; upper division standing; or consent of instructor.

CDFS 417 Premarital Intervention (3)

Prerequisites: A grade of "C" or better in CDFS 312I; or consent of instructor.

Take 9 units of advisor-approved electives. Three of the 9 units must be upper division.

In addition, a course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite. A student receiving a grade lower than a "C", may proceed with other courses with the approval of the Child Development and Family Studies Area Coordinator. Each course on the student's program planner must be completed with a grade of "C" or higher.

Child Development and Family Studies Courses (CDFS)

LOWER DIVISION

111. Preschool Child (3)

Behavior and development in early childhood, with emphasis on the interaction of parents, children and teachers.

(Lecture-discussion 3 hours)

211. Guiding Young Children (3)

Prerequisites: A grade of "C" or better in PSY 100 or SOC 100 or CDFS 111.

Processes, techniques, models, research, and selected issues in child guidance as applied to 3-5 year-old children in family and community settings. Development of a personal approach to guidance based on current scientific research and theory concerning child development.

(Lecture-discussion 3 hours)

214. Environments for Preschool Children (3)

Prerequisites: A grade of "C" or better in CDFS 111; or consent of instructor.

Introduction to preschool care-giving practices. Growth and development of preschool children relating to the classroom

environment. Application of theories, models, and research to current preschool classroom practices.

Letter grade only (A-F). (Lecture-discussion 3 hours)

215. Environments for Infants and Toddlers (3)

Prerequisites: A grade of "C" or better in CDFS 111; or consent of instructor.

Introduction to infant and toddler care-giving practices. Growth and development of children from birth through three years of age relating to the classroom environment. Application of theories, models, and research to current infant and toddler classroom practices.

Letter grade only (A-F). (Lecture-discussion 3 hours)

219. Stress, Coping and Resiliency for the Professional Educator (3)

Prerequisites: A grade of "C" or better in ENGL 100.

Identification of stressors which diminish the effectiveness of the learning environment for at-risk school children. Use Family Resiliency Model to examine critical family dynamics. Practical stress management for future teachers.

Letter grade only (A-F). (Lecture-Discussion 3 hours)

290. Directed Studies (1-3)

Independent study under the direction of a faculty member. Exploration and experience in areas which are not a part of any regular course.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. (Seminar)

UPPER DIVISION

311. Prenatal Development and Infancy (3)

Prerequisites: A grade of "C" or better in CDFS 111; upper division standing.

Human development from conception through prenatal development, childbirth, the neonatal period, infancy and toddlerhood with emphasis on the various aspects of development and the environmental/social factors essential for human growth.

(Lecturer-discussion 3 hours)

312I. Family and Personal Development (3)

Prerequisites: GE Foundation requirements; PSY 100 or SOC 100 or ANTH 120; upper division standing; or consent of instructor.

Interdisciplinary introduction to the concepts underlying contemporary American family life and the influence of social and cultural conditions on human development.

(Lecture-discussion 3 hours)

314. The Older Child (3)

Prerequisites: A grade of "C" or better in CDFS 111; upper division standing; or consent of instructor.

Behavior and development in middle and late childhood and adolescence, with emphasis on individual and cultural differences.

(Lecturer-discussion 3 hours)

319I. Family Stress and Coping (3)

Prerequisites: GE Foundation requirements; ANTH 120 or PSY 100 or SOC 100 or consent of instructor.

Examination of theories and research associated with stressors affecting family functioning throughout the lifecycle. Consideration given to both normative transitions and non-normative stressors. Emphasis on strategies to assist families to deal productively with stress and change.

(Lecture-discussion 3 hours)

402. Child and Family Law (3)

Prerequisites: A grade of "C" or better in CDFS 312I; upper division standing.

Establishment, conduct, and termination of marital and non-marital family relationships, including the rights and duties of the parties

involved. Topics include marital disillusionment, child custody issues, property rights, domestic violence, adoption, support, genetic testing, and new trends in family law.

Letter grade only (A-F). (Lecture-discussion 3 hours)

409. Language, Learning and the Developing Child: A Cross-Cultural Perspective (3)

Explores the communicative-linguistic, cognitive, physical, and socio-emotional development of the child from the prenatal to adolescent period across diverse cultures with an emphasis on language acquisition and the learning process.

Letter grade only (A-F). Not open for credit to students currently enrolled in the Liberal Studies program. Same course as EDEL 429. Not open for credit to student with credit in LING 429, EDEL 429, and EDP 428.

410. International Families: Families in Cross-Cultural Perspectives (3)

Prerequisites: A grade of "C" or better in CDFS 312I; or consent of instructor.

Basic concepts and definitions relating cross-cultural studies will be discussed. Important family life cycle changes will be explained for major ethnic groups within the United States. Family life in selected international families will also be examined.

(Lecture-discussion 3 hours)

411. Individual Child Study and Guidance (3)

Prerequisites: A grade of "C" or better in CDFS 311 or 314 or HDEV 307I or PSY 361; upper division standing; or consent of instructor.

Analysis and interpretation of theory, research, trends and techniques for the study and guidance of the individual child in family and community settings.

(Lecture-activity 3 hours)

412. Family Interaction (3)

Prerequisites: A grade of "C" or better in CDFS 312I; upper division standing; or consent of instructor.

Dynamics of interaction and communication in interpersonal relationships throughout the family life cycle. Experience with a variety of communication skills in small group settings.

(Lecture-discussion 3 hours)

413. Child and Family in the Community (3)

Prerequisites: A grade of "C" or better in CDFS 312I; upper division standing; or consent of instructor.

Study of cultural varieties and the needs of the contemporary American family in an urban community; analysis of current issues and problems; identification of and experience with community resources and agencies.

(Lecture-discussion 3 hours)

414. Fieldwork with Preschool Children (3)

Prerequisites: A grade of "C" or better in CDFS 111, 211, 214; or consent of instructor.

Supervised teaching/learning experience with preschool children including development of skills for observation and assessment as well as curriculum planning, implementation and evaluation.

May be repeated to a maximum of 6 units with assignments reflecting increasing levels of difficulty. (Lecture 1 hour, laboratory 6 hours)

415. Fieldwork with Infants/Toddlers (3)

Prerequisites: A grade of "C" or better in CDFS 111, 211, 215; or consent of instructor.

Supervised teaching/learning experience with preschool children including development of skills for observation and assessment as well as curriculum planning, implementation and evaluation.

May be repeated to a maximum of 6 units in different semesters with assignments reflecting increasing levels of difficulty. (Lecture 1 hour, laboratory 6 hours) Letter grade only (A-F).

416A. Introduction to Administration and Supervision of Child Development Programs (3)

Prerequisites: A grade of "C" or better in CDFS 414 or 415; or consent of instructor.

Minimum and recommended standards and laws pertaining to housing, equipment, play space, adult/child ratio, health supervision and meal service for children's programs. Selection and supervision of personnel, program planning and directing.

(Lecture-discussion 3 hours)

416B. Applications of Administration and Supervision of Child Development Programs (3)

Prerequisites: A grade of "C" or better in CDFS 416A; or consent of instructor.

Decision theory and its application, communication strategies, planning, operating and evaluating programs for young children.

(Lecture-discussion 3 hours)

417. Premarital Intervention (3)

Prerequisites: A grade of "C" or better in CDFS 312I; or consent of instructor.

Review of research on dating relationships and intervention programs designed for individuals or couples prior to marriage. Emphasis on applying research to the development of programs to assist premarital individuals enrich their relationships.

(Lecture-discussion 3 hours)

418. Parent Education (3)

Prerequisites: Upper-division standing and at least 6 units of upper division child development and family studies or equivalent courses, or consent of instructor.

Principles and techniques for working with parents in community and school programs. Assessment of needs and development of programs for adults in a variety of social and cultural settings.

(Lecture-activity 3 hours)

419. Family Life Education (3)

Prerequisites: A grade of "C" or better in CDFS 413; upper division standing; or consent of instructor.

History, purpose, principles, ethics, ten substance areas, and paradigms of family life education will be explored. Planning, implementing, and evaluating family life education programs will be discussed. Gender, ethnicity, and diversity issues related to family life education will be stressed.

Letter grade only (A-F). (Lecture-discussion 3 hours)

492A. Internship in Child Development and Family Studies (3)

Prerequisites: Student must be a Family and Consumer Sciences: Child Development and Family Studies major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Child Development and Family Studies; and CDFS 411, 413, and 414 or 415. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)

492B. Internship in Family Life Education (3)

Prerequisites: Student must be a major in Family and Consumer Sciences in the option of Family Life Education; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; have approval of a faculty advisor in Child Development and Family Studies; have completed CDFS 413 and 419 each with a grade of "C" or higher.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)

CHINESE STUDIES

College of Liberal Arts
Department of Asian and Asian American Studies

Department Chair: John N. Tsuchida

Vice Chair: Teri Yamada

Department Office: Faculty Offices FO3-340

Telephone: (562) 985-4645

FAX: (562) 985-1535

Center: Center for Asian Pacific American Studies

Website: <http://www.csulb.edu/dept/as>

Faculty: Ruixi Ai, Kiyomi Chinen, Masako O. Douglas, Linda N. España-Maram, Hiroko Kataoka, Hsin-sheng C. Kao (Emerita), Barbara W. Kim, Yoko Pusavant (Emerita), San-Pao Li (Emeritus), Dean S. Toji, John N. Tsuchida, Tianwei Xie, Teri Yamada

Advisors:

Graduate: Tim Xie

Undergraduate: Teri Yamada

Undergraduate: Dean Toji (Asian American Studies)

Undergraduate: Teri Yamada (Asian Studies)

Undergraduate: Ruixi Ai (Chinese Studies)

Undergraduate: Masako O. Douglas (Japanese)

Associate Faculty: Bipasha Baruah (International Studies), Christine Bhat (Educational Psychology, Administration and Counseling), Jeffrey Broughton (Religious Studies), Kendall Brown (Art History), Chi-Ah Chun (Psychology), Frank Gossette (Geography), Lisa Grobar (Economics), Jack W. Hou (Economics), Margaret Kuo (History), Tomotaka Ishimine (Economics), Guotong Li (History), Jyotsna Pattnaik (Teacher Education), Xiaoping Liang (Linguistics), William Mulligan (Journalism), Kim Oanh Nguyen-Lam (CLMER), Karen Quintiliani (Anthropology), George Scott (Anthropology), Michiko Takeuchi (History), Teresa Wright (Political Science), Oliver Wang (Sociology), R. Scott Wilson (Anthropology)

Administrative Support Coordinator: Michelle Seales-Kaestner

Students desiring information should contact department office for referral to one of the faculty advisors.

Career Possibilities

Customs Inspector • Immigration Officer • Importer/Exporter • Foreign Service Officer • International Marketing Representative • Travel Guide • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Translator • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Arts in Chinese Studies (120 units)

Residence Requirement for the Majors

At least four upper division courses required for the major must be completed successfully at CSULB. Students are encouraged, however, to complete up to a year of their language study in approved programs of study abroad.

Requirements

A minimum of 38 units is required, including at least 15 units earned in residence at CSULB. CHIN 101 and 102 are prerequisite to the major and may be satisfied by appropriate high school preparation or by examination.

Lower Division (11 units):

Take one of the following:

CHIN 250 Introduction to the I-ching (3)
Prerequisites: GE Foundation requirements.

CHIN 260 Introduction to Chinese Civilization (3)
Prerequisites: None

Take all of the following:

CHIN 201 Intermediate Chinese (4)
Prerequisites: GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Chinese.

CHIN 202 Intermediate Chinese (4)
Prerequisites: GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Chinese.

Upper Division (27 units)

Take all of the following:

CHIN 301 Advanced Chinese (3)
Prerequisites: CHIN 202 or its equivalent, or consent of the instructor.

CHIN 370 Chinese Lit in English Translation (3)
Prerequisite: GE Foundation requirements.

CHIN 451 Chinese Culture and Tradition (3)
Prerequisite: One China-related course in Asian Studies or History and CHIN 302 (Advanced Chinese) or equivalent proficiency.

CHIN 492 Senior Seminar (3)
Prerequisite: One China-related course in Asian Studies or History and CHIN 302 or equivalent proficiency.

Take 15 units of electives from the following:

A. Take 9 units selected from the following:

CHIN 302, 311, 350, 360, 375, 380, 382B, 390, 410, 421, 430A, 430B, 430C, 451, 461, 462, 471, 475, 481, 485, 490, 499; A/ST 490A, 490B.

B. Take 6 units selected from the following:

ANTH 332, 427; AH 468, 469; ASAM 331, 335I, 340, 346, 381; A/ST 300I, 301I, 310, 320, 406A, 495I; HIST 382B, 388, 406A, 410; JOUR 312I; PHIL 306; POSC 362, 455, 485; R/ST 341I; WGSS 406A.

Chinese Studies (CHIN)

LOWER DIVISION

101. Fundamentals of Chinese (4)

Prerequisites: One GE Foundation course which may be taken concurrently, or formal prerequisites and/or competency equivalent for CHIN 101.

Introduction to pronunciation, reading, writing, conversation, and grammar.

Students with previous training or native speakers of Chinese may not enroll.

102. Fundamentals of Chinese (4)

Prerequisites: One GE Foundation course which may be taken concurrently, or formal prerequisites and/or competency equivalent for advanced study in Chinese.

Introduction to pronunciation, reading, writing, conversation, and grammar.

Students with previous training or native speakers of Chinese may not enroll.

111. Accelerated Chinese for Heritage Students I (4)

Prerequisites: One GE Foundation course (may be taken concurrently), and speaking ability of Mandarin Chinese or any of the Chinese dialects. Students who had formal studies of Chinese in China or other Chinese speaking areas may not enroll.

Focus on Chinese literacy and culture and developing reading and writing skills in context for heritage students.

Equivalent to combination of CHIN 101 and 102. Letter grade only (A-F).

201. Intermediate Chinese (4)

Prerequisites: GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Chinese.

Continuation of first year Chinese. Further development of syntax, grammar and sentence patterns, reading, writing and conversation.

Students with previous training or native speakers of Chinese may not enroll.

202. Intermediate Chinese (4)

Prerequisites: GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Chinese.

Continuation of first year Chinese. Further development of syntax, grammar and sentence patterns, reading, writing and conversation.

Students with previous training or native speakers of Chinese may not enroll.

211. Accelerated Chinese for Heritage Students II (4)

Prerequisites: CHIN 111 or speaking ability of Mandarin Chinese (or at least one of the Chinese dialects) and the ability to recognize approximately 500 Chinese characters. Students who have formal studies of Chinese in China or other Chinese speaking areas may not enroll.

The focus of the course is on Chinese literacy and culture, and further development of reading and writing skills in context for heritage students.

Equivalent to the combination of CHIN 201 and 202. Students completing this course may take the third year Chinese courses. Letter grade only (A-F).

250. Introduction to the *I-ching* (3)

Prerequisites: GE Foundation requirements.

Focuses on central position of the *I-ching* in Chinese philosophical and spiritual life, and provide a system of knowledge to analyze and reason the pattern of changes governed by the immutable Law of Change.

Lecture in English, no knowledge of Chinese required. Letter grade only (A-F).

260. Introduction to Chinese Civilization (3)

Thematic survey of various aspects of Chinese civilization from its beginning to the present. Emphasizes not only the understanding of China's history but also the salient cultural elements that made China a great and distinctive country.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

301. Advanced Chinese (3)

Prerequisites: CHIN 202 or its equivalent, or consent of the instructor.

Study of modern spoken and written Chinese involving advanced expressions. Emphasis on reading, comprehension, vocabulary building and idiomatic usage.

302. Advanced Chinese (3)

Prerequisites: CHIN 301 or its equivalent, or consent of the instructor.

Study of modern spoken and written Chinese involving advanced expressions. Emphasis on reading, comprehension, vocabulary building and idiomatic usage.

311. Advanced Spoken Chinese (3)

Prerequisite: CHIN 202 or its equivalent as determined by the instructor.

Advanced study in modern spoken Chinese and Chinese communication. Designed to enhance advanced speaking ability in Mandarin on a range of topics.

Letter grade only (A-F).

321. Chinese Calligraphy (3)

Prerequisites: Consent of instructor. Completion of first-year Chinese or Japanese language or equivalent preferred.

Focuses on the history, development, artistry, and appreciation of Chinese calligraphy. Equal emphasis placed on hands-on practice in and outside of the classroom.

350. Business Chinese for Bilinguals (3)

Prerequisites: Native/near native proficiency in the Chinese language or consent of instructor.

Introduction of written business forms and exploration of business culture, practice, and etiquette. Students must have reading and writing ability in Chinese for general purposes.

360. Classical Chinese (3)

Prerequisites: CHIN 202 or equivalent Chinese reading proficiency or bilingual students.

Study of the basic vocabulary, grammatical structure, and style of classical Chinese. Introduction to various genres of classical literature: prose, poetry and other literary forms.

370. Chinese Literature in English Translation (3)

Prerequisite: GE Foundation requirements.

Readings in translation of representative works of the major literary genres in China covering both the classical and the modern periods. Previous knowledge of the language is highly desirable, but not necessary.

375. The Supernatural and Fantastic in Chinese Literature (3)

Prerequisite: Upper Division standing or consent of instructor.

Study of the supernatural and fantastic elements that commonly comprise a variety of Chinese zhiguai genre from the Six Dynasties (317-588) to the present. Samples of representative works will be examined in depth from the textual and intertextual perspectives.

380. Topics in Chinese Linguistics (3)

Prerequisites: CHIN 102 or equivalent.

Chinese language viewed in its linguistic context, synchronically and diachronically. Introduction to descriptive grammar of modern standard Chinese, classical Chinese, the rise of written vernacular, dialect variations and sociolinguistic issues.

Lecture/discussion.

382B. Modern China (3)

Prerequisite: GE Foundation requirements. Chinese society from the 17th century to 1949.

Chinese society from the 17th century to 1949. Impact of imperialism, reform and revolutionary movements, and the background of Chinese communism.

Not open for credit to students with credit in HIST 482B.

390. Topics in Chinese Cultural Studies (3)

Prerequisites: Upper-division standing or consent of instructor.

Interdisciplinary study of representative features of contemporary Chinese culture and society.

May be repeated to a maximum of 6 units with different topics.

410./510. Chinese Information Processing (3)

Prerequisite: CHIN 202 or equivalent. May be waived with instructor's consent.

Introduction to the fundamentals of Chinese web design, including word-processing, HTML, layout, and user interaction.

May be repeated to a maximum of 6 units with different topics. Undergraduates register in CHIN 410; Graduates register in CHIN 510.

421. Newspaper and Web Reading (3)

Prerequisite: CHIN 302 or equivalent, or consent of instructor.

The course enhances students' proficiency in Chinese through reading newspapers. Students will familiarize themselves with all aspects of Chinese culture and contemporary society, as well as the language use. A hybrid course. Letter grade only (A-F).

430A./530A. Classical Chinese Fiction (3)

Prerequisite: Upper-division standing or consent of instructor.

Study and examination of traditional Chinese fiction, ranging from major works of fiction from the Six Dynasties (317-588) through the Qing Dynasty (1644-1911).

Undergraduates register in CHIN 430A; graduates register in CHIN 530A. May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F).

430B./530B. Classical Chinese Drama (3)

Prerequisite: Upper-division standing or consent of instructor.

Study and examination of Yuan (1279-1368) and Ming (1368-1644) drama, ranging from major works of Northern Drama (Zaju) and Southern Drama (Nanxi) to Peking Opera (Jingxi).

Undergraduates register in CHIN 430B; graduates register in CHIN 530B. May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F).

430C./530C. Classical Chinese Poetry (3)

Prerequisite: Upper-division standing or consent of instructor.

Study and examination of traditional Chinese poetry, ranging from major poetic works from antiquity to Qin Dynasty (1644-1911). Textual analysis and literary interpretational are emphasize..

Undergraduates register in CHIN 430A; Graduates register in CHIN 530A. May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F).

451./551. Chinese Culture and Tradition (3)

Prerequisite: One China-related course in Asian Studies or History and CHIN 302 (Advanced Chinese) or equivalent proficiency.

Designed as a capstone language class. Instruction of this class is in Mandarin.

Undergraduates register in CHIN 451; Graduates register in CHIN 551.

461./561. The Structure of Modern Chinese Language (3)

Prerequisite: CHIN 301 or equivalent or by consent of instructor.

The Chinese language viewed in its linguistic context, synchronically and diachronically. Introduction to descriptive

grammar of modern standard Chinese, the rise of written vernacular, dialect variations and sociolinguistic issues.

Letter grade only (A-F).

462./562. Contrastive Analysis of Chinese and English (3)

Prerequisite: CHIN 302 or equivalent. Designed for students who plan to teach the Chinese language or do research in Chinese linguistics. Comparison of phonological, morphological, syntactic and discourse aspects of English and Chinese. Analysis of common errors in learning Chinese. Letter grade only (A-F).

471./571. Chinese Literature and Culture (3)

Prerequisite: CHIN 451, or minimum of 3 years of Chinese study, or consent of instructor.

Enhances proficiency in Chinese through reading Chinese literature and culture-related topics with in-depth examination of representative works from linguistic, literary, textual, and intertextual perspectives.

Letter grade only (A-F).

475./575. Reading of Chinese Communist Documents (3)

Prerequisites: CHIN 451 or consent of instructor.

Advanced Chinese language course designed to develop students' ability to understand and analyze the newspaper editorials, documents of the Chinese Communist Party and government and works of its leaders in original Chinese text.

481./581. Principles and Practice of Teaching Chinese (3)

Prerequisite: CHIN 461/561 or consent of instructor.

Designed for students planning to become Chinese language teachers, Single Subject Credential program students or graduate students in Asian Studies or Linguistics. Prepares the student to be a Chinese teacher at all levels. Lectures, discussions, class observation and teaching preparation.

Letter grade only (A-F).

485./585. Masterpieces from China (3)

Prerequisites: Consent of instructor.

Reading of major works from China in Chinese. Selected writings represents different periods of Chinese history, thoughts, and literary tradition. Course conducted in Chinese. May be repeated to a maximum of 6 units. Undergraduates register in CHIN 485; Graduate register in CHIN 585.

490./590. Selected Topics in Chinese Studies (3)

Prerequisite: Consent of instructor.

Variable topics related to advanced Chinese Studies, depending on the instructor's discipline and expertise.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. Undergraduates register in CHIN 490; Graduates register in CHIN 590.

492./592. Senior Seminar (3)

Prerequisite: One China-related course in Asian Studies or History and CHIN 302 or equivalent proficiency.

Introduction to research methods and study of conceptual and theoretical Chinese issues.

May be repeated to a maximum of 6 units with different topics. Undergraduates register in CHIN 492; Graduates register in CHIN 592.

499./599. Directed Studies in Chinese (1-3)

Prerequisite: Consent of instructor.

Independent study under supervision of a faculty member.

May be repeated to a maximum of 6 units with different topics in different semesters.

GRADUATE LEVEL

510./410. Chinese Information Processing (3)

Prerequisite: CHIN 202 or equivalent. May be waived with instructor's consent.

Introduction to the fundamentals of Chinese web design, including word-processing, HTML, layout, and user interaction.

May be repeated to a maximum of 6 units with different topics. Undergraduates register in CHIN 410; Graduates register in CHIN 510.

530A./430A. Classical Chinese Fiction (3)

Prerequisite: Upper-division standing or consent of instructor.

Study and examination of traditional Chinese fiction, ranging from major works of fiction from the Six Dynasties (317-588) through the Qing Dynasty (1644-1911).

Undergraduates register in CHIN 430A; graduates register in CHIN 530A. May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F).

530B./430B. Classical Chinese Drama (3)

Prerequisite: Upper-division standing or consent of instructor.

Study and examination of Yuan (1279-1368) and Ming (1368-1644) drama, ranging from major works of Northern Drama (Zaju) and Southern Drama (Nanxi) to Peking Opera (Jingxi).

Undergraduates register in CHIN 430B; graduates register in CHIN 530B. May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F).

530C./430C. Classical Chinese Poetry (3)

Prerequisite: Upper-division standing or consent of instructor.

Study and examination of traditional Chinese poetry, ranging from major poetic works from antiquity to Qin Dynasty (1644-1911). Textual analysis and literary interpretational are emphasized.

Undergraduates register in CHIN 430A; Graduates register in CHIN 530A. May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F).

551./451. Chinese Culture and Tradition (3)

Prerequisite: One China-related course in Asian Studies or History and CHIN 302 (Advanced Chinese) or equivalent proficiency.

Designed as a capstone language class. Class instruction is conducted in Mandarin. Undergraduates register in CHIN 451; graduates register in CHIN 551.

Undergraduates register in CHIN 451; Graduates register in CHIN 551.

561./461. The Structure of Modern Chinese Language (3)

Prerequisite: CHIN 301 or equivalent or by consent of instructor.

The Chinese language viewed in its linguistic context, synchronically and diachronically. Introduction to descriptive grammar of modern standard Chinese, the rise of written vernacular, dialect variations and sociolinguistic issues.

Letter grade only (A-F).

562./462. Contrastive Analysis of Chinese and English (3)

Prerequisite: CHIN 302 or equivalent.

Designed for students who plan to teach the Chinese language or do research in Chinese linguistics. Comparison of phonological, morphological, syntactic and discourse aspects of English and Chinese. Analysis of common errors in learning Chinese.

Letter grade only (A-F).

571./471. Chinese Literature and Culture (3)

Prerequisite: CHIN 451, or minimum of 3 years of Chinese study, or consent of instructor.

Enhances proficiency in Chinese through reading Chinese literature and culture-related topics with in-depth examination of representative works from linguistic, literary, textual, and intertextual perspectives.

Letter grade only (A-F).

575./475. Reading of Chinese Communist Documents (3)

Prerequisites: CHIN 451 or consent of instructor.

Advanced Chinese language course designed to develop students' ability to understand and analyze the newspaper editorials, documents of the Chinese Communist Party and government and works of its leaders in original Chinese text.

581./481. Principles and Practice of Teaching Chinese (3)

Prerequisite: CHIN 461/561 or consent of instructor.

Designed for students planning to become Chinese language teachers, Single Subject Credential program students or graduate students in Asian Studies or Linguistics. Prepares the student to be a Chinese teacher at all levels. Lectures, discussions, class observation and teaching preparation.

Letter grade only (A-F).

585./485. Masterpieces from China (3)

Prerequisites: Consent instructor.

Reading of major works from China in Chinese. Selected writings represents different periods of Chinese history, thoughts, and literary tradition. Course conducted in Chinese.

May be repeated to a maximum of 6 units. Undergraduates register in CHIN 485; Graduate register in CHIN 585.

590./490. Selected Topics in Chinese Studies (3)

Prerequisite: Consent of instructor.

Variable topics related to advanced Chinese Studies, depending on the instructor's discipline and expertise.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. Undergraduates register in CHIN 490; Graduates register in CHIN 590.

592./492. Senior Seminar (3)

Prerequisite: One China-related course in Asian Studies or History and CHIN 302 or equivalent proficiency.

Introduction to research methods and study of conceptual and theoretical Chinese issues.

May be repeated to a maximum of 6 units. Undergraduates register in CHIN 492; Graduates register in CHIN 592.

599./499. Directed Studies in Chinese (1-3)

Prerequisites: Consent of instructor.

Independent study under supervision of a faculty member.

May be repeated to a maximum of 6 units with different topics in different semesters.

CIVIL ENGINEERING AND CONSTRUCTION ENGINEERING MANAGEMENT

College of Engineering

Department Chair: Emelinda M. Parentela

Department Office: Vivian Engineering Center (VEC) – 104
Telephone: (562) 985-5118
Website: www.csulb.edu/colleges/coe/cecem/

Faculty: Tesfai Goitom, Jin-Lee Kim, Yu-Fu (Paul) Ko, El-Hami Nasr, Tang-Hung Nguyen, Richard P. Nguyen, Emelinda M. Parentela, Joseph M. Plecnik, Jeremy Redman, Shadi Saadeh, Antonella Sciortino, Lisa Star, Tariq Shehab-Eldeen, Rebeka Sultana, Chan-Feng (Steve) Tsai

Undergraduate Advisors:

Antonella Sciortino (CE), Tang-Hung Nguyen (CEM), Tariq Shehab-Eldeen (CE/CEM), Shadi Saadeh (CE)

Graduate Advisor: Steve Tsai

General Education Advising: Academic Advising - Horn Center

Administrative Support Coordinator: Ameeta Perera

Students desiring detailed information about Civil Engineering or Construction Engineering Management programs should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Civil Engineer • Traffic Engineer • Sanitary Engineer
• Structural Engineer • Hydraulic Engineer • Highway Administration Engineer • Harbor Engineer • Airport Engineer • Environmental Engineer • Transportation Engineer • Drainage Design Coordinator • Technical Sales and Consulting • Field Engineer • Facilities Engineer • Plant Engineer • Project Engineer • Safety Engineer • Sales Representative • Estimator • Construction Coordinator • Procurement Construction Coordinator • Construction Inspector • Cost Analysis Coordinator • Contract Coordinator • Consultant (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Advisory and Development Councils

The Civil Engineering Advisory and Development Council

This council consists of outstanding engineers and executives from industry and government in Southern California. Its function is to form a liaison between the University and industry and to keep the administration and faculty informed of modern engineering practices. This ensures that the curricula are kept up-to-date. It also advises on placement opportunities before and after graduation.

Construction Engineering Management Advisory and Development Council

This council provides current information and guidance about industrial developments in methods, materials and techniques. Members make recommendations in course content, methods and/or facilities. Present membership in the council is made up of representatives from the different sectors of the construction industry.

ABET Accreditation

The Bachelor of Science in Civil Engineering is accredited by the Engineering Association Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET) (Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite #1050, Baltimore, MD 21202, phone: 410-347-7710, website: <http://www.abet.org>).

Undergraduate Programs

Bachelor of Science in Civil Engineering (131 units)

Mission

The mission of the Civil Engineering Program is to prepare students to succeed in the civil engineering profession by providing them with essential technical tools and skills and to promote the need for lifelong learning.

Educational Objectives

The Civil Engineering Program Educational Objectives are to produce graduates, who after entering the civil engineering practice will:

1. Apply knowledge of fundamental science and engineering principles and design to the solution of complex engineering projects.
2. Pursue lifelong learning through continuing education and/or advanced degrees in civil engineering or other related fields.
3. Progress to professional registration and continue to develop professionally.
4. Progress to leadership or management in engineering.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Lower Division:

Take all of the following:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One

year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CE 101 Intro CE & Construction Engr Management (1)
Prerequisites: None.

CE 130 Surveying and Mapping (1)
Corequisites: CE 130L and MAE 172 or CEM 121.

CE 130L Surveying and Mapping Laboratory (1)
Corequisite: CE 130.

CE 200 Materials for Civil Engineering (2)
Prerequisites: CHEM 111A and PHYS 151 all with a grade of "C" or better; consent of department undergraduate advisor.

CE 205 Analytical Mechanics I (Statics) (3)
Prerequisite: PHYS 151 with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

CE 206 Computer Programming & CE Applications I (2)
Prerequisites: MATH 122, PHYS 151 all with a grade of "C" or better.

ENGR 101 Intro to the Engineering Profession (1)
Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

ENGR 102 Academic Success Skills (1)
Prerequisite: ENGR 101 with a grade of "C" or better.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

MAE 172 Engineering Design Graphics (3)
Prerequisites: None.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following:

BIOL 200 General Biology (4)
Prerequisite: GE Foundation requirements.

MICR 200 Microbiology for Health Professionals (4)
Prerequisites: CHEM 111A or 140 with a grade of "C" or better and GE Foundation requirements.

Take 4 units of the following:

EE 210 Electro-Magnetic Foundations in EE (3)
Prerequisite: PHYS 151 with a grade of "C" or better.
Corequisites: MATH 123, EE 210L.

EE 210L Electro-Magnetic Foundations in EE Lab (1)
Corequisite: EE 210.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Upper Division:

Take all of the following:

CE 335 Fluid Mechanics (3)
Prerequisites: MATH 224 and C E 205 all with a grade of "C" or better.

CE 345 Geotechnical Engineering I (3)
Prerequisite: Consent of Department Undergraduate Advisor.
Corequisites: MAE 373; GEOL 370.

CE 346 Geotechnical Engineering Laboratory (1)
Prerequisite: ENGL 100 or equivalent with a grade of "C" or better.
Corequisite: CE 345.

CE 359 Structural Analysis I (3)
Prerequisite: MAE 373 with a grade of "C" or better.

CE 364 Environmental Engineering (3)
Prerequisites: CHEM 111A, BIOL 200/MICR 200 with a grade of "C" or better.
Prerequisite/Corequisite: CE 335.

CE 406 Cost Engineering and Analysis (3)
Prerequisite: GE Foundation requirements.

CE 407 Probability & Statistics in Civil Engineering (2)
Prerequisites: CE 206 and MATH 224 all with a grade of "C" or better.

CE 426 Transportation Engineering (3)
Prerequisite: CE 345 with a grade of "C" or better.
Corequisite: CE 406.

CE 437 Engineering Hydraulics (3)
Prerequisites: C E 335, MATH 370A all with a grade of "C" or better.

CE 459 Reinforced Concrete Design I (3)
Prerequisites: C E 200 and 359 all with a grade of "C" or better.

CE 481 Professional Practice in Civil Engineering (1)
Prerequisite: Senior standing.

CE 490 Senior Design Project (3)
Prerequisite: CE 459; completion of all 300-level engineering courses for the civil engineering major all with a grade of "C" or better and consent of department undergraduate advisor.
Prerequisite/Corequisite: CE 426, 437. Normally taken in the last year of the undergraduate program.

ECON 300 Fundamentals of Economics (3)
Prerequisites: GE Foundation requirements.

GEOL 370 Geology for Engineers (2)
Prerequisites: MAE 172, CE 130.

MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123. Not open to Freshmen.

MAE 330 Engineering Thermodynamics I (3)
Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.

MAE 371 Analytical Mechanics II (Dynamics) (3)
Prerequisites: CE 205, MAE 205 or CE 206 all with a grade of "C" or better.

MAE 373 Mechanics of Deformable Bodies (3)
Prerequisite: CE 205 with a grade of "C" or better.

Take six units of technical design electives from:

CE 427, 428, 438/438L, 445, 455, 456, 457, 466, 495

Take two laboratories from:

CE 326, 336, 365, 454, MAE 374

Take three units of technical electives from:

CE 429/429L, 435, 439, 446, 458, 464.

A grade of "C" or better must be achieved in the required courses below:

CHEM 111A, MATH 122, 123, 224, 370A, BIOL 200, MICR 200, PHYS 151, ECON 300, MAE 172, MAE 373, CE 130, 130L, 200, 205, 206, 335, 345, 359, 406, 459 and 490.

Bachelor of Science in Construction Engineering Management (128 units)

Mission

The Mission of the Construction Engineering Management program is to educate and prepare students to succeed in the construction engineering management profession by providing them with essential technical, managerial and communication skills and tools which will enable them to perform current and future construction engineering management tasks and to promote the need for life-long learning.

Educational Objectives

The Construction Engineering Management program educational objectives are to produce graduates, who after

entering the construction engineering management practice with a knowledge of fundamental construction engineering management principles and current technologies, communication skills and practical construction experience, will:

1. Provide substantial contributions to the construction industry.
2. Pursue life-long learning through continuing education and/or advanced degrees in construction engineering management or other related fields.
3. Continue to develop professionally through participation in professional organizations and/or participation in professional development activities in the industry.
4. Progress towards professional certifications.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 111 and 113, and PHYS 100A within one calendar year.

Transfer Students: A grade "C" or better must be achieved in MATH 122 and PHYS 100A & B within one calendar year.

Requirements

Lower Division:

Take all of the following:

- CE 101 Introduction to Civil Engineering and Construction Engineering Management (1)
Prerequisites: None.
- CE 130 Surveying and Mapping (1)
Corequisites: CE 130L and MAE 172 or CEM 121.
- CE 130L Surveying and Mapping Laboratory (1)
Corequisite: CE 130.
- ENGR 101 Intro to the Engineering Profession (1)
Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.
- ENGR 102 Academic Success Skills (1)
Prerequisite: ENGR 101 with a grade of "C" or better.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.
- PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.
- PHYS 100B General Physics (4)
Prerequisite: PHYS 100A.
- CEM 121 Construction Drawing I (2)
Prerequisites: None.
- CEM 125 Fundamentals of Construction (3)
Prerequisites: None.
- CEM 200 Concrete Construction (1)
Prerequisite: CEM 125 with a grade of "C" or better.
Corequisite: CEM 200L.
- CEM 200L Concrete Construction Laboratory (1)
Corequisite: CEM 200.

CEM 202 Probability and Statistics for CEM (3)
Prerequisite: High School Algebra.

CEM 204 Applied Mechanics-Statics (3)
Prerequisites: MATH 122 and PHYS 100A all with a grade of "C" or better.

CEM 205 Computer Systems and Programming (2)
Prerequisites: None.

CEM 225 Residential and Light Commercial Construction Practices and Estimating (3)
Prerequisites: CEM 121, 125 all with a grade of "C" or better. Corequisites: CEM 200, 200L.

BLAW 220 Introduction to Law and Business Transactions (3)
Prerequisites: None.

Take one of the following:

BLAW 220 Introduction of Law and Business Transactions (3)
Prerequisites: None

BLAW 320 Legal and Regulatory Environment of Business (3)
Prerequisites: None

Take one of the following:

CEM 201 Cost Accounting for Construction Engineering (3)
Prerequisites: None.

ACCT 201 Elementary Financial Accounting (3)
Prerequisites: None.

Upper Division:

Take all of the following:

- CE 406 Cost Engineering and Analysis (3)
Prerequisite: GE Foundation requirements.
- CEM 304 Applied Mechanics-Strength of Materials (2)
Prerequisite: CEM 204 with a grade of "C" or better.
- CEM 315 Construction Safety (2)
Prerequisite: CEM 225 or CE 200 with a grade of "C" or better.
- CEM 324 Commercial, Institutional, and Industrial Construction Practices and Estimating (3)
Prerequisites: CEM 315 with a grade of "C" or better.
- CEM 335 Soil Mechanics Technology (2)
Prerequisite: CEM 304 with a grade of "C" or better.
Corequisite: CEM 335L.
- CEM 335L Soil Mechanics Technology Laboratory (1)
Prerequisite: CEM 304 with a grade of "C" or better.
Corequisite: CEM 335.
- CEM 365 Mechanical Equipment for Buildings (2)
Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: CEM 324.
- CEM 375 Electrical Equipment Buildings (2)
Prerequisites: CEM 324, PHYS 100B all with a grade of "C" or better.
- CEM 404 Structural Design I (2)
Prerequisite: CEM 304 with a grade of "C" or better.
- CEM 421 Construction Planning and Scheduling (3)
Prerequisite: CEM 324 with a grade of "C" or better.
- CEM 425 Earthwork and Civil Works Construction Practices (2)
Prerequisite: CEM 324, CE 406 with a grade of "C" or better.
- CEM 426 Business and Construction Law (3)
Prerequisites: CEM 324; BLAW 220 with a grade of "C" or better.
- CEM 429 Advanced Estimating and Bidding (3)
Prerequisite: CEM 315 with a grade of "C" or better.
Corequisite: CEM 425.

- CEM 431 Construction Cost Control (3)
Prerequisites: CE 406 and CEM 421 with a grade of "C" or better.
- CEM 438 Structural Design II (2)
Prerequisite: CEM 304 with a grade of "C" or better.
- CEM 485 Senior Seminar (3)
Prerequisites: CEM 429 and 431 with a grade of "C" or better or consent of the instructor.
- CEM 490 Construction Project Management (3)
Prerequisites: CEM 426, 429 and 431 with a grade of "C" or better.
- ECON 300 Fundamentals of Economics (3)
Prerequisites: GE Foundation requirements.
- MGMT 300 Principles of Management & Operations (3)
Recommended: IS 310.
- CBA 300 International Business (3)
Prerequisites: None

Take one of the following:

- MGMT 413 Managing Quality for Productivity (3)
Prerequisites: MGMT 300.
Recommended: IS 301, 310.
- HRM 361 The Human Resource Function (3)
Prerequisites: None.

Upper Division Electives:

Take six units of electives in consultation with an advisor:

1. *Design-build Emphasis*: CEM 373, 409, 443
2. *Facility Management Emphasis*: CEM 374, 409, 432, 433, 434, 436
3. *Heavy Construction Emphasis*: CEM 409, 476, 486.

A grade of "C" or better must be achieved in all required courses listed below:

PHYS 100A and B, MATH 122, CEM 121, 125, 200, 200L, 204, 225, 304, 315, 324, 421, 429, 431, 490; CE 130, 130L, 406, MGMT 300; ACCT 201; BLAW 220 or 320.

Fieldwork Requirements

Fieldwork experience is required for the BS in Construction Engineering Management, consisting of no less than three months full-time (or equivalent part-time) of employment in an approved industry or governmental agency. The student must hold a position equivalent to a technician or higher which affords the opportunity to exercise responsibility usually given to those who have completed two years of college. The fieldwork must be completed prior to graduation, be certified and approved by the faculty of the department.

Certificate in Facilities Operations

Not accepting new students as of Fall 2012.

The certificate is designed to qualify the graduate to serve in plant engineering, industrial construction coordination, facilities development and design, plant layout, and facilities project management. This program provides graduates with a depth of technical knowledge in facilities operations-oriented technical courses, as well as the knowledge of behavioral sciences essential for managing technical functions.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

1. The certificate may be earned concurrently with or subsequent to the baccalaureate degree.

2. This program is open to all majors who have fulfilled the prerequisites as stated below.
3. Requires a total of 25 units as specified below.
 - A. The completion of supporting technical courses chosen in consultation with an advisor.
 - B. Take 25 units selected from the following:
 - CE 406 Cost Engineering and Analysis (3)
Prerequisite: GE Foundation requirements.
 - CEM 121 Construction Drawing I (2)
Prerequisites: None.
 - CEM 320 Operations Management in Contemporary Organizations (3)
Prerequisites: MGMT 300, ENGR 310 all with a grade of "C" or better.
 - CEM 374 Plant Planning and Layout (2)
Prerequisite: CEM 324 with a grade of "C" or better or consent of instructor.
 - CEM 409 Directed Studies in Construction Engineering Management (1-3)
Prerequisites: Senior standing in CEM or consent of instructor.
 - CEM 431 Construction Cost Control (3)
Prerequisites: CE 406 and CEM 421 all with a grade of "C" or better.
 - CEM 432 Facility Administration (3)
Prerequisite: CEM 421 with a grade of "C" or better.
 - CEM 433 Facility Finance Management (3)
Corequisite: CEM 432.
 - CEM 434 Facility and Property Management (3)
Prerequisite: CEM 433 with a grade of "C" or better.
 - CEM 436 Facility Operations Management (3)
Prerequisite: CEM 432 with a grade of "C" or better.
4. Any deviation from this program requires the written permission of the program advisor.

GRADUATE PROGRAMS

Master of Science in Civil Engineering

Mission

The mission of the civil engineering graduate program at CSULB is to provide a high-quality educational experience and the technical specialization required to become successful leaders in industry and the society, to engage students in innovative practical research and encourage them to pursue advanced degrees and lifelong learning.

Program Objectives

Graduates of the MSCE program will:

1. have technical competency in an area of specialization.
2. have technical knowledge and skills needed to conduct independent and/or innovative research.
3. keep current with state of the art technologies and advancements in a specialized technical area.

Prerequisites

1. A bachelor's degree in an ABET accredited curriculum in civil engineering with a minimum GPA of 2.8; or
2. A bachelor's degree with a minimum GPA of 2.8 in engineering, a natural science or other appropriate discipline with the requirement that essential undergraduate prerequisites in civil engineering are satisfied;

3. The general Graduate Record Examination (GRE) is required and appropriate level of competency will be determined by the Department.
4. Graduate students must consult with the graduate advisor for information concerning procedures and requirements for appropriate approval of their courses of study prior to enrolling in their graduate programs.
5. The Graduation Writing Assessment Requirement (GWAR) must be met during the first semester in residence. Failure to attempt to fulfill the GWAR during the first semester will prevent registration in engineering courses in subsequent semesters.

Advancement to Candidacy

1. Removal of all undergraduate deficiencies as determined by the Department Graduate Studies Committee;
2. Completion of at least 12 graduate units at CSULB; minimum GPA of 3.0; currently enrolled;
3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).

Requirements

Completion of a minimum of 30 units beyond the bachelor's degree and graduate coursework as follows:

1. A minimum of 24 units in engineering, probability and statistics and mathematics courses with 18 units of 500-/600-level courses in Civil Engineering. Within these 18 units a student may include six units of CE 698 or three units of CE 697.
 - Students are required to complete successfully either:
 - 697 Directed Studies (1-3)
 - 698 Thesis (2-6)
2. Six units of electives selected from approved graduate courses in appropriate subjects;
3. Fulfill one of the following alternatives:
 - I - Write and present orally a thesis to be approved by the thesis committee;
 - II - Pass a written comprehensive examination on coursework in the student's program.

Graduate Certificate in Waste Engineering and Management

Not accepting new students as of Fall 2012.

This 24-unit program is conducted in cooperation with local engineering consulting firms and government agencies and could accommodate an internship of three units through directed study (CE 697). This certificate may be taken (1) by a graduate as a matriculated student, (2) admitted to a CSULB graduate degree program, or admitted as an unclassified graduate student.

A grade of "C" or better must be obtained in all courses applied to the certificate, with an overall G.P.A. of 3.0. Courses taken on Credit/No Credit or Audit basis will not apply to the certificate. Graduate students taking courses in this program are reminded that grades received will be included in calculations of the M.S. requirement.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

1. Completion of an accredited baccalaureate degree in engineering or a related scientific discipline, with appropriate prerequisites to be met.

2. Take both of the following courses:

CE 543 Waste Management & Landfill Engr (3)
Prerequisite: Graduate standing or consent of instructor.

PPA 590 Topics in Public Policy & Administration (3)
Prerequisites: None.

Take a minimum of 9 units (electives) from the following:
C E 504, 562, 563, 564, 566, 567; CH E 555, and 585.

Normally, at least one of these courses should be from non-Civil Engineering offerings.

3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).
4. Filing of a program application card with Admissions and Records, and filing for the certificate at least one semester prior to completion.

Civil Engineering Courses (C E)

LOWER DIVISION

101. Introduction to Civil Engineering and Construction Engineering Management (1)

Civil engineering and construction engineering management as a profession. Current trends and challenges, ethical, social and environmental issues in professional practice. Professional organizations and licensure. Communication and lifelong learning skills for professional practice.

Letter grade only (A-F). (Lecture-problems 1 hour)

130. Surveying and Mapping (1)

Corequisites: CE 130L and MAE 172 or CEM 121.

Theory and practice of plane surveying, including the use of instruments for measuring distances, angles, and elevations. Plotting of surveying data and topographic mapping. Fundamentals of construction layout. Integration of data with surveying software.

Letter grade only (A-F). (Lecture-Problems 1 hour)

130L. Surveying and Mapping Laboratory (1)

Corequisite: CE 130.

Fundamentals of surveying methods as applied to construction layout. Use of level and total station for location and control of structures, vertical and horizontal control, and area determination.

Letter grade only (A-F). Not open for credit to students with credit in CE 131. (Laboratory 3 hours)

200. Materials for Civil Engineering (2)

Prerequisites: CHEM 111A and PHYS 151 all with a grade of "C" or better and consent of department undergraduate advisor.

Basic properties of materials in civil engineering, including concrete, masonry, steel, wood, asphalt and composites.

Letter grade only (A-F). (Lecture 1 hour, Laboratory 3 hours)

205. Analytical Mechanics I (Statics) (3)

Prerequisite: PHYS 151 with a grade of "C" or better.

Prerequisite/Corequisite: MATH 123.

Application of the mechanics of equilibrium to force systems using analytical and graphical solutions of problems involving structures and machines.

Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours)

206. Computer Programming and Civil Engineering Applications I (2)

Prerequisites: MATH 122, PHYS 151 all with a grade of "C" or better.

Introduction to programming and application of computers to elementary civil engineering problems.

Letter grade only (A-F). (Lecture-Problems 1 hour, Laboratory 3 hours)

UPPER DIVISION

326. GIS Laboratory for Civil Engineers (1)

Prerequisites: CE 130, 130L, 206 all with a grade of "C" or better.
Fundamentals of geographic information systems (GIS); spatial and network analyses. Hands-on application of GIS software to solve civil engineering problems.

(Laboratory 3 hours) Letter grade only (A-F).

335. Fluid Mechanics (3)

Prerequisites: MATH 224 and C E 205 all with a grade of "C" or better.

Properties of fluids, fluid statics, fluid dynamics, dynamic similitude, flow of compressible and incompressible fluids in closed conduits, uniform flow in prismatic open channels.

Letter grade only (A-F). (Lecture-Problems 3 hours)

336. Fluid Mechanics Laboratory (1)

Prerequisite: ENGL 100 or equivalent all with a grade of "C" or better.

Prerequisite/Corequisite: CE 335.

Experiments in and study of the phenomena of fluid flow.

Letter grade only (A-F). (Laboratory 3 hours)

345. Geotechnical Engineering I (3)

Corequisites: MAE 373; GEOL 370.

Prerequisite: Consent of Department Undergraduate Advisor.

Soil mechanics applied to engineering structures. Soil exploration, identification, classification, drainage, stability and bearing capacity.

Letter grade only (A-F). (Lecture-Problems 3 hours)

346. Geotechnical Engineering Laboratory (1)

Prerequisite: ENGL 100 or equivalent all with a grade of "C" or better.

Corequisite: CE 345.

Laboratory investigation and experiments in the phenomena of soil mechanics.

Letter grade only (A-F). (Laboratory 3 hours)

359. Structural Analysis I (2)

Prerequisite: MAE 373 with a grade of "C" or better.

Analysis of structures including trusses, beams, and frames, conjugate beam, virtual work, energy methods, approximate methods, and influence lines. Use of code based finite element computer programs in analysis of frame and truss type structures.

Letter grade only (A-F). (Lecture-Problems 3 hours)

364. Environmental Engineering I: Fundamentals (3)

Prerequisites: CHEM 111A, BIOL 200/MICR 200 all with a grade of "C" or better.

Prerequisite/Corequisite: CE 335.

Introduction to the fundamental physical, chemical and biological processes affecting air and water quality. Models of transport and transformation of impurities. Emphasis on theory underlying the design of water quality control technologies.

Letter grade only (A-F). (Lecture-Problems 3 hours)

365. Environmental Engineering Laboratory (1)

Prerequisite/Corequisite: CE 364.

Experiments in routine water quality analysis and environmental engineering applications.

Letter grade only (A-F). (Laboratory 3 hours)

370. Analytical Mechanics (3)

Prerequisites: PHYS 151 with a grade of "C" or better.

Prerequisite/Corequisite: MATH 123.

Fundamental principles of statics, kinematics and kinetics, with application to idealized structures and systems.

Intended for Electrical Engineering majors. Not open for credit to

Civil or Mechanical Engineering majors. Letter grade only (A-F). (Lecture-Problems 3 hours)

404. Laboratory Techniques (1)

Prerequisites: ENGL 100 or equivalent with a grade of "C" or better., senior standing in Civil Engineering and consent of instructor.

Study in the techniques of organizing and directing of the civil engineering laboratory.

May be repeated to maximum of 3 units. Letter grade only (A-F). (Conference 1 hour, Laboratory 3 hours)

405. Selected Topics in Civil Engineering (3)

Prerequisites: Senior standing in civil engineering and consent of instructor.

Selected topics from recent advances in civil engineering. Course content will vary from year to year.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in *Schedule of Classes*. (Lecture-Problems 3 hours)

406. Project Cost-Benefit Analysis (3)

Prerequisite: GE Foundation requirements.

Systematic evaluation of the economic and social benefits and costs of projects. Decision-making in an environment of limited resources, environmental and economic constraints, and uncertainty. The economy of multi-year projects, selection among competing independent alternatives, before and after tax analyses, replacement economy and inflation.

Letter grade only (A-F). (Lecture-Problems 3 hours)

407. Probability and Statistics in Civil Engineering (2)

Prerequisites: CE 206 and MATH 224 all with a grade of "C" or better.

Analysis of uncertainties, and applications of the basic theories of probability and statistics in civil engineering areas of geotechnical, environmental, water resources, structural and transportation engineering.

Letter grade only (A-F). (Lecture-problems 1 hour, Lab 3 hrs)

408. Special Problems (1-3)

Prerequisite: Senior standing in civil engineering.

Assigned topics in technical literature or laboratory projects and report on same.

Letter grade only (A-F).

426. Transportation Engineering (3)

Prerequisite: CE 345 with a grade of "C" or better.

Corequisite: CE 406.

Operation of various modes of transportation; Characteristics of the driver, pedestrian, vehicle and the road; fundamental principles of traffic flow; introduction to intersection design and control, planning, and geometric design; transportation issues and safety.

Letter grade only (A-F). (Lecture-Discussion 3 hours)

427. Highway Design (3)

Prerequisite: CE 345 with a grade of "C" or better.

Geometric design of highways and streets. Route location and earthwork computation. Introduction to roadside and pavement design. Design problems in highway engineering.

Letter grade only (A-F). (Lecture-Problems 3 hours)

428. Highway Engineering Materials (3)

Prerequisites: CE 200 and 345 all with a grade of "C" or better.

Design and properties of highway materials, including aggregates, asphalt binder, and mixtures. Hot Mix Asphalt (HMA) aggregate gradation, blending procedure, volumetrics, design, plant operation, and lay down. Superpave binder testing and specifications.

(Lecture 2 hours, Laboratory 3 hours) Letter grade only (A-F).

Civil Engineering Courses (C E)

429. Traffic Engineering (2)

Corequisite: CE 426, 429L.

Capacity and level of service analyses of highway facilities. Intersection signal timing design. Introduction to traffic control devices. Volume, speed and delay studies. Use of traffic data for design, planning and operational levels of analyses.

Letter grade only (A-F). Graduate students required to do extra projects. (Lecture-Problems 3 hours)

429L. Traffic Engineering Laboratory (1)

Corequisites: CE 426, 429

Laboratory activities on traffic flow theory, capacity and level of service analyses, signal timing, parking lot design, and travel demand forecasting; traffic volume, speed and delay studies. Use of traffic engineering software.

(Laboratory 3 hours) Letter grade only (A-F). Not open for credit to student with credit in CE 430.

435. Hydrology and Water Resources Engineering (3)

Prerequisite: C E 335 with a grade of "C" or better.

Fundamental surface and ground water hydrology concepts and quantitative methods. Selected topics and procedures of the hydrological cycle. Planning, development and management of water resource surface systems.

Letter grade only (A-F). (Lecture-Problems 3 hours)

437. Engineering Hydraulics (3)

Prerequisites: C E 335, MATH 370 A all with a grade of "C" or better.

Theory and analysis of steady uniform and non-uniform flow in open conduits. Energy and momentum principles, critical flow computations and applications, design of channels, computations of gradually varied, spatially varied and rapidly varied flows.

Letter grade only (A-F). (Lecture-Problems 3 hours)

438. Hydraulic Engineering Design I (2)

Corequisites: CE 437, 438L

Application of hydraulic principles to the design of dams, water courses, water systems and their related structures and devices.

Letter grade only (A-F). (Lecture 2 hours)

438L. Hydraulic Design I Laboratory (1)

Corequisite: CE 438

Computer laboratory applications to the design of water courses, water systems and their related structures and devices

Letter grade only (A-F). (Laboratory 3 hours)

439. Fundamentals of Groundwater Flow and Contaminant Transport (3)

Corequisite: CE 437

Introduction to principles of groundwater flow and contaminant transport. Groundwater remediation methods. Mathematical description of flow and transport in the subsurface with software applications.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

445. Geotechnical Engineering II (3)

Prerequisites: CE 345, 346 all with a grade of "C" or better.

Methods of design and construction of various geotechnical engineering projects utilizing theory of soil mechanics.

Letter grade only (A-F). (Lecture-Problems 3 hours)

446./542. Geotechnical Projects (3)

Prerequisite: CE 345 with a grade of "C" or better.

Design and problem solving oriented geotechnical projects utilizing soil mechanics theory and experimental methods according to the state-of-the-art practice.

Letter grade only (A-F). Graduate students required to do additional readings and write a research term paper to deal with current topics in geotechnical engineering. (Lecture-Problems 3 hours).

454. Structures Laboratory (1)

Prerequisite: CE 359 with a grade of "C" or better.

Corequisite: CE 459.

Laboratory examination of structural concepts. Utilize computer simulation modeling techniques in combination with structural tests.

Letter grade only (A-F). (Lecture 3 hours) Not open for credit to students with credit in CE 491.

455. Structural Steel Design (3)

Prerequisite: CE 359 with a grade of "C" or better.

Detailed design of components with typical codes and specifications.

Letter grade only (A-F). (Lecture-Problems 3 hours)

456. Timber Design (3)

Prerequisite: CE 359 with a grade of "C" or better.

Design of various structural elements made of wood material subjected to both vertical and lateral loads. Application of current building codes and specifications in timber design.

Letter grade only (A-F). (Lecture-Problems 3 hours)

457./517. Reinforced Masonry Design (3)

Prerequisite: CE 359 with a grade of "C" or better.

Theory, design and application of reinforced masonry (brick and block) in compliance with latest Building Code. Earthquake provisions. Construction and specifications. Design of high rise buildings, industrial buildings and retaining walls.

Letter grade only (A-F). Graduate students required to do a design project and assigned readings from journals and research papers. (Lecture-Problems 3 hours)

458. Structural Analysis II (3)

Prerequisite: CE 359 with a grade of "C" or better.

Solution of indeterminate truss and frame structures using moment distribution and slope deflection methods. Introduction to matrix methods. Energy theorems and virtual work principles. Use of code based finite element computer programs in the analysis of indeterminate structural systems.

Letter grade only (A-F). (Lecture-Problems 3 hours)

459. Reinforced Concrete Design I (3)

Prerequisites: C E 200 and 359 all with a grade of "C" or better.

Theory and design of structural elements of reinforced concrete, analysis by working stress and ultimate strength design theories.

Letter grade only (A-F). (Lecture-Problems 3 hours)

464. Environmental Engineering II: Unit Processes (3)

Prerequisites: CE 335 and 364 all with a grade of "C" or better.

Civil engineering applications of the fundamentals of chemical reactions, kinetics of biochemical systems, gas transfer systems, liquid/solid separations, solubility equilibria, adsorption, ion exchange and membrane processes.

Letter grade only (A-F). (Lecture-Problems 3 hours)

466. Environmental Systems Design (3)

Prerequisite: CE 364 with a grade of "C" or better.

Principles of environmental systems design. Design and planning of systems for water distribution, wastewater collection and storm water management.

Letter grade only (A-F). (Lecture-Problems 3 hours)

481. Professional Practice In Civil Engineering (1)

Prerequisite: Senior standing.

Topics related to practice of civil engineering profession. Professional society meetings and readings.

Letter grade only (A-F). (Lecture-Problems 1 hour)

490. Senior Design Project (3)

Prerequisite: CE 459; completion of all 300-level engineering courses for the civil engineering major all with a grade of "C" or better and consent of department undergraduate advisor.
Prerequisite/Corequisite: CE 426, 437.

Normally taken in the last year of the undergraduate program.

A supervised design group project, incorporating all aspects from concept to completed design and oral presentations. Technical aspects, social, environmental, and economic issues considered. Ethical concepts discussed.

Letter grade only (A-F). (Lecture-Problems 2 hrs, Design lab 3 hrs)

495. Seismic Design I (3)

Prerequisites: CE 459 with a grade of "C" or better.

Elements of lateral-force design in steel, concrete, masonry, and timber structures. Application of current building codes.

Letter grade only (A-F). (Lecture 3 hours)

497. Senior Problem Directed Studies (2)

Prerequisites/Corequisites: CE 406, 481, 490.

Directed study on assigned topics or lab/field studies practicum and report on same.

Letter grade only (A-F).

GRADUATE LEVEL

500. Engineering Analysis I (3)

Prerequisites: MATH 370A with a grade of "C" or better.

Application of analytical methods to engineering problems. Differential equations and series solutions, Bessel functions and Legendre polynomials, boundary value and eigenvalue problems, Fourier series, partial differential equations, vector analysis.

Letter grade only (A-F). (Lecture-Problems 3 hours)

501. Engineering Analysis II (3)

Prerequisite: MATH 370A with a grade of "C" or better.

Analysis of engineering mechanics by matrix theory and complex variables; introduction to numerical techniques.

Letter grade only (A-F). (Lecture-Problems 3 hours)

502. Finite Element Method and Applications (3)

Prerequisite: CE 458 with a grade of "C" or better or consent of instructor

Introduction of the theory of finite element method and its application to mechanics of structures and solids. Variational calculus, discretization of continuum, discrete element stiffness matrices, displacement and force vector, direct stiffness formulation, and solution methods for linear equations.

(Lecture-Problems 3hours) Letter grading only (A-F).

503. Selected Topics in Civil Engineering (3)

Prerequisites: Graduate standing and consent of instructor.

Selected topics, with laboratory work required, from the most recent developments in civil engineering.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*. No more than 6 units of CE 503 or CE 504 may be counted for the Master's Degree. (Lecture-Problems 2 hours, Laboratory 3 hrs)

504. Selected Topics in Civil Engineering (3)

Prerequisite: Graduate standing or consent of instructor.

Selected topics from recent developments in civil engineering.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*. No more than 6 units of CE 503 and/or CE 504 may be counted for the master's degree. (Lecture-Problems 3 hrs)

508. Probabilistic and Statistical Methods in Engineering Applications (3)

Prerequisite: Graduate standing or consent of instructor.

Civil Engineering applications of nondeterministic models and decision theory. Applications of proven statistical computer programs.

Letter grade only (A-F). (Lecture-Problems 3 hours)

509. Computational Methods in Civil Engineering (3)

Prerequisite: Graduate standing or consent of instructor.

Numerical analysis and computer methods applied to various areas of civil engineering. Application of proven computer methods, including special problem-oriented languages.

Letter grade only (A-F). (Seminar 3 hrs)

516. Timber Design II (3)

Prerequisite: CE 359 and 456 all with a grade of "C" or better.

Structural behavior of timber buildings/wood structures under seismic load. Analysis/design of nonrectangular buildings, horizontal diaphragms and shearwalls. Analysis/design of member under biaxial bending and axial force. Load/resistance factor design (LRFD) for wood construction. Current building codes/specifications in advanced timber design.

Letter grade only (A-F). (Lecture-Problems 3 hours)

517./457. Reinforced Masonry Design (3)

Prerequisite: CE 359 with a grade of "C" or better.

Theory, design and application of reinforced masonry (brick and block) in compliance with latest Building Code. Earthquake provisions. Construction and specifications. Design of high rise buildings, industrial buildings and retaining walls.

Letter grade only (A-F). Graduate students required to do a design project and assigned readings from journals and research papers. (Lecture-Problems 3 hours)

520. Seaport Planning and Design (3)

Prerequisite: CE 426 with a grade of "C" or better or consent of instructor.

Planning and design of seaports and facilities as access systems. Support transportation, use analysis and ocean transport crafts. Site selection and comprehensive planning.

Letter grade only (A-F).(Lecture-Problems 3 hours)

522. Transportation Planning (3)

Prerequisite: C E 426 with a grade of "C" or better or consent of instructor.

Planning of transportation facilities in urban setting; application of travel forecasting and analytical models in the planning process; evaluation of transportation alternatives and impacts; transportation system and demand management techniques.

Letter grade only (A-F). (Lecture-Problems 3 hours)

526. Pavement Engineering (3)

Corequisite: C E 427 or consent of instructor.

Aggregate, binder systems. Theory and design of pavement structures.

Letter grade only (A-F). (Lecture-Problems 3 hours)

528. Advanced Highway Materials (3)

Prerequisite: CE 428 with a grade of "C" or better or consent of instructor.

Hot mix asphalt design methods and lay down methods. Distress identification and rehabilitation procedures of highway materials.

(Lecture-Discussion 3 hours) Letter grade only (A-F)

529. Advanced Traffic Engineering (3)

Prerequisite/Corequisite: CE 426 or consent of instructor.

Analysis of arterial streets traffic operations. Queuing Analysis; Signal timing coordination and optimization; Use of traffic optimization and simulation computer models to solve problems.

Letter grade only (A-F). (Lecture-Problems 3 hours)

Civil Engineering Courses (C E)

530. Groundwater Flow: Principles and Modeling (3)

Prerequisite: CE 437 with a grade of "C" or better or consent of instructor.

Principles of water flow in the saturated and unsaturated zone. Well hydraulics. Numerical modeling of groundwater flow in the subsurface with computer applications. Groundwater artificial recharge and saline water intrusion.

(Lecture 3 hrs). Letter grade only (A-F).

532. Sediment Transportation (3)

Prerequisite: C E 437 with a grade of "C" or better.

Phenomena of sediment transportation related to streams and marine environments.

Letter grade only (A-F). (Lecture-Problems 3 hours)

533. Groundwater Contaminant Transport: Principles and Modeling (3)

Prerequisites: CE 437, 530 all with a grade of "C" or better or consent of instructor.

Mechanisms of contaminant transport in groundwater. Analysis of groundwater remediation methods and alternatives. Numerical modeling of flow and transport in the subsurface. Software applications.

(Lecture 3 hrs). Letter grade only (A-F).

535. Advanced Hydrology (3)

Prerequisite: Graduate standing or consent of instructor.

Theory and application of surface hydrology. Hydrologic statistics, dynamic wave routing, frequency analysis and risk analysis. Simulation of design flows, flood forecasting, flood plain analysis and hydrologic design. Mathematical models, numerical methods in analysis and evaluation.

Letter grade only (A-F). (Lecture-Problems 3 hours)

536. Urban Surface Water Management (3)

Prerequisite: CE 437 with a grade of "C" or better or consent of instructor.

Planning and design of facilities to control flooding, erosion, sedimentation, and non-point source pollution for urban storm water runoff management. Presentation of analysis and design methodologies, structural and non-structural measures for management, and master planning principles.

Letter grade only (A-F). Lecture-Problems 3 hours)

538. Hydraulic Engineering Design II (3)

Prerequisites: C E 437, 438 all with a grade of "C" or better or consent of instructor.

Design of water supply networks, hydraulic transitions, controls and structures. Hydraulic power conversion. River engineering. Water resources systems.

Letter grade only (A-F). (Lecture-Problems 3 hours)

542./446. Geotechnical Projects (3)

Prerequisite: CE 345 with a grade of "C" or better.

Design and problem solving oriented geotechnical projects utilizing soil mechanics theory and experimental methods according to the state-of-the-art practice.

Letter grade only (A-F). Graduate students required to do additional readings and write a research term paper to deal with current topics in geotechnical engineering. (Lecture-Problems 3 hours).

543. Waste Management and Landfill Engineering (3)

Prerequisite: Graduate standing or consent of instructor.

Advanced principles and practices of landfill engineering for waste management and subsurface flow problems. Presentation

of research and case studies in geotechnical aspects of waste management and landfill engineering.

Letter grade only (A-F). (Lecture-Problems 3 hours)

546. Theory and Design of Foundation Structures (3)

Prerequisite: CE 345 with a grade of "C" or better or consent of instructor.

Foundation, explorations, stress and deformation relationships and design of various footings, piles, piers and caissons. Analysis of lateral loads and design of retaining structures, machinery foundations and foundation dewatering.

Letter grade only (A-F). (Lecture-Problems 3 hours)

547. Soil Dynamics (3)

Prerequisite: CE 345 with a grade of "C" or better or consent of instructor.

Theories and field behaviors of dynamically loaded foundation systems and soil responses with emphasis on engineering applications.

Letter grade only (A-F). (Lecture-Problems 3 hours)

548. Geotechnical Engineering III (3)

Prerequisite: C E 345 with a grade of "C" or better or consent of instructor.

Stress-strain time relationship of soils. Theory and methods of analysis with special emphasis on the applications and limitations in soil engineering.

Letter grade only (A-F). (Lecture-Problems 3 hours)

551. Prestressed Concrete (3)

Prerequisite: C E 459 with a grade of "C" or better.

Principles of prestressed concrete. materials used, applications to structural design, review of existing specifications.

Letter grade only (A-F). (Lecture-Problems 3 hours)

552. Theory of Plates and Shells (3)

Prerequisite: Completion of C E Graduate MATH Requirement.

Review of theory of elasticity; formulation of general equation of bending of thin elastic plates; methods of obtaining exact and approximate solutions; membrane and bending theories of shells with emphasis on cylindrical shells and shells of revolution.

Letter grade only (A-F). (Lecture-Problems 3 hours)

553. Behavior and Design of Steel Structures (3)

Prerequisite: C E 455 with a grade of "C" or better.

Study of torsion, unsymmetrical bending, stability. Plastic design, code provisions and commentary. Design of complete structural systems in steel.

Letter grade only (A-F). (Lecture-Problems 3 hours)

554. Analysis and Design with Composite Materials (3)

Prerequisite: Graduate standing or consent of instructor.

Mechanics of composite materials with design applications in aerospace, civil engineering and construction. Lab experiments on composite samples. Project required with canned computer programs.

(Lecture-Problems 3 hrs) Letter grade only (A-F).

555. Seismic Design II (3)

Prerequisite/Corequisite: CE 495 or consent of instructor.

Characteristics of earthquakes and seismic response spectra, seismic load resisting systems, mechanisms of nonlinear deformation and seismic fuses. Advanced seismic analysis and design of irregular buildings and other structures. Seismic behavior of base isolation structures.

(Lecture-Problems 3 hours) Letter grading only (A-F).

557. Advanced Structural Analysis (3)

Prerequisite: C E 458 with a grade of "C" or better or consent of instructor.

Virtual forces and displacements, strain energy and complementary energy. Force and displacement matrix methods. Computer

applications to planar and space frames, trusses, floor beams and shear wall systems.

(Lecture-Problems 3 hours) Letter grade only (A-F).

558. Dynamics of Structures (3)

Prerequisite: CE 458 with a grade of "C" or better or consent of instructor.

Response of structures and structural components having one or more degrees of freedom. Damping and inelastic action; earthquake and nuclear blasts, dynamic resistance of structural elements and structures, elastic and inelastic response of structures.

(Lecture-Problems 3 hours) Letter grade only (A-F).

562. Water and Wastewater Treatment Design I (3)

Prerequisite: C E 364 with a grade of "C" or better or consent of instructor.

Design of physical and chemical processes for water and wastewater treatment, with emphasis on water treatment plants.

(Lecture-Problems 3 hours) Letter grade only (A-F).

563. Water and Wastewater Treatment Design II (3)

Prerequisite: C E 562 with a grade of "C" or better or consent of instructor.

Design of chemical and biological processes for water and wastewater treatment with emphasis on wastewater treatment.

(Lecture-Problems 3 hours) Letter grade only (A-F).

564. Environmental Health Engineering (3)

Prerequisite: CE 364 with a grade of "C" or better or consent of instructor.

Health and safety aspects of environmental quality and related engineering systems. Regulatory aspects. Projects and case studies.

(Lecture-Problems 3 hours) Letter grade only (A-F).

566. Unit Operations in Environmental Engineering (3)

Prerequisite: CE 364 with a grade of "C" or better or consent of instructor.

Civil engineering applications of the fundamentals of chemical reactions, kinetics of biochemical systems, gas transfer operations, liquid/solid separations, solubility equilibria, adsorption, ion exchange and membrane processes.

(Lecture-Problems 3 hours) Letter grade only (A-F).

567. Liquid and Solid Waste Project Planning and Management (3)

Prerequisite: CE 364 with a grade of "C" or better or consent of instructor.

The presentation of research and case studies of liquid and solid waste project planning and management.

Letter grade only (A-F). (Lecture-Problems 3 hours)

570. Engineering Management Principles and Practices (3)

Prerequisites: CE 406 with a grade of "C" or better, graduate standing or consent of instructor.

Transition of engineers into management. Analysis of technical manager's functions at lower and middle levels as support to corporate management. Principles of engineering management and applications to private and public sector organizations. Case studies of practices in different technical organizations.

Letter grade only (A-F). (Lecture 3 hours)

571. Construction Planning and Cost Control (3)

Prerequisite: Graduate standing or consent of instructor.

Planning, scheduling and resource allocation for a complex construction project. Topics include traditional critical path method, advanced computer expert systems and optimization techniques for construction planning and cost control.

Letter grade only (A-F). (Lecture-Problems 3 hours)

573. Engineering Specifications, Law and Contracts (3)

Prerequisite: Graduate standing or consent of instructor.

Application of law of contracts to construction contracts. Legal matters of concern to engineers.

(Lecture-Problems 3 hours) Letter grade only (A-F).

574. Methods, Analysis and Design of Construction Operations (3)

Prerequisite: CE 571 with a grade of "C" or better or consent of instructor.

Equipment, methods, analysis and design of a construction operation, from site work improvement and data acquisition to modeling and design. Particular attention will be paid to interfacing between design and construction activities and work method development, productivity and safety.

(Lecture-Problems 3 hours) Letter grade only (A-F).

576. Construction Organization and Management (3)

Prerequisite: Graduate standing or consent of instructor.

An introduction to construction organization, control concepts and labor, emphasizing the business aspects of construction engineering management. Topics include legal framework, finance in construction management, labor, accounting and other decision making in the construction business.

(Lecture-Problems 3 hours) Letter grade only (A-F).

577. Business Aspects and Finance of Construction Projects (3)

Prerequisite: CE 406 with a grade of "C" or better or consent of instructor.

Economics and business aspects in construction, financing structure, methodology, and project financial evaluation. Emphasis is on financial aspects in property acquisition, development, construction, and project management.

(Lecture-Problems 3 hours) Letter grade only (A-F).

578. Management of Advanced Technologies in Construction (3)

Prerequisite: Consent of instructor.

New development of advanced technology as applied to construction industry. Productivity and competitiveness in construction on the basis of new technology. Comparison of construction innovation in the U.S., Japan, and other countries.

(Lecture-problems 3 hours) Letter grade only (A-F).

581. Sustainability and Green Construction (3)

Prerequisite: Graduate standing or consent of instructor.

Comprehensive coverage of the green building design and construction practices through high-performance, market-leading design, construction, and operation practices. Presents the green operations and management of new construction and major renovation projects, with emphasis on green building rating systems.

(Lecture 3 hours) Letter grade only (A-F).

582. Management of Productivity and Quality (3)

Prerequisite: CE 570 with a grade of "C" or better or consent of instructor.

System approaches to quality and productivity in construction. Total Quality Management (TQM) in construction engineering and management. Investigation of methods and strategies for improving competitiveness at the company level. Domestic and international competitiveness in the construction business.

(Lecture-Problems 3 hours) Letter grade only (A-F).

585. Utility Rehabilitation and Construction (3)

State of infrastructure systems with a focus on underground facilities, diagnostic and evaluation techniques of underground utility pipes, planning, equipment, materials and methods for rehabilitation and construction of sewer and water mains using Trenchless (i.e. NO-DIG) Technology.

(Lecture-Problems 3 hours) Letter grade only (A-F).

Civil Engineering Courses (C E)

602. Seminar in Civil Engineering (3)

Prerequisite: Graduate Standing or consent of instructor.

Presentation of research in special fields of structures, transportation, environmental, urban, geotechnical, water resources, or construction engineering management. May be repeated once for credit. No more than six units of CE 602.

(Lecture-Problems 3 hours) Letter grade only (A-F).

629. Traffic Operations (3)

Prerequisite: CE 429 or 529 all with a grade of "C" or better, or consent of instructor.

Principles of traffic flow. Highway traffic operations. Evaluation of quality of traffic operations including long-range impact on efficient use of the systems and on safety. Identification and evaluation of measures of effectiveness. Travel demand management strategies and intelligent transportation system applications.

(Lecture-Problems 3 hours) Letter grade only (A-F).

630. Mathematical Modeling in Hydraulic Engineering (3)

Prerequisite: CE 437 with a grade of "C" or better or consent of instructor.

Numerical techniques for solving hydraulic problems in water supply, waste water disposal and storm drainage systems. Prediction of important parameters by mathematical modeling on problems encountered in artificial channels, rivers, estuaries and marine environments.

(Lecture-Problems 3 hours) Letter grade only (A-F).

640./740. Mathematical Modeling in Geotechnical Engineering (3)

Prerequisite: Graduate standing or consent of instructor.

Mathematical modeling techniques used in geotechnical engineering. Application of proven computer programs.

M.S. students register in CE 640; Ph.D. students register in CE 740. Ph.D. students will be required to complete a more rigorous computer project. (Lecture-Problems 3 hours) Letter grade only (A-F).

696. Research Methods (1)

Prerequisite: Candidacy or consent of instructor.

Bibliographical and library techniques and resources. Preparation and presentation of theses and directed studies technical papers.

Letter grade only (A-F).

697. Directed Studies (1-3)

Prerequisite: Graduate standing. Corequisite: CE 696 or written consent of directed studies advisor.

MSCE and MSE degree candidates in Civil Engineering and Interdisciplinary Areas need to have either CE 697 or CE 698 as their program requirement. Theoretical and experimental problems in civil engineering requiring intensive analysis.

Letter grade only (A-F).

698. Thesis (2-6)

Prerequisite: Admission to candidacy for degree of master of science in civil engineering. Corequisite: C E 696 or written consent of faculty advisor.

Planning, preparation and completion of a thesis and/or project in the field of civil engineering.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

699. Thesis (3-9)

Prerequisite: Admission to candidacy for degree of Civil Engineer. Corequisite: C E 696 or written consent of faculty advisor.

Planning, preparation and completion of a thesis in the field of civil engineering practice.

Letter grade only (A-F). May be repeated to a maximum of 9 units.

740./640. Mathematical Modeling in Geotechnical Engineering (3)

Prerequisite: Graduate standing or consent of instructor.

Mathematical modeling techniques used in geotechnical engineering. Application of proven computer programs.

M.S. students register in CE 640; Ph.D. students register in CE 740. Ph.D. students will be required to complete a more rigorous computer project. (Lecture-Problems 3 hours) Letter grade only (A-F).

Construction Engineering Management Courses (CEM)

LOWER DIVISION

121. Construction Drawing I (2) F

An introduction to conventional and computer aided drafting techniques in the relation of drawings for construction. Interpretation of details in construction drawings/blueprints and reference materials. Laboratory: Drafting plans for a residential building using the techniques introduced in the course.

(Lecture 1 hr, laboratory 3 hrs) Letter grade only (A-F).

125. Fundamentals of Construction (3)

Survey of the professional activities and environments of Construction Education. Overview of residential, commercial, institutional, industrial, and heavy civil construction and associated codes, standards, and ethical boundaries. Areas of focus to include type of foundations, materials, contract documents, working drawings and vocabulary.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

200. Concrete Construction (1)

Prerequisite: CEM 125 with a grade of "C" or better. Corequisite: CEM 200L.

Concrete composition, Concrete mix design technology, physical properties of concrete, use of admixtures, concrete batching, curing, testing. Includes physical testing of designed mixes. Modern concepts as fundamental solution to concrete construction challenges. New developments in concrete chemistry and strength theory.

Letter grade only (A-F). Not open for credit to students with credit in CEM 235. (Lecture-Discussion 1 hour)

200L. Concrete Construction Laboratory (1)

Corequisite: CEM 200.

Laboratory exercises in support of CEM 200, Concrete Construction. Develop concrete mix designs and prepare concrete samples for testing, such as compressive strength, slump and air entrainment, and aggregate testing.

(Laboratory 3 hours) Letter grade only (A-F). Not open for credit to students with credit in CEM 235L.

201. Cost Accounting for Construction Engineering (3)

Theoretical Practical and concepts of cost accounting. Variable and fixed costs, break-even point, interrelationships of cost, volume and profits; job-order accounting, general and flexible budgeting, standard costs; product costing methods; cost allocation; inventory planning; control and valuation; joint product.

(Lecture-Problems 3 hours) Letter grade only (A-F).

202. Probability and Statistics for Construction Engineering Management (3)

Prerequisite: High School Algebra.

Statistics and probability theories, sampling, correlation, regression applied to Construction Engineering Management. Laboratory. (Simulation using statistical packages)

(Lecture 2 hours, Activity 2 hours) Letter grade only (A-F).

204. Applied Mechanics–Statics (3)

Prerequisites: MATH 122 and PHYS 100A all with a grade of "C" or better.

Provides an overview of the principles of statics as it relates to building structures and machines. Equilibrium of forces. Free body diagrams. Force components. Bending moments. U.S. and S.I. units of measurements.

(Lecture 2 hours, Activity 2 hours) Letter grade only (A-F).

205. Computer Systems and Programming (2)

Overview of computer systems, Hardware topics include: Updated coverage of the central processing unit and memory, input/output devices, and storage mechanism. Software topics include: operating systems, and systems analysis. For laboratory exercises object oriented programming is used to solve problems.

(Lecture - Discussion 1 hour and Laboratory 3 hrs). Letter grade only (A-F).

225. Residential and Light Commercial Construction Practices and Estimating (3)

Prerequisites: CEM 121, 125 with a grade of "C" or better. Corequisites: CEM 200, 200L.

An introductory course in planning, design, and construction of residential and light commercial buildings including materials, equipment, construction/assembly methods, quantity take-off, and building codes/standards. Field trips or visual presentation is required.

(Seminar 2 hours and Activity 2 hours) Letter grade only (A-F).

UPPER DIVISION**304. Applied Mechanics Strength of Materials (2)**

Prerequisite: CEM 204 with a grade of "C" or better.

Strength of structural materials and applications in building structures and machines. Mechanical properties of materials, structural behaviors of load resisting components associated with construction processes.

(Lecture-Discussion 1 hr, Activity 2 hrs) Letter grade only (A-F).

310. Communication in Engineering Profession (3)

Prerequisites: ENGL 100, COMM 110 all with a grade of "C" or better and Senior standing.

Basic concepts for understanding/practice of communication in world of business for managers and professionals. Language/conversations in business and role in coordinating actions, resolving breakdowns in work and customer satisfaction. Business writing formats, formal report, business conversation. International, technical, and linguistic developments in business communication.

(Lecture - Discussion 3 hours) Letter grade only (A-F).

315. Construction Safety (2)

Prerequisite: CEM 225 or CE 200 all with a grade of "C" or better.

Terminology, safety functions, accident costs, workman's compensation and liability laws, O.S.H.A., governmental and non-governmental codes, regulations and field safety methods pertinent to the construction industry. Field trips.

Not open for credit to students with credit in CEM 328. (Lecture 1 hour, Activity 2 hours) Letter grade only (A-F).

320. Operations Management in Contemporary Organizations (3)

Prerequisites: MGMT 300, ENGR 310 all with a grade of "C" or better.

Overview of Managerial and organizational theories and practices - introduction to concepts, methods to analyze and improve operations performance in construction and in service organizations. Decision-making and problem-solving processes for organizations. management Effectiveness and efficiency at the organizational, process level, and performer level.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

324. Commercial, Institutional and Industrial Construction Practices and Estimating (3)

Prerequisites: CEM 315 with a grade of "C" or better.

Fundamental of commercial construction, including building layout, shallow and deep foundations, introduction to formwork systems, high strength, heavy and light weigh concrete, framing, flooring and roofing systems, construction and expansion joints, masonry and steel construction. Quantity takeoff.

(Lecture-Discussion 2 hours, Activity 2 hours). Letter grade only (A-F).

335. Soil Mechanics Technology (2)

Prerequisite: CEM 304 with a grade of "C" or better.

Corequisite: CEM 335L.

Soil Composition, description, and classification; soil compaction; determination of physical properties of soils.

(Lecture-Problems 2 hours) Letter grade only (A-F).

335L. Soil Mechanics Technology Laboratory (1)

Prerequisite: CEM 304 with a grade of "C" or better.

Corequisite: CEM 335.

Laboratory investigations and experiments in the phenomena of soil mechanics. Field trips.

(Laboratory 3 hours) Letter grade only (A-F).

365. Mechanical Equipment for Buildings (2)

Prerequisite: PHYS 100B with a grade of "C" or better.

Corequisite: CEM 324.

Principles and current practices in water supply, waste disposal, heating, ventilating, air conditioning and fire protection.

(Lecture 1 hour and Activity 2 hours) Letter grade only (A-F).

373. Fundamentals of Integrated Project Delivery (3)

Prerequisite: Junior standing.

General overview of the attributes of all major project delivery systems, procurement methodologies and contracting approaches. (2 hrs lecture, 2 hrs activities) Letter grade only (A-F).

374. Plant Planning and Layout (2)

Prerequisite: CEM 324 with a grade of "C" or better or consent of instructor.

Planning practices, procedures and requirements for laying out industrial facilities.

(Lecture - Discussion 2 hours) Letter grade only (A-F).

375. Electrical Equipment for Buildings (2)

Prerequisites: CEM 324, PHYS 100B all with a grade of "C" or better.

Principles and current practices in the application of electrical equipment and material utilization, sound and signal systems.

(Lecture 1 hour, Activity 2 hours) Letter grade only (A-F).

404. Structural Design I (2)

Prerequisite: CEM 304 with a grade of "C" or better.

Fundamentals of design for structural concrete and masonry buildings in compliance with current building codes.

(Lecture 1 hour, Activity 2 hours) Letter grade only (A-F).

409. Directed Studies in Construction Engineering Management (1-3)

Prerequisites: Senior standing in CEM or consent of instructor.

Advanced work of a technical nature within area of specialization on an experimental or research basis.

Letter grade only (A-F).

421. Construction Planning and Scheduling (3)

Prerequisite: CEM 324 with a grade of "C" or better.

Planning and scheduling of construction projects by graphic charts and Critical Path Method (CPM) networks utilizing manual and computer methods.

Letter grade only (A-F). Field trips. (Lecture-Discussion 2 hrs, Activities 2 hrs)

Construction Engineering Management Courses (CEM)

425. Earthwork and Civil Works Construction Practices (2)

Prerequisite: CEM 324, CE 406 all with a grade of "C" or better.

Fundamentals of earthmoving operations, including volume calculation and mass diagrams, soil protection and dewatering systems, volume change characteristics and fundamentals of moving earth, equipment selection, management and economics.

(Seminar 1 hour and Activity 2 hours) Letter grade only (A-F).

426. Business and Construction Law (3)

Prerequisites: CEM 324; BLAW 220 all with a grade of "C" or better.

Contractors license, mechanics lien, subdivision laws; public works projects, bid and bid requirements. Litigation and legal trends in affirmative action, design professional's liability. Administrative procedures of contractors. Study documentation, claims, waivers, arbitration, bonding, insurance, and indemnification. Discuss ethical practices.

(Lecture-Discussion 3 hrs.) Letter grade only (A-F).

429. Advanced Estimating and Bidding (3)

Prerequisite: CEM 315 with a grade of "C" or better.
Corequisite: CEM 425.

Concept and practices involved in the total estimate bidding process in construction, from initial project selection for submission of final bids. A complete project estimate and bid is prepared by each student.

(Lecture 2 hours, Activity 2 hours) Letter grade only (A-F).

431. Construction Cost Control (3)

Prerequisites: CE 406 and CEM 421 all with a grade of "C" or better.

Establishing and controlling construction projects cost through utilization of procedures, techniques and systems commonly used to control resources allocated and to be expended on construction projects.

(2 hrs lecture, 2 hrs activities) Letter grade only (A-F).

432. Facility Administration (3)

Prerequisite: CEM 421 with a grade of "C" or better.

Management skills for facility management. Emphasis is placed on the management functions of planning, organizing, directing and controlling. Topics include: negotiation; communication; performance measurement; job enrichment; motivation; contracting services and interpersonal relationships.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

433. Facility Finance Management (3)

Corequisite: CEM 432.

Analysis of financial management strategies associated with facility management. Topics include: buy-lease considerations; building efficiency; leasing considerations; cost control and record keeping; facility capitalization; facility budgeting; cost benefit analysis and financial reports.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

434. Facility and Property Management (3)

Prerequisite: CEM 433 with a grade of "C" or better.

Principles of facility and property management. Topics include: property development; cost benefit analysis; site selection; architectural design; layout plans; building engineering; specifications; stacking and blocking plans; aesthetic standards; renovation and contracting standards.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

436. Facility Operations Management (3)

Prerequisite: CEM 432 with a grade of "C" or better.

Analysis of the functions of facility operations management. Topics include: building systems; mechanical systems; energy management; electrical systems; trades operations; grounds maintenance; custodial; furniture and equipment; waste removal contracting services; furniture standards; security systems and planned maintenance.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

438. Structural Design II (2)

Prerequisite: CEM 304 with a grade of "C" or better.

Simplified designs for steel and wood structures in accordance with current building codes. Selection of structural steel and wood systems with structural characteristics of members and connections.

(Lecture 1 hour, Activity 2 hours) Letter grade only (A-F).

443. Principles of Design-Build Project Delivery (3)

Prerequisite: CEM 373 with a grade of "C" or better.

General overview and unique distinguish essential elements of design-build project delivery and how to make the mental-shift needed to transition from traditional Design-Bid-Build to design-build project delivery.

(2 hrs lecture, 2 hrs activities) Letter grade only (A-F).

476. Construction and Maintenance of Infrastructure Facilities (2)

Prerequisites: CEM 425 with a grade of "C" or better.

Comprehensive coverage of the construction principles and technologies embraced by the heavy civil industry. The course presents the construction methods and maintenance practices of heavy civil projects, with emphasis on utility pipes, bridges and roads.

(Lecture 1 hour - Activity 2 hours) Letter grade only (A-F).

485. CEM Senior Seminar (3)

Prerequisites: CEM 429 and 431 all with a grade of "C" or better or consent of instructor.

Advanced work of a technical nature within the construction industry. All students will be required to participate into the Bid Competitions.

(Lecture 2 hours, Activity 2 hours). Letter grade only (A-F).

486. Infrastructure Management (2)

Prerequisites: CEM 476 and CE 406 all with a grade of "C" or better.

Integrated approach to infrastructure management theories and practices including: tools, models and applied systems. The course presents the principles required to manage, preserve and improve the performance of infrastructure systems, with emphasis on utility pipes, bridges and roads.

(1 hr lecture, 2 hrs activities) Letter grade only (A-F).

490. Construction Project Management (3)

Prerequisites: CEM 426, 429 and 431 all with a grade of "C" or better.

Capstone course where integrated project management principles are applied to a case study of actual construction project. Topics include plans and specifications, site logistics, estimating, planning, scheduling, cost control, and contract administration. Additionally, relationships with owners, designers and other officials are analyzed.

(2 hrs lecture, 2 hrs activities) Letter grade only (A-F).

CLASSICS

College of Liberal Arts

Department Chair: Carl Fisher

Department Office: McIntosh Humanities Building (MHB), Rm 515
Telephone / Fax: (562) 985-4239 / (562) 985-4863
Website: www.csulb.edu/colleges/cla/departments/complit-classics

Faculty: Kathryn Chew, Douglas Domingo-Forasté, Paul Scotton

Administrative Support Coordinator: Gretchen Dinger

Students desiring information should contact the department office for an appointment with the advisor.

Career Possibilities

Creative/Media Writer • Editor • Technical Writer • Librarian • Copywriter • Literary Agent • Foreign Service Officer • Public Relations Worker • Medicine • Market Researcher • Educator • Lawyer • Government Affairs Officer • Management Trainee • Underwriter • Claims Adjuster (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Classics includes the study of the languages, literatures and civilizations of ancient Greeks and Romans. Classics offers the Bachelor of Arts in Classics and minors in Classical Studies, Latin, and Greek. Within the Classics major two options are offered, Roman Civilization and Greek Civilization. Students interested in graduate school in either Classics or Classical Archaeology should consult the departmental advisor as early as possible in their academic careers.

The department recommends that some time be spent in either Italy or Greece on one of the many programs designed to familiarize students with the physical remains of these civilizations (College Year at Athens, the American School of Classical Studies at Athens, the Aegean Institute, the Intercollegiate Center for Classical Studies in Rome, etc.). Courses at one of these institutions may be substituted for CSULB courses with departmental approval.

Undergraduate Programs

Bachelor of Arts in Classics (120 units)

Option in Roman Civilization

Requirements

41-43 units with a minimum of 21 upper division units (excluding LAT 300)

1. Elementary Latin (6-8 units) from the following:

LAT 101A Elementary Latin (4)

Prerequisite/Corequisite: Any Foundation course.

and

LAT 101B Elementary Latin (4)

Prerequisite/Corequisite: Any Foundation course.

Prerequisite: LAT 101A or equivalent.

or

LAT 300 Intensive Latin (6)

Prerequisite: None

The requirements in this category may be met by high school equivalents, but total units must still equal 41.

2. Upper Division Latin (12 units) from the following:

LAT 301, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410A, 410B, 410C, 490.

3. Take the following course:

CLSC 202 Latin Literature (3)

Prerequisite: GE Foundation requirements.

4. Take 12 units in Classics from the following:

CLSC 100, 101, 110, 130, 300I, 312I*, 340, 380, 410I, 420I, 440, 490.

* The Department strongly recommends that this course be taken

in Italy in the Winter Session.

5. Take a minimum of 8 units in Antiquity from the following:

GK 101A, 101B; AH 408, 417; CLSC 350; COMM 300; CWL 452**; HIST 131, 314, 318; PHIL 490**;
POSC 301; R/ST 471I.

** With topic appropriate to ancient Rome and advisor approval.

Option in Greek Civilization

Requirements

43 total units with a minimum of 21 upper division units:

1. Elementary Greek (8 units):

GK 101A Elementary Greek (4)

Prerequisite/Corequisite: Any Foundation course.

GK 101B Elementary Greek (4)

Prerequisite: GK 101A or equivalent.

Prerequisite/Corequisite: Any Foundation course.

2. Upper Division Greek (12 units) from the following:

GK 301A, 301B, 401, 402, 403, 404, 405, 490.

3. Take the following course:

CLSC 201 Ancient Greek Literature (3)

Prerequisite: GE Foundation Requirements.

4. Take 12 units of Classics from the following:

CLSC 100, 101, 110, 130, 300I, 311I*, 340, 380, 410I, 420I, 430, 490.

*The Department strongly recommends that this course be taken

in Greece during the winter session.

5. Take a minimum of 8 units in Antiquity from the following:

LAT 101A, 101B, 300; AH 408, 416; CLSC 350; COMM 300; CWL 452**; HIST 131, 313, 318; PHIL 421, 422, 490**; POSC 301; R/ST 471I.

**With topic appropriate to ancient Greece and advisor approval.

Single Subject Teaching Credential in Latin

The subject matter program in Latin consists of 37 units in Latin and related areas. Completion of these courses meets the subject matter competence requirement for the Single Subject Teaching Credential in Latin. Courses taken for subject matter competence for the teaching credential also count toward units needed for the Classics B.A., Option in Roman Civilization.

Prospective students should consult the Latin Education Advisor and the Languages Other Than English (LOTE) Program Advisor early to plan their programs.

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective teachers of Latin are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the website (www.ced.csulb.edu/single-subject) for a description of professional preparation requirements, courses, and application procedures.

Requirements

1. Take all the following:
 - LAT 301 Intermediate Latin (4)
Prerequisite: LAT 101B or 300 or equivalent.
 - LAT 401 Vergil (3)
Prerequisite: LAT 301 or equivalent.
 - LAT 402 Cicero (3)
Prerequisite: LAT 301 or equivalent.
 - LAT 410A Latin Prose Composition (1)
Prerequisite: LAT 301 or equivalent. Beginning Latin prose composition
 - LAT 410B Latin Prose Composition (1)
Prerequisite: LAT 410A. Continuation of prose composition.
 - LAT 410C Latin Prose Composition (1)
Prerequisite: LAT 410B. Continuation of prose composition.
2. Take seven courses from the following:
LAT 403, 404, 405, 406, 407, 408, 409, 490, 499.
3. Take one course from the following:
HIST 312I, 314; CLSC 420I, 440; AH 417.

Students are required to keep a portfolio of written work produced in the above classes with instructor comments. Members of the Latin faculty evaluate the portfolio according to established criteria. The credential candidate also takes an exit examination administered by the Latin faculty which will assess pronunciation, speech and conversation, listening and writing, and reading. Credential students also produce a Latin play.

Minor in Classical Studies

This minor is offered to students majoring in any subject. Interested students should contact the Classics Advisor prior to or during the first semester of taking courses.

The Minor consists of a minimum of 20 units that must include a minimum of 9 units of upper division coursework selected from the following:

1. Take two courses in Latin or Greek in the same language.
2. Take a minimum of two courses from the following:
CLSC 100, 101, 110, 130, 201, 202, 300I, 340, 380, 410I, 420I, 430, 440, 490; CWL 452 (with an appropriate topic); or additional courses in Latin or Greek, not necessarily in the same language as selected in (1).

3. Take a minimum of two courses from the following:
CLSC 311I or HIST 310I; CLSC 312I, or HIST 312I;
CLSC 350; HIST 313, 314; PHIL 421, 422; AH 408, 416, 417; ANTH 140, 450; POSC 301; R/ST 471I.

Minor in Greek

A minimum of 20 units in Greek which must include four upper division courses. Prospective teachers are strongly urged to take, in addition, HIST 313, CLSC 101, 300I, and other courses touching on the ancient world.

The Minor in Greek is available to any non-Classics major.

Minor in Latin

A minimum of 20 units in Latin which must include four upper division courses. Prospective teachers are strongly urged to take, in addition, HIST 314, CLSC 101, and 300I, and other courses touching on the ancient world.

The Minor in Latin is available to any non-Classics major.

Classics Courses (CLSC)

LOWER DIVISION

100. The Classical World of Greece and Rome (3)

Prerequisite/Corequisite: One GE Foundation course.

Introduction to the literature, language and culture of the ancient Greek and Roman worlds. Use of primary sources, such as drama, epic, inscriptions, and the visual arts to explore issues of gender, mythology, theater, combat and sports, slavery and family.

101. Greek Mythology (3)

Prerequisite/Corequisite: One GE Foundation course.

A survey of the major Greek myths, sagas and tales of gods and heroes, and their influence on later eras, particularly ancient Rome.

Not open for credit to students with credit in CLSC 191.

110. Classical Archaeology (3)

Prerequisites/Corequisite: One GE Foundation course.

Introduction to the study of the material culture of Greece, Etruria and Rome from the Minoans to Constantine. Covers history of archaeology, chronology and dating systems and analytical methods of material culture including urban planning, construction techniques, and architecture.

130. Women in the Classical World (3)

Prerequisite/Corequisite: One GE Foundation course.

A survey of the roles and status of women in ancient Greece, Rome and Etruria through literature by and about women and other ancient source material.

Not open for credit to students with credit in CLSC 135.

201. Ancient Greek Literature (3)

Prerequisite: GE Foundation requirements.

A survey of the literature of ancient Greece in translation from Homer and Hesiod to Lucian and the novelists (c. 700 BC to AD 400).

202. Latin Literature (3)

Prerequisite: GE Foundation requirements.

A survey of the literature of the ancient Romans in translation, focusing on major authors from Plautus to Augustine (200 BC to AD 450).

210. Roman Myth and Legend (3)

Prerequisite: One GE Foundation course.

A survey from literature and artifacts of the major Roman myths and legends of heroes and gods focusing on their impact and influence on Rome's development and identity as well as that on subsequent cultures.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300I. Pagan Culture (3)

Prerequisites: GE Foundation requirements, completion of one or more Explorations course, and upper division standing.

Examines the mass cultures of the Greek and Roman periods, its worldview, and its philosophic and religious underpinnings through literary, artistic, archaeological and documentary sources.

Not open for credit to students with credit in CLSC 310I.

311I. Greek World (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Interdisciplinary examination of the society and culture of ancient Greece emphasizing literature, the arts, and history. Topics include Homer, mythology and religion, lyric poetry, the Persian and Peloponnesian Wars, the Athenian Golden Age, and Greek contributions to the modern world.

Same course as HIST 310I. Not open for credit to students with credit in CWL 310I or HIST 310I.

312I. Roman World (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Interdisciplinary examination of the society and culture of ancient Rome emphasizing literature, the arts, and history. Topics include genesis and growth of the Roman world, transition from republic to Empire, imperial maturity, and Roman contributions to the modern world.

Same course as HIST 312I. Not open for credit to students with credit in CWL 312I or HIST 312I.

340. The Underworld (3)

Prerequisite: One course in Classics or consent of instructor.

In-depth investigation of the realm of the dead as given in ancient Greek and Roman myth. Topics include its topography and population, journeys to it, and interpretations of it. Comparative analysis of ancient myths of the underworld from other cultures.

350. Hollywood Does Rome (3)

Prerequisites: CLSC 100 or 101 or 202 or consent of instructor.

Investigation of filmmakers' motives and methods used to portray ancient Romans from the beginnings of cinema to the present. Topics include 'imaging' the past, 'power' of image, community and society, cultural imperialism, film theory, 'language' of myth, and reception theory.

Same course as FEA 350. Not open for credit to students with credit in FEA 350.

366. Classical Stories, Modern Voices (3)

Prerequisite: Completion of Foundation courses and Upper Division standing.

Comparative readings of ancient literature in a global context, including analysis of classical literary genres and archetypes, their modern interpretations/rewritings, and their echoes in popular culture. Same course as CWL 366.

Not open for credit to students with credit in CWL 366.

380. Ancient Eats (3)

Prerequisite: Completion of GE Foundation requirements or consent of Instructor.

Survey of food in the Roman Empire and elsewhere in the ancient Mediterranean world. Topics include farming, sustainability, trade, purchasing, processing, production, ingredients, recipes, tools, the place and function of feasts, and food in myth, cult and philosophy.

410I. Law and Literature in the Classical World (3)

Prerequisites: Completion of GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Introduction to the study of philosophy and interpretation of law through classical literature that encompasses fundamental legal questions and ancient legal source material and the application of modern theories of literary criticism to ancient and modern law.

420I. Classical Drama (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Examination of the plays of Aeschylus, Sophocles, Euripides, and Aristophanes both as literature and as theater. Includes origins of tragedy and comedy, later Greek and Roman drama, and debt of modern drama to the theater of Greeks.

Not open for credit to students with credit in CLSC 421.

430. Archaeology of Ancient Greece (3)

Prerequisite: one of the following courses: CLSC 110, ANTH 140, HIST 131, or AH 416/516, or consent of instructor.

The material culture of ancient Greece, from Minoans to Constantine including urban planning, architecture, sculpture, painting, ceramics, burial customs, religious and secular artifacts, epigraphy and numismatics. Examines chronology and dating systems, analytical methods and history of classical archaeology in Greece.

440. Archaeology of the Roman World (3)

Prerequisite: Completion of one of the following: CLSC 110, ANTH 140, HIST 131, or AH 417/517, or consent of instructor.

The material culture of Roman empire, from Villanovans to Constantine including urban planning, architecture, sculpture, painting, ceramics, burial customs, religious and secular artifacts, epigraphy and numismatics. Examines chronology and dating systems, analytical methods and history of archaeology of Roman empire.

490. Selected Topics in Classics (1-4)

Prerequisite: Consent of instructor.

Topics of special interest in Classics selected for intensive study.

May be repeated to a maximum of 6 units with different topics.

Topics announced in the *Schedule of Classes*.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special interest.

May be repeated to maximum of 6 units.

GRADUATE LEVEL

598. Directed Readings in Classics (1-4)

Prerequisites: Graduate standing and consent of instructor.

Selected topics in Classics or Classical Archaeology will be studied in depth.

A term paper is required. Letter grade only (A-F).

Greek Courses (GK)

LOWER DIVISION

101A. Elementary Greek (4)

Prerequisite/Corequisite: Any Foundation course.

Introduction to ancient Greek, the language of Sophocles, Plato, Aristophanes, Homer and Demosthenes. Forms, syntax and basic vocabulary leading also to a reading knowledge of New Testament Greek. Designed for those beginning a study of ancient Greek.

101B. Elementary Greek (4)

Prerequisite: GK 101A or equivalent.

Prerequisite/Corequisite: Any Foundation course.

Continuation of GK 101A.

102. New Testament and Early Christian Greek (1)

Corequisite: GK 101B.

Supplemental graded readings and writing exercises in New Testament Koine Greek and other very early Christian literature such as the Didache and the Epistle of Clement.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper-division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

301A-B. Intermediate Greek (3-3)

301A. Prerequisite: GK 101B or equivalent.

301B. Prerequisite: GK 301A or equivalent.

Continued study of the language and culture. Reading and translating selections of classical writers.

401. Homer (3)

Prerequisite: GK 301B or equivalent.

Translation and literary study of selected books of the Iliad or Odyssey.

402. Plato (3)

Prerequisite: GK 301B or equivalent.

Translation and literary study of one or more dialogues of Plato.

403. Tragic Poets (3)

Prerequisite: GK 301B or equivalent.

Reading of a play of Aeschylus, Sophocles or Euripides.

May be repeated to a maximum of 9 units with different topics in different semesters.

404. Historians (3)

Prerequisite: GK 301B or equivalent.

Reading from selections from Herodotus, Thucydides and/or Xenophon.

May be repeated to a maximum of 9 units with different topics in different semesters.

405. Attic Orators (3)

Prerequisite: GK 301B or equivalent.

Reading of a speech of Demosthenes, Antiphon, Andocides, Lysias, Isocrates, Aeschines, Hyperides, Isaeus, Lycurgus, Dinarchus or selections from various orators.

May be repeated to a maximum of 9 units with different topics in different semesters.

490. Selected Topics in Greek (1-3)

Prerequisites: 12 units of upper-division Greek courses or consent of instructor.

Translation and literary study of the selected works of an author, genre (e.g., oratory) or period (e.g., Hellenistic Greek).

May be repeated to a maximum of 12 units. Topics announced in the *Schedule of Classes*.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special interest.

May be repeated to a maximum of 6 units.

Latin Courses (LAT)

LOWER DIVISION

101A. Elementary Latin (4)

Prerequisite/Corequisite: Any Foundation course.

Introduction to the Latin language as used by Vergil, Cicero, Livy, Catullus, Tacitus, and Juvenal as well as late Latin and medieval writers. Basic forms, syntax, and basic vocabulary leading to a reading knowledge.

101B. Elementary Latin (4)

Prerequisite/Corequisite: Any Foundation course. Prerequisite: LAT 101A or equivalent.

Continuation of LAT 101A.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300. Intensive Latin (6)

Equivalent to two semesters of Elementary Latin. Designed for undergraduate and graduate students with little or no knowledge of Latin, whose degree programs require or recommend a reading knowledge of the language.

Not open for credit to students with credit in LAT 101B or LAT 321.

301. Intermediate Latin (4)

Prerequisite: LAT 101B or 300 or equivalent.

Continued study of the language and culture of the ancient Romans. Reading and translating selections of classical writers.

401. Vergil (3)

Prerequisite: LAT 301 or equivalent.

Reading of selections from Vergil's Aeneid, and/or selections from the Georgics and Eclogues.

May be repeated to a maximum of 6 units with different topics in different semesters, which includes previously earned credit in GK 352.

402. Cicero (3)

Prerequisite: LAT 301 or equivalent.

Reading of one or more works of Cicero.

May be repeated to a maximum of 6 units with different topics in different semesters, which includes previously earned credit in GK 351.

403. Latin Lyric and Elegy (3)

Prerequisite: LAT 301 or equivalent.

Reading of selected poems of one or more of the lyric and elegiac poets: Catullus, Horace (Odes, Epodes, Carmen Saeculare), Propertius, Tibullus, and Ovid (Amores).

May be repeated to a maximum of 6 units with different topics in different semesters.

404. Latin Epic (3)

Prerequisite: LAT 301 or equivalent.

Reading of selections from Lucretius' *De Rerum Natura* and/or Ovid's *Metamorphoses*.

May be repeated to a maximum of 6 units with different topics in different semesters.

405. Historiography of the Republic (3)

Prerequisite: LAT 301 or equivalent.

Reading of selections from Sallust and/or Julius Caesar.

May be repeated to a maximum of 6 units with different topics in different semesters.

406. Historiography of the Empire (3)

Prerequisite: LAT 301 or equivalent.

Reading of selections from Livy and/or Tacitus.

May be repeated to a maximum of 6 units with different topics in different semesters.

407. Latin of the Early Principate (3)

Prerequisite: LAT 301 or equivalent.

Reading of selections from the following authors and works: Pliny the Younger, Martial, Seneca's letters, Suetonius.

May be repeated to a maximum of 6 units with different topics in different semesters.

408. Roman Comedy (3)

Prerequisite: LAT 301 or equivalent.

Reading of one or more plays of Plautus and Terence.

May be repeated to a maximum of 6 units with different topics in different semesters.

409. Roman Satire (3)

Prerequisite: LAT 301 or equivalent.

Reading of selected satires of Horace, Juvenal, or Persius, the Satyricon of Petronius or the *Apocolocyntosis* of Seneca the Younger.

May be repeated to a maximum of 6 units with different topics in different semesters.

410A-B-C. Latin Prose Composition (1-1-1)

A. Prerequisite: LAT 301 or equivalent. Beginning Latin prose composition

B. Prerequisite: LAT 410A. Continuation of prose composition.

C. Prerequisite: LAT 410B. Continuation of prose composition.

Thorough instruction in writing Latin prose at the advanced level. Extensive coverage of syntax and morphology of Latin.

490. Selected Topics in Latin (1-3)

Prerequisites: LAT 301 or equivalent.

Translation and study of authors of a particular period (e.g., Medieval Latin) or of a methodological specialty (e.g., Latin epigraphy).

May be repeated to a maximum of 9 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

A. Medieval Latin

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special interest.

May be repeated to a maximum of 6 units.

COMMUNICATION STUDIES

College of Liberal Arts

Chair: Amy Bippus

Department Office: Academic Services (AS), Room 309
Telephone / FAX: (562) 985-4301 / 985-4259

Faculty: Jessica Abrams, Terre Allen, Jennifer Asenas, Guy Bachman, Amy Bippus, San Bolkan, Aaron Cargile, Sharon D. Downey, Ragan Fox, Katie Gibson, Amy Heyse, Ann Johnson, Kevin Johnson, Patricia Kearney, Eriko Maeda, James S. Manseau Saucedo, Lynda McCroskey, Valerie C. McKay, Mary McPherson, Timothy G. Plax, Karen Rasmussen, Marc Rich, José Rodríguez, Craig R. Smith, Ebony Utley, Stacy Young

Department Administrator: Wendy Lucas

Hauth Center for Communication Skills

Administrative Director: Tim Plax

Technical Director: Scott Allen

Students desiring information about the Communication Studies program at CSULB should contact the department undergraduate advisor or the graduate advisor.

Career Possibilities

Public Relations Specialist • Personnel Specialist • Claims Adjuster • Radio/TV Announcer • Community Organization Worker • Actor/Actress • Management Trainer • Foreign Service Officer • Advertising Worker • Development Officer/Fundraiser • Lobbyist • Clergy • Lawyer • College Professor • Freelance Writer • Researcher • Politician • Promoter • Speech Writer (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Department of Communication Studies provides students with a liberal arts education in communication arts and sciences with specialized training in communication skills and practices at the baccalaureate and graduate levels. The Department of Communication Studies provides two major services to the University community. Each student is required to consult with the department undergraduate or graduate advisor as appropriate for advisement.

NOTE: Lower-division 100 and 200 level classes taken through California Community Colleges satisfy lower-division CSULB Communication Studies requirements.

Undergraduate Programs

Bachelor of Arts in Communication Studies (120 units)

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

This requires 48 units of which 36 are upper division. All Communication Studies majors, regardless of option chosen, are required to complete the following core:

1. Lower Division Core (12 units):

Take all the following:

COMM 110 Interpersonal Communication (3)
Corequisite: Concurrent enrollment in COMM 110 Workshop.

COMM 130 Essentials of Public Speaking (3)
Prerequisites: None

COMM 131 Essentials of Argumentation (3)
Corequisite: Concurrent enrollment in 131 workshop.

*COMM 200 Gateway to Communication Studies (3)
Prerequisites: None

*Students must take COMM 200 in their first year of declaring the major

2. Upper Division Core (18 units):

Take all the following courses:

COMM 300 Survey of Rhetorical Theory (3)
Prerequisite: GE Foundation requirements.

COMM 301 Communication Criticism (3)
Prerequisite: COMM 300.

COMM 306 Communication Theory (3)
Prerequisites: None

COMM 307 Measurement in Communication Research (3)
Prerequisites: COMM 306 and completion of University GE requirement in mathematics.

COMM 309 Language and Behavior (3)
Prerequisites: None

COMM 330 Intercultural Communication (3)
Prerequisites: None

3. Elective Courses: An additional 18 units of course work (of which at least 9 units must be in 400-level courses) are required for the major.

18 units drawn from: COMM 331, 333, 334, 335, 337, 338, 344, 352, 355, 358, 400, 410, 411, 412, 414, 415, 420, 421, 422, 430, 432, 433, 434, 436, 437, 439, 441I, 442I, 444, 449, 450, 452, 490

Only courses in which a "C" or better have been earned may be applied to satisfy upper division requirements in the major. Classes taken in which less than adequate grades are received must be repeated until an adequate grade is achieved. Majors will not be permitted to take any upper division class in the major on a credit/non-credit basis.

Option in Communication, Culture, and Public Affairs (120 units)

Requirements

This option requires 48 units of which 36 are upper division. All Communication Studies majors, regardless of option chosen, are required to complete the following core.

1. Lower Division Core (12 units):

Take all the following:

COMM 110 Interpersonal Communication (3)
Corequisite: Concurrent enrollment in COMM 110 Workshop.

COMM 130 Essentials of Public Speaking (3)
Prerequisites: None

COMM 131 Essentials of Argumentation (3)
Corequisite: Concurrent enrollment in 131 workshop.

*COMM 200 Gateway to Communication Studies (3)
Prerequisites: None

*Students must take COMM 200 in their first year of declaring the major

2. Upper Division Core (18 units):

Take all the following courses:

COMM 300 Survey of Rhetorical Theory (3)
Prerequisite: GE Foundation requirements.

COMM 301 Communication Criticism (3)
Prerequisite: COMM 300.

COMM 306 Communication Theory (3)
Prerequisites: None

COMM 307 Measurement in Communication Research (3)
Prerequisites: COMM 306 and completion of University GE requirement in mathematics.

COMM 309 Language and Behavior (3)
Prerequisites: None

COMM 330 Intercultural Communication (3)
Prerequisites: None

3. Electives (18 units, 9 units must be 400-level) selected from the following:

COMM 331, 333, 335, 336, 338, 352, 412, 415, 422, 430, 433, 434, 436, 437, 439, 441I, 442I, 449, 490 (consult with a communication studies advisor about which 490 course are appropriate for this degree option).

Only courses in which a "C" or better have been earned may be applied to satisfy upper division requirements in the major. Classes taken in which less than adequate grades are received must be repeated until an adequate grade is achieved. Majors will not be permitted to take any upper division class in the major on a credit/non-credit basis.

Option in Interpersonal and Organizational Communication (120 units)

Requirements

This option requires 48 units of which 36 are upper division. All Communication Studies majors, regardless of option chosen, are required to complete the following core.

1. Lower Division Core (12 units):

Take all the following:

COMM 110 Interpersonal Communication (3)
Corequisite: Concurrent enrollment in COMM 110 Workshop.

COMM 130 Essentials of Public Speaking (3)
Prerequisites: None

COMM 131 Essentials of Argumentation (3)
Corequisite: Concurrent enrollment in 131 workshop.

*COMM 200 Gateway to Communication Studies (3)
Prerequisites: None

*Students must take COMM 200 in their first year of declaring the major

2. Upper Division Core (18 units):

Take all the following courses:

COMM 300 Survey of Rhetorical Theory (3)
Prerequisite: GE Foundation requirements.

COMM 301 Communication Criticism (3)
Prerequisite: COMM 300.

COMM 306 Communication Theory (3)
Prerequisites: None

COMM 307 Measurement in Communication Research (3)
Prerequisites: COMM 306 and completion of University GE requirement in mathematics.

COMM 309 Language and Behavior (3)
Prerequisites: None

COMM 330 Intercultural Communication (3)
Prerequisites: None

3. Elective Courses: An additional 18 units of course work (of which at least 9 units must be in 400-level courses) are required for the major.

18 units drawn from: 334, 335, 337, 344, 355, 400, 410, 411, 412, 414, 420, 421, 432, 444, 449, 450, 452, 490 (consult with a communication studies advisor about which 490 course are appropriate for this degree option)

Only courses in which a "C" or better have been earned may be applied to satisfy upper division requirements in the major. Classes taken in which less than adequate grades are received must be repeated until an adequate grade is achieved. Majors will not be permitted to take any upper division class in the major on a credit/non-credit basis.

Minor in Communication Studies

The Minor in Communication Studies is available to any non-Communication Studies major. A minimum of 21 units in Communication Studies is required, of which at least 15 must be upper division, chosen in consultation with the Department Undergraduate Advisor.

Graduate Programs

Master of Arts in Communication Studies

This degree allows the student to construct a personalized program that draws from the following areas: rhetorical, interpersonal, organizational, or intercultural communication, performance studies, forensics or instructional communication.

Admission

1. Application for Admission to the University. The office of Enrollment Services processes applications to the University (forms available through that office) and forwards those meeting University criteria to the Department.
2. Application to the Department. In addition to the University application, prospective students are also required to submit an application and supporting materials directly to the Department. An application form along with detailed instructions are available on-line at the Department's website (<http://www.csulb.edu/depts/comstudies>). Generally, the department accepts students who have a minimum 3.0 Overall Undergraduate GPA and a minimum combined score of 900 on the Verbal and Quantitative sections of the Graduate Record Exam (minimum of 400 per section) on August 1, 2011, the GRE revised the test and scoring system. For tests taken after, August 1, 2011, applicants will need a minimum combined score of 297 on the Verbal and Quantitative sections, with no less than 146 on either section. The decision to admit is never based

on a single indicator. Students who do not meet these requirements may seek admission through appeal.

3. Admissions Appeal Policy. Students whose GPA and/or GRE scores are below the minimum may seek admission through an appeal letter to the Graduate Advisor. The Graduate Advisor shall distribute copies of any appeal letters to the Graduate Committee. The Graduate Committee shall consider the merits of each appeal letter and determine whether an exception ought to be made with regard to the GPA and/or GRE requirements. The decision of the Graduate Committee is final. Students who are not accepted into the program may not enroll in graduate courses in the Department of Communication Studies. Graduate courses taken through Open University will not apply to the student's degree program in the Department of Communication Studies.
4. Teaching Associateships and Graduate Assistantships. Employment as a Teaching Associate or Graduate Assistant falls under the jurisdiction of the Personnel Committee of the Department. The positions pay approximately \$950.00 per month. Tuition is not waived. Interested students should send letters of application, transcripts, GRE scores, and three letters of recommendation to: Chair, Department of Communication Studies, California State University, Long Beach, 1250 Bellflower Blvd., MHB-717, Long Beach, CA 90840-2407.
5. Advising. Consult the Graduate Advisor to plan a program of study and to receive information regarding Department procedures prior to enrollment. The Graduate Advisor and/or a faculty mentor will guide students through their programs.

General Considerations

1. Requirements
 - A. All requirements date from the time at which a student receives approval for Advancement to Candidacy, not from when a student begins graduate study.
 - B. The Department requires a minimum of thirty semester hours (including four thesis credits in the Thesis Option) for the Master's Degree. The University requires a minimum of twenty-four graduate credits be completed in residence.
 - C. Students must either pass the Department's comprehensive examination or write an acceptable thesis.
 - D. The Department expects its graduate students to possess the writing skills necessary for advanced study. Fulfill the Graduation Writing Assessment Requirement (GWAR). Students should fulfill the GWAR no later than the end of the first semester of graduate study. If you believe you have taken an examination equivalent to fulfillment of the GWAR, consult the Graduate Advisor.
2. Prerequisites
 - A. Units obtained fulfilling prerequisites or deficiencies do not count toward the minimum of thirty semester hours needed to complete the Master's degree.
 - B. Students must meet all prerequisites before enrolling in graduate courses, except for COMM 541 or 546. Individuals may petition for waiver of this rule prior to registering for courses if compelling reasons warrant such a waiver.

3. Students must comply with all University regulations outlined in the CSULB *Catalog*.

Prerequisites

Individuals with a Bachelor's degree in Communication Studies (or its equivalent) from a fully-accredited college or university must have approved coursework in the following:
COMM 300, 301, 306, 307, 309

Requirements

1. A minimum of thirty hours of graduate work in Communication Studies distributed as follows:
 - A. Complete prior to advancement to candidacy and preferably within the first semester of graduate work:
COMM 541 Rhetorical Theory and Criticism I (3)
Prerequisites: None
COMM 546 Communication Theory and Research I (6)
Prerequisites: None
 - B. Complete preferably in the second semester:
COMM 640 Rhetorical Theory and Criticism II (3)
Prerequisite: COMM 541.
COMM 646 Communication Theory and Research II (6)
Prerequisites: COMM 307 (or equivalent) and 546.
 - C. 18 units of graduate level electives or 15 units of electives plus 3 thesis units
2. No more than 3 units may be taken outside the Communication Studies Department or transferred from another institution. The graduate advisor must approve any courses taken outside the department or transferred from another institution.
3. Completion of the Department's Comprehensive Examination or of an acceptable thesis.
4. Please note that Internships and student teaching cannot be included in the required thirty units.

Questions

Any questions not answered in these pages should be directed to the Department Graduate Advisor.

Graduate Courses in Communication Studies

Students may apply the following graduate courses in Communication Studies toward the Master's Degree:
COMM 531, 541, 546, 590, 610, 611, 614, 620, 630, 633, 634, 635, 636, 637, 639, 640, 646, 649, 650, 697, 698

Undergraduate Core Courses

COMM 300, 301, 306, 307, 309, and 330.

Communication Studies Courses (COMM)

LOWER DIVISION

110. Interpersonal Communication (3)

Corequisite: Concurrent enrollment in COMM 110 Workshop.

Lecture: Basic characteristics of processes underlying the formation, maintenance and termination of interpersonal relationships; theoretical and practical implications of these characteristics in various forms of interpersonal communication.
Workshop: Planned exercises and activities to develop interpersonal communications skills.

(Lecture 2 hours, Workshop 2 hours). Not open for credit to

students with credit in COMM 210.

130. Essentials of Public Speaking (3)

Composition and delivery of speeches to inform and persuade. Logical organization is stressed.

131. Essentials of Argumentation (3)

Corequisite: Concurrent enrollment in 131 workshop.

Lecture: Theory of argumentation; examination of forms and sources of evidence, inductive and deductive arguments, construction of case briefs, and refutation.

Workshop: Develops critical thinking abilities with planned exercises and speeches including construction and presentation of arguments, cases, and refutation.

132. Small Group Discussion (3)

Basic principles and techniques of discussion. Relationship of discussion to democratic processes and contemporary society including a study and practice of critical thinking and problem-solving techniques in various group discussion settings.

200. Gateway to Communication Studies (3)

Introduction to the academic discipline of communication studies with emphasis on multiple epistemological, theoretical, and methodological issues relevant to the systematic inquiry and pursuit of knowledge about human communication.

Letter grade only (A-F).

220. Elements of Organizational Communication (3)

Role of communication in achieving organizational goals; theory and practice of communication in private and public organizations; techniques to enhance understanding in organizations.

236. Forensic Activity (1-3)

Participation in intercollegiate forensic activities. Any student who expects to participate in such activities during the semester should enroll. Specific assignments will be determined in consultation with the staff.

May be repeated to a maximum of 4 units. (2-6 hrs. activity)

UPPER DIVISION

300. Survey of Rhetorical Theory (3)

Prerequisite: GE Foundation requirements.

A history of major rhetorical theories from the ancient Greeks to the Twentieth century. Theorists include Gorgias, Plato, Aristotle, Cicero, Quintilian, Augustine, Machiavelli, Locke, Marx, Freud, the existentialists, and others.

301. Communication Criticism (3)

Prerequisite: COMM 300.

The analysis and criticism of public communication events including speeches, editorials, advertisements, and mass media from a variety of rhetorical perspectives.

306. Communication Theory (3)

Conceptual perspectives and studies of coding, meaning, thinking, information, and persuasion within interpersonal, group and organizational contexts; theoretical contributions from other disciplines.

307. Measurement in Communication Research (3)

Prerequisites: COMM 306 and completion of University GE requirement in mathematics.

Application of the scientific method to the study of speech communication; examination of the role empirical methodologies play in communication research; fundamental statistical processes.

Letter grade only (A-F). (Not open for credit to students with credit in COMM 305)

309. Language and Behavior (3)

Symbolic basis of human communicative behavior; relationship between language and behavior; investigation and analysis of discourse and behavioral effects.

330. Intercultural Communication (3)

Study of the relationship between culture and communication with emphasis given to social, psychological, linguistic and nonverbal variables; problems in the practice of intercultural communication.

331. Argumentation and Debate (3)

Prerequisite: GE Foundation requirements.

Techniques of argumentation and their application to debate; logic, reasoning and fallacies of reasoning; experience in various forms of formal argument and debate; techniques of debate program administration.

333. Interpretive Communication of Literature (3)

Derivation of meaning in various literary forms and its communicative interpretation to specific audiences.

334. Business and Professional Communication (3)

Prerequisite: COMM 130 or consent of instructor.

Skills and technologies related to the assessment, strategic planning, development, implementation, and evaluation of effective communication in the business and professional setting.

335. Persuasive Speaking (3)

Prerequisites: GE Foundation requirements.

Skills necessary for advanced public speaking in various venues including legislative, legal, and ceremonial public address; explores various theories of motivation including speaker credibility, emotional appeals, of evidence and argument, style in language, delivery and audience analysis skills.

336. Forensic Activity (1-3)

Participation in intercollegiate forensic activities. Any student who expects to participate in such activities during the semester should enroll. Student's specific assignments will be determined in consultation with the staff.

May be repeated to a maximum of 4 units. (2-6 hrs. activity)

337. Professional Event Planning (3)

Organization and direction of professional, business and political conferences or conventions; program simulation; leadership of and participation in decision making and parliamentary sessions.

May be repeated to a maximum of 6 units.

338. Ensemble Interpretive Reading (3)

Programming and presentation of prose, poetry and drama by an ensemble of readers. Emphasis is placed on experimental presentations and on the development of analytical insight into literary forms.

344. Theory and Techniques of Interviewing (3)

Theory and techniques of oral communication in the process of interviewing. Practical application in employment, information gathering, and persuasive interviews.

352. Story Telling (3)

Cultural heritage in story telling; analysis of story types for oral presentation; techniques of preparation, presentation and listening.

355. Communication in the Classroom (3)

Designed for prospective teachers; communication theories, and skills applicable to the teaching of speech communication; focus on communication strategies that contribute to greater student learning; develop an instructional package for teaching speech communication.

358. Speech Arts for Children (3)

Use of creative dramatics, improvisations, puppetry, choral speech, radio, television and group discussion for the purpose of developing fluency, responsiveness and imagination in children. Integration of speech arts activities with curricular subjects will be stressed. Opportunity to apply the theories in actual situations.

400. Nonverbal Communication (3)

Prerequisites: COMM 110 Lecture.

Basic characteristics of the nonverbal elements of human communication in the oral communication setting.

410. Advanced Concepts in Interpersonal Communication (3)

Prerequisites: COMM 110.

Systems and symbolic interaction approaches to interpersonal communication; consideration of interpersonal needs, self disclosure, understanding, interpersonal perception, interpersonal attraction, and social conflict; rule and performance-centered theories of interpersonal communication.

411. Communication in Conflict Resolution (3)

Prerequisites: GE Foundation requirements, completion of one or more GE Exploration courses, and upper division standing.

Analytical investigation of the nature and dynamics of interpersonal conflict; approaches to the study and understanding of conflict management as examined from intrapersonal, interpersonal, intragroup, organizational, and international perspectives.

412. Gender and Communication (3)

Prerequisites: GE Foundation requirements, completion of one or more GE Exploration courses and upper-division standing.

Survey of theories and research literature to increase students' understanding of and familiarity with major issues regarding communication between men and women in various contexts.

414. Communication in Families (3)

Role of communication in families; theoretical perspective of family interaction, current family issues, intercultural aspects of family interaction, effects of changing career/family roles, and intergenerational interaction.

Letter grade only (A-F).

415. Rhetoric of Social Movements and Protest (3)

Examines goals, strategies, and effects of groups that form to advocate social, political, and/or moral change. Focuses on how (agitator) groups communicate messages, and how institutions of power (establishment) respond in order to control or resist change.

420. Advanced Concepts in Organizational Communication (3)

Prerequisites: COMM 220.

Philosophy, methods and designs for studying the communication systems of complex organizations; organizational communication-needs assessment, methods for developing and improving communication in organizations are examined.

421. Communication in Bargaining and Negotiation (3)

Role of communication in the decision-making process of negotiation and bargaining; emphasis on the functions of communication in resolving disputes through bargaining. Successful completion of COMM 411 is highly recommended.

422. Media Effects (3)

Prerequisites: Upper-division standing and GE Foundation requirements.

Introduces students to the study of the effects of mass communication by examining some of the classic studies in the field of communication as well as exploring contemporary cultural, social, political and psychological effects of the mass media.

430. Advanced Concepts in Intercultural Communication (3)

Prerequisites: COMM 330 or consent of instructor.

Continued study of communication processes involved in interaction between people from different cultural groups; exploration of culturally variable means of thinking and behaving, and study of social psychological processes affecting all forms of intergroup interaction.

Letter grade only (A-F).

432. Communication Leadership (3)

Development of leadership skills in problem-solving communication environments; leadership theories, strategies and techniques of problem-solving and decision making.

433. Trends in Interpretive Communication (3)

Trends and issues in the theoretical and historical development of oral interpretation as applied to current times.

434. Advanced Oral Presentation Skills (3)

Prerequisite: GE Foundation requirements; one or more GE Exploration courses; and upper-division standing.

Development of advanced skills in oral presentations, including audience analysis, presentation technologies, and multi-media applications. Special consideration paid to research and critical analysis of written and oral presentation content and delivery.

Letter grade only (A-F).

436. American Public Address (3)

Prerequisites: COMM 300 and 301.

Comparison and contrast of famous American speakers and their techniques, effects and environments from the colonial period to present.

437. International Public Address (3)

Prerequisites: COMM 300 and COMM 301.

Comparisons and contrasts of famous international speakers and their techniques, effects, and environments from the Greco-Roman era to the present.

Letter grade only (A-F).

439. Communication and Popular Culture (3)

Examines the relationship between communication and popular culture in the public sphere. The course aims at improving students' abilities to respond critically to everyday mass social messages.

Letter grade only (A-F).

441. Issues in Freedom of Communication (3)

Prerequisites: Upper division standing and GE Foundation requirements, and at least two GE Exploration courses. Recommended COMM 331 or COMM 335.

The evolution and impact of First Amendment rights on American society and its political system; Emphasis on the evolution of the First Amendment, significant Supreme Court cases, the First Amendment and electronic media, and the application of case laws that deal with religion, speech, press, and assembly. Recommended for pre-law students.

442. Campaign Persuasion (3)

Prerequisites: GE Foundation requirements, upper division standing, and at least two GE Exploration courses. It is recommended that one be COMM 331 or COMM 335.

Examination of persuasive communicative strategies in political campaigns inclusive of campaign speeches, commercials, news media coverage, image-building, audience analysis through polling, and fund raising.

444. Communicating Civility (3)

Prerequisites: Upper division standing and GE Foundation requirements.

Examine codes of "civilized" communication behavior historically and analytically. Identify what it means to be an ethical and civilized communicator in today's society, and appreciate professional and personal protocols for everyday use.

Letter grade only (A-F).

449. Studies in Oral Persuasion and Attitude Change (3)

Attitude formation and change through oral communication; factors in persuasion; problems determining the effects of persuasive messages; source credibility, message variables; and personality factors in the process of persuasion.

450. Communication Training in Organizations (3)

Nature and role of communication training in a variety of social, educational, and business organizations; the goals, structure, and impact of communication effectiveness programs are examined; audiovisual aids and communication training techniques emphasized.

452. Communication in the Multinational Organization (3)

Communication patterns in multinational and multicultural organizational settings; the nature and impact of different organizational structures, value systems, and cultural norms in relation to productivity, employee and organizational obligations and expectations.

490. Selected Topics in Communication Studies (3)

Topics of current interest selected for intensive study in Communication.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

A. Hip Hop Criticism

492A-B. Internship (3-3)

Prerequisite: Permit required to enroll with consent of instructor; open only to senior majors.

At least 120 hours with cooperating organizations on- or off-campus. Work directed and evaluated by instructor in consultation with supervisor of the participating organizations. Assignments will be varied.

Credit/No Credit grading only. COMM 492A is for unpaid Internship. COMM 492B is for paid internship.

495. Service Learning Internship (3)

Prerequisites: Communication Studies Major with Senior Standing; minimum 3.0 GPA for all college coursework taken; COMM 130 or 335 or their equivalents; COMM 352 or 355 or 358, or the consent of instructor.

Application of academic knowledge of communication skills in the community; public speaking, listening, interpersonal communication, group communication, multicultural communication, and/or interviewing skills training (1) to students in K-12 schools or (2) to persons in the public sector.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

499. Special Studies (1-6)

Prerequisites: "Permit" required to enroll. Open to upper division students or graduate standing and consent of instructor. Approved "Agreement for Independent Study" must be on file with the Department prior to enrolling in this course.

Individualized laboratory or library research selected in consultation with instructor. Written report of the research is required. Not acceptable for graduate credit toward the master's degree.

GRADUATE LEVEL**531. Administering the Forensic Program (3)**

Prerequisite: "Permit" required to enroll with consent of instructor.

Principles of constructing and administering a forensic program, including recruiting, squad direction, budgeting, tournament policies, and current literature on forensics direction.

Letter grade only (A-F).

541. Rhetorical Theory and Criticism I (3)

Introduction to research in rhetorical studies. Examination of major figures and schools of thought on rhetorical theory and criticism from the Pre-Socratics through the contemporary modern British era.

546. Communication Theory and Research I (3)

Examination of theories and research in social cognition, interpersonal, small group, organizational, intercultural, mass, instructional, language and behavior, and nonverbal communication. Critical analysis of empirically-based articles in the field. Social-scientific research proposal required.

Letter grade only (A-F).

590. Selected Topics in Communication Studies (3)

Prerequisite: Consent of instructor.

Investigation of topics of current interest and concern to students in communication and allied areas.

May be repeated to a maximum of 6 units with different topics, no more than 3 units may count toward the Communication Studies master's degree. Topics announced in the *Schedule of Classes*.

590A. Theory and Criticism of Presidential Rhetoric (3)

Examines presidential communication theory and criticism. Topics under consideration include the changing office of the US presidency as well as the evolving role of the first lady. Rhetorical artifacts for analysis span the history of the US presidency.

610. Seminar in Interpersonal Communication (3)

Prerequisite: COMM 546 or consent of instructor.

Current theories and research in interpersonal communication.

Letter grade only (A-F).

611. Seminar in Negotiation and Conflict Resolution (3)

Prerequisites: COMM 411 or 421 and 546 or consent of instructor.

Investigation, analysis, and criticism of the nature, development, and dynamics of conflict and the role of negotiation in interpersonal, group, organizational, and international and intercultural communication; study and understanding of conflict management.

Letter grade only (A-F).

614. Gender and Family Research (3)

Major theoretical perspectives on the role of communication in family and gender issues; epistemological, conceptual, and methodological issues in researching family and gender communication.

Letter grade only (A-F).

620. Seminar in Organizational Communication (3)

Prerequisite: COMM 546 or consent of instructor.

Theories and models of communication in large organizations; design and management of organizational communication systems.

Letter grade only (A-F).

630. Seminar Intercultural Communication (3)

Prerequisites: COMM 541 and 546 or consent of instructor.

Analysis of cultural influences on interpersonal communication; emphasis given to cultural values, perception, social organization, language and nonverbal codes; development of strategies of effective intercultural communication in international and domestic settings.

633. Seminar in Interpretive Communication (3)

Prerequisite: COMM 541 or consent of instructor.

Theories of communicative interpretation of literature, with emphasis on the theory and evaluation of oral presentation of literature as art form and pedagogical instrument.

Letter grade only (A-F).

634. Performance and Ethnography (3)

Students use ethnographic methods to explore the relationship between culture and performance. Students choose a community, conduct fieldwork and collect/perform stories in order to better understand a particular population.

Letter grade only (A-F).

635. Seminar in Communication Criticism (3)

Prerequisite: COMM 541 or consent of instructor.

Critical theories of rhetoric and major systems of communication criticism; development of criteria and approaches for the evaluation of select communication acts and contexts.

Letter grade only (A-F).

636. Seminar in American Public Communication (3)

Prerequisite: COMM 541 or consent of instructor.

Studies of American rhetorical events and their social, political and intellectual settings; application of rhetorical theory in the analysis of these events.

Letter grade only (A-F).

637. Seminar in International Public Communication (3)

Prerequisite: COMM 541 or consent of instructor.

Studies of international rhetorical events and their social, political, and intellectual settings; application of rhetorical theory in the analysis of these public communication events.

Letter grade only (A-F).

639. Seminar in Communication and Popular Culture (3)

Prerequisite: COMM 541 or consent of instructor.

Survey of literature on rhetoric, critical studies, and popular culture to provide a basis for investigating communication in popular culture.

Letter grade only (A-F).

640. Rhetorical Theory and Criticism II (3)

Prerequisite: COMM 541.

Examination of major figures and themes in rhetorical theory and criticism in the contemporary era.

646. Communication Theory and Research II (3)

Prerequisites: COMM 307 (or equivalent) and 546.

Empirical research methodologies applied to communication research; theory and design of scientific research; analysis of findings; computer applications; research report required.

649. Seminar in Persuasion and Attitude Change (3)

Prerequisite: COMM 546 or consent of instructor.

Contemporary theories and models of persuasion; structure and relationships of beliefs, values and attitudes; methods of assessing persuasive effects; analysis of research literature.

Letter grade only (A-F).

650. Seminar in Instructional Communication (3)

Prerequisites: COMM 541 and 546 or consent of instructor.

Designed for teachers/trainers, the course will identify communication variables and strategies which contribute to greater student/client learning as well as greater satisfaction with the learning process. Students will develop an instructional/training package.

Letter grade only (A-F).

697. Directed Research (1-6)

Prerequisites: COMM 541 and 546; authorization of the department Graduate Advisor, Agreement for Independent Study Course form, consent of instructor.

Directed research leading to the definition and discussion of a selected problem or issue in communication and the presentation of research results in a formal paper submitted to the department.

May be repeated to a maximum of 6 units with different topics.

Letter grade only (A-F).

698. Thesis (2-4)

Prerequisites: COMM 541, 546, 640 and 646, authorization of the department Graduate Advisor, Agreement for Independent Study Course form, consent of instructor.

Preparation, completion and submission of an acceptable thesis in partial fulfillment of the requirements for the Master's degree.

Credit/No Credit grading only.

COMMUNICATIVE DISORDERS

College of Health and Human Services

Department Chair: Carolyn Conway Madding

Department Office: Language Arts Building (LAB), Room 102

Telephone / FAX: (562) 985-4594 / (562) 985-4584

Clinic Office: Language Arts Building (LAB) Room 112

Telephone: (562) 985-4583

Faculty: Namhee Kim, Betty McMicken, Carolyn Conway Madding, Geraldine P. Wallach, Jennifer Ostergren, Lei Sun

Advisors:

Undergraduate: Namhee Kim

Graduate: Jennifer Ostergren

Clinic Director: Geraldine P. Wallach

Technician: Rodney Pau

Department Administrator: Susan McNamara

Career Possibilities

Speech-Language Pathologist • Speech-Language Pathology Assistant • Audiologist • Vocational Rehabilitation Counselor • Supervisor of Special Education (For more information, see www.careers.csulb.edu.)

Introduction

The Communicative Disorders Department provides undergraduate coursework for students planning careers in speech-language pathology or audiology. Departmental majors may complete work leading to the Bachelor of Arts degree in Communicative Disorders and Master of Arts degree in Communicative Disorders with a Specialization in Speech-Language Pathology. Students who earn the Master's degree qualify for the Certificate of Clinical Competence in Speech-Language Pathology from the American Speech-Language-Hearing Association, the Speech-Language Pathology Services Credentialing, and the State of California Commission for Teacher Credentialing, and the State of California Licensure in Speech-Language Pathology. Students pursuing the B.A. degree may qualify for State of California Licensure as a Speech-Language Pathology Assistant.

The department maintains a language, speech and hearing clinic to serve as a clinical and research laboratory on campus for both graduate and undergraduate students. Field placements are available in local hospitals, rehabilitation agencies, language/speech/hearing clinics, and public schools.

Prospective students must attend a group advising meeting presented monthly by the undergraduate advisor and AARC (Academic Advising and Resource Center). Once students have declared Communicative Disorders as their major, they will be required to meet with an advisor in AARC once each semester.

The Department of Communicative Disorders at CSULB is fully accredited, by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

Undergraduate Programs

Bachelor of Arts in Communicative Disorders (120 units)

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

Lower Division:

Take all the following courses:

C D 261 Anatomy and Physiology of the Speech and Hearing Mechanism (3)

Prerequisites: None

C D 271 Phonetics (3)

Prerequisite: None

PSY 210 Introductory Statistics (or equivalent) (4)

Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.

Upper Division:

Take all the following courses:

C D 329 Introduction to Language Acquisition (3)

Prerequisites: CD 271. For majors only.

C D 330 Speech and Hearing Science (3)

Prerequisites: CD 261 and CD 271.

C D 373 Audiology I (3)

Prerequisites: CD 261.

C D 431 Pediatric Audiology (3)

Prerequisites: CD 261 and 373.

C D 432 Audiology II (3)

Prerequisites: CD 261 and 373.

C D 440 Aural Rehabilitation for Hearing Impaired (3)

Prerequisites: CD 261 and 373.

C D 456 Speech Pathology I: Disorders of Phonology (3)

Prerequisites: CD 261 and 271.

C D 460 Speech and Language Assessment of

Linguistically and Culturally Diverse Clients (3)

Prerequisites: CD 271.

C D 466 Speech Pathology II: Speech Motor Disorders (3)

Prerequisites: CD 261, 271, and 330.

C D 472 Alternative & Augmentative Communication (3)

Prerequisites: CD 261 and 329.

C D 476 Speech Pathology III: Disorders of Voice/

Oro-Facial Mechanism (3)

Prerequisites: CD 261 and 329.

C D 477 Disorders of Swallowing (3)

Prerequisites: CD 261.

C D 481A Speech Pathology IV: Disorders of Language,

Children (3)

Prerequisites: CD 271 and 329.

C D 481B Speech Pathology IV: Disorders of Language,

Neuropathologies (3)

Prerequisites: CD 261 and 329.

C D 483 Assessment of Monolingual and Bilingual Clients (3)

Prerequisites: CD 261, 271, 329, and 330.

C D 489 Management of Monolingual and Bilingual Clients (3)

Prerequisites: CD 456, 466, 476, 481A, 481B and 483. CD 456, 466, 481A and 481B may be taken concurrently.

Graduate Programs

Master of Arts in Communicative Disorders

Admission to the Graduate Program

Enrollment in 500/600 level courses in communicative disorders is restricted to students who have been accepted to one of the graduate programs (traditional or cohort) of the department as unconditionally classified students. Students wishing to be admitted must complete the following procedures:

1. Students must meet the criteria for acceptance by the University as a graduate student;
2. Every student (new or continuing) must apply directly to the university through CSU Mentor. CSU Mentor applications are processed by the university online at <http://www.csumentor.edu/>. Original transcripts and GRE scores must be sent directly to the university. The department will access these transcripts electronically for department evaluation. All materials to the university must be received no later than December 15th;
3. Students applying to the traditional or special cohort M.A. program, then must apply to the Department of Communicative Disorders for admission to the graduate program using the department application form. This form must be filed with the graduate advisor by December 15th for admission in the subsequent fall semester. The following supportive materials must be filed with the department admission application:

A. Change of objective form available at department office (continuing CSULB students only);

B. One-page summary of relevant work, volunteer or research experience, with name and contact information for corroborating professional.

NOTE: Minimum Criteria 1) a GPA of 3.0 or better in the last 60 units of coursework, including Communicative Disorders coursework; and 2) confirmation of acceptable GPA obtained during the final senior semester.

Any course deficiencies will be determined by the department graduate committee after consultation with the student and the student's faculty advisor. Students applying to the graduate program in Communicative Disorders will have completed one of the two prerequisites listed in the next section prior to enrollment in graduate classes.

Prerequisites

1. A bachelor's degree from an accredited institution with a major in communicative disorders (speech and hearing science, etc.); or

2. A bachelor's degree from an accredited institution in a discipline other than Communicative Disorders. The applicant must have at least 36 units of course work in CD before enrollment in the graduate program. Students may apply to the University and department as a M.A. Preparatory Program student to complete all of the required undergraduate courses prior to applying to one of the graduate programs in Communicative Disorders.

Advancement to Candidacy

In order to be advanced to candidacy for a Master's degree, a student must meet the following criteria:

1. enrollment in the semester or summer session in which advancement takes place;
2. satisfactory completion of C D 696 Research Methods: Applied and Basic (3) and three additional units;
3. satisfactory fulfillment of the CSULB Graduation Writing Assessment Requirement (GWAR). The GWAR must be fulfilled before the student is advanced to candidacy;
4. maintenance of a GPA of at least 3.0 in (a) all graduate work completed in Communicative Disorders, (b) all graduate work completed at CSULB, and (c) all graduate work transferred to meet graduation requirements with no grade below "C";
5. filing of the student Program for the Master of Arts Degree in Communicative Disorders after completion of items 2-5;
6. the Department's standard written program of graduate courses approved by the student's department advisor, the department graduate advisor, the department chairperson, and the College of Health and Human Services Associate Dean. (This form is known as the Advancement to Candidacy form.)

Requirements

Forty-one (41) units of course work are required:

Take all of the following courses:

C D 661 Traumatic Brain Injury Across the Lifespan (3)
Prerequisites: CD 696.

C D 662 Seminar in School-Age Language Disorders: Grade 1 through High School (3)
Prerequisites: CD 456, 481A and 696.

C D 663 Seminar in Preschool Language Disorders: 0-5 Years (3)
Prerequisites: CD 456 and 481A. Corequisite: CD 696.

C D 665 Seminar in Language Disorders in Adults (3)
Prerequisites: CD 481B, 696.

C D 666 Seminar: Speech Motor and Swallowing Disorders (3)
Prerequisites: CD 466, 696.

C D 667 Seminar: Autism Spectrum Disorders (3)
Prerequisites: None.

C D 669A Clinical Practice: Phonological Disorders (2)
Prerequisites: CD 489; Prerequisite/Corequisites: CD 663 and consent of instructor.

C D 669B Clinical Practice: Autism Spectrum Disorders (2)
Prerequisites: CD 667.

C D 669C Clinical Practice: Language Delayed/Disordered Children (2)
Prerequisites: CD 483, 489; Prerequisite/Corequisites: CD 662 and consent of instructor.

C D 669F Clinical Practice: Speech Motor Disorders (2)
Prerequisites: CD 489; Prerequisite/Corequisites: CD 666 and consent of instructor.

C D 669J Clinical Practice: Language Disordered Adults (2)
Prerequisites: CD 489; Prerequisite/Corequisites: CD 665 and consent of instructor.

C D 669L Clinical Practice: Linguistically Different Clients (2)
Prerequisites: 1) Completion of all disorder-specific graduate seminars; 2) completion of a minimum of 3 core clinics (C D 669 A-J); 3) C D 483 and 489, or equivalent as approved by the instructor) and consent of instructor.

C D 696 Research Methods: Applied and Basic (3)
Prerequisites: PSY 210 or equivalent or consent of instructor.

Take at least one of the following courses:

C D 670 Internship in Speech & Language Pathology (5)
Prerequisites: CD 669A or C, D, F, G and J with a GPA of 3.0.

C D 686A Advanced Field Studies with Communication Handicapped (5)
Prerequisites: Passing of CBEST, completion of CD 662, 664, 665, 666 and all but one of the following: CD 669A, 669C, 669D, 669F, 669J.

Choose one of the following options:

C D 695 Directed Readings and a 2-unit elective (C D 575 recommended)
Prerequisites: Consent of instructor.

C D 698 Thesis
Prerequisites: Advancement to candidacy for master's degree.

Within the context of the C D 669L clinical course, the student will complete a minimum of 25 hours of clinical experience under appropriate supervision with a client determined to be of a language or dialect different from that of the student clinician.

C D 483 and 489 and/or C D 460, or equivalent content, are prerequisite to C D 669L.

Students who are bilingual and biliterate in English and another language may be eligible for clinical practice using their non-English language, within the C D 669L practicum.

Regulations governing the preparation and eligibility for the administration of comprehensive examination options are available in the Department Office. Departmental regulations concerning preparation of theses are also available in the office.

Communicative Disorders Master's Preparatory Program

This is a self-support program which allows students with a B.A./B.S. in a field other than Communicative Disorders to complete the undergraduate prerequisites needed to apply to a Master's program in Communicative Disorders. This program allows students to complete a total of 36 units in Communicative Disorders in one year, across three consecutive semesters. Upon completion of this program, students will be eligible for application to the department's traditional or special cohort M.A. programs (or to a master's program at another institution). Please note that students applying to other institutions for completion of a Master's in Communicative Disorders must confirm acceptance of the prerequisites offered in this program. The department cannot guarantee that other institutions will accept these prerequisites in total.

Students admitted to this program will enroll as a cohort and complete 12 units (4 courses) per semester. Courses will be offered solely through the College of Continuing and Professional Education (CCPE) at tuition determined by CCPE. Enrollment in coursework in this program is reserved for the preparatory program students. Courses in this program will be offered in the late afternoon and/or evenings. Students interested must enroll full-time and must complete coursework as a cohort. In addition, transfer units are not accepted in lieu of completion of the 36 units required for this program. Students enrolled in this program are not eligible to enroll in courses offered in department's undergraduate or graduate programs.

This program admits students once per year. Students interested in applying to this program must:

1. Send a completed application to: The M.A. Preparatory Program Director, Department of Communicative Disorders - LAB, California State University, Long Beach, 1250 Bellflower Boulevard, Long Beach, CA, 90840. All applications must be received by the Department no later than March 1st (for enrollment the following Fall semester). Applications received after this due date will not be accepted. GRE scores, resumes, and letters of recommendations are not required for admission to this program and will not be considered in the admission process, thus students are urged to omit them from their applications.
2. Apply directly to the University through CSU Mentor. CSU Mentor applications are processed by the University on-line at: <http://www.csumentor.edu/>. Original transcripts must be sent directly to the University. The Department will access these transcripts electronically for Department evaluation. All materials to the University must also be received no later than March 1st. NOTE: Admission to this program does not guarantee acceptance or give the student undue preference in acceptance to the Department's Master's Programs in Communicative Disorders. A separate application is required for enrollment as a Master's student, once prerequisites have been completed.

Credential for Service in Public Education Speech-Language Pathology Services Credential (code 912)

Candidates must:

1. Complete the master's degree in speech-language pathology.
2. Complete the following courses:
 - EDSP 350 Education of Exceptional Individuals (3)
Prerequisites: None.
 - CD 575 Educational Topics in Speech-Language Pathology (2)
Prerequisites: None.
 - C D 483 Assessment of Monolingual and Bilingual Clients (3)
Prerequisites: CD 261, 271, 329 and 330.
 - C D 489 Management of Monolingual and Bilingual Clients (3)
Prerequisites: CD 456, 466, 476, 481A, 481B and 483. CD 456, 466, 481A and 481B may be taken concurrently

C D 686A Advanced Field Studies with Communication Handicapped (5)

(in order to complete a minimum of 100 contact hours as a Speech-Language Specialist trainee in school setting)
Prerequisites: Passing of CBEST, completion of CD 662, 664, 665, 666 and all but one of the following: CD 669A, 669C, 669D, 669F, 669J.

Communicative Disorders Courses (C D)

LOWER DIVISION

60. Selected Topics in Communicative Disorders (1)

Prerequisite: Consent of instructor.

Speech, language and hearing therapy to students enrolled in the University.

May be repeated to a maximum of 2 units. Topics announced in the *Schedule of Classes*.

261. Anatomy and Physiology of the Speech and Hearing Mechanism (3)

Anatomical, physiological and neurological components of the speech and hearing mechanism. Designed for students planning to enter the clinical program in communicative disorders.

Letter grade only (A-F).

271. Phonetics (3)

Phonetic basis of speech sounds and the various factors which influence pronunciation. Consideration is given to linguistic variations, regional dialects and standards.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 3 hours.)

UPPER DIVISION

329. Introduction to Language Acquisition (3)

Prerequisite: C D 271. For majors only.

Introduction to the study of the acquisition of first and second languages. Linguistic perspectives on the development of phonological, syntactic, semantic, and pragmatic aspects of language. The influence of developmental stages and social and cultural factors on the individual.

Letter grade only (A-F). Not open for credit to students with credit in LING 329.

330. Speech and Hearing Science (3)

Prerequisites: C D 261 and 271.

Course Description: Examination of the anatomical, physiological, psychological and acoustic aspects of speech. Through readings, discussions, videos, and interactive software the student is expected to become more aware and analytical of the instrumentation and scientific basis of production and perception of speech.

Letter grade only (A-F). (Lecture/discussion)

373. Audiology I (3)

Prerequisite: C D 261.

Introduction to audiology; acoustics, anatomy and physiology of the ear, pure-tone audiometry/masking, speech audiometry/masking, principles of taking a case history, and report writing.

Letter grade only (A-F).

431. Pediatric Audiology (3)

Prerequisites: C D 261 and 373.

Sources of hearing impairment (HI) in children birth through school age. Nature of HI in children and effects on communicative function. Procedures for identification (screening), assessment, and intervention (including parent counseling) for HI children.

Letter grade only (A-F). (Discussion 2 hours, laboratory 3 hours)

432. Audiology II (3)

Prerequisites: C D 261 and 373.

Anatomy/pathology/ evaluation of the (1) outer and middle ears, (2) inner ear, (3) central auditory system, and (4) functional hearing loss, taking case history, and report writing.

Letter grade only (A-F).

440. Aural Rehabilitation for the Hearing Impaired (3)

Prerequisites: C D 261 and 373.

Nature of hearing impairment and impact on communicative function. Procedures for assessment and management of hearing loss, including amplification, counseling, and self-report scales. Focus is primarily adult clients but will include some information regarding children.

Letter grade only (A-F).

456. Speech Pathology I: Disorders of Phonology (3)

Prerequisites: C D 261, 271.

Etiology, assessment and treatment of disorders of phonology.

Letter grade only (A-F).

460. Speech and Language Assessment of Linguistically and Culturally Diverse Clients (3)

Prerequisite: C D 271.

Provides understanding of non-discriminatory assessment process for linguistically and culturally diverse clients referred for speech-language assessment. Includes information relative to cultural differences, use of interpreters/translators, biases of assessment, and differential diagnoses, such as language disorder versus language difference.

Letter grade only (A-F).

462. Speech-Language Pathology Assistant (SLPA) Practicum (3)

Prerequisite: At least 33 units in communicative disorders completed with a grade of "B" or better.

For students interested in receiving a license to work as a SLPA. Weekly lectures covering the laws, practices and ethics governing SLPAs and 70 hours of supervised undergraduate clinical practicum.

Letter grade only (A-F).

466. Speech Pathology II: Speech Motor Disorders (3)

Prerequisites: C D 261, 271, and 330.

Etiology, assessment, and therapy for disturbances of the speech motor system with emphasis on the neuroanatomical, neurophysiological, psychological, and linguistic variables correlated to aberrant behaviors.

Letter grade only (A-F).

472. Alternative and Augmentative Communication (3)

Prerequisites: C D 261 and 329.

An understanding of relevant topics in alternative and augmentative communication (AAC), assistive technology (AT); assessment and management of patients with severe communication impairments. Topics will include a variety of disabilities in both pediatric and adult patients, across varying communication environments.

Letter grade only (A-F).

476. Speech Pathology III: Disorders of Voice/ Oro-facial Mechanism (3)

Prerequisites: C D 261 and 329.

Processes of phonation and resonance and their application to etiology, diagnosis and therapy of functional and organic voice disorders, such as those arising from laryngeal pathology, vocal abuse, neurological impairment, auditory impairment and oro-facial abnormalities.

Letter grade only (A-F).

477. Disorders of Swallowing (3)

Prerequisite: C D 261.

Anatomy, physiology, and neuroanatomy of normal swallowing. Neurological and oncologic disorders which affect the swallow process. Evaluation of the patient with dysphagia will include clinical and instrumental analysis. Treatment plans based on history and evaluative results will be designed and examined.

Letter grade only (A-F).

481A. Speech Pathology IV: Disorders of Language (3)

Prerequisites: C D 271 and 329.

An analysis of the components of language and how each is involved with language disorders in children. Provide for the understanding and recognition of variables for the assessment and clinical management of such children.

Letter grade only (A-F).

481B. Speech Pathology IV: Disorders of Language Neuropathologies (3)

Prerequisites: C D 261 and 329.

Neurophysiological and neurolinguistic basis for language and speech disorders associated with central nervous system pathologies. Provides for the recognition and understanding of variables for the assessment and clinical management of such disorders.

Letter grade only (A-F).

483. Assessment of Monolingual and Bilingual Clients (3)

Prerequisites: C D 261, 271, 329, and 330.

Principles underlying assessment procedures in speech language disorders for both monolingual and bilingual clients. Focus is on the cultural and linguistic variables affecting standardized and non-standardized assessment procedures.

Letter grade only (A-F). (Discussion 2 hours, laboratory 3 hours)

489. Management of Monolingual and Bilingual Clients (3)

Prerequisites: C D 456, 466, 476, 481A, 481B, and 483. C D 456, 466, 481A, and 481B may be taken concurrently.

Management of speech and language disorders for monolingual, bilingual, and/or bicultural clients. Relationship of assessment to management, formulation of goals, objectives, task analyses and maintenance. 25 hours observation in schools, campus clinic, and hospital/rehabilitation settings.

Letter grade only (A-F). (Discussion 2 hours, laboratory 3 hours)

491. Proctoring in Communicative Disorders (2-3)

Students shall engage in peer teaching and examination scoring in undergraduate courses under the specific direction of the course instructor.

Open only to students who have achieved the grade of "A" in the course in which they are serving as proctor. May be repeated to a maximum of 6 units.

499. Directed Studies in Communicative Disorders (1-3)

Prerequisite: Consent of instructor.

Independent study under supervision of a faculty member.

May be repeated to a maximum of 6 units. Not acceptable for graduate credit toward the master's degree.

GRADUATE LEVEL

575. Educational Topics in Speech-Language Pathology (2)

Review current issues, legislation and the role of SLPs in public school settings, including service delivery, school reform, accountability, and eligibility criteria. Special consideration given to collaboration and the use of content standards in goal setting and curriculum intervention.

Letter grade only (A-F).

590. Selected Topics in Communicative Disorders (1-3)

Topics from the most recent developments and issues in speech-language pathology and audiology.

May be repeated to maximum of 3 units with different topics. Topics announced in the *Schedule of Classes*.

661. Traumatic Brain Injury Across the Lifespan (3)

Prerequisite: C D 696.

Neurophysiological basis for cognitive and communicative impairments associated with traumatic brain injury (TBI). Addresses rehabilitation research specific to TBI in children and adults.

Letter grade only (A-F).

662. Seminar in School-Age Language Disorders: Grade 1 through High School (3)

Prerequisites: CD 456, 481A and 696.

Components of spoken and written communication and language are examined in children and adolescents with diverse, academically-based language learning disabilities. Major approaches to literacy and curricular-based intervention explored.

Letter grade only (A-F).

663. Seminar in Preschool Language Disorders: 0-5 Years (3)

Prerequisites: CD 456 and 481A. Corequisite: CD 696.

Components of communication, language, speech and pre- and emergent literacy are examined in preschool children with diverse problems across all aspects of language learning. Evidence-based techniques and approaches to language intervention are explored.

Letter grade only (A-F).

664. Seminar in Disorders of Voice and the Oro-facial Mechanism (3)

Prerequisites: C D 476, 696.

Selected problems in voice disorders through an investigation of the literature and clinical research.

Letter grade only (A-F).

665. Seminar in Language Disorders in Adults (3)

Prerequisites: C D 481B, 696.

Provides an understanding of neuropathological substrates of language disorders in adults resulting from brain damage. Provides for the recognition and assessment of the syndromology and clinical aspects of adult language disorders relative to current research.

Letter grade only (A-F).

666. Seminar in Speech Motor and Swallowing Disorders (3)

Prerequisites: C D 466, 696.

Historical and current research and its effect upon the assessment and management of speech motor and swallowing disorders.

Letter grade only (A-F).

667. Seminar in Autism Spectrum Disorders (3)

Historical perspectives, assessment procedures, intervention approaches, and parent training programs for management of clients diagnosed with Autism Spectrum Disorders.

Letter grade only (A-F).

669A. Clinical Practice in Phonological Disorders (2)

Prerequisites: C D 489; Prerequisite/Corequisites: C D 663 and consent of instructor.

Student conducts assessment of phonological disorders and management of therapy, under supervision, with clients in the university speech and hearing clinic. Students handle all aspects of clinical program including initial interviews, parent counseling, and testing.

Letter grade only (A-F).

669B. Clinical Practice – Autism Spectrum Disorders (2)

Prerequisite: C D 667.

Provides students with the opportunity to gain hands-on experience in assessing and managing clients diagnosed with Autism Spectrum Disorders.

Letter grade only (A-F). (2 hrs lecture, 2 hrs clinic)

669C. Clinical Practice With Language Delayed/Disordered Children (2)

Prerequisites: C D 483, 489; Prerequisite/Corequisites: C D 662 and consent of instructor.

Students provide assessment and management of preschool and school-age children with identified delays/disorders. Under supervision, the practicum includes standardized and non-standardized assessment, parent interviews and conferences, development and implementation of a management program and report writing.

Letter grade only (A-F).

669D. Clinical Practice with Voice and Oro-facial Mechanism Disorders (2)

Prerequisites: C D 489; Prerequisite/Corequisites: C D 664 and consent of instructor.

Student conducts therapy sessions under supervision for persons with functional and/or organic voice disorders. Practicum includes initial interviews, diagnostics, therapy program planning, counseling and report writing.

Letter grade only (A-F).

669F. Clinical Practice with Speech Motor Disorders (2)

Prerequisites: C D 489; Prerequisite/Corequisites: C D 666 and consent of instructor.

Assessment planning and management in a supervised clinical experience with persons who have speech motor disorders.

Letter grade only (A-F). (2 hrs lecture, 2 hrs clinic)

669H. Clinical Practice-Special Programs (2)

Prerequisites: At least one of the C D 669A through J courses.

Specialized practice placement to obtain experience with speech, language, and hearing disorders.

May be repeated to a maximum of 4 units. Letter grade only (A-F).

669J. Clinical Practice with Language Disordered Adults (2)

Prerequisites: C D 489; Prerequisite/Corequisites: C D 665 and consent of instructor.

Student conducts clinical management sessions, under supervision, for adults with neurological language disorders. Practicum includes initial interviews, assessment, management program planning, counseling and report writing, and application of research findings to the clinical process.

Letter grade only (A-F).

669L. Clinical Practice with Linguistically Different Clients (2) F, S

Prerequisites: 1) Completion of all disorder-specific graduate seminars; 2) completion of a minimum of 3 core clinics (C D 669 A-J); 3) C D 483 and 489, or equivalent as approved by the instructor) and consent of instructor.

Assessment/management of speech-language disorders in clients whose native language is different than that of the clinician. Training of bilingual interpreters.

Minimum 25 clock hours required. Letter grade only (A-F).

670. Internship in Speech and Language Pathology (5)

Prerequisites: C D 669A or C,D,F,G, and J with a GPA of 3.0.

Advanced clinical supervised practice with speech and language disordered persons in either a hospital, rehabilitation agency or speech and language center.

Letter grade only (A-F).

680. Internship in Audiology (5)

Prerequisites: C D 669A or B or C or consent of the instructor.

Advanced clinical practice in audiology with hearing impaired persons in a community facility.

Letter grade only (A-F).

686A. Advanced Field Studies with Communication Handicapped (5)

Prerequisites: Passing of CBEST, completion of C D 662, 664, 665, 666 and all but one of the following: C D 669A, 669C, 669D, 669F, 669J.

Clinical Rehabilitation Services, Language Speech and Hearing Specialist candidates participate in supervised clinical practicum in an off-campus itinerant speech and language setting(s) for the equivalent of one semester earning 5 units of field study. Enrollment by application to the Communicative Disorders Department only.

Credit/No Credit grading only. (Fieldwork)

695. Directed Readings (1-3)

Prerequisite: Consent of instructor.

Readings in communication sciences/disorders.

Required of all candidates for the master's degree not electing the thesis option.

Under special circumstances, may be repeated to a maximum of 6 units. Letter grade only (A-F).

696. Research Methods: Applied and Basic (3)

Prerequisite: PSY 210 or equivalent or consent of instructor.

Professional issues related to research and clinical settings. Application of scientific method, experimental design (group and single subject) and related statistical methods (parametric and non-parametric). Evaluate literature in the field.

(Lecture 3 hours.) Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite/Corequisites: C D 696 and consent of instructor.

Independent research under supervision of a faculty member.

Letter grade only (A-F).

698. Thesis (1-4)

Prerequisites: Advancement to candidacy for master's degree.

Preparation, completion and submission of an acceptable thesis in partial fulfillment of the requirements for the master's degree.

COMPARATIVE WORLD LITERATURE

College of Liberal Arts

Department Chair: Carl Fisher

Department Office: McIntosh Humanities Building (MHB), Rm 515
Telephone / Fax: (562) 985-4239 / (562) 985-4863
Website: www.csulb.edu/depts/complit/

Professors: Alwin Baum, Elizabeth Dahab, Carl Fisher, Cheryl Goldstein, Nhora Serrano, Vlatka Velcic

Administrative Support Coordinator: Gretchen Dinger

Students desiring information should contact the department office for an appointment with the advisor.

Career Possibilities

Creative/Media Writer • Editor • Technical Writer • Librarian • Copywriter • Literary Agent • Literary Critic • Foreign Service Officer • Public Relations Worker • Market Researcher • Educator • Lawyer • Government Affairs Officer • Management Trainee • Underwriter • Claims Adjuster (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Bachelor of Arts in Comparative World Literature (120 units)

The Bachelor of Arts in Comparative World Literature has three emphasis options: Language and Literature, World Literature, and Cultural Studies.

Emphasis I: Language and Literature

The traditional undergraduate major in Comparative Literature, designed to prepare the student for graduate study in Comparative Literature or related fields, with a 24 unit core and two 12 unit concentrations.

Requirements

1. Required Courses (24 units). Take both of the following:

CWL 330A Masterpieces of European Literature (3)
Prerequisite: One course in literature or consent of instructor.

CWL 330B Masterpieces of European Literature (3)
Prerequisite: One course in literature or consent of instructor.

2. Take at least one course from each of the following groups:

A. *Genre:*

CWL 346, 420, 422I*, 440, 451I*, 453, CLSC 420I*.

B. *Author:*

CWL 430, 449.

C. *Non-Western or Mythology*

CWL 334, 342*, 350, 402, 403, 440, 445, 452.

D. *Theory:*

CWL 361, 365, 461.

E. *Literary Movement or Comparative Study:*

CWL 344, 349, 404, 406, 410, 448, CLSC 311I*, 312I*.

F. *European Period:*

CWL 431, 432, 435, 437, 438.

Note: CWL 440 may be used in both groups A and C with appropriate different topics.

* may be used to satisfy Core requirements with approval of course instructor and completion of supplementary work.

2. The First Concentration. 12 upper-division units in one foreign language, six of which must be in literature classes. If a language is chosen which offers a limited number of courses, some lower-division units will suffice, but they must be, as a minimum, the equivalent of four semesters of college study.

3. The Second Concentration. 12 upper-division units in any one of the following areas: American Indian Studies, Art History, Asian Studies, Asian American Studies, Africana Studies, Chicano and Latino Studies, Classics, English Literature, English-Option in Creative Writing, film studies, History, music history, Philosophy, Religious Studies, Theatre Arts, Women's, Gender, and Sexuality Studies, or a second foreign language.

If the concentration is in American Indian Studies, Asian Studies, Asian American Studies, Africana Studies, Chicano and Latino Studies, English-Option in Creative Writing, Theatre Arts, Women's Studies, or a second foreign language area, 6 of the units must be in literature courses. If the concentration is in Theatre Arts, Women's, Gender, and Sexuality Studies or film studies, appropriate courses may be chosen from any department offering such courses, including Comparative World Literature and Classics.

Emphasis II: World Literature

Requirements

A minimum of 36 units is required, at least 24 upper-division units, as follows, with no more than two lower-division courses in any category (12 units total):

1. Required Courses (9 units):

Take both of the following:

CWL 330A Masterpieces of European Literature (3)
Prerequisite: One course in literature or consent of instructor.

CWL 330B Masterpieces of European Literature (3)
Prerequisite: One course in literature or consent of instructor.

And one of the following:

CWL 361 Masterpieces of Literary Criticism (3)
Prerequisite: None

CWL 365 Cultural Studies: Histories, Theories, and Issues (3)

Prerequisite: one course in literature or instructor's consent.

2. Area Courses (27 units). Take three courses from each of the following groups:

A. *World Literature:*

CWL 100, 103, 104, 124, 334, 346, 350, 402, 403, 406, 440, 448.

B. *Literary Movements and History:*

CWL 101, 342, 349, 414I, 422I, 430, 431, 432, 435, 437, 438, 449, 461.

C. *Cultural Studies:*

CWL 132, 161, 220, 315I, 344, 404, 410, 420, 445, 451I, 452, 453.

Foreign language courses are encouraged but not required for the World Literature emphasis.

Up to six units of required CWL classes may be substituted from upper-division foreign language literature classes. Consult a department advisor.

Emphasis III: Cultural Studies

Cultural Studies is the interdisciplinary and multicultural study of literary and other forms of cultural expression analyzed within their social and historical contexts. It offers an interdisciplinary pattern of courses in cultural studies with the approval of a faculty advisor.

Requirements

1. Core Courses (24 units distributed as follows):

A. Take the following courses:

CWL 330A Masterpieces of European Literature (3)
Prerequisite: One course in literature or consent of instructor.

CWL 330B Masterpieces of European Literature (3)
Prerequisite: One course in literature or consent of instructor.

B. Genre. At least one of the following:

CWL 346, 420, 422I*, 440, 451I*, 453, CLSC 420I*.

C. Author. At least one of the following:

CWL 430, 449.

D. Non-Western or Mythology. At least one of the following:

CWL 334, 342*, 350, 402, 403, 440, 445, 452.

E. Theory. At least one of the following:

CWL 361, 365, 461.

F. Literary Movement or Comparative Study. At least one of the following:

CWL 344, 349, 404, 406, 410, 448, CLSC 311I*, 312I*.

G. European Period. At least one of the following:

CWL 431, 432, 435, 437, 438.

Note: CWL 440 may be used in both groups B and D with appropriate different topics.

* may be used to satisfy Core requirements with approval of course instructor and completion of supplementary work.

2. The Cultural Studies Concentration. 18 upper division units in additional Comparative World Literature classes or appropriate cultural studies courses drawn from the following departments or areas: American Indian Studies, Anthropology, Art History, Asian and Asian American Studies, African Studies, Chicano and Latino Studies, Classics, Dance, English, Film and Electronic Arts, History, Romance, German, Russian Languages and Literatures, Women's, Gender, and Sexuality Studies, or other appropriate departments and areas of study. Consult a department advisor about courses which will count toward the concentration.

Foreign language courses are encouraged but not required for the Cultural Studies emphasis.

Minor in Comparative World Literature

This minor provides a flexible program for the student who is majoring in another discipline.

Requirements

A minimum of 18 units in Comparative World Literature, of which at least 12 are upper division excluding:

CWL 499. Directed Studies (1-4)
Prerequisite: Consent of instructor.

The Center for Medieval and Renaissance Studies

The Center offers two programs. Undergraduate students can pursue a certificate or a minor in Medieval and Renaissance Studies. Graduate students can pursue a certificate. Interested students should turn to "Medieval and Renaissance Studies" in this catalog and/or contact the program directors in MHB 512.

Comparative World Literature Courses (CWL)

LOWER DIVISION

100. Introduction to World Literature (3)

Prerequisite/Corequisite: Any GE Foundation course.

Readings in translation from world literature. Emphasis on how literature engages unique cultural elements around the world as well as cross-cultural comparisons.

101. Introduction to Comparative World Literature (3)

Prerequisite/Corequisite: Any GE Foundation course.

Introduction to basics of literary interpretation and comparative literature. Strongly recommended for majors in Comparative World Literature.

103. Introduction to Comparative Asian Literature and Culture (3)

Prerequisite/Corequisite: Any GE Foundation course.

Introduction to India and China cultures through an exploration of their literatures, cultures, and diasporas. Focus will be on the modern period.

104. Literature and Culture of the Middle East (3)

Prerequisite/Corequisite: Any GE Foundation course.

Introduction to Middle Eastern and North African culture through an exploration of their literatures, with a focus on some of the major figures of the twentieth- and twenty-first centuries, such as Naguib Mahfouz, Ghassan Kanafani, Edward Saïd, and others.

Letter grade only (A-F).

124. Introduction to World Theatre and Drama (3)

Prerequisite/Corequisite: Any GE Foundation course.

Introduction to all aspects of theatre including criticism, dramatic literature, movements, themes, historical background and theatrical production from different parts of the world.

132. Folklore and Mythology (3)

Prerequisite/Corequisite: Any GE Foundation course.

Introduction to the study of mythology and folklore in a global context, with an emphasis on their application in literature.

Not open for credit to students with credit in CWL 232.

161. Reading the World (3)

Prerequisite/Corequisite: ENGL 100 or equivalent.

Introduction to contemporary theories of reading and interpretation. Examination of diverse forms of human expression and critical understanding from around the world and across the disciplines designed to develop and refine a broad repertoire of reading tools and practices.

213: Visual Studies: Comics and Graphic Novels (3)

Prerequisite: G. E. Foundation requirements

Introductory study of Comics and Graphic Novels across cultures and within global contexts by emphasizing visual narrative storytelling as well as the political, social and visual trends that have shaped the powerful creative industry of comics around the world.

220. Literature and Play (3)

Prerequisite: GE Foundation requirements.

Explores interrelation of human physiological, social, and psychological states of being in culturally and historically diverse works of literature concentrated on nature of human play and the purpose of human games.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper-division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

315I. Literature and Medicine (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary examination of the complex relationship between medicine and human experience, integrating materials from the humanities and social sciences to explore diverse experiences across cultures, between and among genders, and in various economic and social contexts.

Letter grade only (A-F).

320I. Comic Spirit (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Study of comedy as a literary genre and of the manifestation of the comic spirit in related art forms such as music, art, and film, focusing on the history and philosophy of comedy as well as theories of laughter.

324I. Theatre Today (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Examines current trends, achievements and problems in contemporary western theatre and dramatic literature. Particular attention will be paid to multicultural expression in the theatre.

Same course as THEA 324I. Not open for credit to students with credit in THEA 324I.

330A,B. Masterpieces of European Literature (3,3)

Prerequisite: One course in literature or consent of instructor.

Representative selections, in translation, of European texts to and since the Renaissance, and their relation to the development of Western civilization.

334. Introduction to East Asian Literatures and Cultures (3)

Prerequisite: GE Foundation requirements.

A comprehensive introduction to the comparative study of East Asian cultures through the reading of representative selections from the literatures of China, Korea, and Japan in historical context. Focus is on the modern period.

Same course as A/ST 334. Not open for credit to students with credit in A/ST 334.

342. The Bible as Literature (3)

Prerequisite: GE Foundation requirements.

Reading of representative Biblical selections interpreted from a literary standpoint.

344. Literature of the Holocaust (3)

Prerequisites: One course in literature or consent of instructor.

Intensive study of literary works of different genres and cultural backgrounds, from 1945 to the present, to analyze the strategies writers use to present the historical events and the cultural reverberations of the Holocaust.

346. Readings in World Poetry (3)

Prerequisite: One course in literature or consent of instructor.

Representative selections of the poetry of the world from the earliest examples to the present. Facing-page translations will be included.

349. Selected Topics – Literary Movements (3)

Prerequisite: One course in literature or consent of instructor.

Intensive study of a movement or theme in world literature. Specific movement or theme announced in the *Schedule of Classes*.

May be repeated to a maximum of 9 units with different topics.

350. Global Literature in American Culture (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Comparative and thematic study of transnational literary culture, as represented in at least three distinct American ethnic groups. Readings examined in relation to contemporary global themes and in relation to the original national literatures.

361. Masterpieces of Literary Criticism (3)

Study of literary criticism from Plato to the present, focusing on history of literary and cultural theory as well as methods of critical analysis applied to literary texts and other forms of cultural expression.

365. Cultural Studies: Histories, Theories, and Issues (3)

Prerequisite: one course in literature or instructor's consent.

Cultural studies in a global, comparative context, including theories of discursive practices and identity politics; examined through theoretical discourses about literature and the arts and also as an interpretive technique for cultural institutions, practices, and products.

366. Classical Stories, Modern Voices (3)

Prerequisite: GE Foundation requirements and upper-division standing.

Comparative readings of ancient literature in a global context, including analysis of classical literary genres and archetypes, their modern interpretations/rewritings, and their echoes in popular culture.

Same course as CLSC 366. Not open for credit to students with credit in CLSC 366.

402./502. Selected Topics - Middle Eastern Literature and Culture (3)

Prerequisite: One course in literature or consent of instructor.

Study of specific authors, themes, genres, movements, or aspects of literature and culture in the Middle East or between the Middle East and the West.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

403./503. Selected Topics - Asian Literature (3)

Prerequisite: One course in literature or consent of instructor.

Interrelationships of two or more authors, themes, genres, movements or aspects of literature and culture in Asia or between Asia and the West.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

404./504. Selected Topics - Women in World Literature (3)

Prerequisite: One course in literature or consent of instructor.

Study of the role of women in world literature.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

406./506. Selected Topics - East European Literature and Culture (3)

Prerequisite: One course in literature or consent of instructor.

Major movements, authors, and themes in Eastern European literature and culture (Slavic and non-Slavic) and/or the relationship of East European literature and culture and Western Europe and North America.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

410. Literature and Music (3)

Prerequisite: One course in literature or consent of instructor.

Examination of relationship between music and literature in 19th and 20th centuries with emphasis placed on representative literary works and musical compositions that show mutual influences and common features and structures.

412I. Art and Literature (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary study of 19th and 20th Century art and literature, emphasizing comparative analysis of styles, methods, principles, and movements across genres as well as major artists, writers and theorists in their social and historical contexts.

414I. Medieval World (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

Interdisciplinary examination of major themes in medieval society and culture, with an emphasis on literature, the arts, and the historical forces that combined to produce medieval culture as a whole.

415I. Ethnic Literature and Culture in America (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

Comparative, interdisciplinary study of multicultural literature in historical and sociopolitical context. Ethnic groups include Native American, African American, Latino/Latina, Asian American and Middle Eastern American.

420. Selected Topics - Comic Spirit (3)

Prerequisite: CWL 320I or consent of instructor.

Study of specific themes, theories, genres and/or interdisciplinary relationships in comedy.

May be repeated for a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

422I. Renaissance Theatre and Drama (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary study of the achievements, problems, themes and trends of Renaissance drama in Italy, Spain, France, and England between 1350 and 1650. Major plays of the period are read in translation, with attention to literary and theatrical elements.

430./530. Dante (3)

Prerequisite: One course in literature or consent of instructor.

A reading, in translation, of the major works of Dante, including the *Vita Nuova* and the *Divine Comedy*. Examination is also given to the comparative nature of Dante's work: his sources and his influence on later writers, artists, and composers.

431./531. Medieval Literature (3)

Prerequisite: One course in literature or consent of instructor.

Representative selections, in translation, from writings of the medieval period, reflecting dominant ideas of the time.

432./532. Continental Renaissance Literature (3)

Prerequisite: One course in literature or consent of instructor.

Comparative study of the major non-dramatic works of Renaissance Europe, including authors such as Petrarch, Boccaccio, Lorenzo de' Medici, Machiavelli, Ariosto, Tasso, Ronsard, Rabelais, Erasmus, and Cervantes. Emphasis is also given to influences, trends, and contributions to the modern world.

435./535. Literature of the Enlightenment (3)

Prerequisite: One course in literature or consent of instructor.

A comparative study of European literature, from approximately 1650 to 1800, with an emphasis on reading literary works within

historical context and considering the imaginative and intellectual achievements and legacies of the Enlightenment.

437./537. Romantic Literature (3)

Prerequisite: One course in literature or consent of instructor.

Representative selections, in translation, from European writers of the Romantic period with an emphasis on a comparative study of works from Germany and France from about 1770-1850.

438./538. 20th Century European Literature (3)

Prerequisite: One course in literature or consent of instructor.

Comparative study of continental European literature from 1900 to present. Focus on novels and drama. Topics include realism, naturalism, psychological novel, theatre of the absurd, existentialism, modernism, postmodernism, and postcolonialism.

440./540. Selected Topics - Latin American Literary Studies (3)

Prerequisite: One course in literature or consent of instructor.

Comparative study of major literary genres in Latin American literature in relation to principal periods and movements of Western literary tradition.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

445./545. Selected Topics - American Folklore Studies (3)

Prerequisite: One course in literature or consent of instructor.

Topics chosen to provide a bridge between literary, aesthetic and specialized folkloristic studies of American culture. Special attention paid to European and Third World contributions to American folklore.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

448./548. Selected Topics - Comparative Studies (3)

Prerequisite: One course in literature or consent of instructor.

Interrelationship of two or more disciplines, with emphasis on reciprocal influences and borrowing of materials during various literary periods. The class will feature a different interdisciplinary study each semester.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

449./549. Selected Topics - Major Continental Writers (3)

Prerequisite: One course in literature or consent of instructor.

Intensive and comparative study of one to three major continental authors.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

451I. Film and Novel in Society (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary study of two genres, with particular focus on novels made into films and on aesthetic distinction of both forms as major genres in 20th and 21st centuries.

452./552. Selected Topics - Mythology (3)

Prerequisites: One course in literature or consent of instructor.

Interrelation of two or more mythologies, mythological themes or theories of mythology. Different areas of study of mythology each semester.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

453./553. Fairy Tales (3)

Prerequisite: One course in literature or consent of instructor.

Study of fairy tale as a unique literary genre and art form. Class will apply contemporary theory to tales and identify psychological, religious, cultural, and alchemical patterns and symbols that manifest the realization of identity and illustrate creative processes.

461./561. Selected Topics - Contemporary Literary Criticism (3)

Prerequisite: Two upper-division literature courses or consent of instructor.

In-depth study of a particular critic or movement in contemporary literary theory.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

492. Internship Program (1-3)

Prerequisites: Consent of instructor and department chair.

Field work in literature-related industries. Internships and other assignments directed by a supervising faculty member.

May be repeated to a maximum of 6 units. Credit/No Credit grading only.

495. Genre (1-3)

Prerequisite: Consent of instructor.

Production of student journal, *Genre*, including editing, design, soliciting contributors, working with printer, desktop publishing, and financial management. Organizational meeting previous fall semester. Contact department office for information.

May be repeated to a maximum of 9 units. Credit/No Credit grading only.

499. Directed Studies (1-4)

Prerequisite: Consent of instructor.

Independent study of special topics under supervision of a faculty member.

May be repeated to a maximum of 6 units with consent of department.

GRADUATE LEVEL

501. Advanced Interdisciplinary Study (3)

Intensive study of the theories and methods of comparing and interrelating literature with other disciplines such as various areas among the fine arts, the social sciences and the sciences. Course will involve independent research.

Letter grade only (A-F).

502./402. Selected Topics - Middle Eastern Literature and Culture (3)

Prerequisite: One course in literature or consent of instructor.

Study of specific authors, themes, genres, movements, or aspects of literature and culture in the Middle East or between the Middle East and the West.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

503./403. Selected Topics - Asian Literature (3)

Prerequisite: One course in literature or consent of instructor.

Interrelationships of two or more authors, themes, genres, movements or aspects of literature and culture in Asia and between Asia and the West.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

504./404. Selected Topics - Women in World Literature (3)

Prerequisite: One course in literature or consent of instructor.

Study of the role of women in world literature.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

506./406. Selected Topics - East European Literature and Culture (3)

Prerequisite: One course in literature or consent of instructor.

Major movements, authors, and themes in Eastern European literature and culture (Slavic and non-Slavic) and/or the

relationship of East European literature and culture and Western Europe and North America.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

530./430. Dante (3)

Prerequisite: One course in literature or consent of instructor.

A reading, in translation, of the major works of Dante, including the *Vita Nuova* and the *Divine Comedy*. Examination is also given to the comparative nature of Dante's work: his sources and his influence on later writers, artists, and composers.

Letter grade only (A-F).

531./431. Medieval Literature (3)

Prerequisite: One course in literature or consent of instructor.

Representative selections, in translation, from writings of the medieval period, reflecting dominant ideas of the time.

Letter grade only (A-F).

532./432. Continental Renaissance Literature (3)

Prerequisite: One course in literature or consent of instructor.

Comparative study of the major non-dramatic works of Renaissance Europe, including authors such as Petrarch, Boccaccio, Lorenzo de' Medici, Machiavelli, Ariosto, Tasso, Ronsard, Rabelais, Erasmus, and Cervantes. Emphasis is also given to influences, trends, and contributions to the modern world.

Letter grade only (A-F).

535./435. Literature of the Enlightenment (3)

Prerequisite: One course in literature or consent of instructor.

Comparative study of European literature, from approximately 1650 to 1800, with an emphasis on reading literary works within historical context and considering the imaginative and intellectual achievements and legacies of the Enlightenment.

537./437. Romantic Literature (3)

Prerequisite: One course in literature or consent of instructor.

Representative selections in translation from European writers of the Romantic period with an emphasis on a comparative study of works from Germany and France from about 1770-1850.

538./438. 20th Century European Literature (3)

Prerequisite: One course in literature or consent of instructor.

Comparative study of continental European literature from 1900 to present. Focus on novels and drama. Topics include realism, naturalism, psychological novel, theatre of the absurd, existentialism, modernism, postmodernism, and postcolonialism.

Letter grade only (A-F).

540./440. Selected Topics - Latin American Literary Studies (3)

Prerequisite: One course in literature or consent of instructor.

Comparative study of major literary genres in Latin American literature in relation to the principal periods and movements of the Western literary tradition.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

545./445. Selected Topics - American Folklore Studies (3)

Prerequisite: One course in literature or consent of instructor.

Topics are chosen to provide a bridge between literary, aesthetic and specialized folkloristic studies of American culture. Special attention will be paid to European and Third World contributions to American folklore.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

548./448. Selected Topics - Comparative Studies (3)

Prerequisite: One course in literature or consent of instructor.

Interrelationship of two or more disciplines, with emphasis on reciprocal influences and borrowing of materials during various

literary periods. The class will feature a different interdisciplinary study each semester.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

549./449. Selected Topics - Major Continental Writers (3)

Prerequisite: One course in literature or consent of instructor.

Intensive and comparative study of one to three major continental authors.

Letter grade only (A-F). May be repeated to maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

550. Selected Topics - Comparative World Literature (3)

Prerequisite: CWL 501 or consent of instructor.

Special studies of movements, figures and relationships in world literature; or between world literature and other disciplines.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

552./452. Selected Topics - Mythology (3)

Prerequisites: One course in literature or consent of instructor.

Interrelation of two or more mythologies, mythological themes or theories of mythology. This class will feature a different area of an interdisciplinary or comparative nature in the study of mythology each semester.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

553./453. Fairy Tales (3)

Prerequisite: One course in literature or consent of instructor.

Study of fairy tale as a unique literary genre and art form. Class will apply contemporary theory to tales and identify psychological, religious, cultural, and alchemical patterns and symbols that manifest the realization of identity and illustrate creative processes.

Letter grade only (A-F).

561./461. Selected Topics - Contemporary Literary Criticism (3)

Prerequisite: Two upper-division literature courses or consent of instructor.

In-depth study of a particular critic or movement in contemporary literary theory.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

COMPUTER ENGINEERING AND COMPUTER SCIENCE

College of Engineering

Department Chair: Kenneth James

Department Office: Engineering & Computer Sciences (ECS) - 552
Telephone: (562) 985-4285
Website: <http://www.cecs.csulb.edu/>

Faculty: Anastasios Chassiakos, Michael Chelian, Sandra Cynar (Emerita), Wayne Dick (Emeritus), Todd Ebert, Burkhard Englert, Arthur Gittleman, Darin Goldstein, Min He, Michael Hoffman, Tom Johnson, Shui Lam, Dar-Biau Liu, Tracy Bradley Maples, Alvaro Monge, Frank Murgolo, Thinh Nguyen, Dennis Volper, Xiaolong Wu

Undergraduate Advisors: Michael Chelian, Alvaro Monge

Graduate Advisor: Shui Lam

General Education Advising: Academic Advising - Horn Center

Minor and Certificate Advisor: Alvaro Monge, Michael Chelian

Administrative Support Coordinator: Robin Ikemi

Administrative Support Assistant: Karyl Anthony

Students desiring detailed information should contact the department for referral to one of the faculty advisors.

Career Possibilities

Computer Engineer • Software Engineer • Systems Analyst • Hand-held Appliance Programmer • Web Application Developer • Mainframe Programmer • Applications Programmer • LAN/WAN Administrator • Systems Administrator • Computer Service Representative • Database Administrator • Technical Services Manager • Telecommunications Analyst (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu/.)

Accreditation

The Bachelor of Science in Computer Engineering is accredited by the Engineering Accreditation Commission (EAC) and the Bachelor of Science in Computer Science by the Computing Accreditation Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202 – telephone: 410/ 347-7700; website: <http://www.abet.org>.

Advisory Board

The Department of Computer Engineering and Computer Science is supported by an Advisory Board composed of engineers, computer scientists, and business executives in the Southern California area. This liaison helps the department keep its curricula responsive to the needs of the community.

Undergraduate Degree Programs

The degree in Computer Engineering focuses on computer hardware (design, construction, and operation of computer systems). The Computer Science degree places more emphasis on computer software (databases and user development). The high school student planning to enter either program is advised to pursue a strong program in science and mathematics.

Students will receive a comprehensive education in computer engineering and/or computer science, as well as the sciences and humanities, and will be able to communicate effectively. They will be able to design systems, components or processes that meet performance, cost, time, safety, and quality requirements. They will understand professional responsibilities and will be able to analyze the social and ethical implications of their work.

Undergraduate Programs

Bachelor of Science in Computer Engineering (121 units)

This program provides students with a strong background in mathematics, physics, and engineering science. Courses, especially those in the junior and senior years, emphasize an open-ended, design-oriented approach to solving engineering problems. Teamwork, communication skills, and an interdisciplinary approach to problem solving are integrated into the senior computer engineering design courses.

Program Educational Objectives

Our students following graduation will be able

- to enter California's high technology workforce, and make significant contributions to Computer Engineering through the research, design and development of a wide range of embedded systems and system-on-chip applications.
- to help further the state's economic growth by developing innovative ideas, and translating them into commercial products that benefit society.
- to function effectively as a team member and/or leader in multidisciplinary and multicultural environments.
- to recognize the societal and global context of their work and to understand professional and ethical responsibilities.
- to pursue lifelong learning through such activities as graduate school, distance education, professional training and membership in professional societies and to be able to adapt to new engineering tools.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Lower Division:

Take all of the following courses:

CECS 100 Critical Thinking in the Digital Information Age (3)

Prerequisite/Corequisite: ENGL 100 or its equivalent all with a grade of "C" or better.

CECS 105 Introduction to Computer Engineering and Computer Science (1)

Prerequisites: None.

CECS 174 Introduction to Programming and Problem Solving (3)

Prerequisite: CECS 100 and MATH 113 (or equivalent) all with a grade of "C" or better.

CECS 201 Computer Logic Design I (3)

Prerequisite: MATH 113 or equivalent all with a grade of "C" or better.

CECS 211 Principles of Computer Engineering I (3)

Prerequisite: MATH 122 with a grade of "C" or better.

CECS 228 Discrete Structures With Computing Applications I (3)

Prerequisites: CECS 174 and MATH 113 or equivalent all with a grade of "C" or better.

CECS 262 C for Embedded Programming (3)

Prerequisites: CECS 174 and 201 all with a grade of "C" or better.

CECS 271 Introduction to Numerical Methods (3)

Prerequisites: CECS 174 and MATH 123 all with a grade of "C" or better.

CECS 274 Object Oriented Programming and Data Structures (3)

Prerequisite: CECS 174 with a grade of "C" or better.

CECS 282 C++ for Java Programmers (3)

Prerequisite: CECS 274 with a grade of "C" or better.

ENGR 101 Introduction to the Engineering

Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

ENGR 102 Academic Success Skill (1)

Prerequisite: ENGR 101 with a grade of "C" or better.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

Take one of the following choices:

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

or both of the following:

EE 210 Electro-Magnetic Foundations in EE (3)

Prerequisite: PHYS 151 with a grade of "C" or better.
Corequisites: MATH 123, EE 210L.

EE 210L Electro-Magnetic Foundations in EE Lab (1)

Corequisite: EE 210.

Upper Division:

Take all of the following courses:

CECS 301 Computer Logic Design II (3)

Prerequisites: CECS 174, 201 all with a grade of "C" or better.

CECS 311 Principles of Computer Engineering II (3)

Prerequisites: CECS 201 and CECS 211 all with a grade of "C" or better.

CECS 346 Microprocessors and Controllers I (3)

Prerequisites: CECS 211 and 262 all with a grade of "C" or better.

CECS 347 Microprocessors and Controllers II (3)

Prerequisites: CECS 301, 311, and 346 all with a grade of "C" or better.

CECS 360 Integrated Circuit Design Software (3)

Prerequisites: CECS 301, 346, MATH 123 or 222 all with a grade of "C" or better.

CECS 362 Real-time Operating Systems (3)

Prerequisites: CECS 285 or 346, and 262 all with a grade of "C" or better.

CECS 440 Computer Architecture (3)

Prerequisites: CECS 346 with a grade of "C" or better.

CECS 447 Microprocessors and Controllers III (3)

Prerequisite: CECS 347 with a grade of "C" or better.

CECS 460 System on Chip Design (3)

Prerequisite: CECS 360 with a grade of "C" or better.

CECS 463 System on Chip Applications (3)

Prerequisite: CECS 360 with a grade of "C" or better.

CECS 490A Senior Project I (3)

Prerequisites: CECS 347 with a grade of "C" or better, senior standing.

CECS 490B Senior Project II (3)

Prerequisites: CECS 490A or 491 with a grade of "C" or better and consent of instructor.

EE 380 Probability, Statistics & Stochastic Modeling (3)

Prerequisites: MATH 123; (CECS 100 or equivalent) with a grade of "C" or better.

Take nine units of approved electives to be selected from:

CECS 343, 406, 451, 461, 474, 475, 497; EE 386, 486; CE 406; ECON 300; CEM 310 (or ENGL 317); ENGR 350; MATH 370A.

A grade of "C" or better must be achieved in all required and elective courses. CE 406; CEM 310; CECS 100, 105, 174, 201, 211, 228, 262, 271, 274, 282, 301, 311, 343, 346, 347, 360, 362, 406, 440, 447, 451, 460, 461, 463, 474, 475, 490A, 490B, 497; ECON 300; EE 210 and 210L, 380, 386, 486; ENGL 317; ENGR 101, 102, 350; MATH 122, 123, 370A; PHYS 151, 152.

Bachelor of Science in Computer Science (122 units)

This degree is designed to prepare graduates for a variety of professional careers in the computer field. The curriculum is designed to provide a balance between the theoretical and practical aspects of computer science. Extensive laboratory time is required for these courses, and design and analysis experiences are emphasized.

Program Educational Objectives

Our students following graduation will be able

- to enter California's high technology workforce, and make significant contributions through the research, design and development of software and networked computer systems.
- to help further the state's economic growth by developing innovative ideas, and translating them into commercial products that benefit society.
- to function effectively as a team member and/or leader in multidisciplinary and multicultural environments.
- to recognize the societal and global context of their work and to understand professional and ethical responsibilities.

- to pursue lifelong learning through such activities as graduate school, distance education, professional training and membership in professional societies and to be able to adapt to new engineering tools.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Lower Division:

Take all of the following courses:

CECS 100 Critical Thinking in the Digital Information Age (3)

Prerequisite/Corequisite: ENGL 100 or its equivalent.

CECS 105 Introduction to Computer Engineering and Computer Science (1)

Prerequisites: None.

CECS 174 Introduction to Programming and Problem Solving (3)

Prerequisite: CECS 100 and MATH 113 (or equivalent) all with a grade of "C" or better.

CECS 201 Computer Logic Design I (3)

Prerequisite: MATH 113 or equivalent all with a grade of "C" or better.

CECS 228 Discrete Structures With Computing Applications I (3)

Prerequisites: CECS 174 and MATH 113 or equivalent all with a grade of "C" or better.

CECS 274 Object Oriented Programming and Data Structures (3)

Prerequisite: CECS 174 with a grade of "C" or better.

CECS 277 Object Oriented Application Development (3)

Prerequisite: CECS 274 with a grade of "C" or better.

CECS 282 C++ for Java Programmers (3)

Prerequisite: CECS 274 with a grade of "C" or better.

CECS 285 Computer Organization and Assembly Language Programming (3)

Prerequisites: CECS 201, 274 all with a grade of "C" or better.

ENGR 101 Intro to the Engineering Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

ENGR 102 Academic Success Skills (1)

Prerequisite: ENGR 101 with a grade of "C" or better.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

Three units of math elective taken from the following:

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 233 Fundamental Concepts for Adv. Math (3)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

Take a minimum of 12 units of approved science-electives to include a two-semester science sequence chosen from the following pairs of courses:

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

or

EE 210 Electro-Magnetic Foundations in EE (3)

Prerequisite: PHYS 151 with a grade of "C" or better. Corequisites: MATH 123, EE 210L.

EE 210L Electro-Magnetic Foundations in EE Lab (1)

Corequisite: EE 210.

or

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

Remaining units to be chosen from the following:

BIOL 153, 200, 205, 207.

Upper Division:

Take all of the following courses:

CECS 323 Database Fundamentals (3)

Prerequisites: CECS 228, 277 all with a grade of "C" or better.

CECS 326 Operating Systems (3)

Prerequisites: CECS 282 and either 285 or 346 all with a grade of "C" or better.

CECS 327 Net-Centric Computing (3)

Prerequisite: CECS 326 with a grade of "C" or better.

CECS 328 Data Structures and Algorithms (3)

Prerequisite: CECS 228 with a grade of "C" or better; Corequisite: CECS 277.

CECS 341 Computer Architecture and Organization (3)

Prerequisites: CECS 285 with a grade of "C" or better.

CECS 343 Introduction to Software Engineering (3)

Prerequisites: CECS 277 or 282 all with a grade of "C" or better.

EE 380 Probability, Statistics and Stochastic Modeling (3)

Prerequisites: MATH 123; (CECS 100 or equivalent) all with a grade of "C" or better.

ENGR 350 Computers, Ethics and Society (3)

Prerequisites: 3 units from GE Category A.1 (Writing) and 3 units from GE Category D (Social and Behavioral Science).

Take one course from the following:

CEM 310 Communications in Engineering Profession (3)

Prerequisites: ENGL 100, COMM 110 all with a grade of "C" or better and Senior standing.

ENGL 317 Technical Writing (3)

Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Take three units of study in formal languages and computation to be chosen from the following courses:

CECS 419, 424, 444

Take 15 units of approved electives chosen from:

Take six units of core electives chosen from the following:

CECS 419, 424, 428, 429, 444, 445, 448, 449, 451, 474, 478, MATH 323

Take three units of applied electives to be chosen from the following:

CECS 455, 470, 472, 475, 476

Take three units from a capstone course to be chosen from the following:

CECS 423, 491, 492

Take three units chosen from either the core, applied, or senior capstone course list, or from the following:

CECS 405, 406, 490B, 497.

A grade of "C" or better is required in the following courses: BIOL 153, 200, 205, 207; CEM 310; CHEM 111A, 111B; CECS 100, 105, 174, 201, 228, 274, 277, 282, 285, 323, 326, 327, 328, 341, 343, 423, 490A, 491, 492; EE 210 and 210L, 380; ENGL 317; ENGR 101, 102, 350; MATH 122, 123, 222, 224, 233, 247, 380; PHYS 151, 152.

Bachelor of Science in Engineering Technology

Technology and Engineering Education Option

For requirements, see the description in the Engineering Technology Programs section of this catalog.

Minor in Computer Science

Requirements

A minimum of 21 units.

Take all of the following:

CECS 174 Introduction to Programming and Problem Solving (3)

Prerequisite: CECS 100 and MATH 113 (or equivalent) all with a grade of "C" or better.

CECS 228 Discrete Structures with Computing Applications (3)

Prerequisites: CECS 174 and MATH 113 or equivalent all with a grade of "C" or better.

CECS 274 Object Oriented Programming and Data Structures (3)

Prerequisite: CECS 174 all with a grade of "C" or better.

CECS 323 Database Fundamentals (3)

Prerequisites: CECS 228, 277 all with a grade of "C" or better.

Take one of the following courses:

CECS 277 Object Oriented Application Development (3)

Prerequisite: CECS 274 with a grade of "C" or better.

CECS 282 C++ for Java Programmers

Prerequisite: CECS 274 with a grade of "C" or better.

Take two courses selected from the following:

CECS 328, 343, 419, 423, 428, 445, 451, 455, 470, 475, 497

Minor in Web Technologies and Applications

Open to all majors except those seeking a B.S. Engineering Technology, Option in Technology and Engineering Education. The minor is conferred concurrently with the BS/BA degree.

This minor will provide the technical skills not included in non-technical degrees, but required for success in a highly technical world. Students will gain an understanding of the system design process and learn to acquire and evaluate information from the internet and to communicate information via the internet including ethical issues encountered. In addition, students will learn to create a robust, useable, and accessible website.

Requirements

A minimum of 18 units as specified below.

Complete the 12 core units:

CECS 100 Critical Thinking in the Digital Information Age (3)

Prerequisite/Corequisite: ENGL 100 or its equivalent.

CECS 110 Beginning Web Design (3)

Prerequisites: None.

CECS 200 Intermediate Web Design (3)

Prerequisite: CECS 110 with a grade of "C" or better. Prerequisite/Corequisite: CECS 100.

CECS 300 Design of Dynamic Web Sites (3)

Prerequisite: CECS 200 with a grade of "C" or better.

Complete 6 units from the following list of electives:

ART 366; CECS 323, 410, 412, 470; ENGR 350; ETEC 435; IS 380, 445, 484; MKTG 437; PSY 3271

Minor in Computer Science Applications

This minor is not open to students majoring in Computer Science or Computer Engineering.

This minor is designed to prepare students to write small programs and to maintain and upgrade PC software and hardware as well as understand how to set up a local area network. In addition it prepares students to be able to design and implement web applications.

Requirements

Completion of 18 units.

Complete the 12 core units:

CECS 110 Beginning Web Design (3)

Prerequisites: None.

CECS 174 Intro to Programming & Problem Solving (3)

Prerequisite: CECS 100 and MATH 113 (or equivalent) all with a grade of "C" or better.

CECS 200 Intermediate Web Design (3)

Prerequisite: CECS 110 with a grade of "C" or better. Prerequisite/Corequisite: CECS 100.

CECS 410 Computers and Networks (3)

Prerequisite: Course design assumes familiarity with computers.

Complete 6 units from the following list of electives:

CECS 300, 310, 412; IS 300, 340, 343; ETEC 435.

Certificate in Web Technologies and Applications

Open to all majors except those with or seeking a B.S. Engineering Technology, Option in Technology and Engineering Education. The certificate is conferred as a post-baccalaureate certificate or concurrently with the BS/BA degree.

This certificate will prepare students to work with a variety of technologies including computers and related technologies and the proper setup and operation of equipment along with valuable troubleshooting skills. Students will gain an understanding of the system design process and learn to acquire and evaluate information from the internet and to

communicate information via the internet including ethical issues. They will learn to create a robust, useable, and accessible website.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

A minimum of 24 units as specified below

Complete the 18 core units:

CECS 100 Critical Thinking in the Digital Information Age (3)

Prerequisite/Corequisite: ENGL 100 or its equivalent.

CECS 110 Beginning Web Design (3)

Prerequisites: None.

CECS 200 Intermediate Web Design (3)

Prerequisite: CECS 110 with a grade of "C" or better.

Prerequisite/Corequisite: CECS 100.

CECS 300 Design of Dynamic Web Sites (3)

Prerequisite: CECS 200 with a grade of "C" or better.

CECS 410 Computers and Networks (3)

Prerequisite: Course design assumes familiarity with computers.

CECS 412 Intro to Computer Network Architectures (3)

Prerequisite: Familiarity with computers.

Complete 6 units from the following list of electives:

ART 366; CECS 323, 470; ENGR 350; ETEC 435; IS 380, 445, 484; MKTG 437; PSY 3271

Graduate Programs

Mission

The mission of the graduate program in Computer engineering and Computer Science at CSULB is to provide a high-quality educational experience and the technical specialization required to become successful leaders in industry. The program also prepares the students to pursue advanced degrees if they so desire. The graduate program involves advanced courses in analysis and design in computer software and hardware. The students may choose to do a thesis or take a comprehensive examination as the culmination of their program.

Program Objectives

Graduates of the MS program will:

1. have technical competency in their field of study.
2. have technical knowledge and skills needed to conduct independent and/or innovative research.
3. keep current with state of the art technologies and advancements in their area.

Master of Science in Computer Science

Admission Procedures

To be considered for admission the graduate applicant must have earned a bachelor's degree from an accredited institution, have been in good standing at the last institution attended, and have a grade point average (GPA) of at least 2.7 for the last 60 semester units (90 quarter units) attempted. The general Graduate Record Examination (GRE) is not required, but highly recommended for international students and those students with a GPA below 3.0.

Option in Computer Engineering

This option offers advanced study in the theory, analysis, design and applications of both computer hardware and software.

Prerequisites

1. A bachelor's degree in computer science, engineering, or other appropriate discipline from an accredited college or university, with a minimum grade point average (GPA) of 2.7 in the last 60 semester units or 90 quarter units attempted.
2. Students are required to have taken the following prerequisite courses (or their equivalents) in their undergraduate study or have any deficiencies removed prior to Advancement to Candidacy:
 - A. One year of instruction in an object-oriented programming language.
 - B. Take all of the following courses:
 - CECS 301 Computer Logic Design II (3)
Prerequisites: CECS 174, 201 all with a grade of "C" or better.
 - CECS 326 Operating Systems (3)
Prerequisites: CECS 282 and either 285 or 346 all with a grade of "C" or better.
 - CECS 343 Introduction to Software Engineering (3)
Prerequisites: CECS 277 or 282 all with a grade of "C" or better.
 - CECS 346 Microprocessors and Controllers I (3)
Prerequisites: CECS 211 and 262 all with a grade of "C" or better.
 - CECS 347 Microprocessors and Controllers II (3)
Prerequisites: CECS 301, 311, and 346 all with a grade of "C" or better.
 - CECS 360 Integrated Circuit Design Software (3)
Prerequisites: CECS 301, 346, MATH 123 or 222 all with a grade of "C" or better.
 - CECS 440 Computer Architecture (3)
Prerequisites: CECS 346 with a grade of "C" or better..
 - MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123. Not open to Freshmen.
3. Students must consult with the graduate program advisor prior to enrolling in any course for the program.

Requirements

Students must complete a minimum of 30 graduate and approved upper-division course units including the following:

1. At least 21 units at the graduate level of instruction;
2. 12 units of required courses consisting of:
 - A. CECS 460 System on Chip Design (3)
Prerequisite: CECS 360 with a grade of "C" or better..
 - B. CECS 530 Advanced Computer Architecture I (3)
Prerequisite: CECS 341 or 440 with a grade of "C" or better.
 - C. One course from the following:
 - CECS 531 Advanced Computer Architecture II (3)
Prerequisite: CECS 530 with a grade of "C" or better.
 - CECS 546 Fault Tolerant Computing Systems (3)
Prerequisite: CECS 530 with a grade of "C" or better.
 - D. One course from the following:
 - CECS 526 Advanced Operating Systems (3)
Prerequisites: CECS 228 and 326 all with a grade of "C" or better.
 - CECS 528 Advanced Analysis of Algorithms (3)
Prerequisites: CECS 328, MATH 380 or EE 380 all with a grade of "C" or better.

3. All students must complete either:
 - A. Comprehensive examination, or
 - B. Thesis with oral defense which requires a total of 6 units from the following (at least 4 units must be CECS 698):
 - CECS 697 Directed Research (1-3)
Prerequisite: Classified Graduate standing.
 - CECS 698 Thesis or Industrial Project (2-6)
Prerequisite: Advancement to Candidacy.

Option in Computer Science

This option offers advanced study in software development and engineering, networking, operating systems, distributed computing, artificial intelligence, security, and analysis of algorithms.

Prerequisites

1. A bachelor's degree in computer science, engineering, or other appropriate discipline from an accredited college or university, with a minimum grade point average (GPA) of 2.7 in the last 60 semester units or 90 quarter units attempted.
2. Students are required to have taken the following prerequisite courses (or their equivalents) in their undergraduate study or have any deficiencies removed prior to Advancement to Candidacy:
 - A. One year of instruction in an object-oriented programming language.
 - B. All of the following courses:
 - CECS 228 Discrete Structures with Computing Applications (3)
Prerequisites: CECS 174 and MATH 113 or equivalent all with a grade of "C" or better.
 - CECS 285 Computer Organization and Assembly Language Programming (3)
Prerequisites: CECS 201, 274 all with a grade of "C" or better.
 - CECS 323 Database Fundamentals (3)
Prerequisites: CECS 228, 277 all with a grade of "C" or better.
 - CECS 326 Operating Systems (3)
Prerequisites: CECS 282 and either 285 or 346 all with a grade of "C" or better.
 - CECS 328 Data Structures and Algorithms (3)
Prerequisite: CECS 228 with a grade of "C" or better.
Corequisite: CECS 277.
 - CECS 341 Computer Architecture and Organization (3)
Prerequisites: CECS 285 with a grade of "C" or better.
 - CECS 343 Introduction to Software Engineering (3)
Prerequisites: CECS 277 or 282 all with a grade of "C" or better.
 - EE 380 Probability, Statistics and Stochastic Modeling (3) [or MATH 380 (3)]
Prerequisites: MATH 122; (CECS 100 or equivalent) with a grade of "C" or better.
 - C. One of the following:
 - CECS 419 Theory of Computation (3)
Prerequisite: CECS 328 with a grade of "C" or better.
 - CECS 424 Organization of Programming Languages (3)
Prerequisites: CECS 326 and 328 all with a grade of "C" or better.
 - CECS 444 Compiler Construction (3)
Prerequisites: CECS 285 and 328 with a grade of "C" or better.
3. Students must consult with the graduate program advisor prior to enrolling in any course for the program.

Requirements

Students must complete a minimum of 30 graduate and approved upper-division course units including the following:

1. At least 21 units at the graduate level of instruction;
2. 12 units of required courses consisting of:
 - A. CECS 528 Advanced Analysis of Algorithms (3)
Prerequisites: CECS 328, MATH 380 or EE 380 all with a grade of "C" or better.
 - B. One course from the following:
 - CECS 526 Advanced Operating Systems (3)
Prerequisites: CECS 228 and 326 with a grade of "C" or better.
 - CECS 530 Advanced Computer Architecture I (3)
Prerequisite: CECS 341 or 440 with a grade of "C" or better.
 - C. Two courses from the following:
 - CECS 521, 531, 543, 546, 572, 575
3. All students must complete either:
 - A. Comprehensive examination, or
 - B. Thesis with oral defense which requires a total of 6 units from the following (at least 4 units must be CECS 698):
 - CECS 697 Directed Research (1-3)
 - CECS 698 Thesis or Industrial Project (2-6)

Advancement to Candidacy for Both Options

Students applying for advancement to candidacy must:

1. have completed all undergraduate deficiencies with grades of "C" or better;
2. have attained an overall grade point average (GPA) of 3.0;
3. have completed at least 12 units of required courses applicable to the degree with a GPA of at least 3.0 for the completed units;
4. have fulfilled the Graduation Writing Assessment Requirement (GWAR);
5. and have their plans of studies approved by the CECS department graduate advisor.

Computer Engineering and Computer Science Courses (CECS)

LOWER DIVISION

100. Critical Thinking in the Digital Information Age (3)

Prerequisite/Corequisite: ENGL 100 or its equivalent.

Help students develop critical thinking skills using technical software. Main topics include: identifying engineering issues for investigation, developing planning and problem solving strategies, locating pertinent information and examples, critically analyzing these sources, forming and testing hypotheses, synthesizing and organizing results for effective communication, and developing transferable problem solving skills.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

105. Introduction to Computer Engineering and Computer Science (1)

Introduction to the fields of computer engineering and computer science. Current and future trends and challenges in various fields of computing. Social, ethical and economical issues related to computing technology. Exploration of career and professional development opportunities.

(Lecture 3 hour) Letter grade only (A-F).

110. Beginning Web Design (3)

Introduction to HTML and CSS using modern tools, following the W3C guidelines for coding. Web sites designed with usability and accessibility principles implemented. Overview of graphics, video, sound, JavaScript and Dreamweaver.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

174. Introduction to Programming and Problem Solving (3)

Prerequisite: CECS 100 and MATH 113 (or equivalent) all with a grade of "C" or better.

Introduction to basic concepts of computer science and fundamental techniques for solving problems using the Java programming language. Structured problem solving, object-oriented programming, programming style. Applications to numerical and non-numerical problems.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

200. Intermediate Web Design (3)

Prerequisite: CECS 110 with a grade of "C" or better.

Prerequisite/Corequisite: CECS 100.

Intermediate HTML and CSS using Dreamweaver, following the W3C guidelines for coding. Web sites designed with usability and accessibility principles implemented.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

201. Computer Logic Design I (3)

Prerequisite: MATH 113 or equivalent all with a grade of "C" or better.

Basic topics in combinational and sequential switching circuits with applications to the design of digital devices. Introduction to Electronic Design Automation (EDA) tools. Laboratory projects with Field Programmable Gate Arrays (FPGA).

(Lecture 2 hours, lab 3 hours) Letter grade only (A-F).

202. The Digital Information Age (3)

Prerequisite: GE Foundation requirements.

The design and use of common-place digital information systems. Introduction to how information is digitized, secured, compressed and transmitted. Students learn how digital age impacts them and the world they live in.

(Lecture 3 hours) Letter grade only (A-F).

211. Principles of Computer Engineering I (3)

Prerequisite: MATH 122 with a grade of "C" or better.

Basic principles of analysis and design of computer-based circuits. Application of transistors, logic families, digital, devices in computer and embedded processor interfacing, importance of phasors and the complex plane. Basic DC/AC circuit fundamentals. Laboratory safety.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

228. Discrete Structures with Computing Applications (3)

Prerequisites: CECS 174 and MATH 113 or equivalent all with a grade of "C" or better.

An introduction to discrete mathematics with applications towards computing. Topics include sets, functions, logic, relations, graphs, trees, recursion, combinatorics, and mathematical reasoning.

Letter grade only (A-F). (Lecture 2 hours, laboratory/problem session 3 hours)

262. C for Embedded Programming (3)

Prerequisites: CECS 174 and 201 all with a grade of "C" or better.

Introduction to embedded system architecture, memory organization and programming using C. Interfacing with external I/O devices, Use of internal special function registers. Development tools and extended C instructions unique to embedded systems. Course will be taught using an embedded processor development board.

(Lecture 2 hours, laboratory 3 hours.) Letter grade only (A-F).

271. Introduction to Numerical Methods (3)

Prerequisites: CECS 174 and MATH 123 all with a grade of "C" or better.

Matrix computations. Linear algebra fundamentals. Numerical methods for algebraic equations. Systems of linear equations. Curve fitting. Least squares. Interpolation. Fourier transform. Frequency domain concepts. Numerical integration and differentiation. Ordinary differential equations. Use of MATLAB or equivalent for algorithm implementation.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

274. Object Oriented Programming and Data Structures (3)

Prerequisite: CECS 174 with a grade of "C" or better.

Disciplined methods of design, coding and testing using the Java programming language. Data abstraction, object-oriented design. Introduction to data structures (linked lists, stacks, queues and trees.) Recursion. Sorting and searching.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

277. Object Oriented Application Development (3)

Prerequisite: CECS 274 with a grade of "C" or better.

Advanced introduction to the fundamentals of computer science and software engineering methodology. Advanced programming techniques and design methodology typically used in large programming projects using the Java programming language.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

282. C++ for Java Programmers (3)

Prerequisite: CECS 274 with a grade of "C" or better.

Structured and Object Oriented Programming in C++. Common features and differences between Java and C++. Pointers, references, and memory management, stream I/O, classes, operator overloading, exception handling, STL.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

285. Computer Organization and Assembly Language Programming (3)

Prerequisites: CECS 201, 274 all with a grade of "C" or better.

Study of computer organization and assembly language programming using embedded processor based systems to solve practical problems. Laboratory projects using embedded system software development and hardware simulation tools. Hands-on projects using hardware prototyping boards.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

UPPER DIVISION

300. Design of Dynamic Web Sites (3)

Prerequisite: CECS 200 with a grade of "C" or better.

Dynamic Web design using modern tools. Creation of domains, using hosting services and content management systems. Website portability, usability and accessibility.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

301. Computer Logic Design II (3)

Prerequisites: CECS 174, 201 all with a grade of "C" or better.

Sequential logic, programmable logic design, basic Arithmetic Logic Unit (ALU) design and memory devices. Laboratory projects with Medium Scale to Very Large Scale Integration (MSI to VLSI) implementations and Computer Aided Design (CAD).

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

310. Computer-Based Learning Resources (3)

Prerequisite: CECS 200 with a grade of "C" or better.

Explore and learn to use the many existing web-based education tools that focus on teaching technology. Evaluation of resources for age appropriateness and gender preferences. Students will develop a web-based tool to teach a technical subject of their choice. Field work required.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

311. Principles of Computer Engineering II (3)

Prerequisites: CECS 201 and CECS 211 all with a grade of "C" or better.

Embedded system components. Bipolar and MOS devices and switching circuits. Embedded systems signal processing with operational amplifiers. Digital/analog interfacing including A/D and D/A converters. Schematic capture, analysis and implementation of embedded signal processing algorithms. Fundamentals of digital communication.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

312. Introduction to Distributed Operating Systems (3)

Prerequisite: CECS 174 with a grade of "C" or better.

The Basics of Operating Systems, Processes, Threads, Concurrent Programming, Protection and Security, Distributed System Structures, Distributed File Systems, Distributed Coordination, Internet Applications.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

323. Database Fundamentals (3)

Prerequisites: CECS 228, 277 all with a grade of "C" or better.

Fundamental topics on database management. Topics include entity-relationship models, database design, data definition language, the relational model, data manipulation language, database application programming and normalization.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

326. Operating Systems (3)

Prerequisites: CECS 282 and either 285 or 346 all with a grade of "C" or better.

The structure and functions of operating systems. Interrupt handling, processes and interprocess communication, memory management, resource scheduling, information sharing and protection. Project implementation in C/C++.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

327. Net-centric Computing (3)

Prerequisite: CECS 326 with a grade of "C" or better.

Introduction to Distributed Computing and Interprocess Communication. Client Server Paradigm. Sockets and the Socket API. Unicasting and Multicasting. Distributed Objects. CORBA. Internet Applications.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

328. Data Structures and Algorithms (3)

Prerequisite: CECS 228 with a grade of "C" or better.

Corequisite: CECS 277.

A broad view of data structures and the structure-preserving operations on them. Abstract data types, algorithms, complexity. Programming projects to exemplify these concepts.

341. Computer Architecture and Organization (3)

Prerequisites: CECS 285 with a grade of "C" or better.

Review of logic design. Instruction set architecture. Arithmetic logic units. Data path and control. Pipelining and performance. Memory system organization and design. Virtual memory and paging. I/O interfacing. Vector and array processing. Distributed computing and supercomputing. Contemporary computer designs.

(Lecture 2 hours, laboratory, 3 hours) Letter grade only (A-F).

343. Introduction to Software Engineering (3)

Prerequisites: CECS 277 or 282 all with a grade of "C" or better.

Principles of software engineering, UML, modeling large software systems, requirements elicitation, object oriented analysis and design using UML, introduction to design patterns, implementation of large systems, software testing, project management, the software lifecycle. Semester long programming project.

Letter grade only (A-F). (Lecture 2 hours, lab 3 hours)

345. Fundamentals of Embedded Systems (3)

Prerequisite: CECS 202 with a grade of "C" or better.

Beginning course in embedded system design and technology. Examines embedded systems market, their fundamental basis, key hardware and software technology drivers, critical applications and component segments. Provides up-to-date analysis of recent developments and current trends in market space.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

346. Microprocessors and Controllers I (3)

Prerequisites: CECS 211 and 262 all with a grade of "C" or better.

Intro microprocessor/controller, embedded programming and design. Basic computer organization, representation of information and instruction, addressing techniques, input/output, assembly language programming. Introduction to assemblers, linkage editors and loaders. Study of the 8051. Design of microprocessor-based systems.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

347. Microprocessors and Controllers II (3)

Prerequisites: CECS 301, 311, and 346 all with a grade of "C" or better.

Study of embedded processor applications and interfacing. Embedded systems design, control of external devices, embedded programming in C and assembly. A/D and D/A converters, digital signal processing, motor and LCD controllers. Laboratory implementation of embedded designs and hardware-assisted debugging.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

360. Integrated Circuit Design Software (3)

Prerequisites: CECS 301, 346, MATH 123 or 222 all with a grade of "C" or better.

Introduction to Computer Aided Design tools used in the design and fabrication of integrated circuits. Discussion of the IC fabrication process, the layout and routing of basic gates, transistor level design of gates, synthesis and RTL level design, floor planning, and IC development costs.

(Lecture 2 hours, lab 3 hours) Letter grade only (A-F).

362. Real-Time Operating Systems (3)

Prerequisites: CECS 285 or 346, and 262 all with a grade of "C" or better.

Introduction to embedded Real-Time Operating Systems (RTOS) and device drivers. Work with open-source RTOS on an 8-bit hardware platform to understand and write kernels, executives and schedulers along with preemptive multi-tasking systems. Student will study and write device drivers that will be implemented in RTOS. Programming will be done in C and assembly language.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

401. Programming Robots – For Educators (3)

Prerequisite: Some programming experience.

Learn how to inspire interest in engineering and computer science among children ages 9 through 16. Using robotic kits, gain hands-on experience in problem solving and computer programming while constructing and programming unique robot inventions.

May not be used to satisfy any MSCS requirements. (Lecture 2 hours, laboratory 3 hours). Letter grade only (A-F).

405. Selected Topics in Computer Science (3)

Prerequisite: Senior standing in computer science major.

Selected topics from recent advances in computer science and technology.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Lecture-problems 3 hours)

406. Selected Topics in Computer Science (3)

Prerequisite: Senior standing in the computer science major.

Each offering is based upon an area of computer science and technology in which recent advances have been made.

Letter grade only (A-F). May be repeated to a maximum of 6 units

with different topics in different semesters. Topics announced in the *Schedule of Classes*. (Lecture 2 hours, laboratory 3 hours)

410. Computers and Networks (3)

Prerequisite: Course design assumes familiarity with computers.

Gain practical, hands-on experience in installing hardware and software on a PC. Learn what a computer network is and how it is similar to the telephone network. Learn the parts that make up a computer and a network.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

412. Introduction to Computer Network Architectures (3)

Prerequisite: Familiarity with computers

Beginning course in computer networking designed to provide a grasp of network architectures through lecture/hands-on laboratory assignments. Overview of networking concepts and design essentials. Networking media and NICs. Network communications/protocols focusing on TCP/IP. Local area networks. Networking administration. Networking problems.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

414. Introduction to Network and System Security Issues (3)

Prerequisites: CECS 174 with a grade of "C" or better.

Controlling the risk of computer security: Security threats and vulnerabilities in the development and use of computer systems. Tools and controls that can reduce or block these threats. Topics in Network Security.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

419./519. Theory of Computation (3)

Prerequisite: CECS 328 with a grade of "C" or better.

Finite Automata and regular expressions. Pushdown automata and context-free languages. Turing machines and computability. Computational complexity.

Letter grade only (A-F). Additional projects required for CECS 519. (Lecture-problems 3 hours)

423. Database Web Applications in JEE (3)

Prerequisites: CECS 323 and 343 all with a grade of "C" or better.

Design and development of data-intensive web applications in Java EE. Database topics include transaction management, stored procedures, triggers, and security. Web application design and development using core JEE patterns like Front Controller, MVC, and DAO. Application of software engineering to complete a group project.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

424. Organization of Programming Languages (3)

Prerequisites: CECS 326 and 328 all with a grade of "C" or better.

Understanding the variety of programming languages and the design trade-offs between current programming language paradigms. Comparison of programming languages in their design, implementation, and run-time supports. Includes programming projects.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

428. Analysis of Algorithms (3)

Prerequisite: CECS 328 with a grade of "C" or better.

Applications of standard combinatorial techniques to applied programming problems. Rigorous analysis of correctness/complexity of algorithms. Advanced graph algorithms are emphasized. Topics include shortest paths on graphs, sorting, string matching, union find problem, divide-and-conquer technique, and weighted-edge problem.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

429./529. Search Engine Technology (3)

Prerequisites: CECS 323 and 328, MATH 380 or EE 380 all with a grade of "C" or better.

Models, algorithms, and evaluation of the retrieval of information

from a collection of documents. Document preprocessing. Indexing and searching. Retrieval evaluation. Search engines.

Additional projects required for CECS 529. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

440. Computer Architecture (3)

Prerequisites: CECS 346 with a grade of "C" or better.

Review of logic design. Register transfer and micro-operations. Basic computer organization. Central processor organization. Microprogram control organization. Arithmetic processor design. Arithmetic algorithms. Input-output organization. Memory organization.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

443. Software Engineering (3)

Prerequisite: CECS 326 with a grade of "C" or better.

Software life cycle. Functional decomposition, data flow and object-oriented development. Reusability and portability.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

444. Compiler Construction (3)

Prerequisites: CECS 285 and 328 all with a grade of "C" or better.

Syntax directed compiler study. Organization of a compiler and overall design: parsing, semantic analysis, optimization and code generation.

(Lecture 3 hours, laboratory 3 hours) Letter grade only (A-F).

445. Software Design and Architecture (3)

Prerequisites: CECS 343 with a grade of "C" or better and senior standing .

In-depth look at software design, design patterns, frameworks, architectures and middleware architectures. Component based design including COM, Corba, and .Net. Fundamentals of software metrics, measuring software qualities. Basics of software evolution, reengineering, and reverse engineering. A semester long team project.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

447. Microprocessors and Controllers III (3)

Prerequisite: CECS 347 with a grade of "C" or better.

Embedded system applications and techniques. Real-time multi-tasking systems, schedulers, kernels, and operating systems for embedded processors. Advanced I/O technologies - CAN, I2C, Ethernet. Embedded Internet applications. Polling vs. interrupt handling. Lab implementation of embedded designs and hardware-assisted debugging.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

448. User Interface Design (3)

Prerequisite: CECS 343 with a grade of "C" or better or consent of instructor.

Evaluation, design and programming of user interface systems. Fundamentals of human cognition, system characteristics, and the interaction between humans and systems. Usability methods and user/task-centered design. Tools for designing and building user interfaces, with emphasis on rapid applications development.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

449. Computer Graphics (3)

Prerequisites: MATH 247, CECS 282 and 328 all with a grade of "C" or better.

Basic software and hardware of 2-D computer graphics. Applications. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

451. Artificial Intelligence (3)

Prerequisites: CECS 277 and 328 all with a grade of "C" or better.

Introduction to the history and implementation of artificial intelligence agents. Topics include search, constraint satisfaction, game-playing, logical agents, belief networks, optimal sequential decision systems. Project implementation.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

453. Mobile Application Development (3)

Prerequisite: CECS 328 with a grade of "C" or better or consent of the instructor.

Languages and application programming interfaces for mobile device platforms. Development of thick and thin client applications for mobile devices.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 3 hours)

455. Introduction to Game Programming (3)

Prerequisite: CECS 328 with a grade of "C" or better or consent of instructor.

Introduction to game programming and graphics. "Slow" games. Real-time games with no adversary. Adversarial real-time games in 2-D.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

460. System on Chip Design (3)

Prerequisite: CECS 360 with a grade of "C" or better.

Complete System on Chip (SOC) design flow from design specification to working SOC. Creation of RTL level modules designed for reuse, integration of Intellectual Property (IP) for RTL and physical level IP, IC verification, creation of self-checking test benches for designs.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

461./561. Hardware/Software Co-design (3)

Prerequisite: CECS 341 or 440 all with a grade of "C" or better.

Introduction to top-down methods for hardware/software system-on-chip co-design. Design flow – system specification, software implementation, hardware synthesis, system design, and verification. Process optimization with various design decisions emphasized. Projects/case studies using system-level design methods and tools.

Additional projects required for CECS 561. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

463. System on Chip (SOC) Applications (3)

Prerequisite: CECS 360 with a grade of "C" or better.

System on Chip (SOC) design applications. Study of a variety of signal processing SOC designs and ASIC algorithms. Class projects emphasizing hardware/software integration with use of FPGA/CPLD devices. Design reviews, specification, team design implementation with project planning and tracking for system level design applications.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

470. Web Programming and Accessibility (3)

Prerequisites: CECS 323 and 343 all with a grade of "C" or better.

Introduction to World-Wide Web development. Accessibility issues. Web architecture, standards, and programming, emphasizing XML technologies and cascading style sheets. Visual design principles and information architecture. Client-side and server-side programming and protocols. Development for adaptive technologies and mobile devices.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

472. Computer Network Programming (3)

Prerequisites: CECS 326 or 362 all with a grade of "C" or better.

Fundamentals of computer network programming. Client-server programming. Concepts of computer network programming including the RPC Procedure Call, CORBA, multicasts, and broadcasts.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

474. Computer Network Interoperability (3)

Prerequisite: CECS 326 or 362 all with a grade of "C" or better.

Overview of computer network theory and practice from a systems perspective. Topics include network infrastructure, local area network (LAN) protocols, wide area network (WAN) protocols, switching technologies, Internet Protocol (IP), Transmission Control Protocol (TCP), network security, and network configuration, design, and performance.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

475. Application Programming Using .NET (3)

Prerequisite: CECS 343 with a grade of "C" or better.

A rigorous introduction to enterprise application development utilizing the .NET environment. Topics include GUI interface concepts, multithreading, collections and web forms as well as application interfaces to database, web services and networks. Intensive individual projects as well as a team project.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

476. System and Network Administration (3)

Prerequisites: CECS 326 or 362 all with a grade of "C" or better.

Introduction to the management and administration of Unix systems and TCP/IP networks. Managing users, local and network file systems, electronic mail, print queues. Establishing and managing a network.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

478./578. Introduction to Computer Security (3)

Prerequisite: CECS 323, 328, and one course selected from 472, 474, 476 all with a grade of "C" or better.

Controlling the risk of computer security. Security threats and vulnerabilities in the development and use of computer systems. Tools and controls that can reduce or block these threats. Law, privacy and ethics.

Additional projects required for CECS 578. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

490A. Senior Project I (3)

Prerequisites: CECS 347 with a grade of "C" or better, senior standing.

A design course where the student will define a problem and provide a report containing a complete design solution.

(Seminar 3 hours) Letter grade only (A-F).

490B. Senior Project II (3)

Prerequisites: CECS 490A or 491 all with a grade of "C" or better and consent of instructor.

Implementation of previously completed design project from CECS 490A or CECS 491. A formal demonstration with an oral and written presentation is required.

(Seminar 3 hours) Letter grade only (A-F).

491. Software Development Project (3)

Prerequisites: CECS 343 with a grade of "C" or better and senior standing.

Selected topics from recent advances in applied computing. Application of selected topics to the design and implementation of a software system within a team setting. Techniques for project management, documentation, and technical presentations. Software design, implementation, and evaluation strategies.

(Seminar 3 hours) Letter grade only (A-F).

492. Computer Networking Project Course (3)

Prerequisite: CECS 474 with a grade of "C" or better or consent of instructor.

Selected topics from recent advances in computer networking. Design, implementation, and performance analysis of enterprise networks. Network modeling and simulation. Application of selected topics to a semester-long team project focusing on the design and implementation of a large-scale network system.

(Seminar 3 hours) Letter grade only (A-F).

496. Computer Science Problem Solving (1)

Prerequisites: CECS 274 with a grade of "C" or better and consent of instructor.

Problem solving in Computer Science. Theory necessary to solve computer science problems and the solutions to the problems. Problems studied will involve applications of graph theory, data structures, recursion, and algorithms.

(Lecture 1 hour) May be repeated to a maximum of 6 units in different semesters. Letter grade only (A-F).

497. Directed Studies (1–3)

Prerequisite: Consent of instructor.

Assigned study in topics in current computer literature or computer-related projects with a final report.

May be repeated to a maximum of 6 units with written consent of the Department Chair.

GRADUATE LEVEL

519./419. Theory of Computation (3)

Prerequisite: CECS 328 with a grade of "C" or better.

Finite Automata and regular expressions. Pushdown automata and context-free languages. Turing machines and computability. Computational complexity.

Additional projects required for CECS 519. (Lecture-problems 3 hours) Letter grade only (A-F).

521./621. Database Architecture (3)

Prerequisites: CECS 328 and 323 or 421 all with a grade of "C" or better.

Relational database design theory—a rigorous approach. Security, recovery, transaction management, distributed databases and query optimization.

Master's students register in CECS 521 or 621; Ph.D. students register in CECS 621. Additional projects required for CECS 621. (Lecture-problems 3 hours) Letter grade only (A-F).

524./624. Advanced Topics in Programming Languages (3)

Prerequisite: CECS 424 with a grade of "C" or better.

Intensive study of languages of current interest which support object-oriented, client-server, and multimedia applications (e.g. JAVA).

Master's students register in CECS 524 or 624; Ph.D. students register in CECS 624. Additional projects required for CECS 624. (Lecture-problems 3 hours) Letter grade only (A-F).

526./626. Advanced Operating Systems (3)

Prerequisites: CECS 228 and 326 all with a grade of "C" or better.

Theoretical foundations of concepts applied in the design of operating systems. Control of concurrent processes, deadlocks, mutual exclusion, virtual memory, resource management and scheduling.

Master's students register in CECS 526 or 626; Ph.D. students register in CECS 626. Additional projects required for CECS 626. (Lecture-problems 3 hours) Letter grade only (A-F).

528./628. Advanced Analysis of Algorithms (3)

Prerequisites: CECS 328, MATH 380 or EE 380 all with a grade of "C" or better.

Theoretical analysis of algorithms. Divide and conquer, dynamic programming and greedy algorithms; basic search and traversal techniques including search trees; sorting; matrix manipulations; NP-completeness.

Master's students register in CECS 528 or 628; Ph.D. students register in CECS 628. Additional projects required for CECS 628. (Lecture-problems 3 hours) Letter grade only (A-F).

529./429. Search Engine Technology (3)

Prerequisites: CECS 323 and 328, MATH 380 or EE 380 all with a grade of "C" or better.

Models, algorithms, and evaluation of the retrieval of information from a collection of documents. Document preprocessing. Indexing and searching. Retrieval evaluation. Search engines.

Additional projects required for CECS 529. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

530./630. Advanced Computer Architecture I (3)

Prerequisite: CECS 341 or 440 all with a grade of "C" or better.

Fundamentals of computer architecture. Description of architecture and description languages. Basic computer design and central processor implementation. Memory hierarchy and input/output. Pipelining. Vector processor, multiprocessor systems and dataflow machines.

Master's students register in CECS 530 or 630; Ph.D. students register in CECS 630. Additional projects required for CECS 630. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

531./631. Advanced Computer Architecture II (3)

Prerequisite: CECS 530 with a grade of "C" or better.

Advanced computer architecture with emphasis on parallel processing. Vector processors and multiprocessor systems. Dataflow computation. RISC/CISC. Hypercube. Parallel software. Applications in artificial intelligence, signal/image processing, neural network and optical computing.

Master's students register in CECS 531 or 631; Ph.D. students register in CECS 631. Additional projects required for CECS 631. (Lecture-problems 3 hours) Letter grade only (A-F).

532. Memory Design and Implementation (3)

Prerequisite: CECS 341 or 440 all with a grade of "C" or better.

Logic design and operation, physical design and operation, performance characteristics, design trade-offs, energy consumption of modern memory hierarchies, memory errors and error correction.

Letter grade only (A-F). (Lecture-problems 3 hours)

543./643. Advanced Software Engineering (3)

Prerequisite: CECS 343 or 443 all with a grade of "C" or better.

Study of software engineering as a broad, problem-solving discipline. Includes structured programming and software project management.

Master's students register in CECS 543 or 643; Ph.D. students register in CECS 643. Additional projects required for CECS 643. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

544./644. Software Testing and Verification (3)

Prerequisite: CECS 543 with a grade of "C" or better.

Testing/verification techniques for software development including black box, white box, incremental, top-down and bottom-up, static and dynamic, performance, regression, thread, and stress testing. Object-oriented software testing with a hierarchical approach. Metrics for test, and verification will be introduced.

Master's students register in CECS 544 or 644; Ph.D. students register in CECS 644. Additional projects required for CECS 644. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

545./645. Software Architecture (3)

Prerequisite: CECS 543 with a grade of "C" or better.

Includes architectural styles, pipes and filters, data abstraction and object-oriented organization, event-based, implicit invocation, layered systems, repositories, interpreters, process control, distributed processes, domain-specific software & heterogeneous architectures. Component-based design patterns & case studies.

Master's students register in CECS 545 or 645; Ph.D. students register in CECS 645. Additional projects required for CECS 645. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

546./646. Fault Tolerant Computing Systems (3)

Prerequisite: CECS 530 with a grade of "C" or better.

Fault tolerant techniques are studied as tools to assure the reliability and continuous availability of computing systems. Case studies of modern fault tolerant systems reviewed. Software fault tolerant systems studied as alternatives to verification and validation approaches to software reliability.

Master's students register in CECS 546 or 646; Ph.D. students register in CECS 646. Additional projects required for CECS 646. (Lecture-problems 3 hours) Letter grade only (A-F).

547./647. Software Maintenance, Reengineering and Reuse (3)

Prerequisite: CECS 343 or equivalent with a grade of "C" or better.
Introduction to software maintenance, defect management, corrective, adaptive and perfective maintenance. Evolution of legacy software systems. Program comprehension techniques, reverse engineering, restructuring, refactoring of software systems. Software re-engineering, data reverse engineering. Software reuse. Impact analysis, regression testing.

Master's students register in CECS 547 or 647; Ph.D. students register in CECS 647. Additional projects required for CECS 647. (Lecture-problems 3 hours) Letter grade only (A-F).

549./649. Advanced Computer Graphics (3)

Prerequisite: CECS 449 with a grade of "C" or better.

Three-dimensional representations, transformations and viewing. Color models and modeling methods. Hidden-line and hidden-surface removal. Lighting and shading. Visual realism. Topics of current interest.

Master's students register in CECS 549 or 649; Ph.D. students register in CECS 649. Additional projects required for CECS 649. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

550./650. Pattern Recognition Using Artificial Intelligence (3)

Prerequisite: CECS 451 with a grade of "C" or better or consent of instructor.

General concepts of pattern recognition and trainable classifiers, decision theory, supervised learning, non-parametric techniques, rule-based systems and neural networks.

Master's students register in CECS 550; Ph.D. students register in CECS 650. Additional projects required for CECS 650. (Lecture-problems 2 hours, laboratory 3 hours) Not open for credit to students with credit in CECS 750. Letter grade only (A-F).

551./651. Advanced Artificial Intelligence (3)

Prerequisite: CECS 451 with a grade of "C" or better.

Advanced concepts in artificial intelligence. Topics include knowledge acquisition and representation, fuzzy logic, logical reasoning, multi-sensor integration, Dempster-Shafer's theory of evidential reasoning, real-time expert systems and neural networks.

Master's students register in CECS 551 or 651; Ph.D. students register in CECS 651. Additional projects required for CECS 651. (Lecture-problems 3 hours) Letter grade only (A-F).

552./652. Computer Simulation and Modeling (3)

Prerequisites: EE 380 (or MATH 380) and CECS 326 all with a grade of "C" or better.

Studies of general purpose and special simulation software. Model verification including graphical models Applications in various areas.

Master's students register in CECS 552 or 652; Ph.D. students register in CECS 652. Additional projects required for CECS 652. (Lecture-problems 3 hours) Letter grade only (A-F).

553./653. Machine Vision (3)

Prerequisite: Graduate standing in engineering or computer science.

Discussion and laboratory implementation of current research in vision and image understanding. Topics include image formation, early processing, segmentation, relational structures in 2-D and 3-D, motion, stereo, 3-D reconstruction, morphological methods and computer architecture for machine vision.

Master's students register in CECS 553 or 653; Ph.D. students register in CECS 653. Additional projects required for CECS 653. (Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

561./461. Hardware/Software Co-design (3)

Prerequisite: CECS 341 or 440 all with a grade of "C" or better.

Introduction to top-down methods for hardware/software system-on-chip co-design. Design flow – system specification, software

implementation, hardware synthesis, system design, and verification. Process optimization with various design decisions emphasized. Projects/case studies using system-level design methods and tools.

Additional projects required for CECS 561. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

570./670. Concurrent Parallel Programming (3)

Prerequisite: CECS 328, or 341, or 440 all with a grade of "C" or better.

Introduction to concurrent and parallel programming for multiprocessing and distributed systems. Computational models and paradigms. Parallel programming languages and programming tools. Portable parallel programming and mapping techniques. Heterogeneous concurrent programming. Concurrent programming on local networks on workstations and personal computers.

Master's students register in CECS 570 or 670; Ph.D. students register in CECS 670. Additional projects required for CECS 670. (Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

572./672. Advanced Computer Networking (3)

Prerequisite: CECS 327 or 474 all with a grade of "C" or better.

Advanced concepts in computer network theory and practice. Computer network design and standards for local area networks (LANs) and wide area networks (WANs). Computer network configuration and performance issues.

Master's students register in CECS 572 or 672; Ph.D. students register in CECS 672. Additional projects required for CECS 672. (Lecture-problems 3 hours) Letter grade only (A-F).

574./674. Topics in Distributed Computer Systems (3)

Prerequisite: CECS 526 or 572 or 626 or 672 all with a grade of "C" or better.

Network operating systems vs distributed operating systems, research and design issues of distributed operating systems, resources and resource management in distributed systems, communication security and user authentication.

Master's students register in CECS 574; Ph.D. students register in CECS 674. Additional projects required for CECS 674. (Lecture-problems 3 hours) Letter grade only (A-F). Not open for credit to students with credit in CECS 673 or 773.

575./675. Object-Oriented Analysis and Design (3)

Prerequisites: CECS 475 and CECS 343 or 443 or 543 all with a grade of "C" or better.

An object-oriented approach to software development based on modeling objects from the real world. Object-oriented methodology from problem statement through analysis, system design, and object design. Implementation of object-oriented designs in various target environments. Case studies.

Master's students register in CECS 575 or 675; Ph.D. students register in CECS 675. Additional projects required for CECS 675.

(Lecture-problems 3 hours) Letter grade only (A-F).

578./478. Introduction to Computer Security (3)

Prerequisite: CECS 323, 328, and one course selected from 472, 474, 476 all with a grade of "C" or better.

Controlling the risk of computer security. Security threats and vulnerabilities in the development and use of computer systems. Tools and controls that can reduce or block these threats. Law, privacy and ethics.

Additional projects required for CECS 578. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

590./690. Selected Topics in Computer Science (3)

Prerequisites: Graduate standing and consent of instructor.

Each offering is based on an area in computer science and technology in which recent advances have been made.

Letter grade only (A-F). May be repeated to a maximum of 6 units with consent of department. Topics announced in the *Schedule of*

Classes. Master's students register in CECS 590 or 690; Ph.D. students register in CECS 690. Additional projects required for CECS 690. (Lecture-problems 3 hours)

621./521. Database Architecture (3)

Prerequisites: CECS 328 and 323 (or 421) all with a grade of "C" or better.

Relational database design theory—a rigorous approach. Security, recovery, transaction management, distributed databases and query optimization.

Master's students register in CECS 521 or 621; Ph.D. students register in CECS 621. Additional projects required for CECS 621. (Lecture-problems 3 hours) Letter grade only (A-F).

624./524. Advanced Topics in Programming Languages (3)

Prerequisite: CECS 424 with a grade of "C" or better.

Intensive study of languages of current interest which support object-oriented, client-server, and multimedia applications (e.g. JAVA).

Master's students register in CECS 524 or 624; Ph.D. students register in CECS 624. Additional projects required for CECS 624. (Lecture-problems 3 hours) Letter grade only (A-F).

626./526. Advanced Operating Systems (3)

Prerequisites: CECS 228 and 326 all with a grade of "C" or better.

Theoretical foundations of concepts applied in the design of operating systems. Control of concurrent processes, deadlocks, mutual exclusion, virtual memory, resource management and scheduling.

Master's students register in CECS 526 or 626; Ph.D. students register in CECS 626. Additional projects required for CECS 626. (Lecture-problems 3 hours) Letter grade only (A-F).

628./528. Advanced Analysis of Algorithms (3)

Prerequisites: CECS 328, MATH 380 or EE 380 all with a grade of "C" or better.

Theoretical analysis of algorithms. Divide and conquer, dynamic programming and greedy algorithms; basic search and traversal techniques including search trees; sorting; matrix manipulations; NP-completeness.

Master's students register in CECS 528 or 628; Ph.D. students register in CECS 628. Additional projects required for CECS 628. (Lecture-problems 3 hours) Letter grade only (A-F).

630./530. Advanced Computer Architecture I (3)

Prerequisite: CECS 341 or 440 all with a grade of "C" or better.

Fundamentals of computer architecture. Description of architecture and description languages. Basic computer design and central processor implementation. Memory hierarchy and input/output. Pipelining. Vector processor, multiprocessor systems and dataflow machines.

Master's students register in CECS 530 or 630; Ph.D. students register in CECS 630. Additional projects required for CECS 630. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

631./531. Advanced Computer Architecture II (3)

Prerequisite: CECS 530 with a grade of "C" or better.

Advanced computer architecture with emphasis on parallel processing. Vector processors and multiprocessor systems. Dataflow computation. RISC/CISC. Hypercube. Parallel software. Applications in artificial intelligence, signal/image processing, neural network and optical computing.

Master's students register in CECS 531 or 631; Ph.D. students register in CECS 631. Additional projects required for CECS 631. (Lecture-problems 3 hours) Letter grade only (A-F).

643./543. Advanced Software Engineering (3)

Prerequisite: CECS 343 or 443 all with a grade of "C" or better.

Study of software engineering as a broad, problem-solving discipline. Includes structured programming and software project management.

Master's students register in CECS 543 or 643; Ph.D. students register in CECS 643. Additional projects required for CECS 643. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

644./544. Software Testing and Verification (3)

Prerequisite: CECS 543 with a grade of "C" or better.

Various types of software testing and verification techniques for software development including black box, white box, incremental, top-down and bottom-up, static and dynamic, performance, regression, thread, and stress testing. Discussion of object-oriented software testing with a hierarchical approach. Metrics in complexity for testing, test, and verification plan will be introduced. Automatic software testing and some case studies.

Master's students register in CECS 544 or 644; Ph.D. students register in CECS 644. Additional projects required for CECS 644. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

645./545. Software Architecture (3)

Prerequisite: CECS 543 with a grade of "C" or better.

Includes architectural styles, pipes and filters, data abstraction and object-oriented organization, event-based, implicit invocation, layered systems, repositories, interpreters, process control, distributed processes, domain-specific software & heterogeneous architectures. Component-based design patterns & case studies.

Master's students register in CECS 545 or 645; Ph.D. students register in CECS 645. Additional projects required for CECS 645. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

646./546. Fault Tolerant Computing Systems (3)

Prerequisite: CECS 530 with a grade of "C" or better.

Fault tolerant techniques are studied as tools to assure the reliability and continuous availability of computing systems. Case studies of modern fault tolerant systems reviewed. Software fault tolerant systems studied as alternatives to verification and validation approaches to software reliability.

Master's students register in CECS 546 or 646; Ph.D. students register in CECS 646. Additional projects required for CECS 646. (Lecture-problems 3 hours) Letter grade only (A-F).

647./547. Software Maintenance, Reengineering and Reuse (3)

Prerequisites: CECS 343 or equivalent all with a grade of "C" or better.

Introduction to software maintenance, defect management, corrective, adaptive and perfective maintenance. Evolution of legacy software systems. Program comprehension techniques, reverse engineering, restructuring, refactoring of software systems. Software re-engineering, data reverse engineering.

Master's students register in CECS 547 or 647; Ph.D. students register in CECS 647. Additional projects required for CECS 647. (Lecture-problems 3 hours) Letter grade only (A-F).

649./549. Advanced Computer Graphics (3)

Prerequisite: CECS 449 with a grade of "C" or better.

Three-dimensional representations, transformations and viewing. Color models and modeling methods. Hidden-line and hidden-surface removal. Lighting and shading. Visual realism. Topics of current interest.

Master's students register in CECS 549 or 649; Ph.D. students register in CECS 649. Additional projects required for CECS 649. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

650./550. Pattern Recognition Using Artificial Intelligence (3)

Prerequisite: CECS 451 with a grade of "C" or better or consent of instructor.

General concepts of pattern recognition and trainable classifiers, decision theory, supervised learning, non-parametric techniques, rule-based systems and neural networks.

Master's students register in CECS 550; Ph.D. students register in CECS 650. Additional projects required for Ph.D. students. (Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

651./551. Advanced Artificial Intelligence (3)

Prerequisite: CECS 451 with a grade of "C" or better.

Advanced concepts in artificial intelligence. Topics include knowledge acquisition and representation, fuzzy logic, logical reasoning, multi-sensor integration, Dempster-Shafer's theory of evidential reasoning, real-time expert systems and neural networks.

Master's students register in CECS 551 or 651; Ph.D. students register in CECS 651. Additional projects required for CECS 651. (Lecture-problems 3 hours) Letter grade only (A-F).

652./552. Computer Simulation and Modeling (3)

Prerequisites: EE 380 or MATH 380 and CECS 326 all with a grade of "C" or better.

Studies of general purpose and special simulation software. Model verification including graphical models Applications in various areas.

Master's students register in CECS 552 or 652; Ph.D. students register in CECS 652. Additional projects required for CECS 652. (Lecture-problems 3 hours) Letter grade only (A-F).

653./553. Machine Vision (3)

Prerequisite: Graduate standing in engineering or computer science.

Discussion and laboratory implementation of current research in vision and image understanding. Topics include image formation, early processing, segmentation, relational structures in 2-D and 3-D, motion, stereo, 3-D reconstruction, morphological methods and computer architecture for machine vision.

Master's students register in CECS 553 or 653; Ph.D. students register in CECS 653. Additional projects required for CECS 653. (Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

670./570. Concurrent Parallel Programming (3)

Prerequisite: CECS 328, or 341, or 440 all with a grade of "C" or better.

Introduction to concurrent and parallel programming for multiprocessing and distributed systems. Computational models and paradigms. Parallel programming languages and programming tools. Portable parallel programming and mapping techniques. Heterogeneous concurrent programming. Concurrent programming on local networks on workstations and personal computers.

Master's students register in CECS 570 or 670; Ph.D. students register in CECS 670. Additional projects required for CECS 670. (Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

672./572. Advanced Computer Networking (3)

Prerequisite: CECS 327 or 474 all with a grade of "C" or better.

Advanced concepts in computer network theory and practice. Computer network design and standards for local area networks (LANs) and wide area networks (WANs). Computer network configuration and performance issues.

Master's students register in CECS 572 or 672; Ph.D. students register in CECS 672. Additional projects required for CECS 672. (Lecture-problems 3 hours) Letter grade only (A-F).

674./574. Topics in Distributed Computer Systems (3)

Prerequisite: CECS 526 or 572 or 626 or 672 all with a grade of "C" or better.

Network operating systems vs distributed operating systems, research and design issues of distributed operating systems, resources and resource management in distributed systems, communication security and user authentication.

Master's students register in CECS 574; Ph.D. students register in CECS 674. Additional projects required for CECS 674. (Lecture-problems 3 hours) Letter grade only (A-F). Not open for credit to students with credit in CECS 773.

675./575. Object-Oriented Analysis and Design (3)

Prerequisites: CECS 475 and CECS 343 or 443 or 543 all with a grade of "C" or better.

An object-oriented approach to software development based on modeling objects from the real world. Object-oriented methodology from problem statement through analysis, system design, and object design. Implementation of object-oriented designs in various target environments. Case studies.

Master's students register in CECS 575 or 675; Ph.D. students register in CECS 675. Additional projects required for CECS 675.

(Lecture-problems 3 hours) Letter grade only (A-F).

690./590. Selected Topics in Computer Science (3)

Prerequisites: Graduate standing and consent of instructor.

Each offering is based on an area in computer science and technology in which recent advances have been made.

Letter grade only (A-F). May be repeated to a maximum of 6 units with consent of department. Topics announced in the *Schedule of Classes*. Master's students register in CECS 590 or 690; Ph.D. students register in CECS 690. Additional projects required for CECS 690. (Lecture-problems 3 hours)

694. Seminar in Computer Science (3)

Prerequisite: 6 units of 500- or 600-level CECS courses.

Intensive study of a broad selection of conceptual and theoretical problems in computer science. A written student research project and an oral presentation are required.

Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Classified Graduate standing.

Theoretical and experimental problems in computer science and engineering requiring extensive research. Advancement to candidacy and program GPA of at least 3.0 are required.

Graduate advisor and project supervisor must be consulted prior to registration.

Independent Study. Letter grade only (A-F).

698. Thesis or Industrial Project (2-6)

Prerequisite: Advancement to Candidacy.

Planning, preparation, completion of thesis or equivalent industrial project report on a suitable topic in computer engineering and computer science following the library's prescribed format.

Requires consultation with Graduate Advisor and submission of Agreement for Independent Study form each semester.

May be repeated to a maximum of 6 units.

CONSUMER AFFAIRS

College of Health and Human Services
Department of Family and Consumer Sciences

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001
Telephone / Fax: (562) 985-4484 / 985-4414

Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Career Possibilities

Consumer Advocates on Television and Radio Stations
• Litigation Consumer Specialist • Product Safety Advocate • Credit Counselor • Food and Drug Consumer Specialist • Federal Trade Consumer Specialist • Community Consumer Educator • Consumer Affairs Teacher • Financial Advisor • Financial Counselor • Product Safety and Health Care Consultants • Customer Service Representative • Housing Counselor • Homeless Coordinator • Property Manager (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Dietetics and Food Administration

This degree offers two options:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality, Foodservice and Hotel Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Consumer Affairs

This program focuses on how businesses, government agencies, and community organizations interact with families and consumers.

Option in Consumer Affairs (120 units)

Take all of the following courses:

CAFF 223 Personal and Family Financial

Management (3)

Prerequisites: GE Foundation requirements.

CAFF 226 Consumer Life Skills (3)

Prerequisites: GE Foundation requirements.

CAFF 228 Housing in Global Perspective (3)

Prerequisites: GE Foundation requirements.

CAFF 321I Family and Consumer Resource

Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

CAFF 322 Family Housing & Urban Community (3)

Prerequisites: Upper-division standing.

CAFF 420 Personal Finance for the Aging (3)

Prerequisites: 400-level course in Consumer Affairs or consent of instructor.

CAFF 422 Housing Policies: Public and Private (3)

Prerequisites: CAFF 322, upper division standing or consent of instructor.

CAFF 425 Personal Financial Planning Analysis (3)

Prerequisites: CAFF 223 or consent of instructor.

CAFF 426 Family Financial Problems (3)

Prerequisites: CAFF 223 or consent of instructor.

CAFF 427 Consumer Dynamics (3)

Prerequisites: None

CAFF 429 Consumer Protection (3)

Prerequisites: Upper Division course in consumer affairs or consent of instructor.

FCSE 299 Intro to Family and Consumer Sciences (1)

Prerequisites: None.

FCSE 486 Instructional Strategies for Family and

Consumer Sciences Professionals (3)

Prerequisites: Senior standing.

FCSE 499 Professionalism and Leadership in FCS (2)

Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course work in Family and Consumer Sciences.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

Take one of the following courses:

ECON 101 Principles of Microeconomics (3)

Prerequisites: MATH 103 or higher.

ECON 300 Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

Take one of the following courses:

ENGL 101 Composition (3)

Prerequisites: ENGL 100.

ENGL 317 Technical Communication (3)

Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300 or equivalents.

ENGL 417 Proposal Writing (3)

Prerequisites: GE Foundation requirements.

ENGL 418 Manual Writing (3)

Prerequisites: GE Foundation requirements.

ENGL 419 Writing in Science, Social Science, and Technology (3)

Prerequisites: GE Foundation requirements.

Take one of the following courses:

C/LA 250 Elementary Statistics (4)

Prerequisites: Knowledge of mathematical procedures usually covered in elementary high school algebra.

SOC 250 Elementary Statistics (4)

Prerequisites: Knowledge of mathematical procedures usually covered in elementary high school algebra as demonstrated on a screening examination.

Take one course from the following:

CAFF 492C Internship in Consumer Affairs (3)

Prerequisites: Senior standing; a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Consumer Affairs; and CAFF 226, 321I, 422, 425, 429, or consent of instructor. Each prerequisite course must be completed with a grade of "C" or better.

FCSE 497 Directed Studies (3)

Prerequisites: Upper division standing, consent of instructor.

Take 9 units of advisor approved electives.

Each course on the student's program planner must be completed with a grade of "C" or better. In addition, a course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Consumer Affairs Area Coordinator.

Minor in Consumer Affairs

Eighteen units as approved by a Consumer Affairs faculty advisor. The Minor in Consumer Affairs is available to any non-Consumer Affairs major.

Take all of the following courses:

CAFF 223 Personal & Family Financial Management (3)

Prerequisites: GE Foundation requirements.

CAFF 226 Consumer Life Skills (3)

Prerequisites: GE Foundation requirements.

CAFF 322 Family Housing & the Urban Community (3)

Prerequisites: Upper-division standing.

Take 9 units from the following courses:

CAFF 420, 422, 425, 426, 427, and 429.

Consumer Affairs Courses (CAFF)

LOWER DIVISION

223. Personal and Family Financial Management (3)

Prerequisite: GE Foundation requirements.

A functional approach to personal finance including budget systems, consumer credit, insurance, debt collection system, status obligation, accumulating reserves. Applicable for personal and professional use.

(Lecture-discussion 3 hours)

226. Consumer Life Skills (3)

Prerequisite: GE Foundation requirements.

Consumer life skills with an emphasis on practical applications in the marketplace. Includes the history of the consumer movement, consumer rights and responsibilities, financial wellness, consumer debt, consumer behavior, fraud, and consumer redress.

(Lecture-discussion 3 hours)

228. Housing in Global Perspective (3)

Prerequisites: GE Foundation requirements.

Family housing options and choices in urban and rural areas throughout the world viewed within the context of history, politics, culture, art, environment, geography, technology and economics.

(Lecture-discussion, 3 hours)

UPPER DIVISION

309I. The Consumer in the Legal and Economic Environment (3)

Prerequisites: GE Foundation requirements; completion of one or more Exploration courses; upper division standing.

Incorporates an integrated coverage of the economic, legal, ethical and regulatory environment of consumers in avoiding and resolving disputes regarding fraudulent transactions, financial matters, personal and real property contracts, torts, credit and investment issues, and family relationships. Team taught.

(Lecture-discussion 3 hours) Same course as FIN 309I and BLAW 309I. Not open for credit to students with credit in FIN 309I or BLAW 309I.

321I. Family and Consumer Resource Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Basic management principles applied to personal and family settings. Examines role of values, goal formation, decision-making, planning, implementing, and evaluation of managerial behavior in diverse family and cultural settings.

Letter grade only (A-F). (Lecture-discussion 3 hours)

322. Family Housing and the Urban Community (3)

Prerequisites: Upper-division standing.

Critical analysis of family housing in urban community including aspects of shelter, city and service providers. Sociological, psychological, legislative, economic and technical factors investigated. Special attention given to families of various structures and socioeconomic background.

(Discussion 3 hours)

388I. Technological Literacy (3)

Prerequisites: GE Foundation requirements, upper division standing, ENGL 100.

Exploration of technological concepts and their impact on individuals, society and culture. Technology as a human adaptive system and its relationship to sociological and ideological systems.

Letter grade only (A-F). (Discussion 3 hours.)

420. Personal Finance for the Aging (3)

Prerequisites: 400-level course in Consumer Affairs or consent of instructor.

Personal finance as applied to the aging population.

Same course as GERN 420. Not open for credit to students with credit in GERN 420. (Lecture-discussion 3 hrs)

422. Housing Policies: Public and Private (3)

Prerequisites: CAFF 322, upper division standing or consent of instructor.

Federal, state, and local policies, programs and legislation concerning housing and urban development. Analysis of the housing industry and its influence on the consumer market.

Letter grade only (A-F). (Discussion 3 hours)

425. Personal Financial Planning Analysis (3)

Prerequisite: CAFF 223 or consent of instructor.

Analysis and protection of personal and family resources; planning and forecasting goals; development of financial strategies utilizing insurance, investment, tax management, pensions, wills and trusts.

(Lecture-discussion 3 hours)

426. Family Financial Problems (3)

Prerequisite: CAFF 223 or consent of instructor.

Theory and practice in the diagnosis of family financial crises; selecting alternative solutions; constructing practical methods for the prevention of family financial problems.

(Discussion 2 hours, laboratory 3 hours)

427. Consumer Dynamics (3)

Examination and analysis of consumer motivation, demand, and behavior. Individual, family, and household dynamics that influence decision making.

Letter grade only (A-F).

429. Consumer Protection (3)

Prerequisites: Upper Division course in consumer affairs or consent of instructor.

Concepts of consumer protection with analysis of a myriad of resources available for individuals and families with consumer problems.

(Seminar 3 hours)

492C. Internship in Consumer Affairs (3)

Prerequisites: Student must be a Family and Consumer Sciences: Consumer Affairs major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Consumer Affairs; and CAFF 226, 3211, 422, 425, 429, or consent of instructor. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)

COLLEGE OF CONTINUING AND PROFESSIONAL EDUCATION

Dean: Jeet Joshee

Associate Dean: Eric Bullard

Senior Director, Finance/Business Services: Michael R. Jones

Director, Advanced Media Production: Dave Kelly

Senior Director, Center for International Education:
Nathan Jensen

Director, American Language Institute: Lynne Richmond

Executive Director, Center for International Trade and Transportation: Marianne Venieris

Director, Marketing and Communications: Rick Schank

College Office: 6300 State University Drive, Ste. 104,
Long Beach, CA 90815

Customer Service Center: 800-963-2250

Email: Info@ccpe.csulb.edu

Website: www.ccpe.csulb.edu

The College of Continuing and Professional Education (CCPE) is one of the eight academic colleges and the self-support community outreach division of the university. The college provides additional access to CSULB's exceptional academic programs and educational resources by offering over 550 credit and professional development (non-credit) programs every semester. The programs, which include graduate and undergraduate degrees and certificates, are designed to meet the personal and professional development needs of more than 20,000 individuals each year. Its capabilities extend internationally.

The Difference – Access and Opportunity

The College of Continuing and Professional Education is different from CSULB's other academic colleges because it is interdisciplinary, and not limited to one specific subject area, such as arts or science. CCPE's unique position as both an academic college and a community outreach entity means that partnerships and collaboration - with the university, businesses, organizations, and community leadership - are an integral part of its operation. CCPE fosters collaborative academic initiatives with both credit and professional development (non-credit) programs.

CCPE programs do not receive state funding and are supported entirely by student fees.

The CCPE Mission Statement

With a clear and focused mission to "help individuals and organizations reach their highest potential" we are committed to become the premier choice for continuing higher education both locally and globally.

The College of Continuing Professional Education programs are major vehicles by which the university fulfills its responsibility to meet the lifelong personal and professional development learning needs of citizens, industries, and institutions within the region and beyond. Through its degree and certificate programs, credit and non-credit classes, seminars and special programs, distance delivered instruction, and customized on-site-training, CCPE

brings the resources of CSULB to individuals and groups at times, locations, and in formats convenient to their diverse lifestyle.

At CCPE we value providing access and opportunity, innovation, pursuit of excellence, integrity, quality customer service, collaboration, and diversity.

Through its work, CCPE advances the mission of Extended Education in the CSU system outlined by its Commission on the Extended University:

- Meeting California's economic and workforce development needs
- Increasing access to educational opportunities by serving broader constituencies
- Developing alternative instructional delivery systems
- Creatively developing new programs
- Providing personal and lifelong learning opportunities
- Generating new resources for the CSU system
- Supporting international educational experiences

Academic Programs

CCPE maintains a customer-focused market-driven approach to develop and deliver its programs. As a result, the programs may change often to adapt to the training and educational needs of the marketplace. CCPE offers both credit programs and professional development (non-credit), in many different subject areas. The major activity of the Academic Programs Office is to work with all colleges and academic departments within the university to develop self support degree and certificate programs. Whether the program is academic credit-bearing or not, CCPE strives to provide the following features in every program:

- Quality curriculum
- Innovative and thoughtfully designed formats
- Convenient days/times
- Affordable fees and payment plan options
- Fast, easy registration

In addition, CCPE provides companies, organizations, and government agencies with customized professional development programs for employees at their work site or at CSULB.

For a catalog of the latest comprehensive programs listings and descriptions, call the CCPE Customer Service Center 800/963-2250 or go to <http://www.CCPE.csulb.edu>

Following is just a sampling of the many types of programs offered by CCPE.

Degrees Offered

Degree programs offered by CCPE are in partnership with other CSULB colleges.

- Bachelor of Arts in Liberal Arts
- Bachelor of Science in Engineering
- Master of Arts in Communicative Disorders
- Master of Arts in Global Logistics (Accelerated)
- Master of Arts in Global Logistics (Hybrid)
- Master of Arts in Kinesiology,
Option: Sport Management

- Master of Business Administration (Saturday MBA for Working Adults)
- Master of Business Administration (Accelerated)
- Master of Public Administration (DL)
- Master of Science in Criminal Justice
- Master of Science Emergency Services Administration
- Master of Science in Health Care Administration (Accelerated)
- Master of Social Work

Professional Development Certificate Programs Offered

- Basic Applied Forensic Science and Crime Analysis
- Green and Sustainable Building
- Lean Management
- Human Resources Management
- Meeting and Events Planning
- Basic Applied Forensic Science and Crime Analysis
- Engineering and Architectural AutoCAD
- Oracle Administrator
- Solar Photovoltaic Power Systems Specialist

Professional Designation Programs and Industry-Specific Exam Prep Programs

- Collections Management for Costume and Textiles
- Global Logistics Specialist
- The SHRM Learning System (PHR/SPHR exam prep)
- Marine Terminal Operations Professional

On-line Programs

- Accounting Fundamentals
- Finance
- Project Management Fundamentals
- Managing Technical Professionals
- Fundamentals of Supervision Management
- Business Administration
- Database Management
- Grant Writing and Non-Profit Management
- Career and Personal Enrichment
- Languages
- Writing for the Screens

International Training Programs (ITP)

The International Training Programs office was established to address the growing needs of international audiences, especially from Asian countries, for academic and professional programs. Programs are customized to meet the needs of the customer and may include one day workshops, two to three week sessions, or month-long training programs. Programs may also include cohort based full credit degree programs. For more information, please contact Heidi Zhang, Program Manager, at (562) 985-4060.

Open University

Through Open University, students who are not matriculated at CSULB may take regular university classes during spring or fall semesters for academic credit on a "space available" basis with permission of the department chair and the course instructor. Open University enrollment does not constitute admission to CSULB. For more information, contact the CCPE Customer Service Center at (562) 985-5561.

Winter Session, May Intersession, and Summer Sessions

These sessions are open to all matriculated CSULB students as well as non-matriculated students such as prospective students, students from other colleges and universities, and interested individuals in the community. No application or admission process is required for registration. Enrolling in any of these sessions does not constitute admission to CSULB. For more information, contact the CCPE Customer Service Center at (562) 985-5561.

Study Abroad

This program promotes a global learning community by offering a full range of programs that foster student success, global perspectives, and intercultural awareness. All study abroad programs are led by CSULB faculty. Most courses are open to all majors, students from other universities, as well as CSULB faculty, staff and members of the community on a space available basis. For more information, contact the CCPE Customer Service Center at (562) 985-5561.

Continuing Education Units

Continuing Education Units (CEUs) are a permanent record of attendance in professional development (non-credit) programs. They are provided by The American Council on Education (ACE) and administered through CCPE. CEUs can enhance ones resume and provide another opportunity to showcase a commitment to professional development. CEUs for specific professions are also available.

Centers and Institutes

The American Language Institute (ALI)

The American Language Institute brings hundreds of international students to campus each year. The institute provides English as a Second Language instruction to international students most of whom are seeking admission to CSULB and other colleges and universities. ALI offerings include long-term and short-term programs, and credit and non-credit courses. Programs offered through ALI include the Intensive English Program, a non-credit program offered year-round, in which students are in class up to 25 hours per week. Through the University Study at the Beach (USB) program, ALI also brings students from foreign universities to CSULB for up to a year of study. ALI also offers a Teaching English as a Foreign Language (TEFL) training program.

The Center for International Education

The Center for International Education (CIE) endeavors to foster the continued growth of a strong internationally focused educational community at CSULB. CIE is responsible for the recruitment, admission and continued advisement of degree seeking international and exchange students for the university. CIE is also responsible for the promotion and advising for all study abroad programs. In addition, CIE conducts international events, assists in faculty international development and facilitates the invitation of international scholars to campus.

The Center for International Trade and Transportation (CITT)

The Center for International Trade and Transportation (CITT), a major programming division of CCPE, is a multidisciplinary center for multifunctional transportation studies and integrated logistics research, education, training, policy analysis, and community outreach. In collaboration with the University of Southern California, CITT is a major partner in the METRANS Transportation Center which is a U.S. Department of Transportation designated University Transportation Center. CITT offers the Master of Arts Degree in Global Logistics (MAGL), the highly acclaimed Global Logistics Specialist (GLS) professional designation program, the Marine Terminal Operation Professional Program (MTO), and various customized programs and workshops.

The Advanced Media Production Center (AMP)

CCPE's Advanced Media Production Center (AMP) is a full service, award winning video and digital media production facility. The center provides the campus, the local community, and appropriate businesses with a wide variety of professional, media production services in support of educational and promotional needs.

AMP services include consultation, planning, design, development and implementation of media projects in video production, web delivery and support, computer graphics, and animation. The AMP Center also operates and programs Beach TV, the university's cable television channel.

CRIMINAL JUSTICE

College of Health and Human Services

Department Chair: Henry F. Fradella

Department Office: Engineering Technology (ET) Room 232
Telephone: (562) 985-4738

Faculty: Alice Choi, Ryan G. Fischer, Henry F. Fradella, Judy Hails, Connie Ireland, Aili Malm, Harvey N. Morley, Dina Perrone, Robert Schug, Tracy Tolbert, Brenda Vogel, John Wang

Undergraduate Advisor: Aili Malm

Graduate Advisor: Connie Ireland

Internship Coordinator: Daryl Meeks

Office Manager: Durrell Dew

CAREER OPTIONS

Police Officer • Probation Officer • Claims Representative • Private Investigator • Customs Agent • Special Agent FBI • Health & Safety Inspector • Criminologist • Game Warden • Park Ranger • Alcohol-Tobacco-Firearms Agent • Correctional Officer • Paralegal • Immigration Inspector • Intelligence Analyst-CIA • Parole Officer • Teacher • Prison Administrator • Lawyer • Credit Investigator • Border Patrol Agent (Some of these careers require additional education or experience.) Various entry-level trainee positions in business and industry are available for graduates regardless of academic discipline.

Introduction

The department works collaboratively to investigate, understand, and solve social problems related to crime through the interdisciplinary and comparative study of crime and criminal behavior, as well as the policies and systems designed to control criminality. Graduates are well-prepared to become agents of positive change in the justice system through evaluation, research, ethical practice, and dedicated service. Graduates are also prepared to pursue advanced degrees in criminology/criminal justice, law, public affairs, and related graduate fields.

UNDERGRADUATE PROGRAMS

Bachelor of Science in Criminal Justice (120 units)

This program is designed to accommodate the needs of new college students, continuing students, transferring students, and experienced criminal justice practitioner. We offer sufficient courses in the evenings for students to graduate with this degree without taking daytime classes.

Students intending to transfer from community colleges to this University are advised to complete general education requirements while attending the community college. Courses equivalent to CRJU 101 and lower-division cognate courses (SOC 100, PSY 100, POSC 100 and PHIL 170), should be taken while attending community college. Other criminal justice courses taken at community colleges will be

accepted as lower-division electives provided the college where they were taken designated them as transferable to CSU. These courses cannot be substituted for upper-division criminal justice courses.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

1. Major Courses: Take 48 units of criminal justice as follows:
 - A. Take 36 units of the following core courses:
 - CRJU 101 The Criminal Justice System in Society (3)
Prerequisites/Corequisites: One GE Foundation course.
 - CRJU 110 Introduction to Justice Research, Writing, and Reasoning (3)
Prerequisites/Corequisites: ENGL 100.
 - CRJU 301 Criminal Courts and Judicial Processes (3)
Prerequisites/Corequisites: CRJU 101 and 110 (may be taken concurrently).
 - CRJU 302 Policing (3)
Prerequisites: CRJU 101 and 110 (may be taken concurrently.)
 - CRJU 303 Corrections: Theory, Policy, Practice Corrections (3)
Prerequisites: CRJU 101 and 110 (may be taken concurrently).
 - CRJU 304 Criminological Theory (4)
Prerequisites: CRJU 101 and 110.
 - CRJU 320 Criminal Justice Research Methods (4)
Prerequisites: CRJU 101, 110 and 304 (may be taken concurrently).
 - CRJU 325 Statistics for Criminal Justice (4)
Prerequisites: CRJU 101, 110 and 320.
 - CRJU 330 Criminal Justice Ethics, Values and Diversity (3)
Prerequisites: CRJU 302 and 303.
 - CRJU 340 Substantive Criminal Law (3)
Prerequisites: CRJU 101, 110, and 301.
 - CRJU 350 Constitutional Criminal Procedure (3)
Prerequisites: CRJU 101, 110, and 301.
 - B. Take 3 units of the following restricted options courses: CRJU 401, 402, 403, 404, 405, 406, 407, 408, or an approved 490 special topics course.
 - C. Take 3 units of any upper-division elective criminal justice course (i.e., course not in core or restricted options), or
 - EMER 405 Campus and Community Volunteer Emergency Response (3)
Prerequisites: None.
 - D. Take at least 6 units of a Senior Integrative Experience in one of the following four ways (note that option 4 requires permission from a sponsoring faculty member):
 1. CRJU 492 Internship (6); or
 2. CRJU 497 Independent Study/Directed Research (3) and any 400-level CRJU elective; or

3. Any 400-level CRJU elective (3) and any one of the following experiential learning courses:
CRJU 405, 423, 430, 440, 441, 470, or any upper-division CRJU travel-study course; or
4. CRJU 497 Independent Study/Directed Research (3) and CRJU 498 Thesis (3)

Courses taken to fulfil options 2 and 3 may not be used to satisfy either the restricted option or in-major elective requirements of the criminal justice major.

Each core or restricted option courses on the student's program planner must be completed with a grade of "C" or better. In addition, a course which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of department advisor or chair.

2. Cognate Courses: Take 6 courses in related disciplines (these satisfy CSULB General Education requirements) from the following:

PHIL 170 Critical Reasoning (3)
Prerequisites/Corequisites: GE Foundation requirements Category A.1 (Written English).

POSC 100 Introduction to American Government (3)
Prerequisites/Corequisites: GE A1 requirement.

PSY 100 General Psychology (3)
Prerequisites/Corequisites: GE A1 requirement.

PSY 370 Abnormal Psychology (3)
Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

SOC 100 Principles of Sociology (3)
Prerequisites/Corequisites: GE A1 requirement.

and any one of the following:

CDFS 319I, CLSC 410I, GEOG 301I, PHIL 352I, PHIL 451I, PSY 350I, RGR 400I, SOC 335I.

Minor in Criminal Justice

Requirements

The minor requires a minimum of 22 units as follows:

1. Take 19 units of the following core courses:
 - CRJU 101 The Criminal Justice System in Society (3)
Prerequisites/Corequisites: One GE Foundation course.
 - CRJU 110 Introduction to Justice Research, Writing, and Reasoning (3)
Prerequisites/Corequisites: ENGL 100.
 - CRJU 301 Criminal Courts and Judicial Processes (3)
Prerequisites/Corequisites: CRJU 101 and 110 (may be taken concurrently).
 - CRJU 302 Policing (3)
Prerequisites: CRJU 101 and 110 (may be taken concurrently.)
 - CRJU 303 Corrections: Theory, Policy, Practice Corrections (3)
Prerequisites: CRJU 101 and 110 (may be taken concurrently).
 - CRJU 304 Criminological Theory (4)
Prerequisites: CRJU 101 and 110.
2. Take 3 units of one of the following:
 - CRJU 340 Substantive Criminal Law (3)
Prerequisites: CRJU 101, 110, and 301.
 - CRJU 350 Constitutional Criminal Procedure (3)
Prerequisites: CRJU 101, 110, and 301.

All courses in the criminal justice minor must be taken for a letter grade only (A-F) and must be successfully completed with a grade of "C" or higher. CRJU 101 and CRJU 110 are prerequisites for all core courses at the 300-level. All 300-level courses must be taken in residence at CSULB and, therefore, may not be transferred in from other colleges or universities.

Admission to the Minor

The minor in criminal justice is available to any non-criminal justice major. Students who would like to declare and/or change to criminal justice as their minor must have an overall G.P.A. of 2.0 and be enrolled in or have completed CRJU 101 or an equivalent course at another college or university. Alternative admission requirements may apply during times when the department is impacted.

Minor in Forensic Studies

This minor provides students with an understanding of the nature of criminal evidence and an appreciation of how forensic investigative methods are used in quest for justice. It is particularly useful for students majoring in engineering, the natural sciences, the social sciences, art, and various human services disciplines. The minor may be combined any major at CSULB, although criminal justice majors may not "double count" CRJU 230, 412, 430, 440, 441, 442, 443, 490, or 492 for credit towards their major elective courses and the minor in forensic studies.

Requirements

The minor in forensic studies requires completion of a minimum of twenty-seven (27) units as follows:

1. Completion of six (6) units of the following required prerequisite courses with grades of "C" or higher:
 - CRJU 101 The Criminal Justice System in Society (3)
Prerequisites/Corequisites: One GE Foundation course.
 - CRJU 110 Introduction to Justice Research, Writing, and Reasoning (3)
Prerequisites/Corequisites: ENGL 100.
2. Completion of fifteen (15) units of the following required core classes:
 - CRJU 230 Survey of the Forensic Sciences (3)
Prerequisites: None.
 - CRJU 301 Criminal Courts and Judicial Processes (3)
Prerequisites/Corequisites: CRJU 101 and 110 (may be taken concurrently).
 - CRJU 350 Constitutional Criminal Procedure (3)
Prerequisites: CRJU 101, 110, and 301.
 - CRJU 412 Criminal Investigation (3)
Prerequisites: CRJU 101, 110, and 302.
 - CRJU 440 Criminalistics: Forensic Science in the Crime Laboratory (3)
Prerequisites: CRJU 230 or consent of instructor.
3. Completion of six (6) units of forensic electives from the following options: CRJU 430, 441, 442, 443, 490, 492 or any approved applied forensics courses offered in a related discipline.

Each course in the minor must be completed with a grade of "C" or better. In addition, a course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite.

Students who would like to declare the minor in forensic studies must have completed the two prerequisite courses (CRJU 100, 110) and have an overall G.P.A. of 2.5. Alternative admission requirements may apply during times when the department is impacted.

GRADUATE PROGRAMS

Master of Science in Criminal Justice

Graduate study in criminal justice provides the requisite knowledge and opportunity for individuals to (1) be competitive for administrative positions in the courts, corrections, law enforcement, security, probation and parole; (2) fill research positions in criminal justice agencies; (3) pursue advanced degrees (J.D. or Ph.D.); and (4) fill community college teaching positions in criminal justice.

The Master of Science degree in criminal justice will expand and increase individual competency, develop and mature thought processes, aid in gaining insights into professional leadership and knowledge, permit an exchange between students and faculty, and further the spirit of research and scholarship to enhance professional and personal development.

Admission

Students seeking admission to the Department of Criminal Justice Graduate Program should have an undergraduate degree and a desire for graduate study. Applicants must apply for admission to the Criminal Justice Department in addition to being admitted by Enrollment Services. Students must be accepted for admission by the Department before their program for a master's degree can be formulated. Students are not allowed to take graduate course work in criminal justice before being accepted to the program. The following items must be submitted:

1. Two copies of the CSULB graduate application. The original must be sent to Enrollment Services and a copy must be sent to the Department of Criminal Justice.
2. Official test scores on the Graduate Record Exam (GRE) General Test. While no specific cut-off scores are required on either the verbal or the quantitative sections, applicants must score a "4" or higher on the analytic writing section of the GRE.
3. Official transcripts of all undergraduate course work, including work done at all community colleges attended. Each applicant must request that official transcripts be sent to both the Graduate Advisor in the Criminal Justice Department and Enrollment Services.
4. Three letters of recommendation from persons able to testify to the student's academic ability, preferably from former professors. These letters must be sent to the Department of Criminal Justice Graduate Advisor.
5. A résumé sent directly to the Department of Criminal Justice Graduate Advisor that describes the applicant's academic achievements (including honors and awards), extracurricular activities, as well as relevant work, internship, and volunteer experiences.
6. A typewritten letter of intent (between 750 and 1,250 words) sent directly to the Department of Criminal Justice

Graduate Advisor. This essay should address: (a) what motivates the applicant to apply for a graduate degree; (b) what relevant research and practical experiences qualify the applicant for admission; (c) what the applicant's specific areas of interests in criminal justice practice, policy, and/or research are; (d) with whom on the faculty the applicant would like to work and why; and (e) what the applicant's personal goals and objectives are for earning a master's degree in criminal justice at CSULB.

Prerequisites

1. A bachelor's degree from a regionally accredited university with a major or minor in criminal justice or a related discipline. The acceptability of other undergraduate preparation shall be determined by the Department Graduate Committee;
2. A student must have an overall undergraduate average (GPA) and average in their major of 3.0 or better. A student whose overall grade point average is less than 3.0, but who presents acceptable evidence of professional potential either through recent academic performance and/or experiential background, may be admitted by special action of the Department's Graduate Committee.

Advancement to Candidacy

1. Students must satisfy the general University requirements for advancement to candidacy, as specified in this catalogue.
2. Before advancing to candidacy, students must successfully complete 15 graduate units within the core (CRJU 501, 504, 520, 525, and 530) with a minimum grade of "B" in each of the courses.
3. Before advancing to candidacy, students must have fulfilled the Graduation Writing Assessment Requirement (GWAR) and have successfully passed the departmental qualifying examination.
4. Each student's graduate program must be approved by the Department Graduate Advisor, the Department Chair, and the Associate Dean of the College of Health and Human Services.

Requirements

1. Take 18 units of the following core courses:
 - CRJU 501 Proseminar and Professional Writing in Criminology and Criminal Justice (3)
Prerequisites: CRJU 504. Restricted to Criminal Justice master's students; all other students must have consent from Graduate Advisor.
 - CRJU 504 Criminological Theory (3)
Prerequisites: Restricted to Criminal Justice masters students; all other students must have consent from the Graduate Advisor.
 - CRJU 520 Adv Criminal Justice Research Methods (3)
Prerequisites: CRJU 320 and 325 or comparable undergraduate research methods and statistics courses approved by the Graduate Advisor. Restricted to Criminal Justice masters students; all other students must have consent from Graduate Advisor.
 - CRJU 525 Advanced Statistics for Criminal Justice (3)
Prerequisites: CRJU 320 and 325 or comparable undergraduate research methods and statistics courses approved by the Graduate Advisor. Restricted to Criminal Justice masters students; all other students must have consent from Graduate Advisor.

CRJU 530 Criminal Justice Ethics, Values & Diversity (3)
Prerequisites: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

CRJU 535 Criminal Justice Policy (3)
Prerequisites: CRJU 504, 520, and 525.

2. Successful passage of the departmental qualifying examination testing graduate-level competency in statistics, research methods, and criminological theory.

3. Take 18 additional graduate units in one of two ways:

A. Thesis Option:

Take 12 units of advisor-approved electives and the following courses:

CRJU 694 Thesis I (3)

Prerequisites: Advancement to candidacy as a Criminal Justice master's student.

CRJU 698 Thesis II (3)

Prerequisites: CRJU 694.

B. Comprehensive Examination Option:

Take 18 units of advisor-approved electives and successful completion of the comprehensive master's essay examination in either policing, corrections, law and social control, or other authorized subject area.

Note: Masters students who were admitted under a prior catalog year need to complete the course requirements specified in the catalog in effect at the time they advance to candidacy. All graduate students have the option of taking comprehensive examinations even if such exams were not listed as an option in the catalog at the time the student matriculated.

In addition to the core classes, take 12 units of electives selected in consultation with graduate advisor. A maximum of 6 units may be taken from 300 or 400-level courses in Criminal Justice. Up to 6 units of graduate work may be transferred from another accredited university or another department in CSULB. Transfer credit must be a "B" or better. All students must earn a grade of "A" or "B" for each required course. Students may not have more than 6 units of "C" grades apply toward the master's degree. Advancement to candidacy is necessary before Thesis I, Thesis II, or comprehensive exams can be taken.

Thesis

The thesis is a supervised experience in the application of theory and analytical tools to an issue in criminology or criminal justice. The thesis should prepare students for further graduate work or research in the field. The project should provide an experience that is directly applicable to an occupation in the criminal justice field.

The thesis is a written product of the systematic study of a significant problem. It clearly identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data, and offers a conclusion or recommendations. The finished product evidences originality, critical and independent thinking, appropriate organization and format, and thorough documentation. The coursework is supervised by a committee of three, including the Thesis Chair, who must be a full-time tenure-track or tenured faculty member in the Criminal Justice Department and two other faculty members.

Criminal Justice Courses (CRJU)

LOWER DIVISION

101. The Criminal Justice System in Society (3)

Prerequisites/Corequisites: One GE Foundation course.

Introduction to the study of criminal justice in American society. Focuses on the history, philosophy, functions, roles, policies, practices, and ethics of the institutions of social control within the criminal justice system, especially police, courts, and correctional personnel.

Letter grade only (A-F). Not open for credit to students with credit in CRIM 101.

110. Introduction to Justice Research, Writing, and Reasoning (3)

Prerequisites/Corequisites: ENGL 100.

Develops the skills needed to conduct and properly cite library and electronic research for social scientific and legal sources; and use them to make persuasive oral presentations and write papers, case briefs, and reports commonly used in the justice professions.

Letter grade only (A-F).

210. Gangs: Structure, Activities, and Responses (3)

An interdisciplinary examination of the factors that contribute to gang formation and membership; the structure and function of gangs; gang activities (including crime); and the various policy and programmatic responses to gangs.

Letter grade only (A-F).

220. Terrorism and the Criminal Justice System (3)

A video and text-based exploration of the origins and reasons for terrorist activity and their effect on select criminal justice agencies in the U.S. and around the world.

Letter grade only (A-F).

230. Survey of the Forensic Sciences (3)

The application of scientific principles to criminal investigations and trials, focusing on crime scene analysis and recording; analytical methods of criminalistics; significance of results; and the specialized roles of criminalists and forensic biology, chemistry, ballistics, medicine, dentistry, anthropology, and psychology.

290. Selected Topics in Criminal Justice (3)

Introductory topics of current interest in the field of criminal justice selected for intensive development.

May be repeated for a maximum of 9 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

Upper Division

301. Criminal Courts and Judicial Processes (3)

Prerequisite/Corequisites: CRJU 101 and 110 (may be taken concurrently).

Examines the structure and operation of the criminal court systems of the U.S. at the local, state, and federal levels, including their respective jurisdictions. Emphasizes pretrial and adjudication processes and the organizational roles and behaviors within the court system.

Not open for credit to students with credit in CRIM 351. Letter grade only (A-F).

302. Policing (3)

Prerequisites: CRJU 101 and 110 (may be taken concurrently).

The historical evolution of policing as an institution of social control with emphasis placed on the contemporary roles of police officers, including patrol strategies, training procedures, ethical standards, and discretion. Considers under-represented groups in policing and corruption in police agencies.

Not open for credit to students with credit in CRIM 483. Letter grade only (A-F).

303. Corrections: Theory, Policy and Practice Corrections (3)

Prerequisites: CRJU 101 and 110 (may be taken concurrently). Historical and philosophical reactions to law violators. Overview of institutional and community corrections. Examination of differing penal institutions. Evaluation of rehabilitation as crime control strategy. Alternatives to incarceration will be explored as criminal sanctions.

Not open for credit to students with credit in CRIM 468. Letter grade only (A-F). Field trips may be required.

304. Criminological Theory (4)

Prerequisite: CRJU 101 and 110.

A writing-intensive exploration of theories of crime, criminal behavior, and crime control policies. Criminological theories are traced through history by focusing on connections to biology, psychology, philosophy, politics, sociology, and economics. Not open for credit to students with credit in CRIM 404. Letter grade only (A-F).

320. Criminal Justice Research Methods (4)

Prerequisites: CRJU 101, 110, and 304 (may be taken concurrently).

Introduction to basic techniques in criminal justice research, including report writing, components of research design models, sampling techniques, data collection techniques, questionnaire construction, interview techniques, and participant observation. Focus on bridging the gaps between theory, research, and justice policy. Letter grade only (A-F). Not open for credit to students with credit in CRIM 480. (3 hours lecture; 2 hours activity)

325. Statistics for Criminal Justice (4)

Prerequisite: CRJU 101, 110 and 320.

Descriptive and inferential statistics covering univariate, bivariate, and multivariate statistical techniques. Focus on probability theory, significance testing, inferential statistics used for quantitative data analysis by criminal justice researchers and administrators. Includes laboratory using statistical software packages.

Letter grade only (A-F). (Lecture 3 hours, laboratory workshop 1 hour.)

330. Criminal Justice Ethics, Values, and Diversity (3)

Prerequisites: CRJU 302 and 303.

Identifies and explores ethics and values in the criminal justice system, paying special attention to issues of social inequality. Discusses remedial strategies and behavior relating to unethical behavior from an individual and group perspective.

Not open for credit to students with credit in CRIM 305. Letter grade only (A-F).

340. Substantive Criminal Law (3)

Prerequisites: CRJU 101, 110, and 301.

Analysis of the historical development of criminal law and the underlying principles used to interpret it. Focuses on statutory construction and case law deconstruction of the elements and defenses to major crimes, and the public policy implications of these interpretations.

Letter grade only (A-F).

350. Constitutional Criminal Procedure (3)

Prerequisites: CRJU 101, 110, and 301.

A study of criminal procedures mandated by the U.S. Constitution emphasizing searches and seizures under the Fourth Amendment; interrogations and confessions under the Fifth Amendment; the Sixth Amendment right to counsel; and due process under the Fourteenth Amendment.

Not open for credit to students with credit in CRIM 451. Letter grade only (A-F).

401. Victimology (3)

Prerequisites: CRJU 101, 110, and 304.

Advances an ecological approach to the study of victimology. Theories and history shaping the bio-psycho-social and environmental characteristics of crime and violent victimization are examined with emphasis on their intersection with issues of race, gender, class, ethnicity, and sexual orientation.

Not open for credit to students with credit in CRIM 373.

402. Crime and Inequality (3)

Prerequisites: CRJU 301 and 304.

Explores variability in the perpetration, apprehension, prosecution, and punishment of crime, as well as criminal victimization, by race, class, gender, ethnicity, and sexual orientation. Focuses on patterns of over-representation and critically evaluates the major explanations for this phenomenon.

403. Comparative Criminal Justice and Transnational Crimes (3)

Prerequisites: CRJU 101, 110, and 304.

Examination of criminal justice systems around the world and related transnational crime issues. Political, social, and economic environments are studied in relation to varying criminological practices. Includes the role of international law, international criminal courts, the UN, and Interpol.

Not open for credit to students with credit in CRIM 484

404. Terrorism, Homeland Security, and Criminal Justice (3)

Prerequisites: CRJU 101, 110, and 304.

Set against the background of our global community, an examination of the relationship between the historical and contemporary motivations and goals of terrorism, United States Homeland Security and select aspects of the United States criminal justice systems.

Letter grade only (A-F).

405. Crime Analysis (4)

Prerequisites: CRJU 101, 110, 304, and 325.

Examines the fundamentals of crime analysis with emphasis on crime mapping, criminal network analysis, and crime prevention. The laboratory portion applies hands-on computational techniques to different types of crime data.

(3 hours seminar, 1 hour activity)

406. Delinquency and the Juvenile Justice System (3)

Prerequisite: CRJU 101, 110, and 304.

Theoretical foundations of delinquency causation. Historical tracing of the American juvenile justice system including the juvenile court and its jurisdiction. Police interaction with juveniles; treatment and correctional strategies for young offenders. Examination of prevention and treatment approaches.

Not open for credit to students with credit in CRIM 487. Letter grade only (A-F).

407. White Collar Crime (3)

Prerequisites: CRJU 101, 110, 304.

Discuss and explain the various types of white-collar crimes and the damage white-collar crime inflicts upon individual victims, society, institutions, and culture. Research current trends in white collar crime, especially those concerning consumer product frauds and fraudulent business opportunities.

408. Serial Killers and Psychopaths: The Psychology of the Criminal Mind (3)

Prerequisites: Criminal Justice majors: CRJU 304. Psychology majors: PSY 220, 370, GE Foundation, and upper-division standing. All other majors: Consent of instructor.

Integrative examination of the intersection of criminal behavior and severe psychopathology using psychodynamic, behavioral,

psychosocial, and neurobiological models. Particular attention is paid to understanding homicide and sex offenses committed by those diagnosed with psychopathy, schizophrenia, and antisocial personality disorder.

410. Police Administration (3)

Prerequisites: CRJU 302 and 330.

Organizational management and systems approach to the study of police administration. Emphasizes the administration of various police functions, organizational structures, resources management, operational techniques, professional ethics, and leadership principles and their implications for generalized and specialized units.

Not open for credit to students with credit in CRIM 325.

412. Criminal Investigation (3)

Prerequisites: CRJU 101, 110, and 302.

Study of basic principles of criminal investigation. Analysis of investigative techniques; patterns and modus operandi; interviewing and interrogation strategies; collection and management of evidence; surveillance; and crime scene investigation. Theories, philosophies, and concepts related to suppression of crime are covered.

Not open for credit to students with credit in CRIM 361. Letter grade only (A-F).

420. Legal Aspects of Corrections (3)

Prerequisites: CRJ 101, 110, and 303.

Overview of court decisions related to corrections. Study of current legal issues and their impact on correctional policies and procedures.

Not open for credit to students with credit in CRIM 356.

421. Probation, Parole and Community Corrections (3)

Prerequisites: CRJU 101, 110 and 303.

Focus is on probation, parole and other intermediate sanctions and community treatment options. Each is examined from both punishment and treatment model perspectives. The pre-sentence investigation (PSI) will be analyzed. Supervision of offender in community and revocation will be discussed.

Not open for credit to students with credit in CRIM 470. Field trips may be required.

422. Correctional Counseling (3)

Prerequisites: CRJU 101, 110, 303

Techniques of counseling strategies utilized by correctional workers, including reality therapy, behavior modification, group counseling, and 12-step programs. Evaluation of the effectiveness of correctional treatment with emphasis on treatment of substance abuse, mental illness, sex offenders, and female offenders.

423. Correctional Environments (3)

Prerequisites: CRJU 101, 110, and 303.

An introduction to American penology through six all-day field trips to city, county, state, and federal correctional facilities. Includes observations of juvenile court proceedings and visits to county juvenile halls, a juvenile treatment facility, and a state youthful offender institution.

Not open for credit to students with credit in CRIM 369. Letter grade only (A-F). Special start dates and end dates apply. Full-day field trips are required. Course fee may be required.

430. Criminal Evidence and Trials (3)

Prerequisites: CRJU 301, 340, 350; and consent of Instructor.

Using a mock-trial approach, an in-depth study of procedural, evidentiary, tactical, and ethical problems experienced by lawyers, witnesses, and defendants. Emphasis on the rules of evidence and expert testimony as it relates to policing and the forensic sciences.

440. Criminalistics: Forensic Science in the Crime Laboratory (3)

Prerequisite: CRJU 230 or consent of the instructor.

Overview of general principles of forensic science, techniques, equipment, and methodologies as used in crime laboratories. Focus on fingerprint and firearm identification, trace evidence (hair, fiber, paint, glass), blood, DNA evidence, forensic document examination, crime scene kits, and forensic microscopy.

Not open for credit to students with credit in CRIM 462. Letter grade only (A-F).

441. Investigating High-Tech Crimes (3)

Prerequisite: CRJU 230 or consent of the instructor.

Overview of general classification, devices, microscopy, and methodologies in investigating high-tech crimes. Focuses on counterfeiting and fraud related to U.S. currency, credit card, checks, driver's licenses, social security cards, DVS/CD, cable TV box/satellite TV cards, and computer-based "cybercrimes."

Not open for credit to students with credit in CRIM 463. Letter grade only (A-F).

442. Forensic Psychology and the Criminal Justice System (3)

Prerequisites: CRJU 301.

An interdisciplinary examination of the relationship between psychiatry, clinical psychology, and the criminal justice system with regard to mentally-ill criminal offenders. Focus is on the legal standards for determining various criminal competencies, insanity, diminished capacity, and related defenses of excuse.

443. Forensic Pathology and the Medical-Legal Investigation of Death (3)

Prerequisite: CRJU 230 or consent of the instructor.

A multimedia examination of the medico-legal investigation of death. Focuses on thanatology and thanato-etiology of unexpected natural deaths, accidental deaths, suicides, and homicides. Special attention to deaths by gunshot wound, sharp force injury, blunt force trauma, asphyxiation, and electrocution.

Letter grade only (A-F). Field trips may be required.

450. Domestic Violence and the Criminal Justice System (3)

Prerequisites: CRJU 101, 110, 301, 302, and 304

Domestic violence is studied as a phenomenon that impacts the criminal justice system. Spousal/intimate partner abuse, child abuse, and elder abuse are studied from a multidisciplinary perspective. Strategies for criminal justice personnel handling these cases are stressed.

Not open for credit to students with credit in CRIM 492.

460. Substance Abuse and the Criminal Justice System (3)

Prerequisites: CRJU 101, 110, and 304.

Biological, psychological, and social factors in alcohol and drug use, abuse and addiction. Legal and social elements of substance abuse and their relationship to criminal justice system. Characteristics of controlled substances; categories of drug offenses; and investigation of drug cases.

Not open for credit to students with credit in CRIM 459.

461. Sex, Sexuality, Crime, and Punishment (3)

Prerequisites: Criminal Justice majors: CRJU 101, 110, 302, 303, and 304. All other majors: upper-division standing and at least one other WGSS course, or consent of the instructor.

Transdisciplinary and critical examination of the accepted boundaries of human sexual behavior and opposing perspectives regarding the roles of criminal justice actors and institutions in regulating sex and sexuality, with special attention paid to sex-related crimes, offenders, and victims.

Same course as WGSS 417. Not open for credit to students with credit in WGSS 417.

470. Qualitative Approaches to Criminal Justice Research (3)

Prerequisites: CRJU 101, 110, and 304.

Qualitative research methodologies for studying criminal behavior and criminal justice system participants. Students will develop, implement, analyze, and write a qualitative research project while adhering to ethical responsibilities regarding human subjects, natural settings, and the dissemination of research.

490. Selected Topics in Criminal Justice (3)

Prerequisites: Completion of 300-level core courses or consent of instructor.

Advanced and specialized topics of current interest in the field of criminal justice selected for intensive development.

May be repeated to a maximum of 9 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

492. Internship (6)

Prerequisites: Departmental consent; completion of 300-level Core (CRJU 301, 302, 303, 304, 320, 325, 330, 340, and 350) or consent of instructor.

Supervised work experience in a criminal justice agency.

Letter grade only (A-F). Not open for credit to students employed in criminal justice agencies.

493. Professional Development for Criminal Justicians (3)

Prerequisites/Corequisites: Consent of the Instructor.

A structured work class to facilitate career development in the justice professions, including those in academia. Includes practical instruction on job application strategies (i.e., job searching; writing cover and inquiry letters; résumé preparation) and successful interviewing techniques.

Credit/No Credit grading only.

497. Directed Research or Independent Study (1-4)

Prerequisites: Consent of instructor.

For students who wish to learn about a topic related to criminology, criminal justice, or forensics in great detail through independent reading and writing assigned by a faculty member.

May be repeated to a maximum of 9 units.

498. Senior Thesis (3)

Prerequisites/Corequisites: Completion of 300-level core courses, a minimum 3.0 grade point average and consent of instructor.

For students who wish to engage in intensive guided research and write a thesis under the direction of a panel of three faculty members. Highly recommended for students who plan to pursue graduate or law school.

May be repeated for a maximum of 6 units with the same topic.

GRADUATE LEVEL

501. Proseminar and Professional Writing in Criminology and Criminal Justice (3)

Prerequisite: CRJU 504. Restricted to Criminal Justice master's students; all other students must have consent from Graduate Advisor.

Overview of graduate study in criminology and criminal justice, focusing multidisciplinary library research for evaluating primary sources used at the graduate level; locating statistical data; and exploring research ideas presented by faculty, students, and guests.

Not open for credit to students with credit in CRIM 584 or CRJU 551. Letter grade only (A-F).

504. Criminological Theory (3)

Prerequisite: Restricted to criminal justice masters students; all other students must have consent from the Graduate Advisor.

Exploration of theories and policy implication of crime. Political, social, and economic context will be used to explore the ecology of criminal behavior. Underpinnings of criminological theory are traced through history by focusing on connection to biology, psychology, and sociology.

Not open for credit to students with credit in CRIM 581. Letter grade only (A-F).

520. Advanced Criminal Justice Research Methods (3)

Prerequisites: CRJU 320 and 325 or comparable undergraduate research methods and statistics courses approved by the Graduate Advisor. Restricted to Criminal Justice masters students; all other students must have consent from Graduate Advisor.

An in-depth exploration of the scientific methods used in criminology and criminal justice research, including research design and both quantitative and qualitative research methodologies. Special attention is paid to the ethics of human subjects research.

Not open for credit to students with credit in CRIM 583. Letter grade only (A-F).

525. Advanced Statistics for Criminal Justice (3)

Prerequisite: CRJU 320 and 325 or comparable undergraduate research methods and statistics courses approved by the Graduate Advisor. Restricted to Criminal Justice masters students; all other students must have consent from Graduate Advisor.

Nonparametric, bivariate, and multivariate inferential statistics that are used for quantitative data analysis by criminal justice researchers and practitioners.

Not open for credit to students with credit in CRIM 582. Letter grade only (A-F).

530. Criminal Justice Ethics, Values, and Diversity (3)

Prerequisites: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

Identifies and explores ethics and values in the criminal justices system, paying special attention to issues of social inequality. Discusses remedial strategies and behavior relating to unethical behavior from an individual and group perspective.

Not open for credit to students with credit in CRIM 512. Letter grade only (A-F).

535. Criminal Justice Policy (3)

Prerequisites: CRJU 504, 520, and 525.

Critical evaluation of policy-oriented scholarly literature in criminology and criminal justice, focusing on contemporary literature related to the philosophical, social, political, and legal policy issues affecting the American criminal justice system.

Letter grade only (A-F).

604. Terrorism, Homeland Security, and Criminal Justice (3)

Prerequisites: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

Set against the background of our global community, an examination of the relationship between the historical and contemporary motivations and goals of terrorism, United States Homeland Security and select aspects of the United States criminal justice systems.

Letter grade only (A-F).

605. Crime Analysis (4)

Prerequisites: CRJU 504 & 525.

Examines the fundamentals of crime analysis with emphasis on crime mapping, criminal network analysis, and crime prevention. The laboratory portion applies hands-on computational techniques to different types of crime data.

(3 hours seminar, 1 hour activity)

608. Serial Killers and Psychopaths: The Psychology of the Criminal Mind (3)

Prerequisites: Restricted to criminal justice master's students; all other students must have consent from the Graduate Advisor.

Integrative examination of the intersection of criminal behavior and severe psychopathology using psychodynamic, behavioral, psychosocial, and neurobiological models. Particular attention is paid to understanding homicide and sex offenses committed by those diagnosed with psychopathy, schizophrenia, and antisocial personality disorder.

621. Administration and Management of Criminal Justice Organizations (3)

Prerequisites: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

Introduction to the management of criminal justice agencies in the U.S. Examines the purposes, goals, and functions of administrative principles from a multidisciplinary systems perspective to develop both a theoretical and practical understanding of criminal justice leadership and management.

Not open for credit to students with credit in CRIM 621. Letter grade only (A-F).

631. Legal Issues in Criminal Justice (3)

Prerequisites: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

Analysis of current and controversial legal issues in the criminal justice system focusing on controversial decisions of the U.S. Supreme Court.

Not open for credit to students with credit in CRIM 551. Letter grade only (A-F).

640. Criminalistics: Forensic Science in the Crime Laboratory (3)

Prerequisite: Restricted to criminal justice masters students only; all others require consent of the Graduate Advisor.

Overview of general principles of forensic science, techniques, equipment, and methodologies as used in crime laboratories. Focus on fingerprint and firearm identification, trace evidence (hair, fiber, paint, glass), blood, DNA evidence, forensic document examination, crime scene kits, and forensic microscopy.

Not open for credit to students with credit in CRIM 562. Letter grade only (A-F). Undergraduate students register for CRJU 440; graduate students for CRJU 640.

641. Investigating High-Tech Crimes (3)

Prerequisite: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

Overview of general classification, devices, microscopy, and methodologies in

investigating high-tech crimes. Focuses on counterfeiting and fraud related to U.S. currency, credit card, checks, driver's licenses, social security cards, DVS/CD, cable TV box/satellite TV cards, and computer-based "cybercrimes."

Not open for credit to students with credit in CRIM 563. Letter grade only (A-F).

642. Forensic Psychology and the Criminal Justice System (3)

Prerequisites: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

An interdisciplinary examination of the relationship between psychiatry, clinical psychology, and the criminal justice system with regard to mentally-ill criminal offenders. Focus is on the legal standards for determining various criminal competencies, insanity, diminished capacity, and related defenses of excuse.

Letter grade only (A-F).

643. Forensic Pathology and the Medical-Legal Investigation of Death (3)

Prerequisite: Open to Criminal Justice master's students only. All others require consent of the Criminal Justice Graduate Advisor.

A multimedia examination of the medico-legal investigation of death. Focuses on thanatology and thanato-etiology of unexpected natural deaths, accidental deaths, suicides, and homicides. Special attention to deaths by gunshot wound, sharp force injury, blunt force trauma, asphyxiation, and electrocution.

Letter grade only (A-F). Field trips may be required.

661. Sex, Sexuality, Crime, and Punishment (3)

Prerequisites: Open to criminal justice master's students only.

Transdisciplinary and critical examination of the accepted boundaries of human sexual behavior and opposing perspectives regarding the roles of criminal justice actors and institutions in regulating sex and sexuality, with special attention paid to sex-related crimes, offenders, and victims.

670. Qualitative Approaches to Criminal Justice Research (3)

Prerequisite: CRJU 504.

Qualitative research methodologies for studying criminal behavior and criminal justice system participants. Students will develop, implement, analyze, and write a qualitative research project while adhering to ethical responsibilities regarding human subjects, natural settings, and the dissemination of research.

690. Selected Topics in Criminal Justice (3)

Advanced and specialized topics of current interest in the field of criminal justice selected for intensive development.

May be repeated to a maximum of 9 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

691. Instructional Strategies for Criminal Justice Professionals (3)

Prerequisites/Corequisites: Consent of instructor.

A structured program to teach graduate students how to create and deliver college-level instruction in criminal justice. Includes design of assignments within a measurable assessment framework; development of teaching strategies; and appropriate use of media and other pedagogical devices. May require time outside of semester format.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

694. Thesis I (3)

Prerequisites: Advancement to candidacy as a criminal justice master's student.

Student works under direct faculty supervision to complete a proposal for the thesis research study. Review of the literature on a topic and development of appropriate methodology.

Not open for credit to students with credit in CRIM 695. Letter grade only (A-F).

695. Directed Readings/Independent Study (1-4)

Prerequisites: Consent of instructor.

For students who wish to learn about a topic related to criminology, criminal justice, or forensics in great detail through independent reading and writing assigned by a faculty member.

May be repeated to a maximum of 6 units.

697. Directed Research (1-4)

Prerequisites: Consent of instructor.

Extensive independent research on assigned topic addressing theoretical criminology and synthesis of literature on current issues in criminal justice.

Letter grade only (A-F). May be repeated to a maximum of 8 units in different semesters.

698. Thesis II (3)

Prerequisites: CRJU 694.

Student works under direct faculty supervision to complete a master's thesis research study.

Not open for credit to students with credit in CRIM 698. Letter grade only (A-F).

DANCE

College of the Arts

Interim Chair: Andrew Vaca

Department Office: Dance Center

Telephone / FAX: (562) 985-4747 / (562) 985-7896

Faculty: Karen Clippinger, Colleen Dunagan, Keith Johnson, Lorin Johnson, Dori Levy, Sophie Monat, Cyrus Parker-Jeannette, Andrew Vaca

Administrative Coordinators: Jeniffer Fuentes-Mishica, Sylvia Rodriguez-Scholz

Career Possibilities

Dancer • Choreographer • Teacher • Dance Company Director • Dance Therapist • Booking Agent • Critic • Performing Arts Administrator • Dance Kinesiologist • Pilates Instructor • Dance/Aerobic Instructor (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Department of Dance is a rigorous program that provides training in dance with a strong foundation in modern and ballet technique and choreography. Physical practice interfaces with theoretical study, placing dance in a historical, pedagogical, scientific, and cultural context. The Department also provides opportunities for the general university student through courses for the non-major. Performances, master classes and residencies also contribute to the artistic enhancement of the campus and community.

All new undergraduate students enter the major under the BA degree. A separate audition for entrance into the BFA degree is required when students have completed specific coursework and have achieved required levels of competency. Entrance to the major or minor in dance is by audition. Applicants may download audition information from the web or may contact the Department of Dance Office. Non-major classes are open to all students and do not require any audition.

The Department of Dance is an accredited institutional member of the National Association of Schools of Dance.

Programs at a Glance

Bachelor of Arts

Dance

Option in Dance Science

Bachelor of Fine Arts

Dance

Master of Arts

Dance

Master of Fine Arts

Dance

Undergraduate Programs

Bachelor of Arts in Dance (120 units)

The Bachelor of Arts in Dance allows for the pursuit of a double major.

Student Learning Outcomes

1. Majors will develop competency in modern dance and ballet, enabling them to pursue careers in education, health and fitness, professional arenas, or to further their academic dance pursuits.
2. Majors will gain an overview of the historical, cultural, and scientific dimensions of dance.
3. Majors will explore the fundamental skills and techniques necessary for the public performance of dance.
4. Majors will have practical experience in the production and technological aspects of dance.
5. Majors will be able to demonstrate an understanding of the craft and aesthetic qualities of dance orally, practically, and in writing.

Requirements

Take five units from the following:

DANC 120 Improvisation (2)

Prerequisites: None

DANC 220 Composition I (3)

Prerequisite: DANC 120. Corequisite: DANC 131.

DANC 320 Composition II (3)

Prerequisite: DANC 220.

Theory (21 units):

Take all the following courses:

DANC 100 Orientation to Dance (1)

Corequisite: DANC 152 or 154.

DANC 131 Introduction to Music for Dance (2)

Prerequisites: None

DANC 161 Placement for the Dancer (2)

Prerequisites: Open to Dance Majors and Minors.

DANC 260 Functional Anatomy for the Dancer (3)

Prerequisites: DANC 161 or consent of the instructor.

DANC 261 Anatomy with Clay Laboratory (1)

Prerequisites: DANC 161 or consent of the instructor.

Corequisites: DANC 260 or consent of the instructor.

DANC 262 Pilates I (3)

Prerequisites: DANC 260 or BIOL 208.

DANC 442 Traditions in Ballet and Modern Dance (3)

Prerequisites: None

Take one of the following courses:

DANC 470 Dance Pedagogy (3)

Prerequisites: DANC 312, or consent of instructor.

DANC 475 Dance for Children (3)

Prerequisites: DANC 120, 312, or consent of instructor.

Take one of the following courses:

DANC 491A Design for Dance Lighting (3)

Prerequisites: Upper division standing or consent of instructor.

DANC 491B Design for Dance Costuming (3)
Prerequisites: Upper division standing or consent of instructor.

Performance/Crew (4 units):

Take two units from the following courses:

DANC 181A, 181B, 381A, 381B, 481A, 481B

Take two units from the following courses:

DANC 180A, 180B, 295, 321, 380A, 380B, 480A, 480B, 495

Technique (22 units):

Take nine units from the following courses:

DANC 152, 252, 312, 412

Take nine units from the following courses:

DANC 154, 254, 314, 414

Take two units from the following courses:

DANC 112A, 114A, 312, 314.

Take two units from the following courses:

DANC 216, 316

Four units from the following courses:

DANC 105, 106, 108, 116, 214, 217, 312, 313, 314, 315, 316, 317, 320, 342, 360, 362, 373I, 412, 414, 416, 420, 426, 445, 470, 475, 491A, 491B, 498.

Each course may only be applied once.

General Education (3 units):

Take the following course:

DANC 435I Dance in Film (3)

Prerequisites: GE Foundation requirements and one or more Exploration course(s), and upper division standing.

Option in Dance Science (120 units)

This option offers a course of study that combines specific science courses with dance and is designed to serve students interested in teaching careers, fitness, kinesiology and other science-based fields in dance. This option also prepares successful students for graduate education in the areas of dance science or related studies. Admission into the program is the same as for the general BA in Dance, which includes an entrance and placement audition and meeting all university entrance requirements.

Student Learning Outcomes

1. Majors will be able to perform a qualitative anatomical analysis of standing alignment and key dance vocabulary, as well as provide exercises and cues for their improvement.
2. Majors will be able to execute and cue Pilates repertoire designed to enhance dance performance, movement coordination and physical conditioning.
3. Majors will demonstrate an understanding of key anatomical and biomechanical principles for preventing dance injuries and promoting optimal technique when training as dancers or teaching dance technique.
4. Majors will attain an understanding of theoretical and practical scientific concepts of movement to help prepare them for pursuing further degrees or certifications in dance science or related fields.
5. Majors will develop competency in modern dance and ballet, enabling them to pursue careers in education, health and fitness, professional arenas, or to further their academic dance pursuits.
6. Majors will gain an overview of the historical, cultural, and scientific dimensions of dance.

7. Majors will be able to demonstrate an understanding of the craft and aesthetic qualities of dance orally, practically, and in writing.

Requirements

Five units from the following:

DANC 120 Improvisation (2)

Prerequisites: None

DANC 220 Composition I (3)

Prerequisite: DANC 120. Corequisite: DANC 131.

DANC 320 Composition II (3)

Prerequisite: DANC 220.

Theory (40 units):

Take all the following courses:

DANC 100 Orientation to Dance (1)

Corequisite: DANC 152 or 154.

DANC 131 Introduction to Music (2)

Prerequisites: None

DANC 161 Body Placement (2)

Prerequisites: Open to Dance Majors and Minors.

DANC 260 Functional Anatomy for the Dancer (3)

Prerequisites: DANC 161 or consent of the instructor.

DANC 261 Anatomy with Clay Laboratory (1)

Prerequisites: DANC 161 or consent of the instructor. Corequisites: DANC 260 or consent of the instructor.

DANC 262 Pilates I (3)

Prerequisites: DANC 260 or BIOL 208.

DANC 362 Pilates II (2)

Prerequisites: DANC 262 or consent of instructor.

DANC 442 Traditions in Ballet and Modern Dance (3)

Prerequisites: None

DANC 470 Dance Pedagogy (3)

Prerequisites: DANC 312, or consent of instructor.

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

BIOL 208 Human Anatomy (4)

Prerequisites: GE Foundation requirements.

KIN 300 Biomechanics of Human Movement (3)

Prerequisites: BIOL 208 or equivalent.

KIN 301 Exercise Physiology (3)

Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour lab with grade of "C" or better or consent of instructor.

KIN 312 Motor Control and Learning (3)

Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.

PSY 100 General Psychology (3)

Prerequisite/ Corequisite: GE A1 requirement.

Performance/Crew (2 units):

Take one unit from the following courses:

DANC 181A, 181B, 381A, 381B, 481A, 481B

Take one unit from the following courses:

DANC 180A, 180B, 295, 380A, 380B, 480A, 480B, 495

Technique (20 units):

Take nine units from the following courses:

DANC 152, 252, 312, 412

Take nine units from the following courses:

DANC 154, 254, 314, 414

Take two units from the following courses:

DANC 216, 312, 314, 316

Three units from the following courses:

ATEP 309; KIN 315, 339I, 368, 430; NUTR 132

Bachelor of Fine Arts in Dance (132 units)

The Bachelor of Fine Arts in Dance is designed to prepare students for professional careers as performers and/or choreographers. All students wishing to pursue the BFA in Dance must demonstrate strong technical skill and must audition after successfully completing the following course work with a grade of "B" or better: DANC 120; 6 units from DANC 152 and/or 252; 6 units from DANC 154 and/or 254; and one unit from DANC 181A, 181B, 381A, 381B. If students are within 3 weeks of completing the technique requirement, they may audition with a signed Grade In Progress from current technique teacher(s). Students may not apply after they have completed more than a maximum of 96 units.

Student Learning Outcomes

1. Majors will develop proficiency in modern dance and ballet, enabling them to pursue careers in the professional arenas of performance and/or choreography.
2. Majors will attain a substantial knowledge of the historical, cultural, and scientific dimensions of dance, to give depth and perspective to the performance aspect of the dance discipline.
3. Majors will have the skills and techniques necessary for professional-level performance in dance.
4. Majors will have practical experience in the production and technological aspects of dance.
5. Majors will demonstrate an understanding of the craft and aesthetic qualities of dance orally, practically, and in writing.

Requirements

Composition (8 units):

Take all the following courses:

DANC 120 Improvisation (2)
Prerequisites: None

DANC 220 Composition I (3)
Prerequisite: DANC 120. Corequisite: DANC 131.

DANC 320 Composition II (3)
Prerequisite: DANC 220.

Theory (29 units):

Take all the following courses:

DANC 100 Orientation to Dance (1)
Corequisite: DANC 152 or 154.

DANC 131 Introduction to Music (2)
Prerequisites: None

DANC 161 Body Placement (2)
Prerequisites: Open to Dance Majors and Minors.

DANC 260 Functional Anatomy for the Dancer (3)
Prerequisites: DANC 161 or consent of the instructor.

DANC 261 Anatomy with Clay Laboratory (1)
Prerequisites: DANC 161 or consent of the instructor.
Corequisites: DANC 260 or consent of the instructor.

DANC 262 Pilates I (3)
Prerequisites: DANC 260 or BIOL 208.

DANC 342 Dance in a Cultural Perspective (3)
Prerequisites: None

DANC 442 Traditions in Ballet and Modern Dance (3)
Prerequisites: None

DANC 445 Movement Analysis (3)
Prerequisites: Open to Dance Majors and Minors only.

DANC 470 Dance Pedagogy (3)
Prerequisites: DANC 312, or consent of instructor.

DANC 498 Senior Seminar in Dance (2)
Prerequisites: DANC 312, 314, 320, 442.

Select one of the following courses:

DANC 491A Design for Dance Lighting (3)
Prerequisites: Upper division standing or consent of instructor.

DANC 491B Design for Dance Costuming (3)
Prerequisites: Upper division standing or consent of instructor.

Performance/Crew (7 units):

Take two units from the following courses:

DANC 181A, 181B, 381A, 381B, 481A, 481B;

Take five units from the following courses:

DANC 180A, 180B, 295, 321, 380A, 380B, 480A, 480B, 495.

Technique (26 units):

Take eleven units from the following courses:

(2 units must be earned from 312)

DANC 152, 252, 312, 412

Take eleven units from the following courses:

(2 units must be earned from 314)

DANC 154, 254, 314, 414

Take two units from the following courses:

DANC 216, 316

Take two units from the following courses:

DANC 412, 414

General Education (3 units):

Take the following course:

DANC 373I Nonverbal Communication: Interaction of Mind and Body (3)

Prerequisites: GE Foundation requirements, completion of one or more Exploration course(s), and upper division standing.

Minor in Dance

Students interested in the minor in dance must audition for placement in dance technique classes prior to starting the program.

Requirements

24 units of which 9 must be upper division.

Technique (9 units):

Take 6 units from the following courses:

DANC 112A (may only be applied once), 152, 252, 312

Take three units from the following courses:

DANC 114A (may only be applied once), 154, 254, 314

Note: 3 units must be earned from 252 or 254.

Theory/Production/Performance (12 units):

Take all of the following courses:

DANC 120 Improvisation (2)
Prerequisites: None

DANC 131 Introduction to Music (2)
Prerequisites: None

DANC 220 Composition I (3)
Prerequisite: DANC 120. Corequisite: DANC 131.

Take one of the following courses:

DANC 342 Dance in a Cultural Perspective (3)
Prerequisites: None

DANC 442 Traditions in Ballet and Modern Dance (3)
Prerequisites: None

Take one unit from the following courses:
DANC 180A, 180B, 295, 380A, 380B, 480A, 480B, 495

Take one unit from the following courses:
DANC 181A, 181B, 381A, 381B, 481A, 481B

Take 3 units from the following courses:
DANC 105, 106, 108, 116, 161, 214, 216, 217, 312, 313, 314, 315, 316, 317, 320, 342, 373I, 426, 435I, 442, 445, 475.

Each course may only be applied once.

Graduate Programs

Master of Arts in Dance

The Master of Arts in Dance is a practice-oriented degree created to serve experienced dance educators, primarily in secondary and community college venues. It is designed to broaden and deepen dance knowledge and skills for teaching dance classes and producing dance concerts and elevates an undergraduate teaching credential to graduate status.

Because M.A. candidates are teaching during the academic year, coursework is completed in three intensive, 6-week consecutive summer sessions in which 9-12 units are earned each summer.

Student Learning Outcomes

1. Students will refine proficiency in modern dance movement vocabularies, enabling them to enhance their careers as educators.
2. Students will engage in theoretical inquiry and study in the dance-related areas of history, dance science, and pedagogy, enabling them to enhance their careers as educators.
3. Students will acquire practical skills in the areas of costume and lighting design.
4. Students will explore, practice, and actualize the craft of making dances to communicate a declared intention.

Criteria for Admission into the Program

Candidates must meet the following criteria for entrance into the M.A. in Dance:

1. Prerequisite Courses:
 - two courses in dance composition;
 - one course in dance history;
 - one course in anatomy/kinesiology (must be taken in the past five years);
2. Bachelor's degree from an accredited institution with a degree in dance or a related field;
3. Minimum of 3 years experience teaching dance in a high school with a secondary teaching credential, or minimum of 3 years part-time or full-time experience teaching dance in a community college (exceptions will be considered for extensive part-time employment teaching dance in a high school, or for an exemplary employment history of teaching dance in other venues);
4. Three letters of recommendation, of which one must be from a supervisor or colleague;
5. Movement audition and personal interview;
6. Completion of all application materials.

Admission will be granted to students who show high promise of success in graduate study based on past academic record and record of teaching experience.

Retention Criteria

1. Maintain a GPA of 3.0 in all graduate work completed at CSULB;
2. Continued satisfactory progress toward degree objectives. Application materials and application cycles (normally a new class of M.A. candidates begins every three years) is posted at csulb.edu/dance.

Advancement to Candidacy

Students will be advanced to candidacy upon successful completion of the following:

1. Satisfy the general university requirements for advancement to candidacy and the department's admission criteria;
2. Maintain a 3.0 GPA in all graduate coursework;
3. Fulfill the Graduation Writing Assessment Requirement (GWAR);
4. Complete a minimum of 21 units of coursework;
5. Removal of any incomplete grades;
6. Satisfactory completion of three artistic endeavors completed during the academic year utilizing student performers from the candidate's school;
7. Filing of the student's graduate program form for the Master of Arts in Dance, signed by the student's graduate advisor, and approved by the Associate Dean for graduate accountability.

Requirements

1. A minimum of 31 units from the following courses:
DANC 510A, 510B, 510C, 521, 522, 565, 591A, 591B, 592, 642, 605
2. Successful completion of a Written Comprehensive Exam to be taken after all coursework has been satisfied.

Master of Fine Arts in Dance

This 60-unit plan of study emphasizes performance and choreography grounded in the modern dance genre, and requires 3 years in residence to complete all course work. This degree is a rigorous program designed to challenge professionally experienced dancers to develop their artistic and analytical work through numerous performances and choreographic opportunities. Curriculum is integrated in technique, composition and theory.

The Department of Dance has chosen to keep the MFA degree program small and selective in order to provide adequate resources to all students in the degree plan. It is expected that applicants for the MFA in Dance should have some life experiences in the field prior to application; therefore, this would normally preclude a person who was recently awarded an undergraduate degree.

Student Learning Outcomes

1. Students will explore, practice, and actualize the craft of making dances to communicate a declared intention.
2. Students will refine proficiency in modern dance and ballet movement vocabularies, enabling them to pursue careers in the professional arenas of performance/choreography and/or education.

- Students will engage in theoretical inquiry and study in the dance-related areas of history, music, film/video, aesthetics, dance science, and dance criticism.
- Students will attain substantial knowledge/practical skills in preparation for teaching, including theoretical, practical, and kinesiological perspectives.
- Students will acquire practical skills in the production aspects of dance, including costume design, lighting design, and stage management and/or public relations.

Criteria for Admission into the Program

Candidates admitted into this program will be selected on the following criteria:

- Meet University admissions requirements;
- B.A., B.F.A., or M.A. degree in dance or equivalent with a 3.0 GPA in upper division dance courses;
- Professional goals consistent with the plan of study;
- Life experiences in the field;
- Audition in performance and choreography.

All MFA candidates are admitted on a conditional status.

Removal of the conditional admit will occur after the following:

- Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
- Completion of all prerequisites;
- Completion of 20 graduate dance units with a GPA of 3.0;
- Approval of Graduate Advisor.

Prerequisites

Advanced technique, Dance Composition (3 courses), Dance History (2 courses), Music for Dance, Anatomy/Kinesiology, Dance Notation or Laban Movement Analysis, Dance Production (2 courses). Candidates may take prerequisite courses along with graduate courses.

When an undergraduate degree is completed in a program which has different requirements than those of the CSULB dance major, additional preparation may be required before the student can be considered for classified status. Up to 24 units from an M.A. degree program may be acceptable, with approval of the graduate advisor.

Application Requirements

- A CSULB post-baccalaureate application.
- The following returned to the CSULB Dance Department:
 - Letter of application;
 - resume;
 - 3 letters of reference;
 - VHS video or DVD of a recent group choreographic work;
 - 2-page (typed, double spaced) personal statement addressing how graduate work will fulfill intended professional goals.
- Audition on the CSULB campus to include a technique class and presentation of a 3-5 minute solo composition.

Advancement to Candidacy

Advancement to candidacy will occur based on the following:

- Unconditional admission status;
- Completion of 30 graduate dance units with a GPA of 3.0;
- Successful choreography produced in a graduate concert;
- Evaluation by graduate faculty of the candidate's satisfactory progress toward the degree;
- Removal of any incomplete grades.

Performance/Choreography Concentration

Take 8 units from the following courses:

DANC 511A, 512

Take 4 units from the following courses:

DANC 511B, 514

Take 15-17 units from the following courses:

DANC 505, 565, 588, 597, 605, 693

Take 12 units from the following courses:

DANC 520A, 520B, 520C, 520D

Take 5 units from the following courses:

DANC 580A, 580B, 585A, 585B, 592, 595

Take 6 units of the following course:

DANC 699 Thesis/Project

Take 8-10 units of additional coursework.

Courses (DANC)

Dance Technique

Note: Dance majors must take technique courses and composition in sequence and screen for level placement in all technique classes. Screening will take place the previous semester and the first day of class. Beginning non-major technique classes are not screened; they are open to all students. Intermediate/Advanced, DANC 216 and DANC 316, have a screening process.

LOWER DIVISION

100. Orientation to Dance (1)

Corequisite: DANC 152 or 154.

Introductory information, degree requirements, career opportunities, current problems and issues in the field.

Letter grade only (A-F).

101. Introduction to Modern Dance (3)

Prerequisite: GE Foundation requirements.

Exploration of modern dance concert dance art form through the study of its aesthetic principles and characteristics. Lectures and video viewing identify major choreographers, performers, choreographic works, and historical development; movement sessions explore elementary exercises in modern dance technique.

Not open for credit to dance majors.

102. Introduction to Ballet (3)

Prerequisite: GE Foundation requirements.

Exploration of ballet as concert dance art form through the study of its aesthetic principles and characteristics. Lectures and video viewing identify major choreographers, performers, choreographic works, and historical development; movement sessions explore elementary exercises in ballet technique.

Not open for credit to dance majors.

103. Introduction to Jazz (3)

Prerequisite: One GE Foundation course.

Introduction to jazz dance as concert and entertainment art form through the study of its aesthetic principles and characteristics. Lectures and video viewing identify major choreographers, performers, choreographic works, and historical development; movement sessions explore elementary exercises in jazz technique.

Open only to non-dance majors.

104. Introduction to Tap (3)

Prerequisite: One GE Foundation course.

Introduction to tap as concert and entertainment art form through the study of its aesthetic principles and characteristics. Lectures

and video viewing identify major choreographers, performers, choreographic works, and historical development; movement sessions explore elementary exercises in tap technique.

Not open for credit to dance majors.

105. Latin Jazz (2)

Basic skills and techniques in Latin Jazz.

Not open for credit to dance majors. May be repeated to a maximum of 4 units in different semesters. (1 hour discussion, 2 hours studio)

106. African Dance (2)

Basic skills and technique in African dance designed to incorporate its role in African culture.

May be repeated to a maximum of 4 units in different semesters. (1 hour discussion, 2 hours studio)

108. Beginning Flamenco (2)

Basic skills and technique in the style of Flamenco dance designed to incorporate its role in Spanish culture.

May be repeated to a maximum of 4 units in different semesters. (1 hour discussion, 2 hours studio)

109. Beginning Hip-Hop (2)

Basic skills and technique in the style of Hip-Hop dance.

May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

110. Viewing Dance (3)

Prerequisite/Corequisite: One GE Foundation course.

Introduction to contemporary dance theater through viewing dance films (modern dance, ballet and ethnic), dance performances, and lecture/discussions on dance.

111A. Beginning Modern Dance (2)

Basic skills and techniques in modern dance.

Not open to dance majors. May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

111B. Beginning Modern Dance (2)

Prerequisite: DANC 111A or consent of instructor.

Continuing beginning skills and techniques in modern dance.

Not open to dance majors. May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

112A. Intermediate Modern Dance (2)

Prerequisite: DANC 111B or consent of instructor. Open to non-majors.

Low intermediate skill and techniques in modern dance.

May be repeated to a maximum of 8 units in different semesters. Dance majors/minors must take for letter grade. (4 hours studio)

112B. Intermediate Modern Dance (2)

Prerequisite: DANC 112A or consent of instructor. Open to non-majors.

Intermediate skill and techniques in modern dance.

May be repeated to a maximum of 8 units in different semesters. Dance majors/minors must take for letter grade. (4 hours studio)

113A. Beginning Ballet (2)

Basic skills and techniques in ballet. Not open to dance majors.

May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

113B. Beginning Ballet (2)

Prerequisite: DANC 113A or consent of instructor.

Continuing beginning skills and techniques in ballet. Not open to dance majors.

May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

114A. Intermediate Ballet (2)

Prerequisite: DANC 113B or consent of instructor. Open to non-majors.

Low intermediate skill and techniques in ballet.

May be repeated to a maximum of 8 units in different semesters. Dance majors/minors must take for letter grade. (4 hours studio)

114B. Intermediate Ballet (2)

Prerequisite: DANC 114A or consent of instructor. Open to non-majors.

Intermediate skill and techniques in ballet.

May be repeated to a maximum of 8 units in different semesters. Dance majors/minors must take for letter grade. (4 hours studio)

115. Beginning Jazz (2)

Basic skills and techniques of jazz.

Not open for credit to dance majors. May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

116. Intermediate Jazz (2)

Prerequisite: DANC 115 or consent of instructor.

Basic theory and practice of modern jazz dance.

May be repeated to a maximum of 8 units in different semesters. (4 hours studio)

117. Beginning Tap Technique (2)

Basic technique in the tap dance idiom, time steps, stylistic patterns, rhythmic patterns and tap combinations.

May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

119. Dance Activity I (1-2)

Basic skills and techniques in ballet, jazz, or modern dance technique.

Not open for credit to dance majors. May be repeated to a maximum of 4 units in different semesters. (2-4 hours studio)

120. Improvisation I (2)

Use of improvisation as an introduction to structural form; individual and group problems.

Letter grade only (A-F). (4 hours studio)

131. Introduction to Music for Dance (2)

Basic music notation, simple and complex rhythmic patterns, poly-rhythms, skill in the use of percussion instruments and a brief survey of the historical periods of music for dance.

Letter grade only (A-F). (4 hours studio)

152. Modern Technique I (3)

Prerequisites: Dance Major or Minor, and placement screening.

Intermediate skill in modern dance technique.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (6 hours studio)

154. Ballet Technique I (3)

Prerequisites: Dance Major or Minor, and placement screening.

Intermediate skill in ballet technique.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (6 hours studio)

161. Placement for the Dancer (2)

Prerequisites: Open to Dance Majors and Minors.

Application of movement principles and exercises from various sources including anatomy, biomechanics and rehabilitation to improve body alignment, core stabilization, and other aspects of technique in key dance movement patterns.

Letter grade only (A-F). (4 hours studio)

179. Exploring Dance: The Language of Movement (3)

Prerequisites: Open to all Liberal Studies Majors, open to others with consent of instructor based on availability.

Exploration of movement language of dance relating to producing dance; to historical and cultural aspects of dance; and to activities geared to developmental aspects of children, 5-12 years, as outlined in California State Framework for Visual and Performing Arts, K-8. Dance component.

Letter grade only (A-F). (1 hour lec., 4 hours lab)

180A. Dance Performance (1)

Prerequisites: Audition, dance major or minor.

Participation in dance productions.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. (3 or more hours studio)

180B. Dance Performance (1)

Prerequisites: Audition, dance major or minor.

Participation in dance productions.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. (3 or more hours studio)

181A. Dance Production Technical (1)

Technical participation in Dance Department-sponsored productions.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. (2 hours studio)

181B. Dance Production Technical (1)

Technical participation in Dance Department-sponsored productions.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. (2 hours studio)

214. Ballet Pointe (1)

Prerequisite: Consent of instructor.

Development of the technique of dancing in pointe shoes.

May be repeated to a maximum of 4 units in different semesters. (2 studios hours)

216. Intermediate/Advanced Jazz (2)

Prerequisites: DANC 116 and placement screening, or consent of instructor.

Intermediate/advanced theory and practice of modern jazz dance.

May be repeated to a maximum of 8 units in different semesters.

Dance majors/minors must take for letter grade. (4 hours studio)

217. Intermediate Tap Technique (2)

Prerequisite: DANC 117 or placement screening.

Intermediate skills in tap technique concentrating on rhythmic complexity, heightened tempos, and contemporary tap styles.

May be repeated to a maximum of 4 units in different semesters. (4 hours studio)

219. Dance Activity II (1-2)

Intermediate skills and techniques in ballet, jazz, or modern dance technique.

Not open for credit to dance majors. May be repeated to a maximum of 4 units in different semesters. (2-4 hours studio)

220. Dance Composition I (3)

Prerequisites: DANC 120. Corequisites: DANC 131.

Theory and practice in the basic elements of dance composition.

Letter grade only (A-F). (1 hour lecture, 4 hours studio)

252. Modern Technique II (3)

Prerequisites: Dance Major or Minor, and placement screening.

Intermediate skill in modern dance technique.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (6 hours studio)

254. Ballet Technique II (3)

Prerequisites: Dance Major or Minor, and placement screening.

Intermediate skill in ballet technique.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (6 hours studio)

260. Functional Anatomy for the Dancer (3)

Prerequisites: DANC 161 or consent of the instructor.

A thorough examination of major muscles, bones and joints as they relate to human movement. Performance of anatomical analyses of common conditioning exercises and key dance movements.

Letter grade only (A-F). (2 hours lecture, 2 hours studio).

261. Anatomy with Clay Laboratory (1)

Prerequisites: DANC 161 or consent of the instructor. Corequisites: DANC 260 or consent of the instructor.

Incorporates rendering muscles on manikens® with clay (user of Anatomy in Clay Learning Systems®) to aid in developing a three dimensional understanding of the location and actions of musculature vital for human movement.

Letter grade only (A-F). (2 hours lab)

262. Pilates I (3)

Prerequisites: DANC 260 or BIOL 208.

Beginning-intermediate level Pilates-based program, emphasizing the use of the Pilates apparatus, designed to enhance dance performance, movement coordination and physical conditioning.

Letter grade only (A-F). (1 hour seminar, 4 hours studio)

295. Repertory (1-3)

Prerequisites: Audition, dance major.

Experience in rehearsal and performance practice in an intensive format.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (2-6 hours studio)

UPPER DIVISION**312. Modern Technique III (2)**

Prerequisites: Dance Major or Minor or placement screening.

Intermediate/advanced skill in modern dance technique.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. (6 hours studio)

313. Modern Dance Workshop (1-3)

Prerequisites: Dance major or minor or consent of instructor.

Exploration of the techniques of modern dance.

May be repeated to a maximum of 6 units in different semesters. (2-6 hours studio).

314. Ballet Technique III (2)

Prerequisite: Dance Major or Minor or placement screening.

Intermediate/advanced skill in ballet technique.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. (6 hours studio)

315. Ballet Workshop (1-3)

Prerequisites: Dance major and minor or consent of instructor.

Exploration of the techniques of ballet.

May be repeated to a maximum of 6 units in different semesters. (2-6 hours studio)

316. Advanced Jazz (2)

Prerequisites: DANC 216 and placement screening, or consent of instructor.

Advanced theory and practice of jazz technique.

May be repeated to a maximum of 8 units in different semesters. Dance majors/minors must take for letter grade. (4 hours studio)

317. Advanced Tap Technique (2)

Prerequisites: DANC 117 and 217 or consent of instructor.

Advanced skills in tap technique concentrating on rhythmic complexity, heightened tempos, improvisational work, and contemporary tap styles.

May be repeated to a maximum of 8 units in different semesters. (4 hours studio)

319. Dance Laboratory (1-3)

Participation in dance technique projects. Consent of instructor.

Letter grade only (A-F). May be repeated to a maximum of 8 units in different semesters. (2 hours studio per unit.)

320. Dance Composition II (3)

Prerequisite: DANC 220.

Development of theme and style in small group studies.

Letter grade only (A-F). (1 hour lecture, 4 hours studio)

321. Directed Choreography (1-3)

Prerequisites: Consent of instructor.

Independent choreographic projects finalized in a performance venue under supervision of a faculty member.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (2-6 hours studio)

342. Dance in a Cultural Perspective (3)

Development of dance from Aboriginal to 20th Century.

Letter grade only (A-F). (3 hours lecture)

350. Dance Notation I (3)

Prerequisite: DANC 131.

Theory and practice of notating movement through Labanotation.

Letter grade only (A-F).

360. Prevention and Care of Dance Injuries (3)

Prerequisite: DANC 260 or consent of instructor.

Study principles to help dancer understand, prevent and recover from common dance injuries. Assessment and development of muscular strength/endurance, flexibility, cardiovascular endurance, body composition/nutrition and proprioception as they relate to common injuries and improved dance performance.

Letter grade only (A-F). (2 hours lec., 2 hours lab)

362. Pilates II (2)

Prerequisites: DANC 262 or consent of instructor.

Intermediate-advanced level. Pilates-based conditioning program which employs a series of exercises designed to enhance dance performance and prevent injury, utilizing apparatus based on designs of Joseph Pilates, exercise balls, free weights and body for resistance.

Letter grade only (A-F). (4 hours studio)

373I. Nonverbal Communication: Interaction of Mind and Body (3)

Prerequisites: GE Foundation requirements, completion of one or more Exploration course(s), and upper division standing.

History and theories of the development of mind/body integration. Enhancement of personal and interpersonal relations through lectures, discussion, films and movement experiences. Analysis and synthesis of the interdependence of the psychological and physical processes in nonverbal communication.

Same course as ED P 373I. Not open for credit to students with credit in ED P 373I.

380A,B. Dance Performance (1,1)

Prerequisite: Open to Dance Majors and Minors only.

Participation as a performer and/or choreographer in Dance Department productions. Concert participation is by audition only.

A combination of 380A,B and 480A,B may be repeated to a maximum of 8 units. (3 or more hours studio)

381A. Dance Production Technical (1)

Prerequisites: Open to dance majors and minors.

Technical production participation in Dance Department sponsored productions.

Letter grade only (A-F). A combination of 381A,B and 481A,B may be repeated to a total of 8 units. (3 hours studio per unit)

381B. Dance Production Technical (1)

Prerequisites: Open to dance majors and minors.

Technical production participation in Dance Department sponsored productions.

Letter grade only (A-F). A combination of 381A,B and 481A,B may be repeated to a maximum of 8 units. (3 hours studio per unit)

412. Modern Technique IV (2)

Prerequisites: Dance Major or Minor, and placement screening.

Advanced skill in modern dance technique.

Letter grade only (A-F). May be repeated to a maximum of 8 units in different semesters. (6 hours studio)

414. Ballet Technique IV (2)

Prerequisites: Dance Major or Minor, and placement screening.

Advanced skills in ballet technique.

Letter grade only (A-F). May be repeated to a maximum of 8 units in different semesters. (6 hours studio)

416. Ballet Variations (2)

Prerequisites: DANC 254 or consent of instructor.

Interpretation and analysis of style, technique, musicality, content, and phrasing in classical and modern ballet variations.

May be repeated to a maximum of 6 units in different semesters. (1 hour discussion, 2 hours studio)

420. Advanced Composition (2)

Prerequisite: DANC 320 or consent of instructor.

Approaches to the development of choreographic materials of extended structure and content.

Letter grade only (A-F). (4 hours studio)

426. Intermediate/Advanced Ballet Pointe (1)

Prerequisites: DANC 214 or consent of instructor.

Intermediate skill development in ballet pointe technique.

May be repeated to a maximum of 4 units in different semesters. (2 hours studio)

435I. Dance in Film (3)

Prerequisites: GE Foundation requirements and one or more Exploration course(s), and upper division standing.

Examination of the relationship between dance and film; study of historical and theoretical connections placed in both aesthetic and cultural contexts.

442. Traditions in Ballet and Modern Dance (3)

Development of Ballet and Modern dance from the 20th Century to present.

Letter grade only (A-F). (2 hours lecture, 2 hours studio)

445. Movement Analysis (3)

Prerequisites: Open to Dance Majors and Minors only.

Study of the principles underlying movement and their application to all areas of movement study.

Letter grade only (A-F). (Lecture 2 hours, 2 hours studio)

470. Dance Pedagogy (3)

Prerequisites: DANC 312, or consent of instructor.

Methods of teaching dance technique for studios, recreation departments, companies, secondary schools, colleges, and universities. Emphasis on teaching teenagers and adult beginners.

Letter grade only (A-F). (1 hour lecture, 4 hours studio)

475. Dance for Children (3)

Prerequisites: DANC 120, 312, or consent of instructor.

Practical experience in teaching creative dance to children. Includes improvisational approaches to teaching elements of dance, exploration and practical implementation of teaching and learning theories, and incorporation of the California Visual and Arts dance standards into elementary school curriculum.

Letter grade only (A-F). (2 hours lecture, 2 hours studio)

480A,B. Dance Performance (1,1)

Prerequisite: Open to Dance Majors and Minors only.

Participation as a performer and/or choreographer in Dance Department approved University-sponsored production. Most concert participation is by audition only.

A combination of 380A,B and 480A,B may be repeated to a total of 8 units. (3 or more hours studio)

481A. Dance Production-Technical (1)

Prerequisites: Open to dance majors or minors.

Technical participation in Dance Department-sponsored productions.

Letter grade only (A-F). A combination of 381A,B and 481A,B may be repeated to a total of 8 units. (3 hours studio per unit)

481B. Dance Production-Technical (1)

Prerequisites: Open to dance majors or minors.

Technical participation in Dance Department-sponsored productions.

Letter grade only (A-F). A combination of 381A,B and 481A,B may be repeated to a total of 8 units. (3 hours studio per unit)

488. Organization of Dance Production (3)

Prerequisite or Corequisite: DANC 312.

Analysis and practice in the production elements of dance concerts. Course is coordinated with a department concert.

Letter grade only (A-F).

490. Selected Topics in Dance (1-3)

Prerequisite: Consent of instructor.

Topics of current interest in the field of dance selected for special presentation and development.

May be repeated to a maximum of 12 units with different topics in different semesters or consent of department chair. Topics announced in the *Schedule of Classes*.

491A. Design for Dance Lighting (3)

Prerequisites: Upper division standing or consent of instructor.

Techniques of designing lighting for dance. Practical applications include designing and executing lighting for dance for concerts in various settings.

Letter grade only (A-F). (6 hours studio)

491B. Design for Dance Costuming (3)

Prerequisites: Upper division standing or consent of instructor.

Designing and constructing costumes for dance.

(6 hours studio)

495. Repertory (1-3)

Prerequisite: Audition.

Students learn and perform works of distinguished choreographers. Leads to concert performance.

May be repeated to a maximum of 18 units provided it is with a different instructor each time. (2-6 hours studio)

498. Senior Seminar in Dance (2)

Prerequisites: DANC 312, 314, 320, 442

Culmination of undergraduate study resulting in individual projects that vary according to artistic, intellectual, and career goals.

Letter grade only (A-F). (1 hour seminar, 2 hours activity)

499. Directed Studies in Dance (1-3)

Prerequisite: Consent of instructor.

Independent projects and research of advanced nature in any area of dance.

Letter grade only (A-F). Course may be repeated to a maximum of 12 units in different semesters. (2-6 hours studio)

GRADUATE LEVEL

505. Dance Pedagogy (3)

Prerequisite: Acceptance into MFA program or consent of advisor.

Theory and methods specific to the teaching of dance technique in secondary and post-secondary education.

Letter grade only (A-F). (1 hour lecture, 4 hours studio)

510A,B,C. Technique Laboratory (1-3, 1-3, 1-3)

Prerequisite: Admission into the MA or MFA degree program.

Intermediate to intermediate/advanced skill in modern dance technique for the graduate student.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (2-6 hours studio)

511A. Intermediate/Advanced Modern Technique (2)

Prerequisites/Corequisites: Admission into the MFA degree program.

Intermediate/Advanced skill in modern dance technique for the graduate student.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (6 hours studio)

511B. Intermediate/Advanced Ballet Technique (2)

Prerequisites/Corequisites: Admission into the MFA degree program.

Intermediate/Advanced skill in ballet technique for the graduate student.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (6 hours studio)

512. Advanced Modern Technique (2)

Prerequisites: Placement screening.

Advanced skill in modern dance technique for the graduate student.

Letter grade only (A-F). May be repeated to a maximum of 12 units in different semesters. (6 hours studio)

514. Advanced Ballet Technique (2)

Prerequisite: Placement screening.

Advanced skill in ballet technique for the graduate student.

Letter grade only (A-F). May be repeated to a maximum of 12 units in different semesters. (4 hours studio)

520A. Choreography A (3)

Prerequisite: Admission into the MFA degree program.

Will center on development of advanced approached to choreographic materials and techniques. It will emphasize outlining of artistic ideas in written form before physical realization, and will emphasize composing and shaping choreography based on clearly stated concepts.

Letter grade only (A-F). (4 hours activity; 1 hour discussion)

520B. Choreography B (3)

Prerequisite: Admission into the MFA program for dance.

Methods and practice of developing choreography utilizing music/composers as the basis for compositional exploration.

Letter grade only (A-F). (4 hours activity; 1 hour discussion)

520C. Choreography C (3)

Prerequisite: Admission into the M.F.A. program.

Advanced study of choreographic methods concentrating on development of choreography inspired by, and relating to, other art forms. Compositional studies geared to traditional theatrical venues and alternate performing venues will be explored.

Letter grade only (A-F). (4 hours activity; 1 hour discussion).

520D. Choreography D (3)

Prerequisite: Admission into the M.F.A. program.

Concentrates on development of dance choreography designed for presentation through video, and video used as an integrated/ supporting form in live performance. Emphasizes skills and techniques in the exploration of dance documentation and the shooting and editing of digital video.

Letter grade only (A-F). (4 hours activity; 1 hour discussion).

521. Dance Composition III (3)

Prerequisite: Admission to the MA degree program in Dance.

Methods and practice of developing choreography as related to the high school and community college setting.

Letter grade only (A-F). (1 hour lec., 4 hours lab)

522. Composition IV (3)

Prerequisite: Admission into the MA degree program.

Methods and practice in developing more advanced choreographic studies related to a high school or community college setting.

Letter grade only (A-F). (4 hours studio; 1 lecture hour).

565. Dance Science as Related to Teaching Technique (3)

Prerequisite: DANC 260 and 505, or consent of instructor.

Application of anatomical principles, scientific principles of training, and biomechanical principles to more effectively design and teach dance technique classes.

Letter grade only (A-F). (1 hour lec., 4 hours lab)

580A,B. Dance Performance (1)

Prerequisite: Audition.

Participation as a performer and/or choreographer in Dance Department approved University-sponsored production.

Letter grade only (A-F). May be repeated to a maximum of 2 units. (3 or more hours studio)

585A,B. Dance Performance (1)

Prerequisite: Audition.

Participation as a performer and/or choreographer in Dance Department approved University-sponsored production.

Letter grade only (A-F). May be repeated to a maximum of 2 units. (3 or more hours studio)

588. Seminar in Dance Management (2)

Techniques and practices in producing and promoting dance performances in fixed sites and in touring venues relevant to the production of MFA thesis concerts and to venues outside the University. For graduate students with prior experience in the field.

Letter grade only (A-F).

590. Selected Topics in Dance (1-3)

Prerequisite: Acceptance into MFA program in dance.

Topics of current interest to graduate students in dance will be selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in *Schedule of Classes*.

591A. Advanced Design for Dance Lighting (3)

Provides students with advanced work in design lighting for dance, and offers the in-depth technical knowledge and practical experience necessary to the execution of complete lighting plots.

Letter grade only (A-F). (6 hours studio)

591B. Advanced Design for Dance Costuming (3)

Provides graduate students with advanced coursework in designing costumes for dance, and with skills necessary to execute the designs.

Letter grade only (A-F). (6 hours studio)

592. Selected Topics in Dance (1-3)

Prerequisite: Acceptance into MFA program in dance.

Topics of current interest to graduate students in dance will be selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (2-6 hours studio)

595. Repertory (1-3)

Prerequisite: Audition.

For graduate dance majors to learn more advanced works from the repertoire of noted choreographers or to have new works created on the students by distinguished choreographers.

Letter grade only (A-F). May be repeated to a maximum of 6 units. (2-6 hours studio)

597. Criticism and Analysis of Dance (3)

Prerequisite: Acceptance into the graduate degree programs in dance.

Introduction to dance studies through viewing historical and contemporary choreography and readings in criticism, aesthetics, and theory. Writing and choreographic lab experiences.

Letter grade only (A-F). (2 hours lecture, 2 hours activity)

599. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Individual research or project under the guidance of a faculty member.

May be repeated to a maximum of 12 units in different semesters. (2-6 hours studio) Letter grade only (A-F).

605. Seminar in Dance (2-3)

Prerequisites: Acceptance into the MA or MFA in Dance.

Will be conducted as a seminar. Literature, including research appropriate to the particular topic of the course, will be examined and discussed.

Letter grade only (A-F).

642. Seminar in Dance History (3)

Intensive study of selected topics in the History of Dance.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics.

693. Teaching Internship (1-3)

Prerequisite: Acceptance into the M.F.A. program in Dance.

Opportunity to work with full-time Dance faculty member in course preparation and instruction in one area of dance theory.

Letter grade only (A-F).

698. Thesis/Project (1-6)

Prerequisite: Advancement to candidacy.

Planning, preparation, and completion of a thesis/project in dance for the M.A. degree.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

699. Thesis/Project (1-6)

Prerequisite: Advancement to Candidacy.

Planning, preparation, and completion of thesis/project in dance for the M.F.A. degree.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester.

DESIGN

College of the Arts

Department Chair: Dorothy Ottolia

Department Office: Design (DESN), Room 101

Telephone / FAX: (562) 985-5089 / (562) 985-2284

Website: <http://www.csulb.edu/depts/design/>

Undergraduate Advisor: B.A./B.F.A./B.S.: Rachael Ryan
(562) 985-4368; Design (DESN), Room 107

Faculty: Heather Barker, John Kleinpeter, Dorothy Ottolia, Eduardo Perez, José Rivera-Chang, David Teubner, Wesley Woelfel

Administrative Coordinator: Pamela Sample

Career Possibilities

Industrial Designer • Interior Designer • Display/Exhibit Designer • Environmental Graphic Designer • Furniture Designer • Car Designer • Model Maker • Package Designer • Technical Illustrator • Teacher • Consultant • Commercial Artist • Architectural Illustrator • Product Designer • 3-D Graphic Illustrator (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Today's designer must achieve sufficient educational breadth to adapt successfully to the varying demands imposed on their work by economic, social and psychological factors. A methodology for encouraging the creative problem solving process and the skill to express visual ideas with clarity must be obtained. A competitive portfolio review is held each year to identify students whose work has reached a level of competence necessary to advance to junior- and senior-level courses in Industrial Design and Interior Design. After passing portfolio requirements, selected students are officially admitted to the B.S. and B.F.A. programs. The B.A. program is open to all students.

The academic programs of the Department of Design have been accredited by the National Association of Schools of Art and Design (National Association of Schools of Art and Design, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, phone: 703-437-0700).

Programs at a Glance

Bachelor of Arts in Design

Bachelor of Fine Arts in Interior Design

Bachelor of Science in Industrial Design

Undergraduate Programs

Bachelor of Arts in Design (120 Units)

This liberal arts degree provides the opportunity for the student to gain a broad exposure to the discipline. In addition to receiving a foundation through the core courses, the curriculum will also enable students to tailor their studies with electives from inside or outside of the college.

Students interested in the BA program in Design should apply as early in their academic career as possible, but no later than 60 units.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

120 units; a minimum of 40 units from Upper Division; and a minimum of 48 units from General Education.

Lower Division:

Take all of the following courses:

AH 111A Foundation Art History I (3)
Prerequisite: One GE Foundation course

AH 111B Foundation Art History II (3)
Prerequisite: One GE Foundation course

DESN 120A Fundamentals of Design (3)
Prerequisite: None

DESN 120B Fundamentals of Design (3)
Prerequisite: 120A or consent of instructor

DESN 132A Perspective and Rendering Systems (3)
Prerequisite: None

DESN 132B Perspective and Rendering Systems (3)
Prerequisites: 132A or consent of instructor

DESN 151 Industrial Design Materials and Tools (2)
Prerequisite: None

DESN 232A Visualization Techniques (3)
Prerequisites: DESN 120B, 132B or consent of instructor

DESN 255 2D Computer-Aided Graphics (3)
Prerequisites: DESN 150 or 141 or consent of instructor

Choose one from the following:

DESN 141 Interior Architectural Drafting (3)
Prerequisite: None

DESN 150 Design Drafting (3)
Prerequisite: None

Choose one of the following:

DESN 156 3D Computer-Aided Design (3)
Prerequisite: DESN 150 or consent of instructor

DESN 246 Computer-Aided Drafting (3)
Prerequisite: DESN 141 or consent of instructor

Upper Division:

Choose one of the following:

DESN 346 Computer-Aided Design - 3D Modeling (3)
Prerequisites: DESN 120B, 151, 232A, 246; and for BFA: DESN 242; and for BA: DESN 255; or consent of instructor

DESN 356 Advanced 3D Computer-Aided Design (3)
Prerequisites: DESN 120B, 150, 151, 156, 232A, and 255

Take all of the following courses:

DESN 360A Environmental Communication Design (3)
Prerequisites: AH 111A, 111B; DESN 156 or 246, 232A, 255 and 346 or 356 or consent of instructor.

DESN 360B Advanced Environmental Communication Design (3)
Prerequisites: DESN 360A or consent of instructor. For Art majors: ART 149, 327 or consent of instructor.

DESN 367 History and Theory of Architecture (3)
Prerequisite: Completion of GE Foundation requirements.

DESN 368 History and Theory of Design (3)
Prerequisite: Completion of GE Foundation requirements.

DESN 369 History of Furniture and Decorative Arts (3)
Prerequisite: Completion of GE Foundation requirements.

DESN 370 Design in Contemporary Society (3)
Prerequisite: GE Foundation requirements.

DESN 450 BA Senior Project (3)
Prerequisites: DESN 346 or 356, 360A, and 6 units of
DESN History or consent of instructor.

Additional Requirements

Select a minimum of 22 additional units from inside
or outside the department. 7 units must be upper-
division.

A total of 120 units is required for degree completion.
Students must achieve "C" or better in each course
required by the major.

Bachelor of Fine Arts in Interior Design

This degree prepares students who will eventually
seek a master's degree or a position as a professional
designer. The BFA program is a rigorous and competitive
one. Portfolios are reviewed in the spring semester for fall
admission to Junior standing in this degree program.

Applicants to the BFA program must receive a positive
recommendation following review of a portfolio submitted
by the applicant. For BFA portfolio review consideration, a
student must be enrolled in or have successfully completed
DESN 241, 242, 245 and 255 with a "C" or better. Students
may apply to the BFA program when they have completed
a minimum of 53 units, but may not apply after they have
completed more than a maximum of 96 units.

Contact department for details of portfolio submission
and review process.

Admission Under Impaction

Refer to the following website for additional impaction
criteria: [http://www.csulb.edu/depts/enrollment/admissions/
impacted_major.html](http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html).

Requirements

132 units, including 90 units for the major.

Lower Division:

Take all of the following courses:

AH 111A Survey of Western Art I (3)
Prerequisite: One GE Foundation course

AH 111B Survey of Western Art II (3)
Prerequisite: One GE Foundation course

DESN 120A Fundamentals of Design (3)
Prerequisite: None

DESN 120B Fundamentals of Design (3)
Prerequisite: 120A or consent of instructor

DESN 132A Perspective and Rendering Systems (3)
Prerequisite: None

DESN 132B Perspective and Rendering Systems (3)
Prerequisites: 132A or consent of instructor

DESN 141 Interior Architectural Drafting (3)
Prerequisite: None

DESN 142 Beginning Space Planning (3)
Prerequisites: DESN 120A, 132A and 141 or consent of
instructor.

DESN 143 Materials of Interiors (3)
Prerequisites: DESN 142 or consent of instructor.

DESN 151 Industrial Design Materials and Tools (2)
Prerequisite: None

DESN 232A Visualization Techniques (3)
Prerequisites: DESN 120B, 132B or consent of instructor

DESN 241 Design Drawing and Processes (3)
Prerequisites: DESN 142 and 232A or consent of instructor

DESN 242 Interior Architectural Model Building (3)
Prerequisites: DESN 120B, 132B, 142 and 151 or consent
of instructor.

DESN 244 Lighting Design for Interior Architecture (3)
Prerequisites: DESN 120B, 132B and 142 or consent of
instructor.

DESN 245 Building Systems for Interior
Architecture (3)
Prerequisites: DESN 142 or consent of instructor.

DESN 246 Computer-Aided Drafting (3)
Prerequisite: DESN 141 or consent of instructor

DESN 255 2D Computer-Aided Graphics (3)
Prerequisites: DESN 150 or 141 or consent of instructor

Upper Division:

Take all of the following courses:

DESN 341A Interior Design (4)
Prerequisites: DESN 241, 242, 244, 245, 246 and Junior
standing in the Interior Design program or consent of
instructor.

DESN 341B Interior Design (4)
Prerequisites: DESN 341A and Junior standing in the
Interior Design program or consent of instructor.

DESN 342 Interior/Architectural Presentations (3)
Prerequisites: DESN 232A, 241, Junior standing in the
Interior Design program and concurrent enrollment in DESN
341A or consent of instructor.

DESN 343 Advanced Drafting and Detailing (3)
Prerequisites: DESN 242, 245 and Junior standing in the
Interior Design program or consent of instructor.

DESN 346 Computer-Aided Design – 3D Modeling (3)
Prerequisites: DESN 120B, 151, 232A, 246; and for BFA:
DESN 242; and for BA: DESN 255; or consent of instructor

DESN 367 History and Theory of Architecture (3)
Prerequisite: Completion of GE Foundation requirements.

DESN 369 History of Furniture and Decorative Arts (3)
Prerequisite: Completion of GE Foundation requirements.

DESN 440 Prof Practices for Interior Architecture (3)
Corequisite: DESN 441A or consent of instructor.

DESN 441A Advanced Interior Design (4)
Prerequisites: DESN 341B, 343 or consent of instructor.

DESN 441B Advanced Interior Design (4)
Prerequisite: DESN 441A or consent of instructor.

Take a minimum of 6 units chosen from the following:
DESN 300, 333A, 344A/B, 351A/B, 352A/B, 360A/B,
366, 368, 370, 435A/B, 490, 495, 499H

A total of 132 units is required for degree completion.
Students must achieve "C" or better in each course required
by the major.

Bachelor of Science in Industrial Design (132 units)

This degree program is concerned with the relationship
between technology and the visual arts. It includes
background courses in engineering and sciences. Portfolio
review is required for admission to the professional BS
program. Portfolios are reviewed in the spring semester for
fall admission to Junior standing in this degree program.

Applicants to the BS program must receive a positive
recommendation following review of a portfolio submitted
by the applicant. For BS portfolio review consideration, a
student must be enrolled in or have successfully completed
DESN 280, 320 and 356 with a "C" or better. Students

may apply to the BS program when they have completed a minimum of 53 units, but may not apply after they have completed more than a maximum of 96 units.

Contact department for details of portfolio submission and review process.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

132 units, including 94 units for the major.

Lower Division:

Take all of the following courses:

AH 111A Foundation Art History I (3)

Prerequisite: One GE Foundation course

AH 111B Foundation Art History II (3)

Prerequisite: One GE Foundation course

DESN 120A Fundamentals of Design (3)

Prerequisite: None

DESN 120B Fundamentals of Design (3)

Prerequisite: 120A or consent of instructor

DESN 132A Perspective and Rendering Systems (3)

Prerequisite: None

DESN 132B Perspective and Rendering Systems (3)

Prerequisites: 132A or consent of instructor

DESN 150 Design Drafting (3)

Prerequisite: None

DESN 151 Industrial Design Materials and Tools (2)

Prerequisite: None

DESN 154 Modeling and Prototyping Techniques (2)

Prerequisites: DESN 150 and 151 or consent of instructor.

DESN 156 3D Computer-Aided Design (3)

Prerequisites: DESN 150 or consent of instructor.

DESN 232A Visualization Techniques (3)

Prerequisites: DESN 120B, 132B or consent of instructor.

DESN 232B Visualization Techniques (3)

Prerequisite: DESN 232A or consent of instructor.

DESN 254 Production Materials and Techniques (3)

Prerequisites: DESN 154 and 156 or consent of instructor.

DESN 255 2D Computer-Aided Graphics (3)

Prerequisites: DESN 150 or 141 or consent of instructor

DESN 280 Industrial Design Processes (3)

Prerequisites: DESN 154, 156, 232B, and 255 or consent of instructor.

Upper Division:

Take all of the following courses:

DESN 300 Designers in Their Own Words (3)

Prerequisites: AH 111A and 111B or consent of instructor.

DESN 320 Advanced Form Study (3)

Prerequisites: DESN 232A and consent of instructor.

DESN 331A Industrial Design (3)

Prerequisites: DESN 280 and Junior standing in the Industrial Design program or consent of instructor.

DESN 331B Industrial Design (3)

Prerequisites: DESN 331A and Junior standing in the Industrial Design program or consent of instructor.

DESN 333A Industrial Design Methodology (3)

Prerequisites: DESN 280 and Junior standing in the professional program or consent of instructor.

DESN 333B Industrial Design Methodology (3)

Prerequisites: DESN 333A and Junior standing in the Industrial Design program or consent of instructor.

DESN 356 Advanced 3D Computer-Aided Design (3)
Prerequisites: DESN 120B, 150, 151, 156, 232A, and 255.

DESN 368 History and Theory of Design (3)

Prerequisite: Completion of GE Foundation requirements.

DESN 431A Advanced Industrial Design (4)

Prerequisite: DESN 331B, PHYS 100A, 100B or consent of instructor

DESN 431B Advanced Industrial Design (4)

Prerequisite: DESN 431A or consent of instructor.

DESN 432A Advanced Rapid Visualization (3)

Prerequisites: DESN 232B, 255; and for BS Industrial Design: DESN 156; and for BFA Interior Design: DESN 346; and for BA Design: DESN 156 or 346 or consent of instructor.

DESN 435A Furniture Design (3)

Prerequisites: DESN 151, 232A; and for BS: DESN 331A; and for BFA: DESN 341A; and for BA: DESN 255 and 346 or 356; or consent of instructor.

Additional Requirements

Take a minimum of 7 units chosen from the following:

DESN 344A/B, 346, 360A/B, 366, 367, 369, 370, 442G, 440, 490, 495, 499C, 499G, 499H.

Take a minimum of 6 units chosen from the following:

PHSC 112; PHYS 100A, 100B, 151, 152; CHEM 100; GEOL 102, 110, 160; BIOL 200, 205, 207.

A total of 132 units is required for degree completion.

Students must achieve "C" or better in each course required by the major.

Courses (DESN)

LOWER DIVISION

110. Foundation Design History (3)

General survey of the history of design and its evolution through various stages leading to its current expression, analyzing the social influences and contributions of prominent designers of various periods.

Letter grade only (A-F).

120A-B. Fundamentals of Design (3-3)

Prerequisites: for 120A: none; for 120B: 120A or consent of instructor.

Systematic approach to process of designing two, three-dimensional objects including color theory, surface, volume investigation.

Letter grade only (A-F). (6 hours laboratory)

132A-B. Perspective and Rendering Systems (3-3)

Prerequisites: for 132A: none; for 132B: 132A or consent of instructor.

Fundamentals of drawing, perspective, rendering techniques used in the design disciplines for accurate dramatic presentations.

Letter grade only (A-F). (6 hours laboratory)

141. Interior/Architectural Drafting (3)

Architectural drafting graphic techniques used in light framing, commercial construction with emphasis on interiors.

Letter grade only (A-F). Course fee may be required. (6 hours laboratory)

142. Beginning Space Planning (3)

Prerequisites: DESN 120A, 132A and 141 or consent of instructor.

Functional, human, aesthetic factors of space planning for interiors.

Letter grade only (A-F). (6 hours laboratory)

143. Materials of Interiors (3)

Prerequisites: DESN 142 or consent of instructor.

Materials, processes, resources related to interior architecture. Examination of technology, application through lecture, demonstration, field trips.

Letter grade only (A-F).

Not open for credit for students with credit in DESN 243.

150. Design Drafting (3)

Introduction to manual, computer aided drafting. Includes descriptive geometry; mechanism sketching; orthographic; isometric drafting; blueprint reading, printing, plotting.

Letter grade only (A-F). Course fee may be required. (6 hours laboratory)

151. Industrial Design Materials and Tools (2)

Hands-on experience with wood, metal, plastic materials, the technical tools for creating form. Includes appropriate safety instruction for use of power equipment.

Letter grade only (A-F). (4 hours laboratory)

154. Modeling and Prototyping Techniques (3)

Prerequisites: DESN 150 and 151 or consent of instructor.

Materials, processes, techniques for creating mock-ups, models, prototypes used by industrial designers.

Letter grade only (A-F). (6 hours laboratory)

156. 3D Computer-Aided Design (3)

Prerequisites: DESN 150 or consent of instructor.

Computer aided modeling strategies techniques for depicting three-dimensional surfaces, solids.

Letter grade only (A-F). Course fee may be required. (6 hours laboratory)

232A. Visualization Techniques (3)

Prerequisites: DESN 120B, 132B or consent of instructor.

Introduction to technical drawing, visual presentation of concepts using communication techniques employed by professional design studios.

Not open for credit to students with credit in DESN 232. Letter grade only (A-F). (6 hours laboratory)

232B. Visualization Techniques (3)

Prerequisite: DESN 232A or consent of instructor.

Further exploration of technical drawing, visual presentation of concepts using communication techniques employed by professional design studios.

Letter grade only (A-F). (6 hours of laboratory)

241. Design Drawing and Processes (3)

Prerequisites: DESN 142 and 232A or consent of instructor

Introduction to Design drawing, design processes. sketching, solving limited scale interior, architectural problems.

Letter grade only (A-F). (6 hours laboratory)

242. Interior/Architectural Model Building (3)

Prerequisites: DESN 120B, 132B, 142 and 151 or consent of instructor.

Building of interior/architectural models for construction, design analysis, presentation.

Letter grade only (A-F). (6 hours laboratory)

244. Lighting Design for Interior Architecture (3)

Prerequisites: DESN 120B, 132B and 142 or consent of instructor.

Use of conceptual practical design problems. Nature, properties of light and color are studied.

Letter grade only (A-F). (6 hours laboratory)

245. Building Systems for Interior Architecture (3)

Prerequisites: DESN 142 or consent of instructor.

Survey of design implications of typical building systems (structural, mechanical, plumbing, electrical, acoustical, energy conservation) as influences on interior architectural design.

Letter grade only (A-F). (3 hours lecture)

246. Computer-Aided Drafting (3)

Prerequisite: DESN 141 or consent of instructor.

Principles, methods of computer graphic applications utilizing AutoCad. Computer drafting of commercial, residential projects.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. Course fee may be required. (6 hours of laboratory)

254. Production Materials and Technical Processes (3)

Prerequisites: DESN 154 and 156 or consent of instructor.

Study of production processes, industrial materials utilized in the manufacturing of products. Includes introduction to rapid prototyping.

Letter grade only (A-F). Course fee may be required. (6 hours laboratory)

255. 2D Computer-Aided Graphics (3)

Prerequisites: DESN 150 or 141 or consent of instructor.

Introduction to computer-aided graphics and image manipulation. Composition with typography and image for presentation authoring. Technology and terminology for digital media processes.

Letter grade only (A-F). (6 hours laboratory) Course fee may be required. Not open for credit for students with credit in DESN 256.

280. Industrial Design Processes (3)

Prerequisites: DESN 154, 156, 232B, and 255 or consent of instructor.

Introductory course in the design processes utilized by industrial designers for product development.

Letter grade only (A-F). (6 hours laboratory)

UPPER DIVISION**300. Designers in Their Own Words (3)**

Prerequisites: AH 111A and 111B or consent of instructor.

Prominent design professionals discuss their career experiences and offer advice through formal presentations to design majors and guests.

Letter grade only (A-F). May be repeated up to 6 units.

320. Advanced Form Study (3)

Prerequisites: DESN 232A and consent of instructor.

Development of 3D models as it relates to Industrial Design. Form generation with emphasis on structure, proportion, surface, transition, detail and trim.

Letter grade only (A-F). (6 hours laboratory)

331A. Industrial Design (3)

Prerequisites: DESN 280 and Junior standing in the Industrial Design program or consent of instructor.

Planning design of useful products for industrial production. Course requires student-owned laptop computer. See Department of Design website for current laptop hardware and software specifications.

Letter grade only (A-F). (6 hours laboratory)

331B. Industrial Design (3)

Prerequisites: DESN 331A and Junior standing in the Industrial Design program or consent of instructor.

Further explorations of planning design of useful products for industrial production. Course requires student-owned laptop computer. See Department of Design website for current laptop hardware and software specifications.

Letter grade only (A-F). (6 hours laboratory)

333A. Industrial Design Methodology (3)

Prerequisites: DESN 280 and Junior standing in the professional program or consent of instructor.

Examination of methods, techniques in design problem solving. Course requires student-owned laptop computer. See Department of Design website for current laptop hardware and software specifications.

Letter grade only (A-F). (6 hours laboratory)

333B. Industrial Design Methodology (3)

Prerequisites: DESN 333A and Junior standing in the Industrial Design program or consent of instructor.

Further examination of methods, techniques in design problem solving. Course requires student-owned laptop computer. See Department of Design website for current laptop hardware and software specifications.

Letter grade only (A-F). (6 hours laboratory)

341A. Interior Design (4)

Prerequisites: DESN 241, 242, 244, 245, 246 and Junior standing in the Interior Design program or consent of instructor.

Design of interior environments emphasizing interrelationships between interior space, architectural form, and human factors in design. Course may require laptop computer. See Department of Design website current laptop hardware and software specifications.

Letter grade only (A-F). (8 hours laboratory)

341B. Interior Design (4)

Prerequisites: DESN 341A and Junior standing in the Interior Design program or consent of instructor.

Further exploration of design of interior environments emphasizing interrelationships between interior space, architectural form, and human factors in design.

Letter grade only (A-F). (8 hours laboratory) May require student-owned laptop computer. See Department website for current laptop hardware and software specifications.

342. Interior/Architectural Presentations (3)

Prerequisites: DESN 232A, 241, Junior standing in the Interior Design program and concurrent enrollment in DESN 341A or consent of instructor.

Exploring, using various techniques, methods of visually, verbally presenting design concepts, ideas, finished projects.

Letter grade only (A-F). (6 hours laboratory)

343. Advanced Drafting and Detailing (3)

Prerequisites: DESN 242, 245 and Junior standing in the Interior Design program or consent of instructor.

Advanced drafting, detailing skills of architectural interior design related to light frame, other construction processes.

Letter grade only (A-F). (6 hours laboratory) May require student-owned laptop computer. See Department website for current laptop hardware and software specifications.

344A. Display and Exhibition Design (3)

Prerequisites: AH 111A, 111B; DESN 120B, 141 or 150 and 232A or consent of instructor.

Use of materials, processes, design concepts in planning preparation of displays, exhibits.

Letter grade only (A-F). (6 hours laboratory)

344B. Display and Exhibition Design (3)

Prerequisites: 344A or consent of instructor.

Use of materials, processes, design concepts in planning preparation of displays, exhibits.

Letter grade only (A-F). (6 hours of laboratory)

346. Computer-Aided Design – 3D Modeling (3)

Prerequisites: DESN 120B, 151, 232A, 246; and for BFA: DESN 242, and for BA: DESN 255; or consent of instructor.

Computer-aided drawing, rendering, 3D drawing, solid modeling. Includes lighting, animation techniques for spatial/architectural modeling, design.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. Course fee may be required. (6 hours lab)

351A. Process of Architectural/Interior Lighting Design (3)

Prerequisites: DESN 232A, 244 or consent of instructor.

Exploration of processes used to conceptualize, present, develop architectural lighting designs.

Letter grade only (A-F). (6 hours laboratory)

351B. Applications of Architectural/Interior Lighting Design (3)

Prerequisites: 351A or consent of instructor

Exploration of major categories of applications (e.g., residential, office, etc.) specific principles, conventions, codes that apply to them as well as the basic use of lighting equipment common to these applications.

Letter grade only (A-F). (6 hours laboratory)

352A. Specialty Equipment (1)

Prerequisite: DESN 156 or 346; or consent of instructor.

Theory and demonstration of specialty equipment (Rapid Prototyping, the Computer Numeric Control machine and the 3D Scanner).

Letter grade only (A-F). May be repeated to a maximum of 2 units in different semesters. (2 hours of laboratory)

352B. Advanced Specialty Equipment (1)

Prerequisite: DESN 352A or consent of instructor.

Advanced training in the operation of specialty equipment (Rapid Prototyping, the Computer Numeric Control machine, and 3D Scanner.)

Letter grade only (A-F). May be repeated to a maximum of 2 units in different semesters. (2 hours of laboratory)

356. Advanced 3D Computer-Aided Design (3)

Prerequisites: DESN 120B, 150, 151, 156, 232A, and 255.

Advanced computer aided modeling techniques and strategic exercises created to assist, improve and accentuate the design process.

Letter grade only (A-F). (6 hours laboratory)

360A. Environmental Communication Design (3)

Prerequisites: AH 111A, 111B; DESN 156 or 246, 232A, 255 and 346 or 356 or consent of instructor.

With new tools and methodology, design and present experimental, dynamic and interactive environments through use of form, color, light, sound, materials, and movement. Create systems for audience experience within virtual and physical environments. See Department of Design website for current laptop hardware and software specifications.

Letter grade only (A-F). (6 hours laboratory) Not open for credit for students with credit in DESN 360.

360B. Advanced Environmental Communication Design (3)

Prerequisites: DESN 360A or consent of instructor. For Art majors: ART 149, 327 or consent of instructor.

Further exploration of audience experience. Design and present identification and information. Create systems for navigation within virtual and physical environments. See Department of Design website for current laptop hardware and software specifications.

Letter grade only (A-F). (6 hours of laboratory) Not open for credit for students with credit in DESN 360.

366. Advanced 3D Digital Modeling (2)

Prerequisite: DESN 346 or consent of instructor.

Advanced texturing, and rendering techniques in 3D digital modeling for interior design.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. Course fee may be required. (4 hours laboratory)

367. History and Theory of Architecture (3)

Prerequisite: Completion of GE Foundation requirements.

Evolution of architecture relative to human need to shape environment in accordance with governing concerns of specific periods in history.

Letter grade only (A-F). Not open for credit to students with credit in ART 417. (3 hours lecture)

368. History and Theory of Design (3)

Prerequisite: Completion of GE Foundation requirements.

Development of design as an independent creative activity including a consideration of both pre-technological and technological culture.

Letter grade only (A-F). Not open for credit to students with credit in ART 418. (3 hours lecture)

369. History of Furniture and Decorative Arts (3)

Prerequisite: Completion of GE Foundation requirements.

Study of the history of furniture, finish materials, accessories.

Letter grade only (A-F). (3 hours lecture)

370. Design in Contemporary Society (3)

Prerequisite: Completion of GE Foundation requirements.

Discover principles of design by examining human relationship to built environment through a sequence of scales: from organization of cities, to public architecture, housing, design of furniture, products. Emphasis will be on experiencing design through lecture, lab, field observations, projects.

Letter grade only (A-F). (3 hours lecture)

431A. Advanced Industrial Design (4)

Prerequisite: DESN 331B, PHYS 100A, 100B or consent of instructor

Advanced planning, design of projects in area of mass produced objects, packaging, traffic, transportation, mechanical design, shelter.

Letter grade only (A-F). (8 hours laboratory)

431B. Advanced Industrial Design (4)

Prerequisite: DESN 431A or consent of instructor.

Further explorations of advanced planning, design of projects in area of mass produced objects, packaging, traffic, transportation, mechanical design, shelter.

Letter grade only (A-F). (8 hours laboratory)

432A. Advanced Rapid Visualization (3)

Prerequisites: DESN 232B, 255; and for BS Industrial Design: DESN 156; and for BFA Interior Design: DESN 346; and for BA Design: DESN 156 or 346 or consent of instructor.

Advanced idea generation, visualization for designers.

Letter grade only (A-F). Course fee may be required. (6 hours of laboratory)

432B. Advanced Rapid Viz (3)

Prerequisites: DESN 432A or consent of instructor

Further explorations of advanced idea generation and visualization for designers.

Letter grade only (A-F). (6 hours of laboratory)

435A. Furniture Design (3)

Prerequisites: DESN 151, 232A; and for BS: DESN 331A; and for BFA: DESN 341A; and for BA: DESN 255 and 346 or 356; or consent of instructor.

Design of public, private interior furnishings with in-depth study of potentials of contemporary production methods, materials.

Letter grade only (A-F). (6 hours of laboratory)

435B. Advanced Furniture Design (3)

Prerequisites: DESN 435A, or consent of instructor.

Continuation of DESN 435A. Projects focus upon research, impact of human factors on design of furniture.

Letter grade only (A-F). (6 hours laboratory)

440. Professional Practices for Interior Architecture (3)

Corequisite: DESN 441A or consent of instructor.

Examination of professional practices for commercial (corporate) institutional/public interior architectural design.

Letter grade only (A-F). (6 hours laboratory)

441A. Advanced Interior Design (4)

Prerequisites: DESN 341B, 343 or consent of instructor.

Advanced interior design and space planning problems emphasizing relationships between built environment and human factors with a focus on social and environmental issues in design.

Letter grade only (A-F). (8 hours laboratory) May require student-owned laptop computer. See Department website for current laptop hardware and software specifications.

441B. Advanced Interior Design (4)

Prerequisite: DESN 441A or consent of instructor.

Further exploration of advanced interior design and space planning problems emphasizing relationships between built environment and human factors with a focus on social and environmental issues in design.

Letter grade only (A-F). (8 hours laboratory) May require student-owned laptop computer. See Department website for current laptop hardware and software specifications.

442G. Internship in Industrial Design (3)

Prerequisite: DESN 331A or consent of instructor.

Student internship experience in selected industrial design offices. Opportunity to work under supervision of industrial designers in field to expand student understanding of complexities, discipline, challenges in practice of industrial design.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Limited to 6 units in one semester. (6 hours laboratory)

442H. Internship in Interior Design (3)

Prerequisite: DESN 341A or consent of instructor

Student internship experience in selected interior design offices. An opportunity to work under supervision of interior designers, architects in field to expand student understanding of complexities, discipline, challenges in practice of interior design.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Limited to 6 units in one semester. (6 hours laboratory)

450. BA Senior Project (3)

Prerequisites: DESN 346 or 356, 360A, and 6 units of DESN History or consent of instructor.

To identify and refine an area of interest through the development of a senior project. Should be taken in the last semester before graduation.

Letter grade only (A-F). (6 hours laboratory) May require student-owned laptop computer. See Department website for current laptop hardware and software specifications.

490. Selected Topics in Design (1-3)

Prerequisite: Consent of instructor.

Special topics of current interest in design will be selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics will be announced in the *Schedule of Classes*. (2-6 hours laboratory)

495. Field Studies in Design (1-6)

Prerequisite: Consent of instructor.

An opportunity to study design movements, objects, theories, techniques at appropriate off-campus locations.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Limited to 6 units in one semester.

499C. Special Studies in Display and Exhibition Design (3)

Prerequisite: Consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in display, exhibition design.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Limited to 6 units in one semester. (6 hours laboratory)

499G. Special Studies in Industrial Design (3)

Prerequisite: Consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in industrial design.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Limited to 6 units in one semester. (6 hours laboratory)

499H. Special Studies in Interior Design (3)

Prerequisite: Consent of instructor.

Opportunity for extensive work with faculty supervision on individual problems in interior design.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Limited to 6 units in one semester. (6 hours laboratory)

ECONOMICS

College of Liberal Arts

Department Chair: Wade E. Martin

Department Office: Social Science/Public Affairs (SS/PA), Rm 361A

Telephone / FAX: (562) 985-5061 / (562) 985-5804

Email: econ@csulb.edu

Website: www.csulb.edu/economics

Faculty: Yutian (Kate) Chen, Alejandra C. Edwards, Elaine F. Frey, Edward Funkhouser, Lisa M. Grobar, Darwin C. Hall, Jack W. Hou, Xuemei Liu, Joseph P. Magaddino, Wade E. Martin, Marshall H. Medoff, Kristen A. Monaco, Chen Feng Ng, Andrew Ojede, Davinder Singh, Seiji Steimetz, Heather Stephens, Steve Yamarik, Guy M. Yamashiro

Advisors

Undergraduate: Yutian Chen, Seiji Steimetz

Graduate: Elaine F. Frey

Career Possibilities

Economist • Agricultural Economist • Financial Analyst • Industrial Analyst • International Trade Economist • Labor Specialist • Market Research Analyst • Tax Analyst • Investment Analyst • Teacher • Securities Salesperson • Bank Management • Loan Officer • Investment Counselor • Social Researcher • Auditor • Credit Analyst • Statistician • Urban Planner (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

When resources are scarce, difficult choices must be made on how resources are to be divided among competing uses. Economics is a social science that addresses the allocation of scarce resources.

Undergraduate Programs

Bachelor of Arts in Economics (120 units)

Requirements Lower Division:

Take all of the following courses:

ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)

Prerequisite/Corequisite: MATH 103 or higher.

ACCT 201 Elementary Financial Accounting (3)

Prerequisites: None

Take one of the following courses:

MATH 115 Calculus for Business (4)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Students with upper division standing declaring Economics as a major may substitute ECON 300 for ECON 100 and 101.

Upper Division:

Complete each of the following courses with grades of "C" or better:

ECON 310 Microeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 311 Macroeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 380 Economic Statistics (4)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Take six additional upper-division courses in Economics of which at least two must be at the 400 level.

The following courses may not be used to satisfy the elective requirement in economics: ECON 300, 306I, 333, 366, 495, and 499.

Option in Mathematical Economics and Economic Theory (120 units)

Requirements

Lower Division:

Take all of the following courses:

ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)

Prerequisite/Corequisite: MATH 103 or higher.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

Students with upper-division standing declaring the option may substitute ECON 300 for ECON 100 and 101.

Upper Division:

Economic Theory:

Complete each of the following courses with grades of "C" or better:

ECON 310 Microeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 311 Macroeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Statistics:

Take all of the following courses:

MATH/STAT 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

STAT 381 Mathematical Statistics (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

Advanced Theory and Quantitative Methods:

Take at least one of the following courses:

ECON 403, 410, 411, 420, 485, 486

Elective Courses:

At least four additional upper-division courses in economics of which at least one economics course must be taken at the 400 level. Students may take one course from the following in meeting the elective requirement: MATH 364A, 485; STAT 410 or 450; these will not substitute for the 400-level economics requirement. ECON 300, 306I, 366, 380, 495 and 499 may not be taken to meet the elective requirement.

Bachelor of Arts in Business Economics (120 units)

Requirements

Lower Division:

Take all of the following courses:

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

ACCT 201 Elementary Financial Accounting (3)
Prerequisites: None

Students with upper division standing declaring business economics as a major may substitute ECON 300 for ECON 100 and 101.

Take one of the following courses:

MATH 115 Calculus for Business (4)
Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Upper Division:

Complete each of the following courses with grades of "C" or better:

ECON 310 Microeconomic Theory (3)
Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 311 Macroeconomic Theory (3)
Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 380 Economic Statistics (4)
Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Take six additional upper division courses from the following groups (at least two must be at the 400 level):

Group A. Analytical Economics

Take at least two courses from the following:
ECON 355, 430, 434, 438, 450, 462, 470.

Group B. Quantitative and Applied Economics

Take at least two courses from the following:
ECON 330, 420, 437, 441, 455, 465, 471, 485, and 486.

Group C. Business and Economics

Take one course from the following:
ECON 320, 333, ACCT 310, FIN 300.

Remaining elective may be any class offered by Economics, except ECON 300, 306I, 366, 495 or 499.

Minor in Economics

The Minor in Economics is available to any non-Economics or non-Business Economics major.

A minimum of 24 units which must include:

Lower Division:

Take all of the following courses:

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

Students with upper division standing declaring the minor may substitute ECON 300 for ECON 100 and 101 with departmental consent.

Take one of the following courses:

MATH 115 Calculus for Business (4)
Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Upper Division:

Complete each of the following courses with grades of "C" or better:

ECON 310 Microeconomic Theory (3)
Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 311 Macroeconomic Theory (3)
Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Take at least three additional upper division economics courses, of which at least one must be at the 400 level. The following courses may not be taken as upper division electives in economics: ECON 300, 495, 499

Minor in Business Economics

This minor is being considered for discontinuance.

The Minor in Business Economics is available to any non-Economics or non-Business Economics major.

A minimum of 24 units which must include:

Lower Division:

Take all of the following courses:

ECON 100 Principles of Macroeconomics (3)
ECON 101 Principles of Microeconomics (3)

Students with upper division standing declaring the minor may substitute ECON 300 for ECON 100 and 101.

Take one of the following courses:

MATH 115 Calculus for Business (4)
MATH 122 Calculus I (4)

Upper Division:

Take one of the following courses:

ECON 310 Microeconomic Theory (3)
ECON 333 Managerial Economics (3)

Take one of the following courses:

ECON 311 Macroeconomic Theory (3)
ECON 320 Money and Banking (3)

The remaining 9 units (3 courses) may be selected from the upper division courses listed immediately above or any of the following courses:

ECON 355, IS 310 or ECON 330, 380, 372, 420, 430, 434, 441, 450, 455, 463, 485, 486.

Minor in International Economics

The Minor in International Economics is available to any non-Economics or non-Business Economics major.

A minimum of 24 units is required and must include:

Lower Division:

Take all of the following courses:

ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)

Prerequisite/Corequisite: MATH 103 or higher.

Students with upper division standing declaring the minor may substitute ECON 300 for ECON 100 and 101.

Take one of the following courses:

MATH 115 Calculus for Business (4)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Upper Division:

Complete each of the following courses with grades of "C" or better:

ECON 310 Microeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 311 Macroeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Take any three of the following courses, of which at least one must be at the 400 level:

ECON 341, 366, 372, 465, 470, 471

Requirements

1. Thirty-two units of upper-division and graduate courses (500- and 600-level courses, of which 26 units must be in economics). All students must develop two fields of concentration in economics, in addition to demonstrating competence in economic theory (microeconomics and macroeconomics), and econometrics.
2. Satisfactory completion of the following courses:
 - ECON 503 Mathematical Economics (3)
Prerequisites: None
 - ECON 510 Advanced Microeconomics (3)
Prerequisites: ECON 403 or 503.
 - ECON 511 Advanced Macroeconomics (3)
Prerequisites: ECON 403 or 503.
 - ECON 585 Econometrics I (4)
Prerequisites: None
 - ECON 586 Econometrics II (4)
Prerequisites: ECON 585.
3. Students must pass two qualifying examinations in the early part of the program; one in microeconomics and one in macroeconomics. Both exams must be attempted at the conclusion of the first full semester's coursework (13 units) that are counted towards the degree. The qualifying exams may be taken no more than two times each.
4. Students must successfully complete coursework in two fields of concentration in economics. Coursework for each concentration includes at least one 500-level prerequisite course and a 600-level course. Students are required to write a research paper in each 600-level course and pass the course with a grade of "B" or better.
5. Students must successfully pass an oral comprehensive exam. The comprehensive exam requires students to defend one of the research papers submitted from a 600-level course. This exam will assess the student's ability to integrate the knowledge in the field of concentration, show critical independent thinking, and demonstrate mastery of the subject matter. A committee of three faculty members will determine if the student has successfully passed the exam based on the quality of the written paper and the oral defense of that paper.

Graduate Programs

Master of Arts in Economics

Candidates in this program are responsible for observing the general requirements stated in this catalog as well as requirements specified by the Department. Information may be obtained from the graduate advisor. A limited number of graduate assistantships are available to qualified students.

Prerequisites

1. A bachelor's degree with a major in economics; or
2. A bachelor's degree with 24 units of upper division courses comparable to those required of a major in economics at this University. (Deficiencies will be determined by the Economics Department.);
3. A minimum undergraduate GPA of 3.0 ("B") in upper division economics courses.
4. Graduate students must consult with the graduate advisor for information concerning department procedures and for approval of their course of study before entering the master of arts program in economics.

Advancement to Candidacy

Satisfy the general requirements of the University for advancement to candidacy.

Courses (ECON)

LOWER DIVISION

100. Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

Money and banking, price changes, national income analysis, business cycles, economic growth, fiscal and monetary policy, international trade.

Not open for credit to students with credit in ECON 202.

101. Principles of Microeconomics (3)

Prerequisite/Corequisite: MATH 103 or higher.

Business organization, price theory, allocation of resources, distribution of income, public economy.

Not open for credit to students with credit in ECON 201.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300. Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

Designed for non-majors. Presents basic training in economics for social studies teachers or citizens who wish to exercise a reasoned judgment about economic issues in public affairs. Content generally same as ECON 100, 101, in condensed form.

Not open for credit to students with credit in ECON 100 or 101 except by consent of the Economics Department.

306I. Environmental Issues of the World Economy (3)

Prerequisites: G.E. Foundation and the Category B requirement, and ECON 101.

Interdisciplinary analysis of human impact on the atmosphere and biological diversity; consideration of policies to foster sustainable development with emphasis on the economic perspective.

Open only to nonmajors.

310. Microeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Analysis of economic concepts and their applications to business situations. Emphasis on supply and demand analysis, costs of production, variations of competition and monopoly, revenues, prices, profits and losses, and other aspects of the operations of the business enterprise.

311. Macroeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Determinants of levels of income, employment, and prices; of secular and cyclical changes in economic activity; and of the effects of public policies upon aggregative economic experience.

313. History of Economic Thought (3)

Prerequisites: ECON 100 and 101, or 300.

Evolution of economics as a science. Doctrines of the different schools of economic thought. Study of the contributions of outstanding economists.

320. Money and Banking (3)

Prerequisites: ECON 100, 101 and either MATH 115 or 122.

Nature and functions of money and its relation to prices; the monetary system of the United States; the functions of banks, bank credit, foreign exchange and monetary control.

330. Game Theory (3)

Prerequisites: ECON 101 or 300.

A formal study of conflict and cooperation, and their application to modeling and analyzing an interactive situation, especially in the context of microeconomics.

333. Managerial Economics (3)

Prerequisites: ECON 100, 101 and either MATH 115 or 122.

The tools of marginal analysis and their application to managerial decisions and planning. Emphasis upon calculating solutions to operational problems. Topics include demand analysis, production and cost, pricing, and output decisions. Product and factor markets will be analyzed.

340. Economics in Movies (3)

Prerequisites: ECON 101 or 300

Application of economic concepts to real-world situations as depicted in movies. Economic analyses of incentives, trade-offs, supply and demand, insurance, the used car market, crime, pollution, and other topics.

341. Global Labor Market Issues (3)

Prerequisites: ECON 101 or 300.

Application of labor economic theory to global labor markets. Focus on international comparison of wages, unemployment, human capital, working conditions, and government labor policy.

Letter grade only (A-F). Only open to non-majors.

355. Law and Economics (3)

Prerequisites: ECON 100 and 101, or 300.

Analysis of economic concepts and their application to law and legal institutions. Emphasis on property law, contract law, accident law, crime control and judicial administration.

366. Introduction to Development Economics (3)

Prerequisites: ECON 100 and 101 or ECON 300.

Economic and social aspects of economic development. General analysis of all aspects of economies in developing countries. Application of concepts to current situation in developing countries from different parts of the world.

Open only to nonmajors.

372. International Economics (3)

Prerequisites: ECON 100 and 101, or 300.

International trade and exchange rate theory. Types of trade control: tariffs, quotas, exchange manipulation, monopolies. Basic U.S. and European commercial policies since 1930.

Not open for credit to students with credit in ECON 470 or 471.

380. Economic Statistics (4)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Use of descriptive and inferential statistical concepts for the analysis of economic data. Topics include measures of central tendency and dispersion, probability theory, discrete and continuous probability distributions, hypothesis testing, regression and correlation analysis.

(Lecture 3 hours, activity 2 hours)

403. Mathematical Economics (3)

Prerequisites: ECON 310 and 311 with grades of "C" or better.

Applications of calculus, linear algebra and other mathematical tools in formulating and solving economic problems. Designed for exceptional undergraduate students who intend to pursue a graduate degree in economics.

Letter grade only (A-F). Not open for credit to students with credit in ECON 503.

410./510. Advanced Microeconomics (3)

Prerequisites: ECON 310 and 311 with grades of "C" or better.

Applications of microeconomic theory. Examination and analysis of particular markets and contemporary issues. Specific emphasis on policy analysis for government and business decisions. Designed for exceptional undergraduate students who intend to pursue a graduate degree in economics.

Letter grade only (A-F). Not open for credit to students with credit in ECON 410H.

411./511. Advanced Macroeconomics (3)

Prerequisites: ECON 310 and 311 with grades of "C" or better.

Applications of macroeconomics, monetary and forecasting theory to operational management and planning decisions of government and business. Designed for exceptional undergraduate students who intend to pursue a graduate degree in economics.

Letter grade only (A-F). Not open for credit to students with credit in ECON 411H.

420. Forecasting (4)

Prerequisites: ECON 311 and 380 with grades of "C" or better.

Principles and methods of forecasting. Evaluation of the reliability of existing forecasting techniques. Also covers use of the macroeconomic model as a basis for forecasting and the role of forecasts in the formulation of national economic policy.

(Lecture 3 hours, activity 2 hours.)

430. Industrial Organization (3)

Prerequisite: ECON 310 with a grade of "C" or better.

The structure, behavior and performance of firms and industries. Implications of separation of ownership and control, Corporate social responsibility and the profit motive. The dilemma of size versus competition.

434. Economics of Regulation (3)

Prerequisite: ECON 310 with a grade of "C" or better.

A comprehensive survey of the past, present and future of the political regulation of economic and business activity. Consideration of the rationale for regulation and deregulation and the creation, design and removal of regulatory practices.

437. Urban Economics (3)

Prerequisite: ECON 310 with a grade of "C" or better.

Economic analyses of city formation and size, business and residential location decisions, land use. Application of microeconomic theory to urban transportation issues, residential segregation, urban poverty and crime, and housing markets. Introduction to local public finance and provision of local public goods.

Not open for credit to students with credit in ECON 537.

438. Regional Economics (3)

Prerequisites: ECON 310 and 311 with grades of "C" or better.

Economic evolution and growth of cities, states and countries. Roles of geography, demography, location of industries, and factors determining regional growth and development will be considered. Special attention will be paid to the economic integration of U.S. states and European nations.

Not open for credit to students with credit in: ECON 538

441. Labor Economics (3)

Prerequisites: ECON 310 and 380 with grades of "C" or better.

Manpower resources and their utilization, with particular reference to labor unions, collective bargaining and related public policies. Effects of these institutions on production, employment, prices and patterns of income distribution.

450. Public Sector Economics (3)

Prerequisites: ECON 310 and 311 with grades of "C" or better.

Analysis of the theory of public goods. Criteria for efficient allocation of resources between private and public sectors. Possible responses of government externalities, such as environmental degradation. Emphasis on the allocation and distribution effects of government expenditures and taxation.

455./555. Transportation Economics (3)

Prerequisites: ECON 310 and 380 with grades of "C" or better.

Economic analysis of intercity transportation, cost measurement, applications of pricing principles, project evaluation, and economic regulation. Policies towards railroads, air transportation, and intercity highways.

Letter grade only (A-F).

462./562. Environmental Economics (3)

Prerequisite: ECON 310 with a grade of "C" or better.

Economic analysis of environmental problems and policy. Market failures due to externalities, public goods, and common property resources will be examined. Private (market) and public (governmental) solutions to environmental problems are examined.

463./563. Energy Economics (3)

Prerequisite: ECON 310 with a grade of "C" or better.

Application of economic analysis to energy problems and policies. Representative topics include macroeconomic effects of energy price shocks, international financial fragility, OPEC pricing strategies, determinants of demand and supply, industrial organization and finance, investor and publicly owned utilities, domestic and international policies.

464./564. Natural Resource Economics (3)

Prerequisite: ECON 310 with a grade of "C" or better.

Microeconomic and capital theory applied to problems of conserving and managing natural resources. Analysis of public policies affecting renewable and nonrenewable resources including price controls, taxation and leasing. Representative topics include: forestry, fishery, energy, water, and mineral economics.

465./565. Economic Development (3)

Prerequisites: ECON 310 and 311 with grades of "C" or better.

Economic and social factors underlying economic development. Analysis of problems associated with economic growth of less developed countries. Evaluation of development policies.

470./570. International Trade (3)

Prerequisite: ECON 310 with a grade of "C" or better.

Examines theories of trade, welfare implications of different trade policies, the political economy of trade policies, and global trading arrangements.

471./571. International Finance (3)

Prerequisites: ECON 311 and 380 with grades of "C" or better.

Covers topics in international finance in both an applied and theoretical framework, such as the balance of payments, the foreign exchange market, income, trade, capital flows, asset market adjustment mechanisms, and exchange rate regimes.

485. Introduction to Econometrics (4)

Prerequisites: ECON 310,311, and 380 with grades of "C" or better.

Introduction to econometrics, with a focus on understanding and applying the classical linear regression model. Emphasis placed on applications of regression analysis.

Letter grade only (A-F). Not open for credit to students with credit in ECON 585. (Lecture 3 hours, activity 2 hours)

486. Econometrics II (4)

Prerequisite: ECON 485 with a grade of "C" or better.

The second in a two-semester sequence introducing students to basic techniques in econometrics: advanced regression, including time-series and panel data analysis. Critical evaluation of selected examples of empirical economic research, and exercises in applied econometrics.

(Lecture 3 hours, activity 2 hours) Not open for credit to students with credit in: ECON 586.

490. Selected Topics in Economics (3)

Prerequisite: Consent of instructor.

Topics of current interest in economics selected for intensive development.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

491H. Senior Honors Seminar in Economics (3)

Prerequisites: Senior standing, ECON 485 or 486, and consent of instructor.

Provides opportunity for students to integrate their knowledge of economics, statistics-econometrics and computer studies. Designed as a seminar in research where students will be expected to write a paper and present their research results orally. Research topics must be approved by instructor.

495. Field Studies Practicum (3)

Prerequisites: ECON 310 or 333 and consent of instructor.

Observation and practical experience, at a managerial level, in an appropriate business or government enterprise.

Applications for permission to enroll must be filed with the Economics Department at least six weeks prior to beginning of the semester involved.

May be repeated to a maximum of 6 units.

499. Directed Study (1-3)

Prerequisite: Consent of instructor.

Independent study under the supervision of a faculty member.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL

500. Business Economics (3)

Workings of the price system in resource allocation with special emphasis on the role of business in the economy. Analysis of the economic implications of various forms of industrial organization and the application of public policy to business activity.

Not open to students majoring in economics or pursuing an M.A. in economics. Letter grade only (A-F).

503. Mathematical Economics (3)

Applications of calculus, linear algebra and other mathematical tools in formulating and solving economic problems.

Letter grade only (A-F). Not open for credit to students with credit in: ECON 403.

510./410. Advanced Microeconomics (3)

Prerequisites: ECON 403 or 503.

Applications of microeconomic theory. Detailed examination and analysis of particular markets and contemporary issues in light of economic theory. Specific emphasis on policy analysis for government and business decisions.

Letter grade only (A-F). Not open for credit to students with credit in ECON 510H.

511./411. Advanced Macroeconomics (3)

Prerequisites: ECON 403 or 503.

Applications of macroeconomics, monetary and forecasting theory to operational management and planning decisions of government and business. Designed for exceptional undergraduate students who intend to pursue a graduate degree in economics.

Letter grade only (A-F). Not open for credit to students with credit in ECON 511H.

537. Urban Economics (3)

Economic analyses of city formation and size, business and residential location decisions, and land use. Application of microeconomic theory to urban transportation issues, residential segregation, urban poverty and crime, and housing markets. Introduction to local public finance and provision of local public goods.

Letter grade only (A-F). Not open for credit to students with credit in: ECON 437.

538. Regional Economics (3)

Economic evolution and growth of cities, states and countries. Roles of geography, demography, location of industries, and factors determining regional growth and development will be considered. Special attention will be paid to the economic integration of U.S. states and European nations.

Letter grade only (A-F). Not open for credit to students with credit in ECON 438.

555./455. Transportation Economics (3)

Economic analysis of intercity transportation, cost measurement, applications of pricing principles, project evaluation, and economic regulation. Policies towards railroads, air transportation, and intercity highways.

Letter grade only (A-F).

562./462. Environmental Economics (3)

Economic analysis of environmental problems and policy. Market failures due to externalities, public goods, and common property resources will be examined. Private (market) and public (governmental) solutions to environmental problems are examined.

Letter grade only (A-F). Same course as ECON 462. Not open for credit to students with credit in ECON 462.

563./463. Energy Economics (3)

Application of economic analysis to energy problems and policies. Representative topics include macroeconomic effects of energy price shocks, international financial fragility. OPEC pricing strategies, determinants of demand and supply, industrial organization and finance, investor and publicly owned utilities, domestic and international policies.

Letter grade only (A-F). Same course as ECON 463. Not open for credit to students with credit in ECON 463.

564./464. Natural Resource Economics (3)

Microeconomic and capital theory applied to problems of conserving and managing natural resources. Analysis of public policies affecting renewable and nonrenewable resources including price controls, taxation and leasing. Representative topics include: forestry, fishery, energy, water, and mineral economics.

Letter grade only (A-F). Same course as ECON 464. Not open for credit to students with credit in ECON 464.

565./465. Economic Development (3)

Economic and social factors underlying economic development. Analysis of problems associated with economic growth of less developed countries. Evaluation of development policies.

Letter grade only (A-F).

570./470. International Trade (3)

Prerequisites: ECON 310.

Examines theories of trade, welfare implications of different trade policies, the political economy of trade policies, and global trading arrangements.

Letter grade only (A-F).

571./471. International Finance (3)

Covers topics in international finance in both an applied and theoretical framework, such as the balance of payments, the foreign exchange market, income, trade, capital flows, asset market adjustment mechanisms, and exchange rate regimes.

Letter grade only (A-F).

585. Econometrics I (4)

First course in a two-semester sequence introducing students to basic techniques in econometrics. Basic statistics and the classical linear regression model are covered. Emphasis is given to computing estimators using simulated and actual data sets.

Letter grade only (A-F). (Lecture 3 hours, activity 2 hours) Not open for credit to students with credit in ECON 485.

586. Econometrics II (4)

Prerequisites: ECON 585.

The second in a two-semester sequence introducing students to basic techniques in econometrics: advanced regression, including time-series and panel data analysis. Critical evaluation of selected examples of empirical economic research, and exercises in applied econometrics.

Letter grade only (A-F). (Lecture 3 hours, activity 2 hours) Not open for credit to students with credit in ECON 486.

597. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Intensive reading and/or practical research in economics.

Letter grade only (A-F).

660. Seminar in Natural Resources and the Environment (3)

Prerequisites: ECON 510, 511, 585, 586, and one of the following: ECON 562, 563 or 564.

Research methods applied to selected topics from energy, natural resources, and the environment.

Letter grade only (A-F). (Seminar 3 hours.)

666. Seminar in Transportation Economics (3)

Prerequisites: ECON 510, 511, 555, 585 and 586.

Advanced topics in transportation economics including passenger and freight transportation issues, congestion pricing, toll roads, mass transit systems, maritime economics, transportation regulation, firm performance, as well as welfare effects of transportation policy.

Letter grade only (A-F).

670. Seminar in International Trade and Development (3)

Prerequisites: ECON 510, 511, 585, 586, and one of the following: ECON 565, 570 or 571.

Selected topics dealing with current problems and solutions in international trade, finance, and development.

Letter grade only (A-F).

690. Seminar in Economics (3)

Prerequisites: ECON 510, 511, 585, 586, and consent of instructor.

Seminar on topics of current interest in economics.

May be repeated to a maximum of 6 units with different topics.

Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Consent of instructor.

Independent research under the guidance of a faculty member.

Letter grade only (A-F).

EDUCATION, COLLEGE OF

Dean: Marquita Grenot-Scheyer

Telephone / FAX: (562) 985-4513 / 985-4951

Website: www.ced.csulb.edu

Associate Deans: Shireen Pavri, Steve Turley

Assistant to the Deans: Marvel Whitson

Administrative Services: Lou Caron, Melody Nielsen

Credential Center: Carol Riley, Director (562) 985-4109

Development Office: Anne Tyler Allen, Director
(562) 985-7477

Educational Career Services: Judi Walker, Director
(562) 985-5772

Educational Psychology Clinic: Kristin Powers, Director
(562) 985-4991

Facilities Coordinator: Toshie Sweeney

SERVE: Hilda Sramek, Director (562) 985-5499

Teacher Preparation Advising Center: (562) 985-9259
Directors: Karen Hakim-Butt, Lisa Isbell

Systems Specialist: Matt Evans

Web Manager: Adam Amberden

Departments:

**Advanced Studies in Education and Counseling
(EDP, EDAD, EDSP, COUN, ETEC, and ELIB)** (562) 985-4517
Jennifer Coots, Chair

Ed.D. in Educational Leadership (EDLD): (562) 985-4998
Heidi Gilligan, Coordinator

Liberal Studies (L/ST) Daniel J. O'Connor, Chair (562) 985-4228

Single Subject Teacher Education (EDSS) (562) 985-5326
Karen Hakim-Butt, University Coordinator

**Teacher Education (CTED, EDCI, EDEC, EDEL, EDME, EDMS,
EDRG, EDSE)**
Felipe Golez, Chair (562) 985-4507

Introduction

The College of Education's mission is to create and nurture a learning and teaching community committed to equity and excellence in education. We fulfill our purpose by preparing professional educators and practitioners who promote equity and excellence in diverse urban settings through pedagogy evidence-based practices, collaboration, leadership, innovation, scholarship, and advocacy.

The College provides undergraduate and graduate studies in education through three departments -- Liberal Studies, Teacher Education, and Advanced Studies in Education and Counseling -- and one university-wide program -- the Single Subject Credential Program. Curriculum in college programs focuses on the preparation of personnel for teaching and educational service in pre-school settings, elementary, middle and high schools, community colleges, adult programs, and other educational agencies. Descriptions that include prerequisites and requirements for each credential, certificate, and degree program are listed in this catalog in the department that houses the particular program. Doctoral program information is included at the end of this section.

College programs are accredited by the National Council for Accreditation of Teacher Education (NCATE) and the State Commission on Teacher Credentialing (CTC).

Please visit the college website at www.ced.csulb.edu for detailed information on departments, programs, centers, and offices.

Programs at a Glance

Bachelor of Arts in Liberal Studies

Master of Arts in Education with Options in:

- Educational Administration
- Educational Psychology
- Educational Technology and Media Leadership
- Curriculum and Instruction (Elementary Education)
- Curriculum and Instruction (Secondary Education)
- Dual Language Development
- Early Childhood Education
- Reading and Language Arts
- Mathematics Education
- Librarianship
- Social and Cultural Analysis of Education

Master of Science in Special Education

Master of Science in Counseling with Options in:

- Marriage and Family Therapy (MFT)
- School Counseling
- Student Development in Higher Education

Ed.D. in Educational Leadership

Teaching Credentials

Elementary:

- Preliminary Multiple Subject Credential Program
- Preliminary Multiple Subject Credential Program with Bilingual Cross-cultural Language and Academic Development (BCLAD) Emphasis
- Integrated Teacher Education Program (ITEP)

Secondary:

- Single Subject Credential Program
 - Art, Biological Sciences, Chemistry, English (Emphasis in Black Studies, Comparative Literature, Creative Writing, Journalism, Language and Linguistics, Literacy and Composition, Literature, Speech, Theatre Arts), Geosciences, Health Science, Home Economics, Industrial and Technology Education, Languages Other than English (French, German, Italian, Japanese, Latin, Spanish), Mathematics, Music, Physical Education (Adapted P.E., Elementary School, Secondary School), Physics, Social Science (covering Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology)

Designated Subjects:

- Adult Education
- Career Technical Education

Specialist Teaching Credentials:

- Reading and Language Arts
- Education Specialist Credential Program, Level I: Mild/Moderate Disabilities or Moderate Severe Disabilities

Education Specialist Credential Program, Level II: Mild/
Moderate Disabilities or Moderate/Severe Disabilities
Services Credentials:

Preliminary Administrative Services
Professional Administrative Services
Teacher Librarian Services
School Counseling
School Psychology

Graduate Certificates:

Career Guidance Specialist (discontinuance under
consideration, admission suspended)
Community College

Other Credentials and Authorizations:

Please refer to the College of Health and Human Services
section of this catalog for credential programs in:

Adapted Physical Education
Health Services (School Nurse)
Speech-Language Pathology Services
School Social Work, Child Welfare, and Attendance

Teacher Preparation Advising Center (ED1-67; 562/985-1105).

One of the pathways to a Multiple Subject credential is the Integrated Teacher Education Program (ITEP). ITEP combines undergraduate study of academic subjects aligned to the California standards for the K-8 curriculum with professional preparation courses, field experiences, and student teaching. ITEP students may also complete the requirements for the Education Specialist Credential or Bilingual Authorization along with those for the Multiple Subject Credential and receive dual authorization. ITEP students are required to demonstrate subject matter competence by passing the CSET: Multiple Subjects exam as a condition of advancement to student teaching. For detailed information on the ITEP program, refer to the Liberal Studies section of this catalog or contact the Liberal Studies Department (AS 133; 562/985-4228).

The Single Subject Credential authorizes the holder to teach a specified subject. A teacher authorized for single subject instruction may be assigned to teach this subject at any grade level — pre-K through grade 12, or in classes for adults. In practice, most teachers with a single subject authorization teach departmentalized classes in middle, junior high or senior high schools. CSULB offers Commission on Teacher Credentialing-approved Subject Matter Programs in Art, Biological Sciences, Chemistry, English Geosciences, Health Science, Home Economics, Industrial and Technology Education, Languages Other than English (French, German, Italian, Japanese, Latin, Spanish) Mathematics, Music, Physical Education (Adapted P.E., Elementary School, Secondary School), Physics, and Social Science. For detailed information on the Single Subject Credential Program, refer to the Single Subject Teacher Education section in this catalog or visit the Teacher Preparation Advising Center (ED1-67; 562/985-5325).

The Education Specialist Credential authorizes a candidate to teach in a special education assignment with students with special needs. This K-12 credential certifies individuals to work as a special day class teacher, inclusion support teacher or resource specialist. In addition to completing a sequence of professional preparation courses and student teaching, candidates must demonstrate subject matter competence by passing all three sub-tests of the California Subject Examinations for Teachers: Multiple Subjects, or the appropriate CSET exam in Math, Science, or Language Arts as a condition of entry to the program. Another pathway to the Education Specialist Credential is the Integrated Teacher Education Program (ITEP), through which students can earn dual authorization to teach Multiple Subjects and Special Education. For detailed information on the Education Specialist Credential Program, refer to the Advanced Studies in Education and Counseling section in this catalog or visit the Teacher Preparation Advising Center (ED1-67; 562/985-1105).

Elementary and secondary teachers who wish to diversify their teaching authorizations may do so by fulfilling specific requirements. Further information is available in the Credential Center (ED1-42; 562/985-4109; credentials@csulb.edu).

Obtaining the Preliminary Credential

Requirements for the Preliminary and Professional Clear credentials are set by the Commission on Teacher Credentialing in accordance with state law. Requirements for the Preliminary credential include:

Credential Programs

Public school teaching and service credentials in California are regulated by the state legislature and administered by the State Commission on Teacher Credentialing (CTC). Credential programs offered at CSULB have been developed to meet current requirements, which are complex and continually reviewed and changed by legislative and agency action. Candidates for all credentials must meet legal requirements in effect when completing credential programs. It is the responsibility of the candidate to be familiar with the program requirements. For information regarding admission, academic requirements, and fieldwork, contact the specific credential program coordinator. For information on state credential laws and regulations, pending changes, and new legislation, contact the Credential Center (ED1-42; 562/985-4109; credentials@csulb.edu).

Basic Teaching Credentials

There are three types of basic teaching credentials: Multiple Subject, Single Subject, and Education Specialist.

The Preliminary Multiple Subject Credential authorizes the holder to teach all subjects in a self-contained classroom. A teacher authorized for multiple subject instruction may be assigned to teach in any self-contained classroom — pre-K to grade 12, or in classes for adults. In practice, most teachers with a multiple subject authorization teach in elementary schools. In addition to completing a sequence of professional preparation courses and student teaching, candidates for the Multiple Subject Credential must demonstrate subject matter competence by passing the California Subject Examinations for Teachers: Multiple Subjects (CSET: Multiple Subjects) as a condition of entry to the program. With additional course work, students in the Preliminary Multiple Subject Credential Program may earn a Bilingual Authorization in Spanish, Chinese (Mandarin), Korean, or Vietnamese. For detailed information on the Multiple Subject Credential Program, refer to the Teacher Education Department section in this catalog or visit the

1. a bachelor's degree from an accredited institution
2. an approved professional preparation program, including the teaching of reading and student teaching
3. verification of subject matter competence (coursework or examination)
4. passage of CBEST (California Basic Educational Skills Test) or an equivalent basic skills test
5. completion of an approved course or examination in the U.S. Constitution
6. demonstration of Level I computer technology proficiency (course or exam)
7. for Multiple Subject and Education Specialist candidates, passage of the Reading Instruction Competence Assessment (RICA)

Graduates of CSULB credential programs meet Commission and program requirements and are recommended for the Preliminary credential by the College.

Obtaining the Professional Clear Credential

The Preliminary Credential is valid for five years from the date of issuance and is not renewable. During the first five years of teaching, teachers are expected to earn the Professional Clear Credential through a Commission-approved Professional Teacher Induction Program sponsored by a school district, county office of education, college or university, consortium, or private school.

For information on the Professional Clear credential, contact the Credential Center (ED1-42; 562/985-4109; credentials@csulb.edu).

Entry Levels for Basic Credential Programs

Credential programs may begin at five different levels:

1. Qualified candidates who wish to earn the Multiple Subject Credential may begin the Integrated Teacher Education Program (ITEP) in the Liberal Studies Department as first-term freshmen. This program leads to the Multiple Subject Credential in four and a half years of full time, accelerated study.
2. Qualified transfer students from community colleges who wish to earn the Multiple Subject Credential and who have started the Integrated Teacher Education Program (ITEP) at their community college may continue the program as transfer students. This program leads to the Multiple Subject Credential in four and a half years of full time, accelerated study.
3. Junior level – With a carefully planned program, credential program courses may be taken as electives as early as the first semester of the junior year with completion of the program coming as early as the first semester after graduation.
4. Senior level – Credential program courses may be taken during the senior year as electives. The remaining credential courses and student teaching are then completed at the post-baccalaureate level. (Note: By petition only, up to twelve units of course work taken in the final undergraduate semester -- and not needed to meet major or degree requirements -- may be counted as postgraduate credit toward credit on a district salary ladder. This petition must be filed prior to graduation. Information is available in the Teacher Preparation Advising Center (ED1-67; 562/985-1105).
5. Graduate level – The entire credential program may be completed at the post-baccalaureate level.

Application to Credential Programs

Information on application to basic credential programs is available in the Teacher Preparation Advising Center (ED1-67; 562/985-1105). Students currently not enrolled in the University must file an application for admission to the University (www.csumentor.edu) as well as an application to the specific program. Note: Some programs have established application periods each year that are separate from the University application periods and process.

Application for Student Teaching

Candidates for student teaching for the summer or fall term of any year must apply by March 1. Spring candidates must apply by October 1. Student Teaching application deadlines are firm.

Candidates for student teaching must attend a Student Teaching Application Meeting which is the only venue for distributing applications. Dates and times for each application period are posted on bulletin boards and program websites.

Appeal Process

Students may address an appeal to the appropriate committee regarding any policy related to admission and continuation in a teacher preparation program. Petition forms and assistance are available in the Teacher Preparation Advising Center (ED1-67; 562-985-1105).

Designated Subjects Credentials

The Designated Subjects Credential Program at CSULB prepares candidates for Clear credential teaching authorizations in Career Technical Education (CTE) and Adult Education (AE). The CTE credential authorizes the holder to teach the subjects named on the credential in grades 12 and below and in classes organized primarily for adults in technical, trade or vocational courses. The AE credential authorizes the holder to teach specific academic and non-academic subjects named on the credential in courses organized primarily for adults and in adult education programs administered by school districts. For detailed information refer to the Teacher Education section of this catalog or contact a program advisor at: www.ced.csulb.edu

Specialist Credentials

CSULB offers programs leading to a Reading Certificate and to a Reading and Language Arts Specialist Credential. Both require a valid basic teaching credential. (Note: the Adapted Physical Education Credential is available through the Department of Kinesiology. Refer to the College of Health and Human Services section of this catalog.)

Service Credentials

Service credential programs are available in the following areas: Preliminary Administrative Services, Professional Administrative Services, Teacher Librarian Services, School Counseling, and School Psychology. Both the Preliminary Administrative Services and the Teacher Librarian Services credentials require a valid basic teaching credential. (Note: Health Services [school nurse], Speech-Language Pathology Services, and School Social Work, Child Welfare and Attendance credentials are also available at CSULB. Refer to the College of Health and Human Services section of this catalog.)

Degree Programs

Bachelor's Degree Programs

The college offers a bachelor's degree in Liberal Studies through the Liberal Studies Department. The Liberal Studies Track I major is a cross-disciplinary liberal arts program of study that meets both the General Education and major requirements of the university. This major prepares students in the broad content necessary for successful elementary school teaching. Track I students often begin taking credential program courses in the junior or senior year, and complete the credential program in the first year after graduating. The Integrated Teacher Preparation Program (ITEP) is a Liberal Studies major that combines a broad liberal arts course of study with teacher preparation courses. ITEP students graduate with both a BA degree and a Preliminary Multiple Subject Teaching Credential. For more information, refer to the Liberal Studies Department section of this catalog.

Master's Degree Programs

Master's degree programs are offered in two departments within the College. General procedures, policies, requirements, and applications for the master's degrees are available from the Graduate Studies and Research Office, ED1-7 (www.ced.csulb.edu/graduate), and are listed following each option in the appropriate section of the catalog. In order to pursue a master's degree, students must submit applications to both the University and the program.

The Advanced Studies in Education and Counseling Department offers a Master of Science degree in Counseling, with Options in Marriage and Family Therapy, School Counseling, Student Development in Higher Education, and Career Counseling (discontinuance under consideration); and a Master of Science degree in Special Education. The Master of Arts in Education degree is offered with Options in Educational Administration, Educational Psychology, Educational Technology and Media Leadership, Librarianship, and Social and Cultural Analysis of Education.

The Teacher Education Department offers six options in the Master of Arts in Education: Curriculum and Instruction (Elementary Education), Curriculum and Instruction (Secondary Education), Dual Language Development, Early Childhood Education, Mathematics Education, and Reading/Language Arts.

To be considered for admission to a master's degree program, students must submit a program application, test scores (if applicable), and any additional program requirements to the Office of Graduate Studies and Research in the College of Education. Program applications vary; please check the individual program for additional requirements. Program applications may be obtained from the Office of Graduate Studies and Research (ED1-7; 562/985-8476; www.ced.csulb.edu/graduate). Please note: Not all programs admit students for the spring semester. For additional program information and contact numbers for advisors, visit the College of Education website at www.ced.csulb.edu and navigate to the appropriate program.

All master's degree candidates in education are required either to complete a thesis or project or take a comprehensive examination according to the requirements of the degree or

degree option. Application for enrollment for thesis, project, or comprehensive examination must be made by October 1 for the spring semester or by March 1 for the fall semester.

Admission

To be eligible for admission to the respective College of Education master's degree programs, applicants must meet the following grade point average (GPA) requirements:

Clear Conditional Admission — Applicants must have a GPA of 2.85 or higher in the last 60 semester or 90 quarter units of course work taken. Lower division and/or extension courses taken after obtaining the bachelor's degree are excluded from this calculation.

Applicants who meet all requirements for clear conditional admission except one program requirement may nevertheless qualify for clear conditional admission by earning a minimum GPA of 3.00 on 12 units of approved course work planned by the student and advisor.

Conditional Admission — Applicants who fail to meet more than one program admission requirement must be recommended by faculty as a promising candidate in order to be conditionally admitted.

NOTE: Individual programs retain the right to determine who is admitted to the program. Meeting the University requirements for clear conditional or conditional admission does not guarantee acceptance to the program.

Clear conditional admission to the CED is required for enrollment in 500- and 600-level courses.

Advancement to Candidacy

To be advanced to candidacy for a graduate degree, a candidate must:

1. Fulfill the Graduation Writing Assessment Requirement (GWAR)
2. Satisfy all general University requirements for advancement to candidacy, as well as the specific requirements for the degree option
3. A minimum 3.0 overall grade-point average and a 3.0 grade-point average in all units undertaken for the student program (at least 6 units)
4. Complete all prerequisites and testing, file for an approved program of studies with the College of Education Office of Graduate Studies and Research, and be currently enrolled
5. Resolve all incomplete grades (to either "complete" or "default" grade)

Note: The Graduate Record Examination (GRE) is required for the MA in Education, Option in Educational Psychology.

College Offices and Services

The following services and offices are available in the College. For information about these services and offices, visit the College of Education website at www.ced.csulb.edu and navigate to the appropriate program or office.

- Center for Collaboration in Education (CCE)
- Center for Language Minority Education and Research (CLMER)
- Credential Center (CC)
- Development Office
- Educational Career Services (ECS)
- Educational Psychology Clinic
- Service Experiences for ReVitalizing Education (SERVE)
- Scholarships

Educational Leadership Doctorate

P-12 Specialization Community College/Higher Education Specialization

The Education Leadership doctoral program is designed to prepare current and future P-16 educational leaders to develop and nurture organizations that are designed to serve the diverse populations of southern California. Graduates of this program will be prepared to serve as leaders in urban education with expertise to function in a global technological society. The program produces reflective practitioners aware of the complex challenges of curriculum, finance, organizational dynamics, and collaboration with local, state, and national stakeholders.

Students will become more effective leaders by (a) solving problems from multiple perspectives; (b) using multicultural competence to interact with personnel, students and community members; (c) challenging assumptions to improve educational systems; and (d) learning to lead organizations toward respect of divergent viewpoints, learning styles, and ranges of ability.

Emphasis is placed on the expanding and changing role of education for social change to meet the needs of society. Graduate students in a learning cohort community will experience an interdisciplinary approach to the study of educational leadership, teaching and learning, organizational development, management and research.

Graduates of the program will be qualified for a variety of teaching and leadership positions in education and education-related settings, such as superintendent, central office administrator, school principal in P-12, or chancellor, president or administrator in community colleges or 4-year universities.

University Admission

Applications are reviewed annually and students accepted to the program begin study in the summer of each year. Students must file an application for Graduate Admission along with one complete set of official transcripts from all educational institutions with the University Office of Admissions.

Program Admission

In addition to the university application, prospective students must also submit a program application. Admission is granted on a competitive basis; meeting the minimum requirements qualifies an individual for consideration but does not guarantee admission to the program. Requirements for admission will apply to all Ed.D. applicants and include:

1. Evidence of completing an acceptable baccalaureate degree earned at a regionally accredited institution.
2. Evidence of completing a master's degree earned at a regionally accredited institution, or the applicant has completed equivalent academic preparation.
3. A cumulative grade point average of at least 3.0 in upper-division and graduate study combined.
4. Good standing at the last institution of higher education attended.
5. Demonstration of sufficient preparation for, experience in, and potential for educational leadership, including: successful experience in leadership in school,

postsecondary, or community contexts, and/or policy leadership; academic excellence; problem-solving ability; technological proficiency; interest in critically assessing current educational policies and practices; and interest in improving current educational policies and practices.

6. Graduate Record Examination (GRE) scores from the three sections of the General Test, taken within five years of applying to the Ed.D. program.
7. Three letters of recommendation attesting to leadership and scholarship potential.
8. A written statement of purpose reflecting an understanding of the challenges facing the public schools or community colleges in California.
9. A written statement from the applicant describing the applicant's plan for meeting professional responsibilities and the demands of the program.
10. A written statement from the applicant's employer indicating support for the applicant's doctoral studies, if applicable.
11. A personal interview.

Requirements

The program requires a minimum of 60 units of which 12 are dissertation units. At least 42 units must be completed in residence at the campus.

All courses must be completed:

1. Core courses (23 units):
 - EDLD 720 Proseminar in Educational Leadership (1)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
 - EDLD 721A Advanced Proseminar in Educational Leadership (1)
Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720 or consent of program director.
 - EDLD 721B Advanced Proseminar in Educational Leadership (1)
Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A or consent of program director.
 - EDLD 721C Advanced Proseminar in Educational Leadership (3)
Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A, 721B or consent of program director.
 - EDLD 721D Advanced Proseminar in Educational Leadership (1)
Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A, 721B, 721C or consent of program director.
 - EDLD 721E Advanced Proseminar in Educational Leadership (1)
Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A, 721B, 721C, 721D or consent of program director.
 - EDLD 722 History and Systems of U.S. Education (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
 - EDLD 723 Legal and Ethical Leadership: Implications for Policy and Practice in P-16 Educ Settings (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
 - EDLD 724 Critical Perspectives of U.S. Education and Diversity (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

- EDLD 725 Organizational Leadership in Educational Settings (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 726 Policy, Politics, Power in Educational Settings (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
2. Research courses (13 units):
Take all of the following:
- EDLD 730 Educational Research Epistemologies and Methodologies (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 731 Qualitative Research Methods for Educational Leadership (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 733 Program and Student Assessment (1)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 734 Survey Methods in Educ Research (1)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 735 Applied Field Research (2)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- Take one of the following:
- EDLD 732A Inferential Data Analysis in Education A (3)
Prerequisites: Admission to the Educational Leadership Doctorate program and EDLD 730 or consent of program director.
- EDLD 732B Inferential Data Analysis in Education B (3)
Prerequisites: Admission to the Educational Leadership Doctorate program and EDLD 730 or consent of program director, ED P 419 or equivalent, and EDLD 730.
3. Specialization courses (12 units). Choose one of the following specializations:
- A. Community College/Higher Education Specialization:
- EDLD 740 Policy and Finance Issues in Community Colleges (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 741 Teaching and Learning in Post Secondary Settings (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 742 Exploration of Campus Cultures: Impact and Influence (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 743 Leadership in Higher Education (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- B. P-12 Specialization:
- EDLD 750 Instructional Improvement and Accountability (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 751 Organizational Culture and Community Engagement in Education (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 752 Financial and Human Resource Development (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
- EDLD 753 Supervision of Curriculum, Teaching, Learning and Assessment (3)
Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.
4. Dissertation (12 units):
EDLD 798 Doctoral Dissertation (3)
Prerequisites: Consent of instructor/doctoral candidacy required. Student research and writing of the Ed.D. dissertation.
- Doctoral students must maintain a 3.0 GPA to be in good standing. Students who have a grade point average below 3.0 in two successive terms will be disqualified from the program.
- The Ed.D. program is designed to allow students to complete all program requirements within three calendar years, including three required summer sessions. Students are expected to complete program requirements within five years after full admission to the program. Extensions of up to two years may be granted if the student is in good standing, there are compelling individual circumstances, and the student demonstrates current knowledge of research and practice in educational leadership. After completion of all course work and successful completion of the qualifying examination, the student will advance to candidacy and undertake the dissertation.
- Continuous enrollment is a requirement of the program. If extenuating circumstances require that the student leave the program for a period of time, the faculty will consider an adjusted schedule and an individualized plan.

Qualifying Examination Paper

The qualifying examination paper shall include a rigorous written demonstration of student knowledge; the examination must be passed prior to the student's advancement to candidacy. The examination will be due by the end of the fourth term in the program. The student will synthesize knowledge from courses taken to date: (1) Leadership core courses, (2) Research Methods courses, and (3) Specialization courses completed up to that time. The structure of the qualifying examination paper will be a definition of the problem under study and a review of the literature that could serve as a preparatory chapter of the dissertation. Failure to earn a designation of "pass with reservations" or above after the second submission, will result in dismissal from the Ed.D. Program.

Dissertation Proposal Examination

The dissertation proposal examination and oral defense will evaluate the student's readiness to proceed with the dissertation research. The dissertation proposal examination will consist of the first three chapters of the dissertation. It will typically focus on an examination of (a) an educational issue, (b) a practice or program, (c) an educational policy or reform or improvement, or (d) implementation studies within an educational organization or community setting.

The dissertation committee will evaluate the proposal. A determination of passing must be made by consensus of the committee. Passing this examination shall constitute formal approval for the candidate to proceed with the proposed dissertation research, subject to Institutional Review Board approval.

Advancement to Candidacy

After being admitted to the program, passing the qualifying examination, completing coursework, and successfully defending the dissertation proposal, the student will advance to

candidacy. The total time from admission until candidacy shall not exceed three years unless there are mitigating circumstances and the program faculty have approved the extension. An extension for advancement to candidacy shall not exceed one year.

Dissertation

The dissertation shall be the written product of systematic, rigorous research on a significant educational issue. The dissertation is expected to contribute to an improvement in public P-12 or community college professional practices or policy, generally or in the context of a particular educational institution.

The dissertation shall identify the field-based research problem and question(s), state the major theoretical perspectives, explain the applied significance of the undertaking, relate it to the relevant scholarly and professional literature, set forth the appropriate sources for and methods of gathering and analyzing the data, and offer a conclusion or recommendation. It shall include a written abstract that summarizes the significance of the work, objectives, methodology, and a conclusion or recommendation.

The Dissertation Committee will minimally consist of a chair and two members. The chair will be selected by the procedure followed by the College of Education. The chair and student will then select two other members: one will be from the college faculty and the other will be either a university faculty member outside of the college, a P-16 practitioner who holds a doctorate, or a community member associated with the program who holds a doctorate.

The dissertation committee chair shall provide primary supervision for the dissertation. The chair shall be a tenured or tenure-track faculty member in the College. The Ed.D. program director may allow the replacement of a committee member, based on the evaluation of a rationale provided by the student or committee member making the request.

Final Examination Oral Defense of the Dissertation

The Dissertation Committee will conduct a final oral examination during which the doctoral student defends the dissertation. By unanimous vote the Committee may approve the dissertation and recommend conferral of the degree or may request minor and/or substantive changes. In the event that the Dissertation Committee requires substantive changes, the final vote of the Committee will be postponed until the changes are completed. The Committee may also vote to reject the dissertation, thereby ending the student's participation in the degree program.

Courses (EDLD)

720. Proseminar in Educational Leadership (1)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Introduction to the field of educational leadership. Orientation to doctoral education, academic research, and practice-oriented doctoral-level skills. First semester of a six-semester sequence.

Letter grade only (A-F).

721A. Advanced Proseminar in Educational Leadership (1)

Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720 or consent of program director.

Focus on the continued development of the research problem and identification of literature necessary to complete the qualifying examination. Second semester of a six-semester sequence.

Letter grade only (A-F).

721B. Advanced Proseminar in Educational Leadership (1)

Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A or consent of program director.

Focus on continued development of the requisite research skills necessary to complete the qualifying examination and, eventually, the proposal and dissertation. Third semester of a six-semester sequence.

Letter grade only (A-F).

721C. Advanced Proseminar in Educational Leadership (3)

Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A, 721B or consent of program director.

Focus on the development of the Qualifying Examination Paper. Fourth semester of a six-semester sequence.

Letter grade only (A-F).

721D. Advanced Proseminar in Educational Leadership (1)

Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A, 721B, 721C or consent of program director.

Focus on the development of the dissertation literature review. Fifth semester of a six-semester sequence.

Letter grade only (A-F).

721E. Advanced Proseminar in Educational Leadership (1)

Prerequisite: Admission to the Educational Leadership Doctorate program and EDLD 720, 721A, 721B, 721C, 721D or consent of program director.

Focus on the development of chapter 1 of the dissertation. Sixth semester of a six-semester sequence.

Letter grade only (A-F).

722. History and Systems of U.S. Education (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Critical analysis of major schools of U.S. historical thought and their connection to social developments and examination of history as an interpretive, subjective process in which historians engage in dialogue with larger intellectual communities.

Letter grade only (A-F).

723. Legal and Ethical Leadership: Implications for Policy and Practice in P-16 Educational Settings (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of legal and ethical issues, implications, and applications. Exploration of leadership in complex educational environments, multiple perspectives applying legal and ethical principles and policies, technological legal research. Examination of broad national and state theoretical and practical contexts using an ethical, legal leadership framework.

Letter grade only (A-F).

724. Critical Perspectives of U.S. Education and Diversity (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of identity in relation to disenfranchisement in educational institutions, multiple forms of cultural hegemony, policy and practices that foster inequality in schooling as well as issues related to students with disabilities and second language learners. Letter grade only (A-F).

725. Organizational Leadership in Educational Settings (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of dynamic organizations from a leader's perspective. Analysis of organizational theory, structure, culture and interrelationships from multiple perspectives as well as the leader's role in managing critical factors that can undermine a high performance organization.

Letter grade only (A-F).

726. Policy, Politics, Power in Educational Settings (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

In-depth analysis of topics relevant to politics and power in educational policy and reform. Exploration of issues related to governance, structure, programs, leadership, strategic planning and assessment.

Letter grade only (A-F).

730. Educational Research Epistemologies and Methodologies (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

In-depth exploration of epistemological underpinnings of educational research, qualitative and quantitative studies, and emergent research and methodologies pertinent to educational practice and policy.

Letter grade only (A-F).

731. Qualitative Research Methods for Educational Leadership (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Advanced study of qualitative research traditions and methods for both understanding and application. Methods and research design elements include ethnographic and focus group interviews, participant and naturalistic observation, case study and document analysis.

Letter grade only (A-F).

732A. Inferential Data Analysis in Education A (3)

Prerequisites: Admission to the Educational Leadership Doctorate program and EDLD 730 or consent of program director.

Hypothesis testing using analysis of variance, factorial analysis of variance, analysis of covariance, multiple regression, and path analysis. A focus on data analyses to address research questions, interpretation of the results, and preparation of a written report of the findings.

Letter grade only (A-F).

732B. Inferential Data Analysis in Education B (3)

Prerequisites: Admission to the Educational Leadership Doctorate program and EDLD 730 or consent of program director, ED P 419 or equivalent, and EDLD 730.

Hypothesis testing using analysis of variance, factorial analysis of variance, analysis of covariance, multiple regression, and path analysis. Overview of Structural Equation Modeling. A focus on data analyses to address research questions, interpretation of the results, and preparation of a written report of the findings.

Letter grade only (A-F).

733. Program and Student Assessment (1)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Assessment of student learning and development and program assessment. Focus on design of a holistic program evaluation incorporating assessment and measurement of student outcomes.

Letter grade only (A-F).

734. Survey Methods in Educational Research (1)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Focus on application and practical methodological tools in designing survey research in educational settings.

Letter grade only (A-F).

735. Applied Field Research (2)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Focus on the development of chapter 3 of the dissertation and piloting of the dissertation study research methods.

Letter grade only (A-F).

740. Policy and Finance Issues in Community Colleges (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

In-depth analysis of the community college system, function and purpose. Exploration of issues related to governance, structure, program, leadership, and strategic planning and assessment.

Letter grade only (A-F).

741. Teaching and Learning in Post Secondary Settings (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Focus on student development and learning theories based on cognitive, psychosocial, typology, and person-environment perspectives. Exploration of the role of faculty and others in the collaborative development and implementation of responsive curricula at 2- and 4-year institutions.

Letter grade only (A-F).

742. Exploration of Campus Cultures: Impact and Influence (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of faculty, administrative, and student cultures in terms of values, behavioral norms, impact and influences. Application of research methods to the study of campus cultures. Dialogue concerning the implications of these findings for higher education policies and practices.

Letter grade only (A-F).

743. Leadership in Higher Education (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Analysis of current research and theories on leadership and organizational change in higher education: multicultural organizational development theories, planning, change, and the effective strategies for change. Exploration of case studies of organizational leadership.

Letter grade only (A-F).

750. Instructional Improvement and Accountability (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of the role of educational leaders in engaging stakeholders in data collection, analysis, and application to practice; the development of a culture of inquiry, and the distribution of leadership for continuous instructional improvement and accountability systems design.

Letter grade only (A-F).

751. Organizational Culture and Community Engagement in Education (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of school organizational culture, leadership and the local community in a global context: organizational strategies and development of teams to promote systemic change, cultural transformation and social justice.

Letter grade only (A-F).

752. Financial and Human Resource Development (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of the acquisition, distribution, cultivation and management of human, fiscal, and time resources in public education. Identification and application of skills necessary for harnessing human and financial resources that further the goals of a school and district.

Letter grade only (A-F).

753. Supervision of Curriculum, Teaching, Learning and Assessment (3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Advanced theoretical analysis of curriculum, teaching, learning, and assessment of student achievement in diverse settings; impact of electronic and information technology on student knowledge acquisition; principles of professional development; macro and micro political and policy influences; leadership implications.

Letter grade only (A-F).

754. Leadership in P-12 Education (3)

Prerequisite: Admission to the Educational Leadership Doctoral Program or consent of program director. P-12 leadership paradigms, models, theories, organizational/structural configurations; internal/external local, state, national influences on leadership; change theory/agency; relationship, communication, and professional disposition-building strategies; research/practice integration.

Letter grade only (A-F).

755. Curriculum Theory, Instructional Leadership, and Accountability (3)

Curr Theory, Instr Lead, and Acct

Prerequisite: Admission to the Educational Leadership Doctoral Program or consent of program director.

Advanced research and analysis of the relationship among theory, curriculum, teaching, learning, assessment, and professional development in diverse settings. Role of the instructional leader.

Letter grade only (A-F).

790. Selected Topics - Educational Leadership (1-3)

Prerequisite: Admission to the Educational Leadership Doctorate program or consent of program director.

Examination of various issues in educational leadership.

Letter grade only (A-F). May be repeated with different topics in the same semester up to a maximum of 24 units. Topics announced in the *Schedule of Classes*.

- A. Issues of Leadership Roles and Responsibilities
- B. Change Management
- C. Focus Group Facilitation
- D. Data-based Organizational Change
- E. Applications of Technology
- F. The Needs of Student Populations
- G. Governing Boards
- H. Staff Development Programs
- I. Personnel Assessment Instruments

797. Directed Individual Study (1-3)

Prerequisites: Consent of instructor, department chair and associate dean.

Individual research or intensive study under the guidance of a faculty member.

Letter grade only (A-F). May be repeated to a maximum of 24 units in different semesters. Special Begin Date: Summer 2007.

798. Doctoral Dissertation (3)

Prerequisites: Consent of instructor/doctoral candidacy required. Student research and writing of the Ed.D. dissertation.

Credit/No Credit grading only. May be repeated to a maximum of 24 units in different semesters.

ELECTRICAL ENGINEERING

College of Engineering

Department Chair: James Ary

Department Office: Engineering and Computer Science (ECS) 512
Telephone: (562) 985-5102/5103
Website: <http://www.csulb.edu/colleges/coe/ee>

Faculty: James Ary, Chin Chang, Anastasios G. Chassiakos, Christopher Druzgalski, Fumio Hamano, Kenneth James, I-Hung Khoo, Rajendra Kumar, Tulin E. Mangir, Hassan Mohamed-Nour, Alfonso Rueda (emeritus), Bahram Shahian, Robert Teng, Chit-Sang Tsang, Mahmoud Wagdy, Fei Wang, Ray Wang, Heu-Geul (Henry) Yeh

Undergraduate Advisors

Electrical Engineering: Fei Wang
Electronics and Computer Engineering Technology: I-Hung Khoo
Electronics Engineering Technology: I-Hung Khoo

Graduate Advisor: Fumio Hamano

General Education Advising: Academic Advising - Horn Center

Biomedical Engineering Advisor: Maryam Moussavi

Administrative Coordinator: Clarice Ross

Students desiring detailed information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Electrical Engineer • Systems Engineer • Electronics Engineer • Communications Engineer • Electrical Design Engineer • Sales Engineer • Electronics Test Engineer • Research Engineer • Consultant • Manufacturer's Representative • Safety Engineer • Quality Control Specialist • Production Manager (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Advisory and Development Council

The Department of Electrical Engineering is supported by an Advisory and Development Council consisting of outstanding engineers and executives from industry and government in southern California. Its function is to form a liaison between the University and industry and to keep the administration and faculty informed of modern engineering practices. This ensures that the curricula are kept up-to-date. It also advises on placement opportunities before and after graduation.

ABET Accreditation

The Bachelor of Science in Electrical Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 111 Market Place, Suite #1050, Baltimore, MD 21202, phone: 410-347-7700, website: <http://www.abet.org>.

Undergraduate Programs

Bachelor of Science in Electrical Engineering (126 units)

The objectives of the Bachelor of Science in Electrical Engineering Program are to prepare students to be successful and advance in their chosen careers in industry,

academia, and public institutions, making significant contributions to the field of electrical engineering. These objectives are achieved by providing students:

1. a solid foundation in basic science, mathematics, and EE practices and major design skills to maintain high employability, adaptability, and an ability to develop and apply new technology;
2. effective communication skills to be able to progress in their careers;
3. an awareness of ethical and societal responsibilities;
4. an ability to work effectively in a team environment.

The bachelor's degree in electrical engineering is designed to prepare graduates for responsible engineering positions in design, development, research, applications, and operation in the fields of communications, control systems, digital signal processing systems, electromagnetics, digital and analog electronic circuits, physical electronics, computer-aided design and power systems. The curriculum is built around a strong basic core of mathematics, physics and engineering science. This is followed by intermediate courses in electrical engineering topics and finally a senior elective sequence including a senior design seminar and terminating in a capstone design course.

By choice of senior elective sequence, comprehensive coverage is provided in any one of the above fields.

Laboratory facilities are available in the engineering buildings allowing for basic as well as more advanced laboratory instruction in electronics, digital signal processing, control systems, microelectronics, communications, power, and digital systems.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an advisor to determine if the student's performance in the courses merits an additional semester to complete the requirements.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Core:

Take all the following courses:

CECS 100 Critical Thinking in the Digital Information Age (or equivalent) (3)
Prerequisite/Corequisite: ENGL 100 or its equivalent.

EE 200 Trends in Electrical Engineering (1)
Prerequisites: None.

EE 201 Digital Logic Design (4)
Prerequisite: MATH 117 (or equivalent) all with a grade of "C" or better.

EE 202 Computer Methods in Engineering (3)
Prerequisites: CECS 100 and MATH 123 all with a grade of "C" or better.

EE 211 Electric and Electronic Circuits I (3)
Prerequisites: (EE 210/210L or PHYS 152) and (MATH 123 or equivalent) all with a grade of "C" or better.

EE 211L Electric Circuits Laboratory (1)
Corequisite: EE 211.

ENGR 101 Intro to the Engineering Profession (1)
Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

ENGR 102 Academic Success Skills (1)
Prerequisite: ENGR 101 with a grade of "C" or better.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 370A Applied Mathematics I (or equivalent) (3)
Prerequisites: MATH 123. Not open to Freshmen.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 254 Applied Modern Physics (3)
Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

EE 301 Digital System Design (3)
Prerequisite: EE 201 with a grade of "C" or better.

EE 310 Signals and Systems (3)
Prerequisites: EE 211; and MATH 370A or equivalent all with a grade of "C" or better.
Corequisite: EE 202.

EE 330 Analog Electronic Circuits I (4)
Prerequisite: EE 211 with a grade of "C" or better.

EE 346 Microprocessor Principles and Applications (3)
Prerequisites: EE 201, (CECS 100 or equivalent) all with a grade of "C" or better.

EE 350 Energy Conversion Principles (3)
Prerequisites: (EE 202 or equivalent) and EE 211 and 211L all with a grade of "C" or better, or consent of instructor.

EE 360 Electromagnetic Fields (3)
Prerequisites: MATH 224, EE 310 all with a grade of "C" or better.

EE 370 Control Systems (3)
Prerequisite: EE 310 all with a grade of "C" or better.

EE 370L Control Systems Laboratory (1)
Prerequisite/Corequisite: EE 370.

EE 380 Probability, Statistics & Stochastic Modeling (3)
Prerequisites: MATH 123; (CECS 100 or equivalent) all with a grade of "C" or better.

EE 382 Communications Systems I (3)
Prerequisite: EE 310 all with a grade of "C" or better.

EE 386 Digital Signal Processing (3)
Prerequisites: EE 310 or CECS 301 all with a grade of "C" or better.

Take one of the following choices:

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151 with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

or both of the following:

EE 210 Electro-Magnetic Foundations in EE (3)
Prerequisite: PHYS 151 all with a grade of "C" or better.
Corequisites: MATH 123, EE 210L.

EE 210L Electro-Magnetic Foundations in EE Lab (1)
Corequisite: EE 210.

Each of the foregoing courses must be completed with a grade of "C" or better as well as ENGL 100 or equivalent.

Other required courses are:

EE 400D Electrical Engineering Design Seminar and Project (2)
Prerequisites: EE 330, 370, and 382 all with a grade of "C" or better; or consent of instructor.

EE 430 Analog Electronic Circuits II (3)
Prerequisites: EE 330 and 370 all with a grade of "C" or better, or graduate standing.

EE 430L Analog Electronics II Laboratory (1)
Prerequisite/Corequisite: EE 430.

Each BSEE student must propose course work consisting of a capstone design course supported by at least two related courses, which form an area of in-depth study as approved by the EE Undergraduate Advisor. Possible areas of study include but are not limited to power, digital signal processing, controls, communications and electronics. A list showing the required supporting courses and capstone design course for each area of study is available from the EE Undergraduate Advisor. Combinations of the above areas of study or another area of study may be proposed to the EE Undergraduate Advisor. Additional elective courses must be chosen from EE 400 level courses to total at least 15 units. The entire program must total at least 126 units.

A grade of "C" or better is required for the capstone senior design course in the area of specialization.

Concurrent and/or Summer Enrollment in Another College

Students who wish to take coursework in a community college or another college to meet curricular requirements while enrolled as an undergraduate in the Department of Electrical Engineering must petition the EE Undergraduate Advisor for prior approval to enroll in specific courses. This policy is for either concurrent enrollment or summer enrollment. Prior approval for transfer credit for upper division major courses may generally be approved for no more than six semester units, subject to approval by the EE Undergraduate Advisor and the EE Department Chair who may require sufficient information to determine if each requested course is deemed equivalent to an EE course at CSULB. Exceptions require approval by vote of the EE Undergraduate Curriculum Committee.

Bachelor of Science in Engineering Option in Biomedical and Clinical Engineering (129 units)

The Department of Electrical Engineering administers an option in Biomedical and Clinical Engineering that allows the student to acquire substantive competence in biomedical engineering and biology. The program builds upon a strong base of biology, mathematics, physics, chemistry, and engineering science to develop a clinically oriented biomedical engineer to serve medical and industrial needs. It includes a core of standard electrical engineering courses as well as courses and laboratories in biomedical engineering, anatomy, physiology and biology. Elective units are available in the senior year to explore individual areas of interest.

Students planning to attend medical, dental or other health professional or graduate schools in Biomedical Engineering may select courses in Chemistry and/or Biology with the approval of the Biomedical Engineering advisor.

Laboratory facilities in the field of biomedical engineering are available in the engineering buildings; and laboratory facilities for anatomy and physiology are available on campus. Computer systems are available to simulate biological systems and to collect, process and display physiological data.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade C or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Lower Division

Take all of the following courses:

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

CECS 100 Critical Thinking in the Digital Information Age (3)

Prerequisite/Corequisite: ENGL 100 or its equivalent.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

EE 200 Trends in Electrical Engineering (1)

Prerequisites: None.

EE 201 Digital Logic Design (4)

Prerequisite: MATH 117 (or equivalent) all with a grade of "C" or better.

EE 202 Computer Methods in Engineering (3)

Prerequisites: CECS 100 and MATH 123 all with a grade of "C" or better.

EE 211 Electric and Electronic Circuits I (3)

Prerequisites: (EE 210/210L or PHYS 152) and (MATH 123 or equivalent) all with a grade of "C" or better.

EE 211L Electric Circuits Laboratory (1)

Corequisite: EE 211.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

PHYS 254 Applied Modern Physics (3)

Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

Each of the foregoing courses must be completed with a grade of "C" or better as well as ENGL 100 or equivalent. The interdisciplinary courses as well as the Communications Studies (COMM) courses required for General Education must be taken for a letter grade.

Upper Division:

Take all of the following courses which must be completed with a "C" or better:

EE 310 Signals and Systems (3)

Prerequisites: EE211; and MATH 370A all with a grade of "C" or better or equivalent.
Corequisite: EE 202.

EE 330 Analog Electronic Circuits I (4)

Prerequisite: EE 211 all with a grade of "C" or better.

EE 346 Microprocessor Principles and Applications (3)

Prerequisites: EE 201, (CECS 100 or equivalent).

EE 360 Electromagnetic Fields (3)

Prerequisites: MATH 224, EE 310 all with a grade of "C" or better.

EE 370 Control Systems (3)

Prerequisite: EE 310 all with a grade of "C" or better.

EE 370L Control Systems Laboratory (1)

Prerequisite/Corequisite: EE 370.

EE 382 Communication Systems I (3)

Prerequisite: EE 310 with a grade of "C" or better.

EE 386 Digital Signal Processing (3)

Prerequisites: EE 310 or CECS 301 all with a grade of "C" or better.

EE 406 Medical Instrumentation and Measurements (3)

Prerequisite: EE 330 with a grade of "C" or better or consent of instructor or graduate standing.

EE 406L Biomedical Engineering Laboratory (1)

Prerequisite/Corequisite: EE 406.

EE 407 Applications of Computers in Medicine (3)

Prerequisite: EE 346 with a grade of "C" or better or consent of instructor or graduate standing.

EE 430 Analog Electronic Circuits II (3)

Prerequisites: EE 330 and 370 all with a grade of "C" or better, or graduate standing.

EE 444 Microprocessor Based System Design (3)

Prerequisites: EE 346 with a grade of "C" or better or graduate standing.

MATH 370A Applied Mathematics I (3)

Prerequisites: MATH 123. Not open to Freshmen.

Select one course from the following:

MAE 330 Engineering Thermodynamics I (3)

CE 370 Analytical Mechanics (3)

Take additional approved biomedical electives, including an approved senior design course to at least 129 units.

Bachelor of Science in Electronics Engineering Technology

For requirements and courses, see description in the Engineering Technology Programs section of this catalog.

Bachelor of Science in Computer Engineering Technology

For requirements and courses, see description in the Engineering Technology Programs section of this catalog.

Graduate Programs

Master of Science in Electrical Engineering

This program affords an opportunity for engineers and others to advance their competency in analysis and design to better meet the high technology needs of local industry. Each student selects two core courses and three graduate courses in one area of emphasis, and the remaining courses must augment and support the area of emphasis. Some current examples of areas of emphasis are biomedical, communications, computer/communication networks and security, control systems and robotics, digital signal processing, digital and computer systems, electromagnetics and optics, electronics, networks and filters, and power. Students may create other areas of emphasis with the approval of the graduate advisor. Students will choose one of the three alternatives: thesis, project, and course-only. Successful completion of a thesis provides a unifying culmination to the program, and an enhanced resume for future industrial or academic endeavor. A limited number of laboratory and teaching assistantships are available to qualified graduate students.

Prerequisites

1. A bachelor's degree from an accredited program in electrical engineering or a bachelor's degree from an accredited engineering, natural science or other appropriate program with the requirement that essential undergraduate deficiencies in electrical engineering are removed prior to Advancement to Candidacy.
2. The prospective graduate student must have attained a GPA of at least 2.7 for the last 60 semester units (90 quarter units) attempted prior to entry in the MSEE program.
The student should apply online at CSU Mentor. Do not send an application to the Department. International students should apply online at CSU Mentor or through the Center for International Education.

Requirements

Take at least 2 out of the below 5 courses appropriate to area of emphasis and subject to graduate advisor approval:

- EE 503 Advanced Systems Engineering (3)
Prerequisite: EE 411 with a grade of "C" or better or equivalent mathematical maturity.
- EE 505 Advanced Engineering Mathematics for EE (3)
Prerequisites: Consent of instructor.
- EE 508 Probability Theory and Random Processes (3)
Prerequisite: EE 380 with a grade of "C" or better.
- EE 509 Network Theory (3)
Prerequisites: EE 386, 410 or 430 all with a grade of "C" or better.
- EE 511 Linear Systems Analysis (3)
Prerequisite: EE 411 or 470 all with a grade of "C" or better or equivalent mathematical maturity.

Complete 30 unit minimum in 400-, 500-, or 600-level courses as approved in advance by the graduate advisor.

Take one of the following three alternatives:

1. Thesis Alternative:
500/600-level EE courses including core (15 units);

EE 697 Directed Research (3);
EE 698 Thesis or Industrial Project (6);
400/500/600-level courses in EE (6 units);
Comprehensive Oral Exam on Thesis.

2. Project Alternative:

500/600-level EE courses including core (21 units);
EE 697 Directed Research (3) (on a capstone project);
400/500/600-level EE courses (6 units);
Comprehensive Oral Exam on the capstone project.

3. Course-Only Alternative:

500/600-level EE courses including core and at least three courses forming area of emphasis (24 units);
400/500/600-level EE courses (6 units);
Comprehensive Oral Exam on the area-of-emphasis.

Tentative Program

Upon matriculation graduate students must consult with the graduate advisor and a tentative program must be approved by the advisor by a few weeks into the first semester. The program must contain two core courses and exhibit an area of emphasis comprised of at least three related graduate courses (500 or 600 level). Students should obtain the MSEE Handbook, which covers the procedures and requirements, from the advisor or Electrical Engineering Department office or Electrical Engineering web.

Advancement to Candidacy

At least one semester before the graduating semester students must advance to candidacy. To apply for advancement to candidacy students must satisfy the following requirements:

1. All deficiencies must have been made up with a GPA of at least 3.0.
2. Currently enrolled in a regular session.
3. Demonstration of competence in technical writing by passing an appropriate writing course such as ENGL 317, 417, 418, or 419 with a grade of "C" or better or by providing acceptable proof of technical writing ability to the graduate advisor. This requirement can be waived for thesis or project students upon recommendation of the graduate advisor.
4. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).
5. Completion of at least 9 units as a graduate student in residence while maintaining both an overall GPA and a program GPA of at least 3.0. Students are advised to seek advancement before completing 15 units of the program.

Ph.D. in Engineering and Industrial Applied Mathematics

For requirements, see the description in the College of Engineering section of this catalog.

Courses (E E)

LOWER DIVISION

200. Trends in Electrical Engineering (1)

Electrical Engineering as a profession. Nature of professional and design activities. Advances in Electrical Engineering. Current designs, future trends and challenges in various fields of Electrical Engineering. (Lecture 1 hour) Letter grade only (A-F).

201. Digital Logic Design (4)

Prerequisite: MATH 117 (or equivalent) with a grade of "C" or better.

Practical design of digital circuits. Basic topics in combinational and sequential switching circuits with applications to the design of digital devices.

(Lecture-problems 4 hours)

202. Computer Methods in Engineering (3)

Prerequisites: CECS 100 and MATH 123 all with a grade of "C" or better.

Introduction to MATLAB and numerical methods with applications to engineering. Programming in MATLAB. Introduction to SIMULINK and other MATLAB toolboxes.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F). Not open for credit to students with credit in ENGR 202.

210. Electro-Magnetic Foundations in Electrical Engineering (3)

Prerequisite: PHYS 151 all with a grade of "C" or better.

Corequisites: MATH 123, EE 210L.

Electric fields. Magnetic fields. Ohm's law. Kirchoff's laws. Physics of inductance and capacitance. Conservation of energy. Introduction to RL, RC and RLC circuits. Introduction to phasors. Introduction to electric machinery, computer electronics, electromagnetic radiation, and communication.

(Lecture-problems 3 hours) Letter grade only (A-F).

210L. Electro-Magnetic Foundations in Electrical Engineering Laboratory (1)

Corequisite: EE 210.

Laboratory experiments demonstrating behavior of resistive circuits; capacitors and inductors; transient RL and RC circuits; sinusoidal (phasor) RL, RC and RLC circuits; motors, generators, and transformers.

Letter grade only (A-F).

211. Electric and Electronic Circuits (3)

Prerequisites: (EE 210/210L or PHYS 152) and (MATH 123 or equivalent) all with a grade of "C" or better.

Linear circuit analysis techniques including circuit transformations, mesh and node analyses. Thevenin's, Norton's, Superposition, and Maximum Power Transfer theorems. Transient analysis of RL, RC and RLC circuits. Phasors. Power concepts. Nonlinear circuits including diodes. Circuit solution using PSpice.

(Lecture-problems 3 hours) Letter grade only (A-F).

211L. Electric Circuits Laboratory (1)

Corequisite: EE 211.

Laboratory investigation of Ohm's Law, Kirchoff's Laws, voltage and current division, mesh and nodal analysis, Thevenin and Norton equivalents, superposition, simple RL, RC, RLC circuits, phasors. Use of voltmeters, ammeters, ohmmeters and oscilloscopes. Identification of unknown elements.

(Laboratory 3 hours) Letter grade only (A-F).

220. Materials Sciences for Electrical Engineers (3)

Prerequisites: MATH 224 and EE 210 all with a grade of "C" or better.

Basic principles of optical and wave propagation. Introduction to quantum electronics. Fundamental aspects of photonics and materials sciences and their relevance to solid state electronic circuits.

Letter grade only (A-F). (Lecture-problems 3 hours)

236. Introduction to Nanotechnology: A Tour in Nano-Land (3)

Prerequisite: Sophomore standing.

Overview of the fundamentals of nanoscience and nanotechnology, a wide range of applications, and issues that affect widespread use of these technologies based on ongoing research and discourse. An interdisciplinary course, taught by an interdisciplinary team of

Instructors. Students will observe nature and matter in submicron and nanometer scale.

(Lecture-problems 3 hours) Letter grade only (A-F).

248. Security, Information Assurance, and Computers (3)

Computer security and information assurance as crucial challenges, consequences for individuals, economy, and society as a whole. Security threats and vulnerabilities in the use of computer systems. Tools and controls to reduce or block these threats. Law, privacy, and ethics.

(Lecture-problems 3 hours) Letter grade only (A-F).

260. Analytical Methods for Electromagnetics (4)

Prerequisite: EE 210 or PHYS 152 or equivalent all with a grade of "C" or better.

Fundamental concepts and analytical methods for electromagnetics.

(Lecture 3 hours, problem session 2 hours.) Letter grade only (A-F).

UPPER DIVISION

301. Digital System Design (3)

Prerequisite: EE 201 with a grade of "C" or better.

FPGA based digital design. Implementation of FPGA digital hardware systems based on the algorithms and implementation requirements using hardware description languages, optimization, logic synthesis, place and route methods. Implementation of finite state machines.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

310. Signals and Systems (3)

Prerequisites: EE211; and MATH 370A or equivalent all with a grade of "C" or better.

Corequisite: EE 202.

Fundamental concepts of signals and systems. Laplace Transforms. Fourier Series. Fourier Transforms. Two-port parameters.

(Lecture-problems 3 hours) Letter grade only (A-F).

315. Introduction to Systems Analysis (3)

Prerequisite: MATH 123 with a grade of "C" or better.

System definitions: linear, nonlinear, continuous, discrete. Analytical, and qualitative solution of nonlinear systems. Linear system analysis and solutions. Introduction to complex algebra. Discrete systems modeling, analysis, solutions. State space representation and stability analysis. Introduction to linear and matrix algebra.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

330. Analog Electronic Circuits I (4)

Prerequisite: EE 211 with a grade of "C" or better.

Analysis and design of diode, bipolar junction transistor, field-effect transistor (MOSFET and JFET), and CMOS circuits. Op-Amp linear and nonlinear circuit applications. Digital electronic circuits. Laboratory includes transistor and operational amplifier circuit design and CAD tools.

(Lecture-problems 3 hours, laboratory 3 hours) Letter grade only (A-F).

332. Digital Electronic Circuits (3)

Prerequisites: EE 201, 211, 420 all with a grade of "C" or better.

Analysis and design of digital electronic circuits. Structure and operation of MOS transistors, including SPICE models. NMOS and CMOS inverters. Bipolar transistor inverters. Bipolar digital gate circuits (TTL & ECL). Regenerative logic circuits (flip-flop, Schmitt trigger, multivibrator). Semi-conductor memories. Basic IC design-Gate Array, Standard Cell, PLA.

(Lecture-problems 3 hrs) Letter grade only (A-F).

346. Microprocessor Principles and Applications (3)

Prerequisites: EE 201, (CECS 100 or equivalent) all with a grade of "C" or better.

Introduction to the design of modern RISC based microprocessors and microcontrollers. Programming problems written in C++ and assembly using the critical thinking skills learned in CECS100. Architectural principles learned in the classroom illustrated using the assembly programming language.

Letter grade only (A-F). (Lecture-problems 2 hours, lab 3 hours)

350. Energy Conversion Principles (3)

Prerequisites: (EE 202 or equivalent) and EE 211 and 211L, or consent of instructor all with a grade of "C" or better.

Electromechanical energy conversion. Power transformers. DC, synchronous, and induction machines. Laboratory experiments on power electronics and rotating machinery.

Letter grade only (A-F). (Lecture-problems 2 hours, lab 3 hours).

360. Electromagnetic Fields (3)

Prerequisites: MATH 224, EE 310 all with a grade of "C" or better.

Electric and magnetic field theory including propagation of plane waves in lossless and dissipative media. Maxwell's equations. Transmission lines and waveguides.

(Lecture-problems 3 hours) Letter grade only (A-F). Not open for credit to students with credit in EE 460.

370. Control Systems (3)

Prerequisite: EE 310 with a grade of "C" or better.

Control systems analysis; block diagrams, signal flow graphs, stability criteria, root locus, frequency domain analysis. Examples of classical control system design.

Letter grade only (A-F). (Lecture-problems 3 hours).

370L. Control Systems Laboratory (1)

Prerequisite/Corequisite: EE 370.

Experiments which reinforce concepts learned in EE 370. Digital simulation modeling, analysis, and design. Real time applications.

Letter grade only (A-F). (Laboratory 3 hours)

380. Probability, Statistics, and Stochastic Modeling (3)

Prerequisites: MATH 123; (CECS 100 or equivalent) all with a grade of "C" or better.

Probability with an emphasis on computer modeling of probabilistic systems. Topics such as discrete and continuous random variables, moments, correlation, covariance, Markov processes and queuing theory presented from a mathematical foundation developed and exemplified with realistic computer simulations from students.

Letter grade only (A-F). (Lecture 2 hrs, laboratory 3 hrs)

382. Communication Systems I (3)

Prerequisite: EE 310 with a grade of "C" or better.

Review of Fourier series and transforms. Introduction to passive, active, and digital filters. Basic elements of probability theory, statistics, concept of white noise, AM, DSB, SSB and vestigial modulation, narrowband and wideband FM.

Letter grade only (A-F). (Lecture-problems 2 hours, lab 3 hours)

386. Digital Signal Processing (3)

Prerequisites: EE 310 or CECS 301 all with a grade of "C" or better.

Introduction to discrete-time signals and systems, z-transform, digital filters, system design, and comparison to the analog counterparts. Multimedia-based laboratory experiments for discrete-time signals and systems in time and frequency domain, synthesis of digital sound/music with MATLAB or C.

Letter grade only (A-F). Not open for credit to students with credit in EE 485. (Lecture-problems 2 hours, laboratory 3 hours)

400D. Electrical Engineering Design Seminar and Project (2)

Prerequisites: EE 330, 370, and 382 all with a grade of "C" or better; or consent of instructor.

Design terminologies, processes and issues. Simple design examples. Constraints imposed by factors such as performance, economics, reliability, safety, aesthetics, packaging, codes, standards and practices. Ethics and social and environmental impact. Case studies. Individual and group projects. Oral presentation required. (Lecture-problems 1 hour, laboratory 3 hours) Letter grade only (A-F).

401. Mathematical Methods for Electrical Engineers (3)

Prerequisite: MATH 370A with a grade of "C" or better.

Analytic techniques relevant to electrical engineering.

Letter grade only (A-F). (Lecture-problems 3 hours).

402./502. Engineering Modeling and Simulation (3)

Prerequisite: EE 380 with a grade of "C" or better.

Fundamental techniques of modeling and simulation of complex engineering systems. Next generation simulation tools (DES), Output analysis of systems. Alternative system configurations. Variance reduction techniques. Project proposal developments.

Projects required for EE 502. (Lecture-problems 3 hours). Letter grade only (A-F).

403. Systems Engineering (3)

Prerequisites: ENGR 203 or EE 202 all with a grade of "C" or better, or graduate standing.

Modeling and analysis, and design of deterministic and stochastic systems. The building blocks of Systems Engineering models ranging from network models with special structured, to unstructured linear and nonlinear optimization.

Letter grade only (A-F). (Lecture-problems 3 hours)

405. Selected Topics in Electrical Engineering (3)

Prerequisites: Senior standing in electrical engineering or consent of instructor or graduate standing.

Selected topics from recent advances in electrical engineering.

Letter grade only (A-F). May be repeated to a maximum of 6 units with undergraduate advisor consent. Topics announced in *Schedule of Classes*. (Lecture-problems 3 hours).

406. Medical Instrumentation and Measurements (3)

Prerequisite: EE 330 with a grade of "C" or better or consent of instructor or graduate standing.

Design and analysis of medical instruments, electrodes and amplifiers for measurement of physiological signals.

Letter grade only (A-F). (Lecture-problems 3 hours)

406L. Biomedical Engineering Laboratory (1)

Prerequisite/Corequisite: EE 406.

Laboratory study of medical instrumentation, transducers and computer data processing.

(Laboratory 3 hours) Letter grade only (A-F).

407. Applications of Computers in Medicine (3)

Prerequisite: EE 346 with a grade of "C" or better or consent of instructor or graduate standing.

Principles of analysis and design of computers and data collection equipment for real-time on-line medical systems.

(Lecture-problems, computer projects 3 hours) Letter grade only (A-F).

410. Analog Filter Design (3)

Prerequisite: EE 310 with a grade of "C" or better or graduate standing.

Theory and design of active filters using operational amplifiers. Emphasis is placed on low-pass filters.

Lecture-problems 3 hours) Letter grade only (A-F).

411. Continuous- and Discrete-Time Linear Systems (3)

Prerequisite: EE 370 with a grade of "C" or better or graduate standing.

Review of matrices and linear algebra. Z-transforms, linear systems, and difference equations. State-space description of linear systems. Analysis including stability, reachability, and observability. State-feedback.

(Lecture-problems 3 hours) Letter grade only (A-F).

412. Fractals in Engineering (3)

Prerequisite: EE 310 with a grade of "C" or better or graduate standing.

Application of fractal geometry to system theory. Study of system dynamics leading to complex behaviors and chaos. Scaling laws, sensitivity to initial conditions, strange attractors, and *if* noise will also be discussed.

(Lecture-problems 3 hours). Letter grade only (A-F).

420. Solid State Electronic Devices (3)

Prerequisite: PHYS 254 with a grade of "C" or better or graduate standing.

Semiconductor crystal structure and growth. Carrier modeling, drift and diffusion currents. P-N junctions, diodes, solar cells and light-emitting diodes (LED). Bipolar junction transistor (BJT) biasing, linear and switched operation. Metal oxide semiconductor field effect transistor (MOSFET) operation. Solar cells, photovoltaics, and lasers.

Not open for credit to students with credit in EE 320. (Lecture-problems 3 hours) Letter grade only (A-F).

427./527. Digital Filter Design and Audio Processing (3)

Prerequisite: EE 386 with a grade of "C" or better or consent of instructor.

Digital filter design methods, filter architectures, round-off noise, implementation and applications to audio signal processing. Additional projects required for EE 527.

(Lecture-problems 3 hours) Letter grade only (A-F).

428./528. Speech Signal Processing (3)

Prerequisite/Corequisite: EE 486 or consent of instructor.

Principles and engineering applications of speech signal processing. Speech synthesis, recognition, encoding, and compression. Applications of neural networks.

Additional projects required for EE 528. (Lecture-problems 3 hours) Letter grade only (A-F).

430. Analog Electronic Circuits II (3)

Prerequisites: EE 330 and 370 with a grade of "C" or better, or graduate standing.

Differential pairs, current sources, output stages, and integrated operational amplifiers. Op-amp applications and practical issues. Frequency response. Computer-aided circuit analysis and design. Feedback amplifiers and stability. Oscillators.

(Lecture-problems 3 hours) Letter grade only (A-F).

430L. Analog Electronics Laboratory II (1)

Prerequisite/Corequisite: EE 430.

Advanced transistor, operational amplifier, and linear-integrated circuits and systems design laboratory.

Not open for credit to students with credit in EE 433L. (Laboratory 3 hours) Letter grade only (A-F).

434./534. Mixed-Signal IC Design (3)

Prerequisites: EE 201 and 330 all with a grade of "C" or better or consent of instructor.

CMOS fabrication. Component layout. MOSFET modeling. Mixed-signal devices such as D/A and A/D converters and phase-locked loops. Substrate Noise coupling. System-on-chip considerations. Design using CAD tools.

Additional projects required for EE 534. (Lecture-problems 2 hours, Laboratory 3 hours) Letter grade only (A-F).

435./535A. Microelectronics (3)

Prerequisites: EE 201 and 330 all with a grade of "C" or better.

Theory of microelectronics integrated circuit design, IC fabrication technology, device characterization, modelling, digital and analog simulation tools, physical layout tools, digital standard cell library design, IC digital system designs, I/O pad design, full chip simulation and physical designs.

Additional projects required for EE535A. (Lecture-problems 3 hours) Letter grade only (A-F).

435L. Microelectronics Laboratory (1)

Corequisite: EE 435.

Laboratory evaluation of IC process steps. Wafer probe, packaging, and final test. Empirical device model formulation from test data.

Not open for credit to students with credit in EE 420L. (Laboratory 3 hours) Letter grade only (A-F).

436./536. Microfabrication and Nanotechnology (3)

Prerequisites: EE 330 and PHYS 254; or MAE 300 all with a grade of "C" or better.

Techniques and the technology of miniaturization of electrical, mechanical, optical, and opto-electronic devices in sizes from millimeters to nanometers. Design examples of sensors, microlenses, cantilevers, and micromotors, process fabrication.

Additional projects required for EE 536. (Lecture-problems 3 hours) Letter grade only (A-F).

437. Multidisciplinary Nano-Science and Engineering (3)

Prerequisite: Consent of instructor or graduate standing.

Introduces four key areas: nanoscience properties of materials; nanotechnology in biology and nature; observation, measurement, analysis; applications. Importance of understanding and engineering nanoscale structures, materials, and processes for the 21st Century. Use of scanning electron microscope and atomic force microscope.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

443. System-on-Chip Architecture and Applications (3)

Prerequisite: EE 346 with a grade of "C" or better or consent of instructor or graduate standing.

Introduction to System-on-Chip Architecture by using ARM's MCU and MMU. Concepts and methodologies in designing a system-on-chip (SoC) based microprocessor core. Principles of modern SoC and processor design. Embedded applications based around SoC processor cores.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

444. Microprocessor Based System Design (3)

Prerequisites: EE 346 with a grade of "C" or better or graduate standing.

Study of microprocessor based systems and their integration with peripheral devices including sensors, actuators, and serial communications. Following a progressive lab sequence, over the semester the student will design and construct a modern RISC microcontroller based system.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F). Not open for credit to student with credit in EE 347.

446. Advanced Microprocessors and Embedded Controllers I (3)

Prerequisite: EE 444 with a grade of "C" or better or consent of the instructor or graduate standing.

Advanced microprocessors such as Pentium series, RISC, and CISC. Hardware features and new instructions. Support for virtual memory, paging, privilege levels, multitasking and internal cache. Floating point coprocessors. Embedded controllers, on-chip resources and applications.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

447. Design of Electronic Systems (3)

Prerequisites: (EE 301 or 435) and EE 346 and EE 430 all with a grade of "C" or better, or graduate standing.

Prerequisite/Corequisite: EE 400D or graduate standing.

Extensive laboratory projects. Design of analog and digital systems. Computer-aided design including, for example, hardware descriptive language (HDL) and SPICE.

(Lecture-problems 2 hours. laboratory 3 hours) Letter grade only (A-F).

448./548. Wireless and Mobile Networks and Security in Wireless Networks (3)

Prerequisite: EE 482 with a grade of "C" or better or equivalent.

Wireless and Mobile Ad-hoc Networks and Security. Ad-hoc and geographic routing, resource discovery, MAC, IP-mobility, mobility modelling, wired-wireless networks, security aspects. Lab Projects will include use of tools such as OPNET, Ethereal, Sniffer, Scanner, IDS, etc.

Advanced project required for EE 548. (Lecture-problems 3 hours) Letter grade only (A-F).

449. Topics in Multimedia and Hypermedia (3)

Prerequisite: EE 483 with a grade of "C" or better or equivalent.

Theoretical and practical issues in designing multimedia systems, design and implementation of interactive multimedia and hypermedia applications including interactive television (e.g., video-on-demand, eLearning), hypermedia systems (e.g., the World Wide Web), and video conferencing and groupware. Emphasis placed on current design issues and research topics.

Extra project for graduate students. (Lecture-problems 3 hours) Letter grade only (A-F).

450. Electronic Control of Motors (3)

Prerequisite: EE 350 with a grade of "C" or better or graduate standing.

Prerequisites/Corequisites: EE 370 or graduate standing.

Characteristics of semiconductor power switches. Modeling and application of control theory to various types of motors. Bidirectional and four-quadrant converter topologies for motion control. Selection of drives to control AC and DC motors. Uninterruptible power supplies and adjustable speed drives.

(Lecture-problems 3 hours) Letter grade only (A-F).

451. Electric Vehicles (3)

Prerequisites: EE 350 and (EE 370 or MAE 376) all with a grade of "C" or better; or graduate standing.

Electric propulsion systems for electric and hybrid electric vehicles. DC and AC motor drives. Brushless DC motors. Switched reluctance motors. Energy storage systems including batteries and supercapacitors. Electric Vehicle Mechanics and Drivetrain.

(Lecture-problems 3 hours) Letter grade only (A-F).

452. Computer Applications in Power Systems (3)

Prerequisite: EE 350 with a grade of "C" or better or consent of instructor or graduate standing.

Modeling of power generation, transmission, and distribution systems, load-flow analyses, short-circuit studies, voltage drop and power loss calculations, transient stability and optimal power flow analyses. Application of specialized computer software for power system design and analyses.

(Lecture-problems 3 hours) Letter grade only (A-F).

453./553. Protection of Power Systems (3)

Prerequisites: EE 310, 350 all with a grade of "C" or better.

Protective relays, instrument transformers, low-voltage and high-voltage circuit breakers, protection of generators and motors, transformer protection and transmission line protection. Relay coordination and commercial power systems. Application of

computer programs for protective device coordination. Additional projects required for EE 553.

(Lecture-problems 3 hours) Letter grade only (A-F).

455./555. Space Electric Power Systems (3)

Prerequisites: EE 330 and 350 all with a grade of "C" or better.

A comprehensive treatment of characteristics of and requirements from spacecraft power systems, power sources, power conversion and control. Energy storage, electrical equipment, power converters and loads, power management. Future space missions and technological needs. Additional projects required for EE 555.

(Lecture-problems 3 hours) Letter grade only (A-F).

458. Design of Power System Components (3)

Prerequisites: EE 330 and (either EE 450 or EE 452 or EE 453) all with a grade of "C" or better; or graduate standing.

Prerequisite/Corequisite: EE 400D or graduate standing.

Design of electrical, electronic and electromechanical components required for power conversion, control, transmission, distribution, protection and measurements in terrestrial and space electric power systems.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

462. Electromagnetics and Applications to Wireless Systems (3)

Prerequisite: EE 310 with a grade of "C" or better or graduate standing.

Electromagnetic field theory including transmission lines, vector fields, electrostatics and magnetostatics.

Maxwell's equations and plane wave propagation. Waveguides and microstrip-RF circuit principles and devices. Radiation and antenna design. Wireless communication systems including satellite and cell-phone technologies.

Letter grade only (A-F). Not open for credit to students with credit in EE 460 or 464. (Lecture-problems 2 hours, laboratory 3 hours)

464. Electromagnetics and Applications to Electro-Optics (3)

Prerequisite: EE 310 with a grade of "C" or better or graduate standing.

Electromagnetic field theory including transmission lines, vector fields, electrostatics and magnetostatics. Maxwell's equations and plane wave propagation. Electromagnetic formulation of geometric and Fourier optics. Semiconductor and gas laser applications to fiber-optic communication systems and electro-optic devices.

Not open for credit to students who have credit in EE 460 or 462. (Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

470. Digital Control (3)

Prerequisites: EE 370, EE 370L, and (EE 386 or EE 411) all with a grade of "C" or better, or graduate standing.

Analysis and synthesis of digital control systems. General application of both the Z-transform and the state-space approach for discrete system design.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

471. Design of Control Systems (3)

Prerequisite: EE 370 with a grade of "C" or better or graduate standing.

Prerequisite/Corequisite: EE 400D.

Design of compensators using root-locus and Bode-plot methods. Design of state-space control systems and observers. Computer-aided design.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

474./574. Robot Modeling and Control (3)

Prerequisite: EE 370 with a grade of "C" or better.
Recommended: EE 411 or 511

Basic methodology for analysis and design of robotic manipulators. Classification of robots. Homogeneous transformations, kinematics, dynamics, trajectory planning and control of robots. Application of robots in flexible manufacturing. Advanced projects required for EE 574. EE 411 or 511 is recommended as a pre/corequisite.

(Lecture-problems 3 hours) Letter grade only (A-F).

476./576. Neural Networks and Fuzzy Logic (3)

Prerequisite: EE 386 with a grade of "C" or better or consent of instructor.

Principles and application of artificial neural networks and fuzzy logic. Mechanisms of supervised and unsupervised neural networks. Fuzzy control systems. Applications in signal processing, communications, control, and other areas.

Additional projects required for EE 576. Not open for credit to students with credit in EE 589/689. (Lecture-problems 3 hours) Letter grade only (A-F).

481./581. Satellite Communication Systems (3)

Prerequisite: EE 482 with a grade of "C" or better.

Basic orbital mechanics, link analysis, multiple access architectures and protocols, FDMA, TDMA, and CDMA systems. Synchronization techniques, modulation and coding techniques. Security and spread spectrum requirements. System design.

Additional projects required for EE 581. (Lecture-problems 3 hours) Letter grade only (A-F).

482. Communication Systems II (3)

Prerequisite: EE 382 with a grade of "C" or better or graduate standing.

Information sources and communication systems. Orthogonal series representation of signals, pulse and digital modulation techniques, band-pass digital communication systems, special topics in communications.

(Lecture-problems 3 hours) Letter grade only (A-F).

483. Digital Image Processing (3)

Prerequisite: EE 386 with a grade of "C" or better or graduate standing.

Image formation. Image detectors and their characteristics. Perception, image models. Sampling and quantization. Pixel relationships. Statistical characterization of discrete images - probability density models. Image fidelity criteria and image intelligibility. Image transforms. Image enhancement techniques.

(Lecture-problems 3 hours) Letter grade only (A-F).

486. Digital Signal Processing for Multimedia Communications (3)

Prerequisite: EE 386 with a grade of "C" or better or graduate standing.

Discrete-time signals and systems, discrete Fourier transform, fast Fourier transform, spectral estimation, interpolation and decimation, filter design and structures and applications to multimedia communications. Laboratory projects for image processing, FFT receiver, signal detection, digital phase-locked loop.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

488. Communication System Design (3)

Prerequisite/Corequisite: (EE 400D, EE 430, and EE 482), or graduate standing.

Design of Communication systems/subsystems and their implementation in software and hardware. Design of Capstone Senior Project in the area of Communication systems.

(Lecture-problems 2 hours, laboratory 3 hours). Letter grade only (A-F).

489. Digital Signal Processing Design (3) S

Prerequisites/Corequisites: (EE 400D and 486) or graduate standing.

Design, implementation, and real-time testing of projects such as FIR filters, IIR filters, tone generator, 32-bit addition and multiplication, FFT spectrum analyzer. All projects are simulated in fixed-point arithmetic with MATLAB or C and TMS320C54x assembly code in bit-exact.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

490. Special Problems (1-3)

Prerequisites: Minimum G.P.A. of 2.5 and consent of instructor. Assigned topics in technical literature or laboratory projects and reports.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

492. Instrumentation and Data Acquisition for Engineering Applications (3)

Prerequisites: (EE 370 and EE 370L) all with a grade of "C" or better, or consent of instructor or graduate standing.

Concepts of instrumentation, data acquisition and computer-based control of industrial systems. Topics include signal conditioning, software and hardware for data acquisition and computer-based control, graphical programming and virtual instrumentation.

(Lecture-problems 2, laboratory 3 hours) Letter grade only (A-F).

GRADUATE LEVEL

502./402. Engineering Modeling and Simulation (3)

Prerequisite: EE 380 with a grade of "C" or better.

Fundamental techniques of modeling and simulation of complex engineering systems. Next generation simulation tools (DES), Output analysis of systems. Alternative system configurations. Variance reduction techniques. Project proposal developments.

Additional projects required for EE 502. (Lecture-problems 3 hours). Letter grade only (A-F).

503. Advanced Systems Engineering (3)

Prerequisite: EE 411 with a grade of "C" or better or equivalent mathematical maturity.

Modeling and analysis, and design of deterministic and stochastic systems. The building blocks of engineering optimization models ranging from network models with special structured, to unstructured linear and nonlinear optimization.

Letter grade only (A-F). (Lecture-problems 3 hours)

504. Introduction to Entrepreneurship for Engineers (3)

Prerequisite: Graduate standing in engineering or computer science.

Core business concepts and issues, essence of leadership. Understanding of finance, marketing, sales, and management issues from practical entrepreneurial perspective through classroom discussion, guest speakers' seminars, case study, and creation of business plan based on student's specific area of interest.

(Lecture-problems 3 hours) Letter grade only (A-F).

505. Advanced Engineering Mathematics for Electrical Engineers (3)

Prerequisite: Consent of instructor.

Boundary-value problems and generalized Fourier (or eigenfunction) expansions. Review of Fourier series. Fourier transforms (FT, FFT and STFT), wavelet transform and its computer implementation. Z-transform. Hilbert transform. Solutions of partial differential equations using methods of separation of variables, etc.

(Lecture-problems 3 hours) Letter grade only (A-F).

506./606. Theory and Practice of Biomedical Instrumentation (3)

Prerequisites: Graduate standing in engineering or natural sciences and either EE 406 with a grade of "C" or better or consent of instructor.

Advanced design concepts and practical utilization of biomedical instrumentation. Transduction of physiological parameters. Theory and practice.

Master's students register in EE 506; Ph.D. students register in EE 606. Additional projects required for EE 606. (Lecture-problems 3 hours) Letter grade only (A-F).

507./607. Advanced Biomedical Systems (3)

Prerequisites: Graduate standing in engineering or natural sciences and either EE 406 with a grade of "C" or better or consent of instructor.

Novel trends in biotechnology, design and organization of modern hospital systems, and utilization of advanced technologies. Modeling and simulation of physiological and medical systems.

Master's students register in EE 507; Ph.D. students register in EE 607. Additional projects required for EE 607. (Lecture-problems 3 hours) Letter grade only (A-F).

508. Probability Theory and Random Processes (3)

Prerequisite: EE 380 with a grade of "C" or better.

Probability spaces, random vectors and processes, convergence concepts, stationarity and ergodic properties, second-order moments and linear systems, correlation and spectral representations. Some applications of random processes.

(Lecture-problems 3 hours) Letter grade only (A-F).

509. Network Theory (3)

Prerequisite: EE 386 or 410 or 430 all with a grade of "C" or better.

Network classifications and study of non-linear circuits. Analysis of linear networks using topological and state-space techniques. Characterization of networks using scattering and other parameters. Tellegen's theorem and its application.

(Lecture-problems 3 hours) Letter grade only (A-F).

510. Circuit Synthesis (3)

Corequisite: EE 509.

Synthesis of passive lumped networks, cascade synthesis (link with filter synthesis), realization of commensurate distributed networks, discrete passive networks.

(Lecture-problems 3 hours) Letter grade only (A-F).

511. Linear Systems Analysis (3)

Prerequisite: EE 411 or 470 all with a grade of "C" or better or equivalent mathematical maturity.

Review of linear algebra and z-transforms. Continuous and discrete-time systems. Sampled data systems. State-space linear system analysis. Stability, reachability, and observability. Minimal realization. State feedback and pole assignment. Asymptotic observers. Examples of applications. Project on a related subject.

(Lecture-problems 3 hours) Letter grade only (A-F).

514. Advanced Circuit Synthesis and Design (3)

Prerequisite: EE 510 with a grade of "C" or better.

Scattering synthesis in (s-z) domains, wave digital filters. Lossless bounded-real two-port and orthogonal digital filters with an emphasis on structures suitable for VLSI implementation.

(Lecture-problems 3 hours) Letter grade only (A-F).

526. High Speed Communication Circuits (3)

Prerequisite: EE430 with a grade of "C" or better or consent of instructor

Design of integrated circuits for high speed data communication. Serial communication standards. Transceiver architecture. High speed and broadband circuit design techniques. Serializer, deserializer, clock recovery circuits. Channel equalization. Jitter and channel interference issues.

(Lecture-problems 3 hours) Letter grade only (A-F).

527./427. Digital Filter Design and Audio Processing (3)

Prerequisite: EE 386 with a grade of "C" or better or consent of instructor.

Digital filter design methods, filter architectures, round-off noise, implementation and applications to audio signal processing. Additional projects required for EE 527.

Not open for credit to students with credit in EE 513. (Lecture-problems 3 hours) Letter grade only (A-F).

528./428. Speech Signal Processing (3)

Prerequisite/Corequisite: EE 486 or consent of instructor.

Principles and engineering applications of speech signal processing. Speech synthesis, recognition, encoding, and compression. Applications of neural networks.

Additional projects required for EE 528. (Lecture-problems 3 hours) Letter grade only (A-F).

531. CMOS Electronics (3)

Prerequisite: EE 430 with a grade of "C" or better.

Electronic design automation CAD tools, silicon compilers, CMOS design, BiCMOS design (technologies, modeling, device characterization and simulation), CMOS and BiCMOS subcircuits, amplifiers, op-amps and systems.

(Lecture-problems 3 hours) Letter grade only (A-F).

532./632. Analog Signal Processing (3)

Prerequisite: EE 430 with a grade of "C" or better or consent of instructor.

Basic CMOS circuit techniques. Low-voltage and current-mode signal processing. Switched-capacitor (SC) and switched-current (SI) circuits such as amplifiers, integrators, S/H circuits, filters, oscillators, D/A and A/D converters, etc. Advanced techniques for corrections of nonideal behavior. Analysis and simulation projects.

Master's students register in EE 532; Ph.D. students register in EE 632. Additional projects required for EE 632. Letter grade only (A-F). (Lecture-problems 3 hours)

533./633. Quantum and Optical Electronics (3)

Prerequisite: EE 360 or 462 or 464 all with a grade of "C" or better or consent of instructor.

Modern quantum and optical concepts of relevance in lasers, fiber optics, optical technology and semiconductor solid state electronics. Basic theory and applications to state-of-the-art electronics engineering.

Master's students register in EE 533; Ph.D. students register in EE 633. Additional projects required for Ph.D. students. (Lecture-problems 3 hours) Letter grade only (A-F).

534./434. Mixed-Signal IC Design (3)

Prerequisites: (EE 201 and 330) all with a grade of "C" or better or consent of instructor.

CMOS fabrication. Component layout. MOSFET modeling. Mixed-signal devices such as D/A and A/D converters and phase-locked loops. Substrate Noise coupling. System-on-chip considerations. Design using CAD tools.

Additional projects required for EE 534. (Lecture-problems 2 hours, Laboratory 3 hours) Letter grade only (A-F).

535. VLSI Design (3)

Prerequisite: EE 430 with a grade of "C" or better.

Techniques for designing Very Large Scale Integrated (VLSI) circuits using n-channel metal oxide semiconductors (n-MOS).

Not open for credit to students with credit in EE 520. (Lecture-problems 3 hours) Letter grade only (A-F).

535A./435. Microelectronics (3)

Prerequisites: (EE 201 and 330) all with a grade of "C" or better or consent of instructor.

Theory of microelectronics integrated circuit design, IC fabrication technology, device characterization, modelling, digital and analog simulation tools, physical layout tools, digital standard cell library design, IC digital system designs, I/O pad design, full chip simulation and physical designs.

Letter grade only (A-F). Additional projects required for EE 535A. (Lecture-problems 3 hours)

536./436. Microfabrication and Nanotechnology (3)

Prerequisites: EE 330; EE 320 or PHYS 254; or MAE 300 all with a grade of "C" or better.

Techniques and technology of miniaturization of electrical, mechanical, optical, and opto-electronic devices in sizes from millimeters to nanometers are presented. Design examples of sensors, microlenses, cantilevers, and micromotors are covered and process fabrication using latest technology demonstrated.

Additional projects required for EE 536. (Lecture-problems 3 hours) Letter grade only (A-F).

540. Advanced Digital System and Computer Architecture (3)

Prerequisite: EE 446 with a grade of "C" or better or equivalent. Strongly recommended: EE 546.

High level computer architectures including studies of network processors, security processing, embedded computers; system design and implementation approaches including ASIC's, SOC's, and networks on chip concepts. Simulation and design tools. Project required.

(Lecture-problems 3 hours) Letter grade only (A-F).

545. Computer Communication Networks (3)

Prerequisite: Consent of instructor.

Design and analysis of computer communications networks including their topologies, architectures, protocols, and standards. LAN, WAN environments and access methods. Ethernet, ATM, bridges, routers, gateways and intelligent hubs. TCP/IP and other Networking protocols. Load balancing, traffic monitoring, use of simulation tools.

(Lecture-problems-computer projects 3 hours) Letter grade only (A-F).

546. Advanced Microprocessors and Embedded Controllers II (3)

Prerequisite: EE 446 with a grade of "C" or better or consent of the instructor.

Advanced concepts for embedded controllers, mobile processors, network processors, embedded Internet, and embedded Internet devices. Parallelism, multithreading, pipelining, coherence protocols, interconnection networks, clustering. Simulation and analysis tools. Project required.

(Lecture-problems 3 hours) Letter grade only (A-F).

548./448. Wireless and Mobile Networks and Security in Wireless Networks (3)

Prerequisites: EE 482 with a grade of "C" or better or equivalent.

Wireless and Mobile Ad-hoc Networks and Security. Ad-hoc and geographic routing, resource discovery, MAC, IP-mobility, mobility modelling, wired-wireless networks, security aspects. Lab Projects will include use of tools such as OPNET, Ethereal, Sniffer, Scanner, IDS, etc.

Advanced project required for EE 548. (Lecture-problems 3 hours) Letter grade only (A-F).

550. Power Electronics and Applications (3)

Prerequisites: EE 350 and 430 all with a grade of "C" or better.

Power converters: rectifiers, inverters, choppers and cycloconverters. PWM and PFM techniques. Harmonics and filters. Magnetics. Applications in motor controls in industrial systems, energy conversion, HVDC transmission, aircraft and spacecraft power systems.

(Lecture-problems 3 hours) Letter grade only (A-F).

551. Theory and Applications of DC/DC Converters (3)

Prerequisite: EE 550 with a grade of "C" or better or consent of instructor.

Modeling, analysis, design and application of DC/DC switch-mode converters.

(Lec-prob 3 hrs) Letter grade only (A-F).

552. Electric Drives and Applications (3)

Prerequisites: EE 370 and 452 all with a grade of "C" or better or consent of instructor.

Characteristics and applications of small electric machines including stepper motors, brushless DC motors, permanent-magnet synchronous motors and switched-reluctance motors. Motor performance, control and drive-circuit configurations.

(Lecture-problems 3 hours) Letter grade only (A-F).

553./453. Protection of Power Systems (3)

Prerequisites: EE 310 and 350 all with a grade of "C" or better.

Protective relays, instrument transformers, low-voltage and high-voltage circuit breakers, protection of generators and motors, transformer protection and transmission line protection. Relay coordination and commercial power systems. Application of computer programs for protective device coordination. Additional projects required for EE 553.

(Lecture-problems 3 hours) Letter grade only (A-F).

555./455. Space Electric Power Systems (3)

Prerequisites: EE 330 and 350 all with a grade of "C" or better.

A comprehensive treatment of characteristics of and requirements from spacecraft power systems, power sources, power conversion and control. Energy storage, electrical equipment, power converters and loads, power management. Future space missions and technological needs.

Additional projects required for EE 555. (Lecture-problems 3 hours) Letter grade only (A-F).

566. RF and Microwave Electronics (3)

Prerequisite: EE 360 or 462 or 464 all with a grade of "C" or better or consent of instructor.

Transmission Lines, Waveguides, Matching Networks, MW Amplifier Design, MW Resonators Design, MW Oscillator Design, MW Mixer, Noise Analysis in Microwave Electronics and Network Analysis Methods.

(Lecture-problems 2 hours, Laboratory 3 hours). Letter grade only (A-F).

574./474. Robot Modeling and Control (3)

Prerequisite: EE 370 with a grade of "C" or better.

Recommended: EE 411 or 511.

Basic methodology for analysis and design of robotic manipulators. Classification of robots. Homogeneous transformations, kinematics, dynamics, trajectory planning and control of robots. Application of robots in flexible manufacturing. Advanced projects required for EE 574. EE 411 or 511 is recommended as a pre/corequisite.

(Lecture-problems 3 hours) Letter grade only (A-F).

575./675. Non-Linear Control Systems (3)

Prerequisite: EE 511 with a grade of "C" or better or consent of instructor.

Methodologies and results dealing with stability and robust stabilization of non-linear systems applied to robotics, aerospace, artificial neural networks, etc. Phase plane analysis, limit cycles, Lyapunov stability theory and its extension, Positive real transfer matrix and passivity, feedback linearization and stabilization, tracking, robust control.

Ph.D. students register in EE 675. Advanced projects for EE 675 students. (Lecture-problems 3 hours) Not open for credit to students with credit in EE 775. Letter grade only (A-F).

576./476. Neural Networks and Fuzzy Logic (3)

Prerequisite: EE 386 with a grade of "C" or better or consent of instructor

Principles and application of artificial neural networks and fuzzy logic. Mechanisms of supervised and unsupervised neural networks. Fuzzy control systems. Applications in signal processing, communications, control, and other areas.

Additional projects required for EE 576. Not open for credit to students with credit in EE 589/689. (Lecture-problems 3 hours) Letter grade only (A-F).

580. Statistical Communication Theory (3)

Prerequisites: (EE 482, 505 and 508) all with a grade of "C" or better or consent of instructor.

Power spectral density of analog and digital communication signals. Matched filters. Signal-to-noise-ratio performance analysis for analog and pulse modulation systems. Vector space representation of digital signals. Error rate analysis for various signaling formats. Optimum digital receivers. Fading channels. (Lecture-problems 3 hours) Letter grade only (A-F).

581./481. Satellite Communication Systems (3)

Prerequisite: EE 482 with a grade of "C" or better.

Basic orbital mechanics, link analysis, multiple access architectures and protocols, FDMA, TDMA, and CDMA systems. Synchronization techniques, modulation and coding techniques. Security and spread spectrum requirements. System design.

Additional projects required for EE 581. (Lecture-problems 3 hours) Letter grade only (A-F).

582. Spread Spectrum Communication Systems (3)

Prerequisite: EE 580 with a grade of "C" or better or consent of instructor.

Spread spectrum (SS) techniques. Direct sequence systems, frequency hopped systems. Generation and properties of pseudo random sequences. Electronic jamming and interference. Processing gain, carrier synchronization, code acquisition and tracking, information modulation and coding. Applications include ranging, CDMA etc.

(Lecture-problems 3 hours) Letter grade only (A-F).

583./683. Digital Image Processing (3)

Prerequisite: EE 505 with a grade of "C" or better or consent of instructor.

Acquiring Images. Correcting Imaging defects. Image enhancement. Segmentation and thresholding. Processing Binary images. Tomography. Three dimensional Imaging. Some image data compression techniques.

Masters students register in EE 583; Ph.D. students register in EE 683. Additional projects required for EE 683. (Lecture-problems 3 hours) Letter grade only (A-F).

584. Information Theory and Coding (3)

Prerequisites: EE 482 and 508 all with a grade of "C" or better.

Information measures, source coding, Shannon's first theorem, mutual information and channel capacity, Shannon's second theorem, coding techniques for reliable information transmission over noisy channels.

(Lecture-problems 3 hours) Letter grade only (A-F).

585./685. Advanced Digital Signal Processing (3)

Prerequisite: EE 486 with a grade of "C" or better or consent of the instructor.

Advanced topics in digital signal processing and applications to communication and power line systems, including adaptive filters, FFT-based OFDM transceivers. IEEE standards for green energy communication and optimization.

Masters students register in EE 585; Ph.D. students register in EE685. Additional projects for EE 685. (Lecture-problems 3 hours). Letter grade only (A-F).

586. Real-Time Digital Signal Processing (3)

Prerequisite: EE 486 or CECS 440 all with a grade of "C" or better or consent of instructor.

Digital signal processors architecture and language. Real-time DSP considerations and limitations. Digital filter and signal processing system implementations.

(Lecture-problems 3 hours) Letter grade only (A-F).

590. Selected Topics in Electrical Engineering (3)

Prerequisites: Graduate standing in electrical engineering and consent of instructor.

Selected topics from recent advances in electrical engineering. Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*. (Lecture-problems 3 hours)

591. Adaptive Systems (3)

Prerequisite: EE 508 with a grade of "C" or better.

Adaptive systems and their applications to communication, control, and signal processing systems.

(Lecture-problems 3 hours) Letter grade only (A-F).

600. Graduate Seminar and Presentation (1)

Prerequisites: Graduate standing and advancement to candidacy.

Lectures by faculty and guests on advanced topics. A report and presentation are required.

(Seminar 1 hour) Letter grade only (A-F).

606./506. Theory and Practice of Biomedical Instrumentation (3)

Prerequisites: Graduate standing in engineering or natural sciences; and either EE 406 with a grade of "C" or better or consent of instructor.

Advanced design concepts and practical utilization of biomedical instrumentation. Transduction of physiological parameters. Theory and practice.

Master's students register in EE 506; Ph.D. students register in EE 606. Additional projects required for EE 606. (Lecture-problems 3 hours) Letter grade only (A-F).

607./507. Advanced Biomedical Systems (3)

Prerequisites: Graduate standing in engineering or natural sciences; and either EE 406 with a grade of "C" or better or consent of instructor.

Novel trends in biotechnology, design and organization of modern hospital systems and utilization of advanced technologies. Modeling an simulation of physiological and medical systems.

Master's students register in EE 507; Ph.D. students register in EE 607. Additional projects required for EE 607. (Lecture-problems 3 hours) Letter grade only (A-F).

632./532. Analog Signal Processing (3)

Prerequisite: EE 430 with a grade of "C" or better or consent of instructor.

Basic CMOS circuit techniques. Low-voltage and current-mode signal processing. Switched-capacitor (SC) and switched-current (SI) circuits such as amplifiers, integrators, S/H circuits, filters, oscillators, D/A and A/D converters, etc. Advanced techniques for corrections of nonideal behavior. Analysis and simulation projects.

Master's students register in EE 532; Ph.D. students register in EE 632. Additional projects required for EE 632. Letter grade only (A-F). (Lecture-problems 3 hours).

633./533. Quantum and Optical Electronics (3)

Prerequisite: EE 360 or 462 or 464 all with a grade of "C" or better or consent of instructor.

Modern quantum and optical concepts of relevance in lasers, fiber optics, optical technology and semiconductor solid state electronics. Basic theory and applications to state-of-the-art electronics engineering.

Master's students register in EE 533; Ph.D. students register in EE 633. Additional projects required for Ph.D. students. (Lecture-problems 3 hours) Letter grade only (A-F).

675./575. Non-Linear Control Systems (3)

Prerequisite: EE 511 with a grade of "C" or better or consent of instructor.

Methodologies and results dealing with stability and robust stabilization of non-linear systems applied to robotics, aerospace, artificial neural networks, etc. Phase plane analysis, limit cycles, Lyapunov stability theory and its extension, Positive real transfer matrix and passivity, feedback linearization and stabilization, tracking, robust control.

Ph.D. students register in EE 675. Advanced projects for EE 675 students. (Lecture-problems 3 hours) Not open for credit to students with credit in EE 775. Letter grade only (A-F).

683./583. Digital Image Processing (3)

Prerequisite: EE 505 with a grade of "C" or better or consent of instructor.

Acquiring Images. Correcting Imaging defects. Image enhancement. Segmentation and thresholding. Processing Binary images. Tomography. Three dimensional Imaging. Some image data compression techniques.

Masters students register in EE 583; Ph.D. students register in EE 683. Additional projects required for EE 683. (Lecture-problems 3 hours) Letter grade only (A-F).

685./585. Advanced Digital Signal Processing (3)

Prerequisite: EE 486 with a grade of "C" or better or consent of the instructor.

Advanced topics in digital signal processing and applications to communication and power line systems, including adaptive filters, FFT-based OFDM transceivers. IEEE standards for green energy communication and optimization.

Masters students register in EE 585; Ph.D. students register in EE 685. Additional projects for EE 685. (Lecture-problems 3 hours) Letter grade only (A-F).

697. Directed Research (3)

Prerequisite: Graduate Standing. Advancement to Candidacy is strongly recommended.

Theoretical and experimental problems in electrical engineering requiring intensive analysis culminating in a substantial report.

Letter grade only (A-F).

698. Thesis or Industrial Project (3-6)

Prerequisite: Advancement to Candidacy.

Planning, preparation and completion of a thesis (total 6 units), or industrial project (3 units), in electrical engineering.

Letter grade only (A-F).

EMERGENCY MANAGEMENT

College of Health and Human Services

Department of Criminal Justice

Program Director: James E. Koval

Department Chair: Henry F. Fradella

Department Office: Engineering Technology (ET) 232

Telephone: (562) 985-4738

Faculty: Veronica Acosta-Deprez (Health Science), Guy Bachman (Communication Studies), San Bolkan (Communication Studies), Shirley Feldmann-Jensen, Sarath Gunatilake (Health Science), Connie Ireland (Criminal Justice), Peter Kreysa (Family and Consumer Sciences), James E. Koval (Family and Consumer Sciences), Chris Lee (Geography), Aili Malm (Criminal Justice), Tracey Mayfield (Library), Harvey Morley (Criminal Justice), Emelinda Parentela (Civil Engineering), Dave Powell (Public Policy and Administration), Christine Rodrigue (Geography), Joanne M. Tortorici Luna (Advanced Studies in Education and Counseling)

Advisor: Peter G. Kreysa

Distance Learning Administrator: James E. Koval

Administrative Assistant: Durrell Dew

Career Possibilities

Public Safety Administration • Emergency Manager • Emergency Operation Specialist • Homeland Security Administrator • Local Preparedness Coordinator • Training/Citizen Corp Specialist • Emergency Planners • Area School Safety Coordinator • Outreach Specialist • Public Health Emergency Response Manager • Emergency Management Analyst • Emergency Logistics Manager • Environmental Emergency Officer • Community Disaster Recovery Manager • Emergency Services Specialist • Risk Specialist • Public Assistance Officer • Disaster Operations Coordinator • Recovery and Mitigation Specialist • Municipal Readiness Coordinator • Safety Coordinator • Emergency Program Manager. (Some of these, and other careers, require additional education or experience. For more information, visit www.careers.csulb.edu.)

Master of Science in Emergency Services Administration

This program is interdisciplinary, developed by faculty experts from departments across campus.

The EMER curriculum and all advising and student research presentations are designed exclusively for online delivery utilizing the most up-to-date instructional technologies available. The program provides students with the conceptual foundation, communication, managerial, and analytical skills required for designing, testing, and implementing an effective response to workplace and community emergencies. The program has two major purposes: 1) to provide an understanding of the administration and management of emergency services with an emphasis on the roles and job expectations of public safety professionals and emergency managers, and 2) to prepare students for leadership roles in emergency and disaster administration by stressing independent research, communication, and writing skills, exposure to experts, and practical experiences of respected emergency services and disaster organizations.

Admission Criteria

1. Obtain admission to the graduate program by completing and forwarding the official CSULB graduate admissions forms and fees to the University's Office of Enrollment Services. Each applicant for graduate standing shall have completed an appropriate baccalaureate degree from an accredited university.
2. A resume and a letter of intent that includes a summary of the applicant's reasons for seeking a master's degree in Emergency Services Administration. Both documents must be sent directly to the Department's Graduate Advisor.
3. Three letters of recommendation from persons able to testify to the applicant's academic ability, preferably from former professors or immediate supervisors. These letters must be sent directly to the Department's Graduate Advisor.
4. Have at least a 3.0 grade-point average in the last 60 semester units attempted. A student whose overall grade point average is less than 3.0, but who presents acceptable evidence of professional potential either through recent academic performance and/or experiential background may be admitted by special action of the Department's Graduate Committee.
5. Be accepted by the department and graduate advisor for admission to the program.

Advancement to Candidacy

1. Satisfaction of the general University requirements for advancement to candidacy, including successful completion of the Graduation Writing Assessment Requirement (GWAR);
2. Completion of all core courses;
3. Maintenance of "B" average (3.0 GPA) in all work completed in graduate program;
4. Approval of Emergency Management Graduate Faculty and Director of Graduate Studies and Research, College of Health and Human Services.

Requirements

Satisfactory completion of 37 units of approved graduate courses to include:

1. Take all of the following courses (27 units):
 - EMER 500 Information Literacy for Emergency Services Administration (1)
Corequisites: EMER 504.
 - EMER 502 Practical Writing Applications for Emergency Services Administration (2)
Prerequisites: None.
 - EMER 504 E-learning Applications for Emergency Services Administration (1)
Prerequisites: None.
 - EMER 506 Emergency Planning and Management (3)
Prerequisites: None.
 - EMER 530 Analytical Techniques for Decision Support and Innovation (2)
Prerequisites: None.

EMER 540 Emergency Management Organizations: Constructs for Influencing Complex Systems (3)
Prerequisites: None.

EMER 545 Disaster Mental Health Issues in Emergency Management (3)
Prerequisites: None.

EMER 548 Risk, Crisis, and Inter-Agency Communications (3)
Prerequisites: None.

EMER 661 Emergency Management Leadership Across the Megacommunity (3)
Prerequisites: None.

EMER 671 Strategic Planning and Integrative Practices in Emergency Services Administration (3)
Prerequisites: EMER 661.

CRJU 520 Advanced Criminal Justice Research Methods (3)
Prerequisites: CRJU 320 and 325 or comparable undergraduate research methods and statistics courses approved by the Graduate Advisor. Restricted to Criminal Justice masters students; all other students must have consent from Graduate Advisor.

2. Take all of the following courses as noted:

Project Students take both the following courses:

EMER 694A Project: Strategic Planning and Integrative Practices in Emergency Services Administration (3)
Prerequisites: Successful completion of all core requirements or approval of graduate advisor.

EMER 694B Project: Strategic Planning and Integrative Practices in Emergency Services Administration (1)
Prerequisites: EMER 694A or approval of graduate advisor.

Thesis Students take the following course:

EMER 698 Thesis (1-4)
Prerequisites: Advancement to Candidacy.

3. Two additional elective courses selected in consultation with a faculty advisor (6 units).

Courses (EMER)

UPPER DIVISION

405./505. Campus and Community Volunteer Emergency Response (3)

Community outreach and education in all-hazard volunteer emergency response; disaster mental health and acute stress management in natural and human-induced disasters. Certification as members of Community Emergency Response Team (CERT) and CSULB's Volunteer Crisis Resource Team (VCRT).

Letter grade only (A-F).

500. Information Literacy for Emergency Services Administration (1)

Corequisite: EMER 504.

Research processes and methods for retrieving information on topics in emergency services administration in the modern library environment.

Letter grade only (A-F).

501. Principles of Emergency Services Administration (3)

Survey of the field of Emergency Services Administration with emphasis on local government systems, including context and organization, functions and phases of emergency response, and historical perspectives.

Letter grade only (A-F).

502. Practical Writing Applications for Emergency Services Administration (2)

Preparation of written documents required in Emergency Services Administration.

Letter grade only (A-F).

504. E-learning Applications for Emergency Services Administration (1)

Introduction to on-campus and free-source e-learning technologies required to competently interface with all EMER program content, student and faculty communications, and course projects and evaluations. Initiate construction of student webpages and e-portfolios. Must be taken first semester of the program and concurrently with EMER 500.

Letter grade only (A-F).

505./405. Campus and Community Volunteer Emergency Response (3)

Community outreach and education in all-hazard volunteer emergency response; disaster mental health and acute stress management in natural and human-induced disasters. Certification as members of the Community Emergency Response Team (CERT) and CSULB's Volunteer Crisis Resource Team (VCRT).

Letter grade only (A-F).

506. Emergency Planning and Management (3)

The planning and management processes and the issues involved in large-scale emergencies. The nature of natural and technological risk and emergency will be explored via case studies. Public sector roles in contingency planning and response will be assessed.

Letter grade only (A-F). Same course as PPA 542. Not open for credit to students with credit in PPA 542 or EMER 542.

530. Analytical Techniques for Decision Support and Innovation (2)

Integration of theoretical and applied analytical techniques to support emergency management decision making and improve delivery of emergency services. Problems in planning, decision making and innovation are examined using quantitative and qualitative analysis. Use of computer software packages.

Letter grade only (A-F).

540. Emergency Management Organizations: Constructs for Influencing Complex Systems (3)

Historical events, policies, and complex organizational settings that shape emergency management organizations. Critical reviews of modern and post-modern organizational theories associated with complex systems. Strategic improvements in emergency management organizations.

Letter grade only (A-F).

543. Legal, Economic, and Human Issues in Emergency Administration (3)

Legal, strategic, political, economic, ethical, and human issues encountered in the management of disasters or major traumatic public events.

Letter grade only (A-F). (Discussion 3 hours.)

544. Law and Legal Issues in Emergency Management (3)

Prerequisite: Graduate standing.

Overview of federal, state, and local legislation related to emergency management in various types of disasters. Guaranteed rights under the US Constitution and the legal and ethical application of measures within the parameters of these rights in emergency situations.

Letter grade only (A-F).

545. Disaster Mental Health Issues in Emergency Management (3)

Theories and practical applications of emergency mental health and self-care for those responding to, or managing response to, widespread natural and human-induced disasters.

Letter grade only (A-F).

547. Business Continuity & Emergency Management (3)

Development and maintenance of comprehensive emergency management programs for business and industry. Plan development and implementation, vulnerability analysis, hazard identification, life safety, property protection, communications and community outreach.

Letter grade only (A-F).

548. Risk, Crisis, and Inter-Agency Communications (3)

Theory and practical applications of emergency communications for those responding to or managing response to widespread natural and human-induced disasters.

Letter grade only (A-F).

601. Technology Use in Emergency Management (3)

Prerequisite: EMER 506 or consent of instructor.

Role of technology in effective emergency management. Exploration of Internet, disaster simulation software, and geographic tools such as GIS, GPS, and direct and remote sensing devices through case study analyses and in-class simulations.

Letter grade only (A-F).

605. Public Health Issues in Emergency Management (3)

Prerequisite: EMER 506 or consent of instructor.

Roles and responsibilities of the public health system in emergency management. Structure of public health systems, management tools, public health intervention strategies, communication, collaboration, and ethical considerations. Role of public health regarding assessments following disasters and maintaining public health standards.

Letter grade only (A-F).

631. International Emergency Administration Systems: Comparative Analysis (3)

Prerequisite: GEOG 558

Comparative analysis of international emergency management systems and structures. Implications of emerging threats and disasters in an increasingly interdependent world.

Letter grade only (A-F).

650. Graduate Seminar (3)

Students will undertake literature reviews and/or research to explore emerging issues, trends and research in the field of emergency services administration.

Letter grade only (A-F).

661. Emergency Management Leadership Across the Megacommunity (3)

Competencies of professional emergency management defined through the megacommunity. Models of strategic leadership in all phases of disaster management, with often competing professional organizations and networks, across culturally and economically diverse constituencies, and for natural or human-made disasters.

Letter grade only (A-F).

671. Strategic Planning and Integrative Practices in Emergency Services Administration (3)

Prerequisites: EMER 661.

Capstone course focusing on all phases of disaster management of selected disaster case studies, a natural disaster and human-made event, using existing research literature, Internet-based simulation software, and post-incident evaluation techniques.

Letter grade only (A-F).

690. Selected Topics in Emergency Management (1-6)

Group investigation of selected topics.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

694A. Project: Strategic Planning and Integrative Practices in Emergency Services Administration (3)

Prerequisite: Successful completion of all core requirements or approval of graduate advisor.

Capstone course synthesizing research on all phases of disaster management and research methodologies leading to the development and implementation of a collaborative group project designed to provide practical solutions to an existing problem within the emergency services megacommunity.

Letter grade only (A-F).

694B. Project: Strategic Planning and Integrative Practices in Emergency Services Administration (1)

Prerequisite: EMER 694A or approval of graduate advisor.

Presentation to EMER faculty of EMER 694A Capstone Group Project delivered through digital media. Evaluation of individual student electronic portfolios.

Letter grade only (A-F).

695. Independent Study (1-6)

For students who wish to focus their studies on a specific area of emergency services administration which coincides with a faculty member's research or practical expertise.

Letter grade only (A-F).

697. Directed Studies (3)

Prerequisites: Advancement to Candidacy

Research in an area of specialization under the direction of a faculty member.

Letter grade only (A-F).

698. Thesis (1-4)

Prerequisites: Advancement to Candidacy.

Planning, preparation, and completion of a thesis

Letter grade only (A-F).

ENGINEERING, COLLEGE OF

Dean: Forouzan Golshani

Assistant to Dean: Elise Brown (562) 985-5123

College Office:

Phone Directory: (562) 985-5121

FAX: (562) 985-7561

Website: www.csulb.edu/coe

Interim Associate Dean for Research:

Hamid Rahai

Associate Dean for Academic Programs:

Dhushy Sathianathan

Graduate Programs Coordinator:

Burkhard Englert

Assistant to the Associate Deans:

Kim Truesdelle (562) 985-8032

Development Director: Eugenia "Jennie" Stewart (562) 985-5840

Administrative Services

Dorisula "Dee Dee" Green, Manager (562) 985-1586

Facilities and Equipment: Mike Berg (562) 985-8746

Safety Officer: Mike Berg (562) 985-8746

Departments

Chemical Engineering: Larry K. Jang, Chair (562) 985-7533

Civil Engineering and Construction Engineering Management:
Emelinda Parentela, Chair (562) 985-5118

Computer Engineering and Computer Science: Kenneth James,
Chair (562) 985-4285

Electrical Engineering: James Ary, Chair (562) 985-5102

Mechanical and Aerospace Engineering: Hamid Hefazi, Chair
(562) 985-1502

Introduction

The Mission of the College of Engineering is to serve the State of California, the nation, and society at large, by graduating well-prepared professionals, who are provided with excellent education and training in the fundamentals of their discipline through a combination of theory and laboratory practice, and who are provided with the ability and skills to expand knowledge and transform complex ideas into working systems.

The College of Engineering offers four-year curricula leading to Bachelor of Science degrees in the disciplines of Engineering, Computer Science, and Engineering Technology. The B.S. programs provide broad education and training for entry to the professions and for continuing academic work toward advanced degrees. The graduate programs in the college include Master of Science degrees in Aerospace, Civil, Computer, Electrical and Mechanical Engineering, and in Computer Science. The Master of Science in Engineering is also offered in interdisciplinary areas. The Ph.D. in Engineering and Industrial Applied Mathematics is offered jointly with The Claremont Graduate University. These programs provide opportunities to specialize in the areas of Aerospace, Biomedical, Chemical, Civil, Computer, Electrical, Construction Management.

Accreditation

The Bachelor's programs in Aerospace, Chemical, Civil, Computer, Electrical and Mechanical Engineering

programs are accredited by the Engineering Accreditation Commission (EAC)* of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202 - telephone: (410) 347-7700; website: www.abet.org. The Computer Science program is accredited by the Computing Accreditation Commission (CAC)** of ABET.

Programs at a Glance

The following is a list of degree programs offered by the college. Details about each program is described in the respective sections of the catalog.

Bachelor of Arts:

Engineering Systems

Bachelor of Science:

Aerospace Engineering*

Chemical Engineering*

Civil Engineering*

Computer Engineering*

Computer Engineering Technology

Computer Science**

Construction Engineering Management

Electrical Engineering*

Electronics Engineering Technology

Engineering

Option in Audio Engineering

Not accepting new students as of Fall 2012

Option in Biomedical and Clinical Engineering

Option in Industrial-Management Engineering

Not accepting new students as of Fall 2012

Engineering Technology

Manufacturing Engineering Technology

Not accepting new students as of Fall 2012

Mechanical Engineering *

Minors:

Computer Science

Computer Science Applications

Environmental Engineering

Web Technologies and Applications

Single Subject Teaching Credential:

Industrial and Technology Education

Master of Science:

Aerospace Engineering

Civil Engineering

Computer Science

Option in Computer Engineering

Option in Computer Science

Electrical Engineering

Engineering (Interdisciplinary)

Mechanical Engineering

Ph.D. in Engineering and Industrial Applied Mathematics
(jointly with The Claremont Graduate University)

Certificates:

Heating, Ventilating & Air-Conditioning Engineering (MAE)

Not accepting new students as of Fall 2012

Waste Engineering and Management (CECEM)

Not accepting new students as of Fall 2012

Energy Conversion and Power Systems Engineering (MAE and EE)
 Not accepting new students as of Fall 2012
 Industrial Plastics Processing and Design (MAE and ChE)
 Not accepting new students as of Fall 2012
 Facilities Operations (CECEM)
 Not accepting new students as of Fall 2012
 Safety Operations (ChE)
 Not accepting new students as of Fall 2012
 Aerospace Manufacturing (MAE)
 Not accepting new students as of Fall 2012
 Systems Engineering (COE)
 Not accepting new students as of Fall 2012
 Web Technologies and Applications (CECS)

Academic Standards

Preparation for Admission

High school students planning to enter engineering, engineering technology, or computer science are advised to pursue a program with courses in biology, physics, chemistry, advanced algebra, and trigonometry. The general requirements for admission to the University must be satisfied. Deficiencies in any of these areas may result in an extension of the time required to complete the program. Full-time students can complete any baccalaureate degree in engineering, engineering technology, or computer science in four years.

The curricula are also designed to accommodate students transferring from other colleges or universities. Full-time students who complete two years at a community college can complete the B.S. degrees in two additional years. Transfer students should note and follow, where possible, the appropriate curriculum as outlined in later sections. None of the COE programs are impacted.

Most required courses are offered in multiple sections every semester. In addition, many required courses are also offered during Summer Sessions.

General Academic Requirements

The College of Engineering values good communication skills which are achieved through the General Education courses and are measured by the Graduation Writing Assessment Requirement (GWAR). A student must fulfill the GWAR before qualifying for any degree. Students are advised that, while specific course requirements vary depending on the nature of the subject, most College of Engineering courses require not only detailed analysis, and competent design, but also clear and concise written and oral reports and presentations. ENGL 100 or equivalent is a prerequisite to upper division laboratory courses.

Letter Grade Policy

A grade of "C" or better must be achieved in prerequisites for courses required of Engineering, Computer Science, and Engineering Technology majors.

Required Foundation courses must be taken for a Letter grade only, not Credit/No Credit.

Concurrent and/or Summer Enrollment in Another College

Students who wish to take coursework in a community college or another college or university to meet curricular

requirements while enrolled as an undergraduate in the College of Engineering must petition the appropriate department for prior approval to enroll in specific courses. This policy is for either concurrent enrollment or summer enrollment. University policy must also be complied with; see "Concurrent Enrollment" and "Transfer of Undergraduate Credit" in this *Catalog*. Courses not receiving prior approval may not be accepted for credit by the department.

The Engineering Student Success Center (ESSC)

Interim Coordinator of Academic Advising

Jason Deutschman (562) 985-2729

Director of Leadership and Diversity

Emmitt Clark (562) 985-1719

Director of Outreach and Recruitment

Saba Yohannes-Reda (562) 985-1463

Engineering Education Research Associate

Lily Gossage (562) 985-2498

The Engineering Student Success Center provides key services to students in an inclusive environment that fosters collaboration, community building and academic success skills. The center provides outreach and recruitment activities, first-year experience programs for freshmen and incoming transfer students, mandatory academic advising by professional and peer advisors, tutoring resources, professional development and practice services, and career and graduate school guidance. As a one-stop shop, the center encourages students to visit for help from professional advising staff. The center focuses its full efforts on informing, engaging and encouraging students to be self-directed in their educational planning process and overall academic success.

Undergraduate Programs

Bachelor of Science in Engineering

Option in Audio Engineering (127 units)

Not accepting new students as of Fall 2012

This option is designed to train students for work in the audio engineering industry. The curriculum in the College of the Arts will show students in the program how the arts and entertainment industry uses modern technology in the recording, processing and creation of sound. The curriculum in the College of Engineering will teach students how to analyze and design the electronic and computer components used in the arts and entertainment industry.

As this option is not ABET accredited, students are urged to either take a second major in Computer Engineering (follow the Computer Engineering Track) or Electrical Engineering (follow the Electrical Engineering Track)

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Computer Engineering Track

Lower Division:

Take the following courses:

- BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.
- CECS 174 Intro to Programming & Problem Solving (3)
Prerequisite: CECS 100 and MATH 113 (or equivalent) with a grade of "C" or better.
- CECS 201 Computer Logic Design I (3)
Prerequisite: MATH 113 or equivalent with a grade of "C" or better.
- CECS 228 Discrete Structures with Computing Applications I (3)
Prerequisites: CECS 174 and MATH 113 or equivalent with a grade of "C" or better.
- CECS 274 Object Oriented Programming and Data Structures (3)
Prerequisite: CECS 174 with a grade of "C" or better.
- EE 210 Electro-Magnetic Foundations in EE (3)
Prerequisite: PHYS 151 with a grade of "C" or better.
Corequisites: MATH 123, EE 210L.
- EE 210L Electro-Magnetic Foundations in EE Lab (1)
Corequisite: EE 210.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.
- MATH 222 Intermediate Calculus (3)
Prerequisite: A grade of "C" or better in MATH 122.
- MUS 190 Listener's Approach to Music (3)
Prerequisites/Corequisites: ENGL 100 or another GE Foundation course.
- PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Upper Division:

Take the following courses:

- CECS 301 Computer Logic Design II (3)
Prerequisites: CECS 174, 201 with a grade of "C" or better.
- CECS 311 Principles of Computer Engineering II (3)
Prerequisites: CECS 201 and CECS 211 with a grade of "C" or better.
- CECS 326 Operating Systems (3)
Prerequisites: CECS 282 and either 285 or 346 with a grade of "C" or better.
- CECS 346 Microprocessors and Controllers I (3)
Prerequisites: CECS 211 and 262 with a grade of "C" or better.
- CECS 347 Microprocessors and Controllers II (3)
Prerequisites: CECS 301, 311, and 346 with a grade of "C" or better.
- CECS 360 Integrated Circuit Design Software (3)
Prerequisites: CECS 301, 346, MATH 123 or 222 with a grade of "C" or better.
- CECS 447 Microprocessors and Controllers III (3)
Prerequisite: CECS 347 with a grade of "C" or better.
- CECS 460 System on Chip Design (3)
Prerequisite: CECS 360 with a grade of "C" or better.

CECS 497 Directed Studies (3)

Prerequisite: Consent of instructor.

E E 386 Digital Signal Processing (3)

Prerequisites: EE 310 or CECS 301 with a grade of "C" or better.

E E 486 Digital Signal Processing for Multimedia Communications (3)

Prerequisite: EE 386 with a grade of "C" or better or graduate standing.

ENGR 340 Guitar Electronics: Engineering Sound (3)

Prerequisites: Upper division standing, GE Foundation requirements, one course from G.E. category Blb.

MATH 323 Introduction to Numerical Analysis (3)

Prerequisites: MATH 222 or 224, and a course in computer programming.

MATH 370A Applied Mathematics (3)

Prerequisites: MATH 123. Not open to Freshmen.

MATH 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

Take three courses from the following:

FEA 307, THEA 449, EE 428, MUS 370, 455, 456

Take an approved technical elective.

Electrical Engineering Track

Lower Division:

Take the following courses:

- BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.
- CECS 100 Critical Thinking in the Digital Information Age (3)
Prerequisite/Corequisite: ENGL 100 or its equivalent.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.
- MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.
- MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.
- MUS 190 Listener's Approach to Music (3)
Prerequisites/Corequisites: ENGL 100 or another GE Foundation course.
- E E 201 Digital Logic Design (4)
Prerequisite: MATH 117 (or equivalent) with a grade of "C" or better.
- E E 202 Computer Methods in Engineering (3)
Prerequisites: CECS 100 and MATH 123 with a grade of "C" or better.
- E E 210 Electro-Magnetic Foundations in Electrical Engineering (3)
Prerequisites: MATH 123, PHYS 151 with a grade of "C" or better.
Corequisite: EE 210L.
- E E 210L Electro-Magnetic Foundations in Electrical Engineering Laboratory (1)
Corequisite: EE 210.
- E E 211 Electric and Electronic Circuits (3)
Prerequisites: (EE 210/210L or PHYS 152) and (MATH 123 or equivalent) with a grade of "C" or better.
- E E 211L Electric Circuits Laboratory (1)
Corequisite: EE 211.
- PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Upper Division:

Take the following courses:

- C E 370 Analytical Mechanics (3)
Prerequisites: PHYS 151 with a grade of "C" or better;
Prerequisite/Corequisite: MATH 123.
- E E 310 Signals and Systems (3)
Prerequisites: EE211; and MATH 370A or equivalent with a
grade of "C" or better.
Corequisite: EE 202.
- E E 330 Analog Electronic Circuits I (4)
Prerequisite: EE 211 with a grade of "C" or better.
- E E 346 Microprocessor Principles and Application (3)
Prerequisites: EE 201, (CECS 100 or equivalent) with a
grade of "C" or better.
- E E 360 Electromagnetic Fields (3)
Prerequisites: MATH 224, EE 310 with a grade of "C" or
better.
- E E 370 Control Systems (3)
Prerequisite: EE 310 with a grade of "C" or better.
- E E 370L Control Systems Laboratory (1)
Prerequisite/Corequisite: EE 370.
- E E 382 Communications Systems I (3)
Prerequisite: EE 310 with a grade of "C" or better.
- E E 386 Digital Signal Processing (3)
Prerequisites: EE 310 or CECS 301 with a grade of "C" or
better.
- E E 430 Analog Electronic Circuits II (3)
Prerequisites: EE 330 and 370 with a grade of "C" or
better, or graduate standing.
- E E 444 Microprocessor Based System Design (3)
Prerequisites: EE 346 with a grade of "C" or better or
graduate standing.
- E E 486 Digital Signal Processing for Multimedia
Communications (3)
Prerequisite: EE 386 with a grade of "C" or better or
graduate standing.
- ENGR 340 Guitar Electronics: Engineering Sound (3)
Prerequisites: Upper division standing, GE Foundation
requirements, one course from G.E. category B1b.
- MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123. Not open to Freshmen.

Take one of the following courses:

- E E 489 Digital Signal Processing Design (3)
Prerequisites/Corequisites: (EE 400D and 486) or
graduate standing.
- E E 490 Special Problems (3)
Prerequisites: Minimum G.P.A. of 2.5 and consent of
instructor.

Take three courses from the following:

FEA 307, THEA 449, EE 428, MUS 370, 455, 456

Take an approved technical elective.

Bachelor of Arts in Engineering Systems (120 units)

Program Director: Tracy Bradley Maples

The Bachelor of Arts in Engineering Systems provides students with an opportunity to study engineering in an interdisciplinary environment. This program combines a core engineering program with two options and course work and programs in business, communications, design, economics, or language.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some

students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 111 and 113 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Requirements

Core

Thirty-one units required. Take all of the following:

- CECS 100 Critical Thinking in the Digital Information Age (3)
Prerequisite/Corequisite: ENGL 100 or equivalent.
- CECS 174 Introduction to Programming and Problem Solving (3)
Prerequisite: CECS 100 and MATH 113 (or equivalent) with a grade of "C" or better.
- CECS 202 The Digital Information Age (3)
Prerequisite: GE Foundation requirements.
- CECS 312 Introduction to Distributed Operating Systems (3)
Prerequisite: CECS 174 with a grade of "C" or better.
- CECS 414 Introduction to Network and System Security Issues (3)
Prerequisites: CECS 174 with a grade of "C" or better.
- ENGR 203 Engineering Problems and Analysis (3)
Prerequisite: MATH 122 with a grade of "C" or better;
Corequisite: ENGR 203L.
- ENGR 310 Business Communications in Engineering Profession (3)
Prerequisites: ENGL 100, COMM 110 with a grade of "C" or better.
- ENGR 498 Engineering Systems Senior Project (3)
Prerequisite: Senior Standing.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Take one of the following:

- EE 403 Systems Engineering (3)
Prerequisites: ENGR 203 or EE 202 with a grade of "C" or better, or graduate standing.
- EE 380 Probability, Statistics & Stochastic Modeling (3)
Prerequisites: MATH 122; (CECS 100 or equivalent) with a grade of "C" or better

Select one of the following emphases (31 units)

Emphasis in Systems and Security

Take all of the following:

- PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.
- CECS 110 Web Design I (3)
Prerequisites: None.
- CECS 200 Web Design II (3)
Prerequisite: CECS 110 with a grade of "C" or better.
- CECS 410 Computers and Networks (3)
Prerequisite: Course design assumes familiarity with computers.
- CECS 412 Introduction to Computer Network Architectures (3)
Prerequisite: Familiarity with computers.

ENGR 3021 Energy and Environment: A Global Perspective (3)
Prerequisites: G.E. Foundation requirements, one or more Exploration courses, and upper-division standing.

ENGR 350 Computers, Ethics and Society (3)
Prerequisites: 3 units from GE Category A.1 (Writing) and 3 units from GE Category D (Social and Behavioral Science).

Take 9 units of approved engineering and non-engineering courses (see program advisor for a detailed list of courses)

Emphasis in Systems Engineering

Take all of the following:

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

CECS 271 Introduction to Numerical Methods (3)
Prerequisites: CECS 174 and MATH 123 with a grade of "C" or better.

CECS 345 Fundamentals of Embedded Systems (3)
Prerequisite: CECS 202 with a grade of "C" or better.

ENGR 432 Logistics Systems Engineering (3)
Prerequisite: Consent of instructor.

CE 406 Cost Engineering and Analysis (3)
Prerequisite: GE Foundation requirements.

EE 402 Engineering Modeling and Simulation (3)
Prerequisite: EE 380 with a grade of "C" or better.

Take one of the following:

EE 380 Probability, Statistics & Stochastic Modeling (3)
Prerequisites: MATH 122; (CECS 100 or equivalent) with a grade of "C" or better.

EE 403 Systems Engineering (3)
Prerequisites: ENGR 203 or EE 202 with a grade of "C" or better, or graduate standing.

Take 9 units of approved engineering and non-engineering courses (see program advisor for detailed list of courses)

Take 24 units of non-engineering courses with advisor's consent:

- Business (e.g., Finance, Information Systems, Operations Management)
- Communication Studies
- Design
- Economics
- Foreign language

Take approved engineering and non-engineering courses to reach a total of 120 units including 40 upper division units (see program advisor for a detailed list of courses)

Minor in Environmental Engineering

This 18-unit interdisciplinary minor is designed for undergraduates from various engineering and science backgrounds who are interested in applying engineering approaches to environmental issues.

Requirements

A minimum of 6 units selected from the following core:

Take one of the following courses:

C E 364 Environmental Engineering I: Fundamentals (3)
Prerequisites: CHEM 111A, BIOL 200/MICR 200 with a grade of "C" or better,
Prerequisite/Corequisite: CE 335.

CH E 475 Environmental Pollution (3)
Prerequisite: CHEM 320A or 327 with a grade of "C" or better, or consent of instructor.

Take the following course:

CH E 455 Environmental Compliance (3)
Prerequisite: CHEM 327 with a grade of "C" or better or consent of instructor.

Take 12 units from the following:

CH E 415, 445, 465, 485; C E 466; E T 409F, 476

Most of the courses in the minor require some background in engineering and/or chemistry. Upper division students majoring in Biology, Chemistry, Chemical Engineering, Civil Engineering, or Mechanical Engineering may have sufficient background to select from the above choices without needing additional prerequisites. Those majoring in other branches of science and engineering may need several additional courses in engineering and/or chemistry to meet prerequisite requirements of courses in this minor.

All prerequisites to the courses in the minor must be completed with a grade of "C" or better.

Graduate Programs

Master of Science in Engineering

Program Director: Burkhard Englert

Typical tasks and responsibilities undertaken by students in the curriculum for this program would not fall within one of the traditional specialties in engineering, e.g. aerospace, chemical, civil, electrical and mechanical engineering, or computer science and engineering. The student may pursue an interdisciplinary program, approved by a graduate advisor, by selecting courses from the various departments of engineering. For information concerning the programs, special facilities, laboratories and research possibilities, contact the College of Engineering.

Prerequisites

1. A bachelor's degree in an ABET accredited curriculum in engineering with a minimum GPA of 2.7; or
2. A bachelor's degree with a minimum GPA of 2.7 in engineering, mathematics, natural science or other discipline with the requirement that essential undergraduate prerequisites in engineering are satisfied.
3. The general Graduate Record Examination (GRE) is required.
4. Graduate students must consult with a graduate advisor, with whom they will be working, for information concerning procedures and requirements for appropriate approval of their courses of study prior to enrolling in their graduate programs.
5. The Graduation Writing Assessment Requirement (GWAR) must be met during the first semester in residence. Failure to attempt to fulfill the GWAR during the first semester will prevent registration in engineering courses in subsequent semesters.

Requirements

1. Completion of a minimum of 30 units beyond the bachelor's degree in upper division and approved graduate courses, including:
 - A. A minimum of 18 units of 500- and/or 600-level courses in engineering;

- B. Six units of electives selected from approved upper division (400-level) or graduate courses from appropriate areas;
- C. Completion of an acceptable thesis or project and/or comprehensive examination.

Note: Students are strongly advised to read and be familiar with the campus regulations described under "Graduate Programs" elsewhere in this catalog.

Advancement to Candidacy

Students applying for advancement to candidacy must have:

1. completed all undergraduate deficiencies with grades of "C" or better;
2. attained an overall grade point average of (GPA) or 3.0;
3. completed at least 12 units applicable to the degree with a GPA of at least 3.0;
4. fulfilled the Graduation Writing Assessment Requirement (GWAR). This requirement can also be met by presenting evidence that the student met the requirement while an undergraduate at CSULB or at certain CSU campuses;
5. program of studies approved by the program's graduate advisor.

Graduate Certificate in Systems Engineering

Not accepting new students as of Fall 2012.

This 18-unit post-baccalaureate certificate is focused toward development and management of complex systems. Each such complex system requires a clear Systems Engineering Master Plan, a set of methodologies, appropriate tools, a rigorous requirements flow-down technique, and a comprehensive Project Management Plan to enable system design and project management for effective and efficient human interaction.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirement

1. Completion of an accredited baccalaureate degree in engineering or equivalent;
2. Satisfactory completion of 18 units listed below;
3. File a program application card with Admissions and Records, and file for the Certificate at least one semester prior to completion;
4. The Certificate may be awarded concurrently or subsequently to baccalaureate degree.

Required Courses

The Certificate Program requires a minimum of 18 semester units, as indicated below.

1. System Engineering Core Courses, 6 units of the following:
 - EE 503 Advanced Systems Engineering (3)
Prerequisite: EE 411 or equivalent mathematical maturity with a grade of "C" or better.
 - MAE 508 Systems Engineering and Integration (3)
Prerequisite: Senior standing with a grade of "C" or better or consent of instructor.
2. Engineering Management Courses, 6 units from the following:
 - CECS 521 Database Architecture (3)
Prerequisites: CECS 328 and 323 or 421 with a grade of "C" or better.

MAE 506 Management of Engineering Technology and Innovation (3)

Prerequisite: Graduate engineering standing.

MAE 507 Engineering Project Management (3)

Prerequisite: Graduate engineering standing.

3. Manufacturing Courses, 3 units of the following:

MAE 574 Computer-Aided Manufacturing (3)

Prerequisites: MAE 322, 490A with a grade of "C" or better.

4. Advanced Engineering Mathematics/Analysis Courses, 3 units from the following:

EE 502 Engineering Modeling and Simulation (3)

Prerequisite: EE 380 with a grade of "C" or better.

EE 505 Advanced Engineering Mathematics for Electrical Engineers (3)

Prerequisites: Consent of instructor.

EE 508 Probability Theory & Random Processes (3)

Prerequisite: EE 380 with a grade of "C" or better.

MAE 501 Engineering Analysis I (3)

Prerequisite: MATH 370A with a grade of "C" or better.

MAE 502 Engineering Analysis II (3)

Prerequisite: MAE 501 with a grade of "C" or better.

Ph.D. in Engineering and Industrial Applied Mathematics

Program Director: Burkhard Englert

Degree Designation

In accordance with an agreement between Claremont Graduate University and CSULB, the degree is granted at Claremont Graduate University in the name of the two universities. The diploma indicates the dual nature of the degree and specifies that it is granted only when requirements have been satisfied in both subject areas as specified by the collaborating institutions.

Program Supervision

Overall program supervision is the responsibility of the Program Committee, consisting of the directors of the Joint Doctoral Program (JDP) from each institution, the Dean of Mathematics at CGU, and the Dean of Engineering at CSULB.

Admission Requirements

Students must be admitted to both institutions jointly. Admission will be granted to a limited number of qualified students; therefore, application should be made as early as possible. Applications are encouraged from both men and women, particularly from members of minority groups or individuals with disabilities. Completed applications must be received by April 1 for the fall semester or October 1 for the spring semester, although late applications are allowed at the discretion of the Program Committee. The Program Committee is responsible for making admission decisions consistent with campus regulations (see Application Procedure in this booklet).

To be admitted to the Joint Doctoral Program, an applicant must have received a bachelor's or master's degree in science, engineering, or mathematics from an accredited institution. Moreover, he or she must have attained scholastic records and present confidential recommendations which indicate that he or she is well qualified to pursue, with distinction, advanced study and research. Be advised that admission may be refused solely on the basis of limited facilities in the option desired.

GRE Requirement

The analytical, verbal, and quantitative portion of the Graduate Record Examination (GRE) is required before admission. GRE subject examinations (mathematics and engineering) are not required. Applicants whose first or native language is not English are required to have a current minimum score of 550 (213 on the new scale) on the Test of English as a Foreign Language (TOEFL); however, this requirement is waived for students with a bachelor's or master's degree from an accredited U. S. university.

Registration and Enrollment

It is important that students register and enroll in classes each semester at either CGU or CSULB. Failure to enroll at any given semester will be considered leave without permission (discontinued enrollment) and the student will be dropped from the program.

Program Planning and Supervision

At CSULB, an initial engineering advisor is assigned to the student at the time of admission. At CGU, the student needs to arrange with the program director, within the first semester of study, for a mathematics advisor. The student's program of study is arranged individually in collaboration with their advisors; the two advisors confer periodically regarding the student's progress. The Program Committee monitors the student's overall performance.

Course Work and Examinations

A minimum 72 units of course work, independent study, and research (including transfer credit) must be completed. Transfer credit of up to 24 units of related courses at the master's level is permissible on approval of the Program Committee; this course work must have been completed with at least a grade of "B" or better, at an accredited institution, and must be directly related to the joint program and the student's goals. Of the 72 units, a minimum of 24 units must be completed in the graduate engineering program at CSULB and a minimum of 24 units in the graduate mathematics program at CGU. Both sets of 24 units must conform to the area requirements of the relevant institution and must be approved by the Program Committee. All degree requirements must be completed within seven years (or six with the transfer of 24 units according to CGU regulations) from the time a student begins graduate study.

Every doctoral student must maintain a cumulative grade-point average (GPA) of 3.0 and a grade-point average of 3.0 in all courses applicable to the degree. Furthermore, students must earn at least a grade of "B" or better in any course that is counted towards the course work requirement. Students are put on academic probation if they fail to maintain a cumulative or term GPA of at least 3.0 in all units attempted subsequent to admission to the degree program. After two consecutive semesters on probation, students are subject to disqualification if they fail to earn sufficient grade points to be removed from the probationary status.

CSULB Course Requirement

The only specific CSULB course requirement is four units of Engr 796 Doctoral Seminar (2). The remaining 20 units, for students who have received transfer credit, may include

courses needed for the Preliminary Examinations (see the Preliminary Examination section of this handbook), Doctoral Dissertation, Advanced Special Topics, and Advanced Directed Studies. Presently, students are permitted to count the following courses in addition to the regular graduate courses, offered by the five engineering departments, towards meeting the CSULB 24-unit course requirement.

ENGR 790: Advanced Special Topics in Engineering (8 units allowed)
Prerequisites: MS or equivalent and formally admitted to the Ph.D. program.

ENGR 795 or MAE 795: Advanced Directed Studies (8 units allowed)

ENGR 796: Doctoral Seminar (4 units required)
Prerequisite: Graduate Standing.

ENGR 798 or MAE 798: Doctoral | Dissertation (4 units allowed)

Minimum Student Load Per Semester

It is highly recommended that doctoral students enroll in at least 9.0 units per semester in order to demonstrate progress towards the degree. The CSULB director of the program, in consultation with the doctoral advisor, may require that a student take at least 9.0 units per semester if the student is not showing adequate progress.

These courses may include the following:

ENGR 797A Preparation for Ph.D. Preliminary Examinations
Prerequisite: Graduate Standing.

ENGR 797B Preparation for Ph.D. Qualifying Examination
Prerequisite: Graduate Standing.

Students may take from 4.0 to 12.0 units of ENGR 797A or ENGR 797B each semester, though these courses may not be used to fulfill the 72-unit course work. Both of these courses are offered on Credit/No Credit bases and are designed to formally recognize the students' efforts towards the program.

Residency Requirements

Doctoral students must complete their program within a period of seven years (or six with the transfer of 24 units) according to CGU regulations (see below). During this time, a minimum of 72 units of course work, independent study, and research (including transfer credit) must be completed. Normally no more than 16 units per semester may be credited toward the degree. No more than 12 units per summer session may be credited toward the degree. The transfer of credit form is available on the CGU website. The Program Committee will consider petitions for extensions and/or exemptions.

All degree requirements must be completed within seven years from the time a student begins graduate study. Work for which transfer credit is granted will be counted as part of the seven years, e.g., if transfer credit of 24 units (one year) is granted, the time limit will be six years.

The residency requirements for the Ph.D. may be met either by two semesters of full-time study in a 24-month period or by the completion of 48 units of course work within a 48-month period (including work in the summer session). There are special provisions for students transferring units as described below.

Students who receive transfer credit for 12 units or less

may meet the residency requirement either by completing two full-time semesters of course work within a 24-month period or by completing 36 units within a 48-month period. Those receiving transfer credit for 13 to 24 units may meet the residency requirement by completing 24 units within a 36-month period. The seven-year maximum time period for the Ph.D. degree is reduced by six months for 12 units or less of transfer credit and by 12 months for 13 to 24 units of transfer credit.

Plan of Study

After consultation with their advisors, students are required, before the end of the first year, to prepare and file with the Program Committee a Plan of Study for completing the course requirements for the degree. The purpose of the Plan of Study is to ensure that the student is aware of the requirements for the degree. The Plan of Study should indicate the areas of study that the student will be taking in preparation for the preliminary examinations. In consultation with the student's advisor and Program Committee, the Plan of Study may be altered at a subsequent time by petition.

If a student withdraws from the program after completing a substantial portion of the course work, a master's degree at either or both institutions is still possible by satisfaction of the appropriate requirements. Both CGU and CSULB require 30-36 semester units of course work for master's degrees.

Preliminary Examinations

The student is required to pass written preliminary examinations. These examinations consist of four examination areas: two in engineering and two in mathematics. These examinations should be taken immediately after completion of the relevant course work at each institution. These examinations are given two or three times a year at the discretion and under the control of the Program Committee. Should a student fail an examination, they may petition the Program Committee for one retake.

Before taking the first preliminary examination, the student is required to complete the Preliminary Examination Permission Form (available at the CSULB website, www.csulb.edu/colleges/coe, or at the CGU site, www.cgu.edu/math). This form requires the student to specify the four areas of the Preliminary Examination; the student's intended dissertation advisor and the directors of the Joint Doctoral Program must sign it. The purpose of this form is to certify that the student and dissertation advisor are in agreement on the set of examinations. If, in the course of time, this set of examinations and/or the advisor is amended, the form must be resubmitted. The preliminary examinations are considered completed when the four examinations specified on the student's form have been successfully passed. You must be enrolled at CSULB (e.g., enrolling in at least 4.0 units of 797A) in order to take the CSULB portion of the Preliminary Examinations. For a list of courses, please review the student handbook at our web site www.csulb.edu/coe/phd

Research Tool

Students in the Joint Doctoral Program must demonstrate proficiency in problem-solving ability using computer programs. This demonstration may take different

forms depending on the student's engineering sub-discipline, but must include evidence that the student has used an appropriate computer language and an algorithmic method to solve a problem from an engineering discipline.

Research and Dissertation

Upon completion of at least 48 units of course work (including transfer units), the preliminary examinations, and the research tool requirement, a student embarks on the research phase of the Joint Doctoral Program. In preparation for the research phase, the student is expected to spend at least a semester in advanced graduate courses, seminars, or directed reading courses where exposure to research material is emphasized. From these and other sources, the student gains the ability to understand the motivation for research in engineering and applied mathematics and learns to apply research techniques.

Doctoral Committee

During entry to the program and through the period of the main body of course work at CGU and CSULB, the Program Committee will monitor the student's progress. Upon successful completion of the preliminary examinations, the student petitions the Program Committee to constitute the Doctoral Committee. The student chooses this committee with advice from the faculty advisor and with approval of the Program Committee. The committee must include at least two faculty members each from CGU and CSULB; it must also provide breadth and depth in mathematics and engineering in the chosen faculty members. The Doctoral Committee supervises the student's progress through research preparation and dissertation writing; it also administers the qualifying and oral examinations for the degree. The chair of the Doctoral Committee is the dissertation supervisor.

Research Proposal and Qualifying Examination

With these advanced courses as background, and with the guidance of the Doctoral Committee, the student defines an area of proposed research and prepares a written Dissertation Proposal containing an outline of the research to be undertaken and references to relevant source materials. The Dissertation Proposal is presented to the Doctoral Committee at least two weeks prior to the Qualifying Examination. The appropriate form under "Doctoral Degree Forms" can be obtained from the CGU website www.cgu.edu (under Current Students, Registrar Information). The Qualifying Examination is an oral presentation to the Doctoral Committee describing the planned research. The student is expected to present evidence both as to the mathematical content and to the engineering application of the proposed research, supporting such evidence with references to previous research in both areas. The Doctoral Committee judges the fitness and quality of the Dissertation Proposal from this presentation and from the written proposal. It subsequently communicates its recommendations to the Program Committee. Only upon a positive recommendation may the student embark on a dissertation. In the event of failure, the qualifying examination may be retaken once after petition to the Program Committee.

Advancement to Candidacy

After successful completion of the Qualifying Examination and certification that all other requirements are fulfilled, the student is advanced to candidacy. The appropriate form under "Doctoral Degree Forms" may be obtained from the CGU website. This must occur at least six months before the Final Oral Defense.

Dissertation and Final Oral Examination

Upon completion of the research, the student will prepare the dissertation in accordance with CGU regulations. A final draft of the dissertation will be presented to each member of the Doctoral Committee at least three weeks prior to the final oral examination. The appropriate form under "Doctoral Degree Forms," along with an abstract of the dissertation, must be filed with CGU's Office of Admission and Records three weeks before the exam. This deadline is very strict and no exceptions will be made. Please see the CGU website under "Academic Calendar" for the final defense scheduling dates. The oral defense will normally be held on the campus of the dissertation supervisor.

Policies and Procedures

1. Throughout their entire program of study, unit-taking students must be registered at either CGU or CSULB. Students, who intend not to take course work at either institution, including those who have finished their required units, must take the necessary steps to maintain continuous enrollment. This is achieved by registering for Math 499 (Doctoral Study) at Claremont Graduate University or by registering for Engineering 798 (Doctoral Dissertation) at California State University, Long Beach. At least two semesters of registration for Math 499 at CGU must be maintained during the last year prior to graduation. In order for the degree to be conferred, a student must meet all regulations as stated in the CGU Bulletin under "Degree Regulations."

Requests for leave of absence must be submitted to each registrar's office and approved by both institutions according to the standards of each; upon approval of leave the student should advise the math office at CGU and the office of the Joint Doctoral Program at CSULB. Students should contact each registrar's office for leave of absence policies. If the student fails to advise the registrar at CGU of his/her leave granted by CSULB, he/she will be dropped from the program (CGU has no official arrangement for leaves). Upon return, the student will be required to pay CGU a reinstatement fee in addition to regular semester tuition.

2. International students registered for units at CSULB must provide the CGU International Student Advisor, Nusha Shishegar, with proof of registration within two weeks of the beginning of the semester at CGU. Proof of full-time registration (8 units minimum) is required to maintain immigration status. (In the circumstance of completion of units, registration in Doctoral Study, CGU Math 499, is required.)
3. Students should arrange for advisors, one in math at CGU and one in engineering at CSULB, at the earliest opportunity. The program committee will help provide advisors.

4. After consultation with their advisors, students must submit a plan of study, including a petition for transfer of credits, if applicable, during their first year of study. The Plan of Study must be approved and transfer of units recommended to the Registrar by the program committee.

Procedures for Student Admission

1. Students must complete application forms for both CGU and CSULB. The completed application package must include official transcripts, three letters of reference (preferably on the forms supplied in the CGU package), a personal statement and a resume. Current, official GRE scores are required. Scores may not be older than 5 years.
2. The completed application package (including a separate Long Beach fee and application) must be submitted to the CGU Admissions Office, 160 East Tenth Street, Claremont, CA 91711-6163. Do not send application materials to CSULB as this will result in considerable delay. Both application fees are required
3. Online applications are acceptable for the Joint Program; however, consult the Program Advisors at CGU and CSULB for appropriate procedures.
4. The CGU director of the CSULB/CGU Joint Doctoral Program, Ellis Cumberbatch, reviews completed files. In the event of a negative review, a rejection letter is issued by CGU. In the event of a positive review, the application, along with a copy of the completed file, is forwarded to the CSULB director of the CSULB/CGU Joint Doctoral Program, Dr. Mahyar Amouzegar.
5. Results of the Long Beach review are transmitted back to CGU Math. Upon a positive review by CSULB, the application and fee are sent to the CSULB Admissions Office to be processed. A negative review initiates a rejection letter from CGU.
6. Upon admission to the program, CGU will generate two admission letters; one is mailed to the student and one is sent to CSULB. This letter includes a decision card and specifies a required \$200 tuition deposit that should be submitted to CGU if the student chooses to accept the offer of admission.
7. Students admitted to provisional status must provide the materials needed to complete their files before the end of their first semester of enrollment. Official scores for the GRE General Test are required of all students before admission to full graduate standing. The joint faculty program committee will review completed files for change of status.
8. The academic progress of students admitted to conditional status will be reviewed by the program committee prior to a decision about change of status.

Courses (ENGR)

LOWER DIVISION

100. Fundamentals of Engineering Analysis (4)

Prerequisites: Appropriate ELM score, ELM exemption, or MAPB11.

Use of an application-oriented, hands-on approach to math topics in a variety of core engineering courses; analysis of experimental data; applications of MATLAB in solving engineering problems.

Letter grading only (A-F). (Lecture 3 hours, Laboratory 3 hours)

101. Introduction to the Engineering Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122

Freshman orientation seminar on careers in engineering. Speakers from various fields illustrate opportunities and challenges in the engineering profession.

(Lecture-problems 1 hour) Letter grade only (A-F).

102. Academic Success Skills (1)

Prerequisite: ENGR 101 with a grade of "C" or better.

Development of skills and identification of strengths and weaknesses for success in a COE major.

(Lecture 1 hour). Letter grade only (A-F).

123. Inventions and Innovations: Good, Bad, and Weird (3)

Use of language, thought, and logic in science, distinguishing scientific fact from science fiction. Critical review of technological achievements from ancient times to the present, from practical inventions to perpetual motion machines. Science, pseudoscience, and paranormal. Experimentation and witchcraft.

(Lecture-Problems 3 hours)

130. Health, Energy, Environment, Transportation (HEET) (3)

Prerequisites: Completion of high school classes in geometry, algebra, chemistry, and environmental sciences.

Introductory course in healthy environment requirements, renewable energy, elements green design, transport systems and management, economics, environmental impacts of transportation. Hybrid, module-based class, with simulations, interact exercises, design projects and assessments renewable energy, green design, water resources, and air quality.

Letter grade only (A-F). (Lecture 3 hours)

170. Introduction to Solid Modeling and Engineering Graphics (2)

Prerequisites: Knowledge of geometry and intermediate algebra.

Introduction to part modeling, solid models, detail drawings with dimensioning and assembly modeling using SolidWorks software. Focuses on project-based learning, which organizes learning around complete projects.

Letter grade only (A-F). (Lecture-problems 1 hour, Lab 2 hours)

203. Engineering Problems and Analysis (3)

Prerequisite: MATH 122 with a grade of "C" or better; Corequisite: ENGR 203L.

Formulation of engineering problems and methods for their analysis. Application of vectors, matrices, derivatives and integration into engineering problems. Computer aided analysis using MATLAB, MathCad, etc.

(Lecture - Problems hours) Letter grade only (A-F).

203L. Engineering Problems and Analysis Laboratory (1)

Prerequisite: MATH 122 with a grade of "C" or better; Corequisite: ENGR 203.

Computer-based exercises on fundamental concepts such as vectors, matrices, derivatives, integrals. Practical engineering problems are assigned and solved using MATLAB.

(Laboratory 3 hours) Letter grade only (A-F).

UPPER DIVISION

302I. Energy and Environment: A Global Perspective (3)

Prerequisites: G.E. Foundation requirements, one or more Exploration courses, and upper-division standing.

Renewable/nonrenewable energy sources, including fossil fuels, nuclear, solar, wind, wave, geothermal, hydroelectric and biomass. Available resources, market, trends, and technology. Energy conservation, balance, alternatives, social, cultural, and political impacts. Ecosystem, human-induced climate changes.

Environment and power generation, pollution, ozone depletion. Recycling.

(Lecture-Problem 3 hours) Letter grade only (A-F).

310. Business Communications in Engineering Profession (3)

Prerequisites: ENGL 100, COMM 110 all with a grade of "C" or better.

Basic concepts for understanding/practice of communication in world of business for managers and professionals. Language/conversations in business and role in coordinating actions, resolving breakdowns in work and customer satisfaction. Business writing formats, formal report, business conversation. International, technical, and linguistic developments in business communication.

Letter grade only (A-F). (Lecture-Problem 3 hours) May be used to satisfy the GEAR. Students who have failed the WPE at least once can take the course and submit a portfolio at the end for GEAR credit that will be issued if the student passes the portfolio that is reviewed by a committee.

340. Guitar Electronics: Engineering Sound (3)

Prerequisites: Upper division standing, GE Foundation requirements, one course from G.E. category Blb.

Historical review of electro-magnetic principles and their application to the reproduction, modification, and creation of sound. The electric guitar, its amplifiers, and special effects devices (analog and digital) will be used to gain practical experience. Electrical safety, physiology and physics of the ear.

Not open for credit to students with credit in EE 333. (Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

350. Computers, Ethics and Society (3)

Prerequisites: 3 units from GE Category A.1 (Writing) and 3 units from GE Category D (Social and Behavioral Science).

Examination of the social impact of information technologies. Topics include a survey of the technology (software, hardware and key applications), ethical obligations of specialists, the computer in the workplace, shifts of power, privacy, and legal issues related to computing.

(Lecture-problems 3 hrs)

360. Robotic Technology in Health Care (3)

Explores various robotic innovations developed for biomedical applications and their global impact on the quality of patient care, economy, and policy through new methods and tools for diagnosis and treatment, clinical training, education, and rehabilitation.

Letter grade only (A-F). (Lecture-Problems 3 hours)

370I. Astronautics and Space (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Combines the disciplines of space engineering with economics, human physiology, satellite meteorology, earth resources and environmental science, astronautics and space exploration. Emphasis on oral and written communications, numeracy and use of computers. Extensive use of computer animation, videographics and the Internet.

(Lecture-problems 3 hours) Letter grade only (A-F).

388. Engineering for Elementary School Teachers (3)

Developing and fabricating teaching aids and integrated hands-on projects for elementary schools. Basic skill in teaching engineering and technology in the elementary grades.

(Lecture 2 hours, Laboratory 3 hours)

392. Water: People, Politics, and Processes (3)

Prerequisite: GE Foundation requirements.

Explores the impact of water resources management on society, economy, and governance through socio-political and hydrological overviews as well as both domestic and international case studies.

Letter grade only (A-F). Same course as I/ST 350. Not open for credit to students with credit in I/ST 350. (Lecture-Problems 3 hours.)

Courses (ENGR)

432./532. Logistics Systems Engineering (3)

Prerequisite: Consent of instructor.

Logistics concepts, methods and techniques for engineering. Logistics from a historical perspective, the economic impact of logistics, the engineering tool chest, and logistics as an integrating function. Logistics systems requirements and design; transportation and distribution, inventory analysis and operational support.

(Lecture-problems 3 hours) Letter grade only (A-F).

492B. Internship In Engineering (3)

Prerequisites: Major in the College of Engineering, completion of 9 units of upper division COE coursework, a 2.5 GPA overall or 2.75 GPA in the student's major, and consent of instructor prior to registration.

Qualifying students must provide contact information for the major- or career-related assignment in private industry or in public agencies for which the course is being used. The position may be either a volunteer or paid work assignment. The instructor is required to visit the work site. Learning assignments will be arranged through the Career Development Center and the instructor. Final written report required.

Minimum of 120 hours of field experience required. Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters. (Activity 6 hours)

498. Engineering Systems Senior Project (3)

Prerequisite: Senior Standing.

Senior Project in Engineering Systems. Design and development of a senior project. Presentation of oral and written report.

(Seminar 3 hours) Letter grade only (A-F).

GRADUATE LEVEL

511. Quality Assurance in Manufacturing (3)

Prerequisites: CE 406 with a grade of "C" or better or consent of instructor, and graduate standing.

In-depth studies of planning for quality, productivity and competitive positioning in manufacturing. Understanding the TQM process. Inspection and standardization and product reliability strategies. Case study projects.

Letter grade only (A-F). (Lecture-problems 3 hours)

532./432. Logistics Systems Engineering (3)

Prerequisite: Consent of instructor.

Logistics concepts, methods and techniques for engineering. Logistics from a historical perspective, the economic impact of logistics, the engineering tool chest, and logistics as an integrating function. Logistics systems requirements and design; transportation and distribution, inventory analysis and operational support.

(Lecture-problems 3 hours) Letter grade only (A-F).

790. Selected Topics in Engineering (1-4)

Prerequisites: MS or equivalent and formally admitted to the Ph.D. program.

Each offering is based on an area of engineering in which recent advances have been made.

Letter grade only (A-F). Topics announced in the *Schedule of Classes*.

795. Advanced Directed Studies (4)

Explorations of theoretical and experimental (if applicable) Engineering problems in great depth with emphasis on mathematical modeling and analysis. Students must present the findings in a formal report and a seminar.

Letter grade only (A-F).

796. Doctoral Seminar (2)

Prerequisite: Graduate Standing.

Research seminar on advanced technical fields.

May be repeated to a maximum of 4 units in different semesters. (Seminar 2 hours). Letter grade only (A-F).

797A. Preparation for Ph.D. Preliminary Examinations (4-12)

Prerequisite: Graduate Standing.

Tutorial. Limited to doctoral students who are preparing for the preliminary examinations.

ENGR 797A does not count towards the 48 units of course requirement. Credit/No Credit grading only.

797B. Preparation for Ph.D. Qualifying Examination (4-12)

Prerequisite: Graduate Standing.

Tutorial. Limited to doctoral students who are preparing for the qualifying examination.

ENGR 797B does not count towards the 48 units of course requirement. Credit/No Credit grading only.

797C. Research for Ph.D. Dissertation (4-12)

Prerequisite: Graduate Standing. Tutorial. Limited to doctoral students who are preparing or working on the dissertation research. ENGR 797C does not count towards the 48 units of course requirement. Credit/No Credit grading only.

798. Doctoral Dissertation (4-12)

Prerequisites: Successful completion of the Ph.D. preliminary examinations, research tool test, and at least 48 units of course work. A written dissertation proposal containing an outline of the research to be undertaken and references to relevant source material must be submitted. Only upon a positive recommendation a student may embark on a dissertation.

Letter grade only (A-F).

Courses (MSEM)

UPPER DIVISION

406B. Engineering Economy and Administration (3)

Prerequisite/Corequisite: ECON 300 or consent of instructor.

Engineering management principles and economic analysis: with time value of money, after-tax analysis for rate of return. Graduate students will be required to do an additional assignment.

Letter grade only (A-F).

GRADUATE LEVEL

506B. Management of Engineering Technology and Innovation (3)

Prerequisite: Graduate engineering standing.

Analysis of the principles and theory of engineering administrative organizations, information systems, management functions, decision making tools, strategies and administrative policy formulations.

Letter grade only (A-F).

507B. Engineering Project Management (3)

Prerequisite: Graduate engineering standing.

Theory and philosophies of project management, principles of internal and industrial organization planning and control systems, motion in time study, industrial statistics, industrial research as aid to decision making.

Letter grade only (A-F).

508B. Systems Engineering and Integration (3)

Prerequisite: Senior standing or consent of instructor.

Introduction to the tools and methods employed by systems engineers in the aerospace industry. Development of system functions, requirements, verification and validation, and interfaces in the context of integrated product teams and the product life cycle.

Letter grade only (A-F).

511B. Advanced Manufacturing Management Systems (3)

Prerequisite: Consent to instructor.

Management systems for Integrated Product Development and Concurrent Engineering; Quality, Productivity and Costs, emphasis Just-in-Time Manufacturing; Quality-Based Manufacturing Systems: TQM and ISO 9000; Customer Requirement and Quality Function Deployment; Design Manufacturing and Assembly, Poka-Yoke; Demand-Driven, "Pull" manufacturing. "Lean Enterprise".

Letter grade only (A-F).

570B. Engineering Management Principles and Applications (3)

Prerequisite: Graduate standing, or consent of instructor.

Engineering management principles/applications. Relationships of management functions -modern products or service based companies. Technical organization in global market place. Reengineering, empowerment, concurrent engineering, and systemic thinking. Evolutionary theories of management. Strategic planning, goal setting, communication, resource distribution, etc. Team projects.

Letter grade only (A-F).

591B. Engineers to Managers – A Transition (3)

Prerequisites: Consent of instructor and graduate standing.

Engineers transitioning to management. Engineering mindset advantages and disadvantages; Successful managers; Corporations - system of people, machines, and facilities; Requirements; Inter-acting disciplines; "people skills" in non-coercive supervision; Technical managers; Managing Changes and technology; Team projects.

(Lecture-Problems 3 hours) Letter grade only (A-F).

596B. Special Projects in Engineering Management (3)

Prerequisites: Eligible for advancement to candidacy and consent of instructor.

Under faculty supervision students will pursue synthesis work, as a culminating experience, on the topics learned for the interdisciplinary MSEM degree. In consultation with the Program Advisor, an Independent Study form must be completed. An acceptable project report must be submitted.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

ENGINEERING TECHNOLOGY PROGRAMS

College of Engineering

Introduction

The Engineering Technology (ET) Programs at CSULB serve society by graduating well-prepared professionals, who are provided with an excellent education in the fundamentals of Engineering Technology through a combination of theory and laboratory practice, and who are able to apply their knowledge and transform their ideas into working systems.

Advisory Council

The Engineering Technology Advisory and Development Council (ETADC), composed of leaders actively engaged in areas of relevant engineering technology, provides information and guidance about industrial developments in methods, materials and techniques. The members make recommendations for changes in curriculum content, methods and/or facilities.

Career Possibilities

Computer Option: Hardware and software Computer Applications Engineers • Test Equipment Engineers • Manufacturing Engineers or Technical Sales Engineers in industry and organizations where a combination of hardware and software background is required

Electronics Option: Electronic Technician • Calibration Engineer • Construction Inspector • Computer Applications Engineer • Time Study Engineer • Facilities Planner • Field Engineer • Manufacturing Engineering • Operations Research Analyst • Sales Representative • Project Engineer • Associate Electronics Engineer • Product Design Engineer • Process Engineer • Instructor

Environmental Option: Air Quality Engineer • Compliance Officer • Environmental Assessment Consultant • Groundwater and Soil Contamination Specialist • Hazardous Materials Manager • Incineration Management Specialist • Natural Resources Manager • On-site Sewage Disposal Director • Permits Compliance Manager • Remedial Design and Construction Manager • Site Assessment Specialist • Technical Writer - Environmental Specialist • Urban-Environmental Studies Planning Director • Waste Management Director

Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.

General Requirements

All students in the BSET, BSEET, or BSCET programs must receive a minimum grade of "C" in each of the prerequisite courses before enrolling in any Engineering Technology course. In addition to any other all-university requirements regarding grade point averages for graduation, student must achieve a minimum of 2.0 average in all Engineering Technology courses.

Bachelor of Science in Engineering Technology

Option in Technology and Engineering Education (120 units)

Administered by the Computer Engineering and Computer Science Department.

Faculty Advisor - Roni Allen

CECS Department Office - ECS 540

Faculty Advisor's Office - ECS 525

Faculty Advisor's Telephone -(562) 985-1523

The Option in Technology and Engineering Education is for students preparing to teach technology and programming courses at the middle or high school level. Completion of these courses meets the subject matter competence requirement for the Single Subject Teaching Credential in Industrial and Technology Education (ITE). Students should consult the department's Industrial and Technology Education advisor to plan their program.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 111 and 113, and PHYS 100A within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 122, PHYS 100A and B within one calendar year.

Requirements

Lower Division:

Take all of the following courses:

CECS 100 Critical Thinking in Digital Information Age (3)
Prerequisite/Corequisite: ENGL 100 or equivalent.

CECS 110 Beginning Web Design (3)
Prerequisites: None.

CECS 174 Programming and Problem Solving (3)
Prerequisite: CECS 100 and MATH 113 (or equivalent) all with a grade of "C" or better.

CECS 200 Intermediate Web Design (3)
Prerequisite: CECS 110 with a grade of "C" or better.
Prerequisite/Corequisite: CECS 100.

CECS 202 The Digital Information Age (3)
Prerequisite: GE Foundation requirements.

CEM 121 Construction Drawing I (2)
Prerequisites: None.

CEM 125 Fundamentals of Construction (3)
Prerequisites: None.

DESN 120A Fundamentals of Design (3)
Prerequisites: None.

- ENGR 101 Introduction to Engineering Profession (1)
Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.
- ENGR 102 Academic Success Skills (1)
Prerequisite: ENGR 101 with a grade of "C" or better.
- ET 101 Introduction to Engineering Technology (1)
Prerequisites: None.
- ET 170 Engineering Drafting and Design (3)
Prerequisite: Sophomore standing.
- MAE 272 Introduction to Manufacturing Processes (2)
Prerequisite: MAE 172 with a grade of "C" or better.
- PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.
- PHYS 100B General Physics (4)
Prerequisite: PHYS 100A.

Choose one of the following pairs:

- ET 250 Circuit Analysis I (2)
Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 250L.
- ET 250L Circuit Analysis I Laboratory (1)
Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 250.
- or
- ET 302 Industrial Electricity (2)
Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 302L.
- ET 302L Industrial Electricity Laboratory (1)
Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 302.

Upper Division:

Take all of the following:

- CE 426 Transportation Engineering (3)
Prerequisite: CE 345 with a grade of "C" or better.
Corequisite: CE 406.
- CECS 310 Computer-Based Learning Resources (3)
Prerequisite: CECS 200 with a grade of "C" or better.
- CEM 310 Communication in Engineering Profession (3)
Prerequisites: ENGL 100, COMM 110 all with a grade of "C" or better and Senior standing.
- DESN 368 History and Theory of Design (3)
Prerequisite: GE Foundation requirements.
- ENGR 302I Energy and Environment (3)
Prerequisites: G.E. Foundation requirements, one or more Exploration courses, and upper-division standing.
- ENGR 375 Total Quality & Continuous Improvement (3)
Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.
- ET 307 Industrial Safety (2)
Prerequisite: Junior Standing.

Concentration I:

- CECS 401 Programming Robots – For Educators (3)
Prerequisite: Some programming experience.
- CECS 410 Computers and Networks (3)
Prerequisite: Course design assumes familiarity with computers.
- CECS 414 Intro to Network & System Security Issues (3)
Prerequisites: CECS 174 with a grade of "C" or better.
- EETEC 435 Accessible Electronic and Info Technologies (3)
Prerequisite: Either ETEC 110, 411, 444 all with a grade of "C" or better or consent of instructor.

Concentration II:

- CE 406 Cost Engineering and Analysis (3)
Prerequisite: GE Foundation requirements.
- ET 244 Machine Tools (1)
Corequisite: ET 244L.

- ET 244L Machine Tools Laboratory (1)
Corequisite: ET 244.
- ET 264 Industrial Tooling (1)
Prerequisites: ET 170 with a grade of "C" or better;
Corequisite: ET 264L.
- ET 264L Industrial Tooling Laboratory
Prerequisites: ET 170 all with a grade of "C" or better;
Corequisite: ET 264.
- ET 313 QA, Inspection Measurement and Testing (2)
Prerequisite: ET 311 all with a grade of "C" or better.
Corequisite: ET 313L.
- ET 313L QA, Inspection Measurement & Testing Lab (1)
Prerequisite: ET 311 all with a grade of "C" or better.
Corequisite: ET 313.
- ET 335 Engineering Materials and Processes I (3)
Corequisite: ET 335L.

Single Subject Teaching Credential in Industrial and Technology Education

In addition to meeting the subject matter competence for the Teaching Credential, prospective students are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog, or the Single Subject Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

Option in Environmental Technology (133 units)

Not accepting new students as of Fall 2012.

Prerequisite Core

Lower Division:

Take all of the following courses:

- CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).
- ENGR 203 Engineering Problem Solving & Analysis (3)
Prerequisite: MATH 122 with a grade of "C" or better;
Corequisite: ENGR 203L.
- ENGR 203L Engr Problem Solving & Analysis Lab (1)
Prerequisite: MATH 122 with a grade of "C" or better.
Corequisite: ENGR 203.
- ET 101 Introduction to Engineering Technology (1)
Prerequisites: None.
- ET 170 Engineering Drafting and Design (3)
Prerequisite: Sophomore standing.
- ET 202 Probability and Statistics for Technology (3)
Prerequisite: High school algebra. Corequisite: ET 202L.
- ET 202L Probability & Statistics for Technology Lab (1)
Prerequisites: 2 yrs high school algebra, geometry, and intermediate algebra (or MATH 010) or equivalent.
Corequisite: ET 202.

ET 204 Applied Mechanics-Statics (3)
Prerequisites: MATH 120, PHYS 100A all with a grade of "C" or better.

ET 205 Computer Systems and Programming (1)
Corequisite: ET 205L.

ET 205L Computer Systems and Programming Lab (1)
Corequisite: ET 205.

MATH 120 Technical Calculus (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 100B General Physics (4)
Prerequisites: PHYS 100A.

Upper Division:

Take all of the following courses:

ECON 300 Fundamentals of Economics (3)
Prerequisites: GE Foundation requirements.

ET 301 Engineering Materials (2)
Prerequisites: CHEM 111A with a grade of "C" or better.
Corequisite: ET 301L.

ET 301L Engineering Materials Laboratory (1)
Prerequisites: CHEM 111A with a grade of "C" or better.
Corequisite: ET 301.

ET 307 Industrial Safety (2)
Prerequisite: Junior Standing.

ET 335 Engineering Materials and Process I (3)
Corequisite: ET 335L.

ET 335L Engineering Materials and Process I Lab (1)
Corequisite: ET 335.

ET 410 Cost Engineering and Analysis (3)
Prerequisites: Economics course, Junior standing.

Select one of the following:

ET 309 Industrial Leadership (2)
Prerequisites: ET 101 with a grade of "C" or better.

ENGR 310 Bus Communication in Engr Profession (3)

Requirements

Lower Division:

Take all of the following courses:

ET 206 Introduction to Environmental Hazardous Materials and Waste Technology (3)
Prerequisites: CHEM 111A, PHYS 100A all with a grade of "C" or better.

ET 209 Environmental Applications of Physics and Organic Chemistry (2)
Prerequisite: CHEM 111A with a grade of "C" or better.

ET 210 Hazardous Material & Waste Management (3)
Prerequisites: CHEM 111A, ET 206 all with a grade of "C" or better.

ET 213 Environmental Health, Safety and Emergency Response (3)
Prerequisites: CHEM 111A, ET 206 all with a grade of "C" or better.

Upper Division:

Take all of the following courses:

ET 319 Environmental Regulations and Compliance (3)
Prerequisites: None.

Select at least 11 units of approved electives in consultation with an advisor from the following courses:

ET 409F, 476; H SC 422

Fieldwork Requirements

Fieldwork experience is required for the BS in Engineering Technology, Option in Environmental Technology, consisting of no less than three months full-time (40 hours/week) (or equivalent part-time) of employment in an approved industry or governmental agency. The student must hold a position equivalent to a technician or higher which affords the opportunity to exercise responsibility usually given to those who have completed two years of college. The fieldwork must be completed prior to graduation, be certified and approved by the faculty of the Department.

Bachelor of Science in Computer Engineering Technology (129 units)

Administered by the Electrical Engineering Department.

Faculty Advisor - I-Hung Khoo

EE Department Office - ECS 561

Faculty Advisor's Office - ECS 517

Faculty Advisor's Telephone - (562) 985-5082

This program is available to students interested in the manufacturing of computers and the applications and operations aspects of computer hardware and software.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 111, 113, and PHYS 100A within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 122 and PHYS 100A and B within one calendar year.

Requirements

Lower Division:

Take all the following courses:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

ENGR 101 Introduction to Engineering Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

ENGR 102 Academic Success Skills (1)

Prerequisite: ENGR 101 with a grade of "C" or better.

ENGR 203 Engineering Problem Solving & Analysis (3)

Prerequisite: MATH 122 all with a grade of "C" or better.
Corequisite: ENGR 203L.

ENGR 203L Engr Problem Solving & Analysis Lab (1)

Prerequisite: MATH 122 all with a grade of "C" or better.
Corequisite: ENGR 203.

- ET 101 Introduction to Engineering Technology (1)
Prerequisites: None.
- ET 170 Engineering Drafting and Design (3)
Prerequisite: Sophomore standing.
- ET 202 Probability and Statistics for Technology (3)
Prerequisite: High school algebra.
Corequisite: ET 202L.
- ET 202L Probability & Statistics for Technology Lab (1)
Prerequisites: 2 yrs high school algebra, geometry, and intermediate algebra (or MATH 010) or equivalent.
Corequisite: ET 202.
- ET 205 Computer Systems and Programming (1)
Corequisite: ET 205L.
- ET 205L Computer Systems and Programming Lab (1)
Corequisite: ET 205.
- ET 250 Circuit Analysis I (2)
Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 250L.
- ET 250L Circuit Analysis I Laboratory (1)
Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 250.
- ET 252 Circuit Analysis II (2)
Prerequisites: MATH 120, ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 252L.
- ET 252L Circuit Analysis II Lab (1)
Prerequisites: MATH 120, ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 252.
- ET 255 Introduction to Digital Electronics (2)
Prerequisites: ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 255L.
- ET 255L Introduction to Digital Electronics Lab (1)
Prerequisites: ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 255.
- ET 260 Solid State Electronic I (2)
Prerequisites: ET 252, 252L all with a grade of "C" or better.
Corequisite: ET 260L.
- ET 260L Solid State Electronic I Lab (1)
Prerequisites: ET 252, 252L all with a grade of "C" or better.
Corequisite: ET 260.
- ET 286 Intro to Object-Oriented Programming (2)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 286L.
- ET 286L Intro to Object-Oriented Programming Lab (1)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 286.

Upper Division:

Take all the following courses:

- ET 309 Industrial Communications and Leadership (3)
Prerequisites: ET 101 with a grade of "C" or better.
- ET 311 Quality Engineering Technology (3)
Prerequisites: ET 202, 202L all with a grade of "C" or better.
- ET 360 Control Instrumentation (2)
Prerequisites: ET 260, 260L all with a grade of "C" or better.
Corequisite: ET 360L.
- ET 360L Control Instrumentation Lab (1)
Prerequisites: ET 260, 260L all with a grade of "C" or better.
Corequisite: ET 360.
- ET 386 Introduction to Microprocessors (2)
Prerequisite: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 386L.
- ET 386L Introduction to Microprocessors Lab (1)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 386.
- ET 387 Robot Programming and Mechatronics (2)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 387L.
- ET 387L Robot Programming & Mechatronics Lab (1)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 387.
- ET 388 Technical Applications Using Programming Languages (2)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 388L.
- ET 388L Technical Applications Using Programming Languages Lab (1)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 388.
- ET 410 Cost Engineering and Analysis (3)
Prerequisites: Economics course, Junior standing.
- ET 442 Computer Circuits (2)
Prerequisites: ET 255, 255L all with a grade of "C" or better.
Corequisite: ET 442L.
- ET 442L Computer Circuits Lab (1)
Prerequisites: ET 255, 255L all with a grade of "C" or better.
Corequisite: ET 442.
- ET 486 Data Structures (2)
Prerequisites: ET 388, 388L all with a grade of "C" or better.
Corequisite: ET 486L.
- ET 486L Data Structures Lab (1)
Prerequisites: ET 388, 388L all with a grade of "C" or better.
Corequisite: ET 486.
- ET 487 Introduction to Data Communications and Networking (2)
Prerequisites: ET 286, 286L, 386, 386L or equivalents all with a grade of "C" or better.
Corequisite: ET 487L.
- ET 487L Introduction to Data Communications and Networking Lab (1)
Prerequisites: ET 286, 286L, 386, 386L or equivalents all with a grade of "C" or better.
Corequisite: ET 487.
- ET 488 Microcomputer Systems (2)
Prerequisites: ET 386, 386L all with a grade of "C" or better.
Corequisite: ET 488L.
- ET 488L Microcomputer Systems Lab (1)
Prerequisites: ET 386, 386L all with a grade of "C" or better.
Corequisite: ET 488.
- ET 489 Computer Interfacing (2)
Prerequisites: ET 442, 442L, 488, 488L all with a grade of "C" or better.
Corequisite: ET 489L.
- ET 489L Computer Interfacing Lab (1)
Prerequisites: ET 442, 442L, 488, 488L all with a grade of "C" or better.
Corequisite: ET 489.
- ET 492 Computer Controlled Industrial Systems (2)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 492L.
- ET 492L Computer Controlled Industrial Systems Laboratory (1)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 492.
- ET 494 Applied Systems Development Project (2)
Prerequisites: ET 386, 386L, 487, 487L all with a grade of "C" or better.
Corequisite: ET 494L.
- ET 494L Applied Systems Development Project Lab (1)
Prerequisites: ET 386, 386L, 487, 487L all with a grade of "C" or better.
Corequisite: ET 494.

Take 3 units of either ET 312 Statistical Quality Control or ET 461 Management of Manufacturing Operations. Take at least 3 units from the following, in consultation with an advisor:
ET 409E or (491, 491L) or (497, 497L).

Fieldwork Requirements

Fieldwork experience is required for the BS in Computer Engineering Technology, consisting of no less than three months full-time (40 hours/week) (or equivalent part-time) of employment in an approved industry or governmental agency. The student must hold a position equivalent to a technician or higher which affords the opportunity to exercise responsibility usually given to those who have completed two years of college. The fieldwork must be completed prior to graduation, be certified and approved by the faculty of the Department.

Bachelor of Science in Electronics Engineering Technology (129 units)

Administered by the Electrical Engineering Department.
Faculty Advisor - I-Hung Khoo
EE Department Office - ECS 512
Faculty Advisor's Office - ECS 517
Faculty Advisor's Telephone - (562) 985-5082

The Electronics Engineering Technology program, prepares the student for a position as a technologist, in such industries as aerospace, computers, communications, biomedical, chemical, power, etc. Students are offered a wide range of training in topics such as instrumentation, controls, microprocessors, microelectronics, biomedical electronics, communications, motors and generators, robotics, computer applications, programming and interfacing. Moreover the program emphasizes written and oral communications skills as well as modern methods of industrial administration and supervision.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 111 and 113, and PHYS 100A within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 122 and PHYS 100A and B within one calendar year.

Requirements

Lower Division:

Take all the following courses:

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

PHYS 100A General Physics (4)
Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 100B General Physics (4)
Prerequisites: PHYS 100A.

ENGR 101 Introduction to Engineering Profession (1)
Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

ENGR 102 Academic Success Skills (1)
Prerequisite: ENGR 101 with a grade of "C" or better.

ENGR 203 Engineering Problem Solving & Analysis (3)
Prerequisite: MATH 122 all with a grade of "C" or better.
Corequisite: ENGR 203L.

ENGR 203L Engr Problem Solving & Analysis Lab (1)
Prerequisite: MATH 122 with a grade of "C" or better.
Corequisite: ENGR 203.

ET 101 Introduction to Engineering Technology (1)
Prerequisites: None.

ET 170 Engineering Drafting and Design (3)
Prerequisite: Sophomore standing.

ET 202 Probability and Statistics for Technology (3)
Prerequisite: High school algebra.
Corequisite: ET 202L.

ET 202L Probability & Statistics for Technology Lab (1)
Prerequisites: 2 yrs high school algebra, geometry, and intermediate algebra (or MATH 010) or equivalent.
Corequisite: ET 202.

ET 205 Computer Systems and Programming (1)
Corequisite: ET 205L.

ET 205L Computer Systems and Programming Lab (1)
Corequisite: ET 205.

ET 250 Circuit Analysis I (2)
Prerequisite: PHYS 100B all with a grade of "C" or better.
Corequisite: ET 250L.

ET 250L Circuit Analysis I Laboratory (1)
Prerequisite: PHYS 100B all with a grade of "C" or better.
Corequisite: ET 250.

ET 252 Circuit Analysis II (2)
Prerequisites: MATH 120, ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 252L.

ET 252L Circuit Analysis II Lab (1)
Prerequisites: MATH 120, ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 252.

ET 255 Introduction to Digital Electronics (2)
Prerequisites: ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 255L.

ET 255L Introduction to Digital Electronics Lab (1)
Prerequisites: ET 250, 250L all with a grade of "C" or better.
Corequisite: ET 255.

ET 260 Solid State Electronic I (2)
Prerequisites: ET 252, 252L all with a grade of "C" or better.
Corequisite: ET 260L.

ET 260L Solid State Electronic I Lab (1)
Prerequisites: ET 252, 252L all with a grade of "C" or better.
Corequisite: ET 260.

ET 286 Intro to Object-Oriented Programming (2)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 286L.

ET 286L Intro to Object-Oriented Programming Lab (1)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 286.

Upper Division:

Take all the following courses:

ET 309 Industrial Communications and Leadership (3)
Prerequisites: ET 101 with a grade of "C" or better.

ET 311 Quality Engineering Technology (3)
Prerequisites: ET 202, 202L all with a grade of "C" or better.

ET 341 Solid State Electronic II (2)
Prerequisites: ENGR 203, 203L, ET 260, 260L all with a grade of "C" or better.
Corequisite: ET 341L.

- ET 341L Solid State Electronic II Lab (1)
Prerequisites: ENGR 203, 203L, ET 260, 260L all with a grade of "C" or better.
Corequisite: ET 341.
- ET 350 Motors and Generators (2)
Prerequisites: ET 252, 252L all with a grade of "C" or better.
Corequisite: ET 350L.
- ET 350L Motors and Generators Lab (1)
Prerequisite: ET 252 252L all with a grade of "C" or better.
Corequisite: ET 350.
- ET 360 Control Instrumentation (2)
Prerequisites: ET 260, 260L all with a grade of "C" or better.
Corequisite: ET 360L.
- ET 360L Control Instrumentation Lab (1)
Prerequisites: ET 260, 260L all with a grade of "C" or better.
Corequisite: ET 360.
- ET 386 Introduction to Microprocessors (2)
Prerequisite: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 386L.
- ET 386L Introduction to Microprocessors Lab (1)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 386.
- ET 387 Robot Programming and Mechatronics (2)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 387L.
- ET 387L Robot Programming & Mechatronics Lab (1)
Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 387.
- ET 388 Technical Applications Using Programming Languages (2)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 388L.
- ET 388L Technical Applications Using Programming Languages Lab (1)
Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 388.
- ET 410 Cost Engineering and Analysis (3)
Prerequisites: Economics course, Junior standing.
- ET 442 Computer Circuits (2)
Prerequisites: ET 255, 255L all with a grade of "C" or better.
Corequisite ET 442L.
- ET 442L Computer Circuits Lab (1)
Prerequisites: ET 255, 255L all with a grade of "C" or better.
Corequisite ET 442.
- ET 444 Telecommunications (3)
Prerequisites: ET 360, 360L all with a grade of "C" or better.
- ET 447 Industrial Applications of Electronic Circuits (2)
Prerequisites: ET 341, 341L all with a grade of "C" or better.
Corequisite: ET 447L.
- ET 447L Industrial Appl of Electronic Circuits Lab (1)
Prerequisites: ET 341, 341L all with a grade of "C" or better.
Corequisite: ET 447.
- ET 460 Electronic Packaging and Design (2)
Prerequisites: ET 341, 341L all with a grade of "C" or better and senior standing.
Corequisite: ET 460L.
- ET 460L Electronic Packaging and Design Lab (1)
Prerequisites: 341, 341L all with a grade of "C" or better and senior standing.
Corequisite: ET 460.
- ET 488 Microcomputer Systems (2)
Prerequisites: ET 386, 386L all with a grade of "C" or better.
Corequisite: ET 488L.
- ET 488L Microcomputer Systems Lab (1)
Prerequisites: ET 386, 386L all with a grade of "C" or better.
Corequisite: ET 488.

Take 3 units of either ET 312 Statistical Quality Control or ET 461 Management of Manufacturing Operations.
Take at least 3 units from the following courses, in consultation with an advisor:
ET 409B or 441 or (445, 445L).

Fieldwork Requirements

Fieldwork experience is required for the BS in Electronics Engineering Technology, consisting of no less than three months full-time (40 hours/week) (or equivalent part-time) of employment in an approved industry or governmental agency. The student must hold a position equivalent to a technician or higher which affords the opportunity to exercise responsibility usually given to those who have completed two years of college.

The fieldwork must be completed prior to graduation, be certified and approved by the faculty of the Department.

Engineering Technology Courses (E T)

LOWER DIVISION

101. Introduction to Engineering Technology (1)

Survey of professional activities and environment of engineering technologist. Covers role of technologist in American industry, the history of technology and the growth and future of those professionals who hold the Bachelor of Science degree in Engineering Technology.

(Lecture-Discussion 1 hour) Credit/No Credit grading only.

170. Engineering Drafting and Design (3)

Prerequisite: Sophomore standing.

Graphic communication including freehand sketching. Introduction to blueprinting reading and computer aided drafting. Emphasis on engineering drafting practices; general standards, tolerances, thread series, welding joints, surface finishes, fasteners, structural shapes.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

202. Probability and Statistics for Technology (3)

Prerequisite: High school algebra. Corequisite: ET 202L.

Statistics and probability theory, sampling, correlation, regression as applied to Engineering Technology.

(Lecture-problems 3 hours) Letter grade only (A-F).

202L. Probability and Statistics for Technology Laboratory (1)

Prerequisites: 2 yrs high school algebra, geometry, and intermediate algebra (or MATH 010) or equivalent.
Corequisite: ET 202.

Laboratory exercises in statistics and probability theory, sampling, correlation, regression as applied to Engineering Technology. Simulation using statistical packages.

(Laboratory 3 hours) Letter grade only (A-F).

204. Applied Mechanics-Statics (3)

Prerequisites: MATH 120, PHYS 100A all with a grade of "C" or better.

Force systems acting on structures, moments, equilibrium, centroids, trusses, beams, cables, frames, machines, friction, section properties, masses, both U.S. and S.I. units of measurements.

(Lecture 2 hrs, activity 2 hrs) Letter grade only (A-F).

Engineering Technology Courses (E T)

205. Computer Systems and Programming (1)

Corequisite: ET 205L.

Overview of computer systems, hardware, and software development. Hardware topics include central processing unit and memory, input/output devices, storage mechanism, and communication. Software topics include programming languages, operating systems, and systems analysis and design.

(Lecture – discussion, exercise, 1 unit) Letter grade only (A-F). Same course as CEM 205

205L. Computer Systems and Programming Lab (1)

Corequisite: ET 205.

Laboratory exercises in computer programming to solve problems in business, manufacturing, research and simulation. An object-oriented programming language will be used for these activities.

(Laboratory 3 hours) Letter grade only (A-F). Same as CEM 205L

206. Introduction to Environmental Hazardous Materials and Waste Technology (3)

Prerequisites: CHEM 111A, PHYS 100A 100A all with a grade of "C" or better.

Overview of environmental effects of industrial pollution and history of environmental legislation. Study of industrial processes and generation of waste streams in selected industries. Introduction to concepts of sustainable development, energy conservation, waste minimization and waste treatment.

Letter grade only (A-F). (Lecture-Discussion 3 hours)

208. Hazardous Waste Stream Generation, Reduction, Treatment (3)

Industrial processes and waste streams in industry: electroplating, metal finishing/printed circuit board production, oil refining/chemical production, general manufacturing, printing/graphic reproduction, agriculture/consumer services. Raw materials/chemicals in industry as they move through industrial process, material balance of inventory. Regulations and importance of waste minimization/treatment.

Letter grade only (A-F).

209. Environmental Applications of Physical and Organic Chemistry (2)

Prerequisite: CHEM 111A 100A all with a grade of "C" or better.

Applications of physical and organic chemistry in environmental science and engineered environmental systems.

Letter grade only (A-F). (Lecture-Discussion 2 hours)

210. Hazardous Material and Waste Management (3)

Prerequisites: CHEM 111A, ET 206 100A all with a grade of "C" or better.

A study of the requirements of federal, state and local regulations relating to the management of hazardous materials and hazardous wastes. Particular focus on compliance with shipping, storage, labeling, sampling, and inventory and release reporting requirements.

Letter grade only (A-F). (Lecture-Discussion 3 hours)

212. Hazardous Materials Management Application (3)

Requirements and applications of federal, state and local laws and regulations relating to hazardous materials. Compliance with Department of Transportation, Occupation Safety and health Administration, Hazard Communication, Superfund Amendments and Reauthorization Act, Title III community Right to Know etc.

Letter grade only (A-F).

213. Environmental Health, Safety and Emergency Response (3)

Prerequisites: CHEM 111A, ET 206 100A all with a grade of "C" or better.

Hands-on instruction in safety and emergency response to chemical and physical exposures in industrial and field settings. Acute and chronic health effects produced by exposure to chemical agents.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

244. Machine Tools (1)

Corequisite: ET 244L.

Operations and use of the conventional and non-conventional machine tools.

Not open for credit to students with previous machine tools credit. (Lecture-Discussion 1 hour) Letter grade only (A-F).

244L. Machine Tools Laboratory (1)

Corequisite: ET 244.

Laboratory exercises using conventional and non-conventional machine tools.

Not open for credit to students with previous machine tools experience. (Laboratory 3 hours) Letter grade only (A-F).

250. Circuit Analysis I (2)

Prerequisite: PHYS 100B with a grade of "C" or better.

Corequisite: ET 250L.

Fundamentals of DC theory, units of measurements, systems of units. Current, voltage, resistance, Ohm's law, power, energy. Series and parallel circuits. Methods of analysis and selected topics. Network theorems such as superposition, Thevenin's, Norton's and Millman's theorems.

(Lecture-Discussion 2 hours) Letter grade only (A-F).

250L. Circuit Analysis I Laboratory (1)

Prerequisite: PHYS 100B with a grade of "C" or better.

Corequisite: ET 250.

Laboratory exercises will be conducted on AC and DC circuits using proto boards and power supplies, multi-meters, function generators, oscilloscopes and frequency counters.

(Laboratory 3 hours) Letter grade only (A-F).

252. Circuit Analysis II (2)

Prerequisites: MATH 120, ET 250, 250L all with a grade of "C" or better.

Corequisite: ET 252L.

Study of circuit analysis techniques in AC, including network theorems, mesh and nodal analysis, transients, time domain and phasors, magnetic circuits, sinusoidal and non-sinusoidal wave forms, resonance circuits (series and parallel), filters (low-pass, high-pass, passband and bandstop).

(Lecture-Discussion 2 hours) Letter grade only (A-F).

252L. Circuit Analysis II Laboratory (1)

Prerequisites: MATH 120, ET 250, 250L all with a grade of "C" or better.

Corequisite: ET 252.

Laboratory exercises will be conducted on AC circuits using proto boards and AC power supplies, function generators, oscilloscopes, and frequency counters.

(Laboratory 3 hours) Letter grade only (A-F).

255. Introduction To Digital Electronics (2)

Prerequisites: ET 250, 250L all with a grade of "C" or better.

Corequisite: ET 255L.

Combinational logic utilizing Boolean algebra and the binary numbering system. Includes Karnaugh maps, truth tables, coding, switching circuits, converters and logic circuit elements.

(Lecture-problems 2 hours) Letter grade only (A-F).

255L. Introduction to Digital Electronics Laboratory (1)

Prerequisites: ET 250, 250L all with a grade of "C" or better.

Corequisite: ET 255.

Laboratory exercises in basic logic circuits. Topics included are

breadboarding, basic gates, and combinational circuits.
(Laboratory 3 hours) Letter grade only (A-F).

260. Solid-State Electronics I (2)

Prerequisites: ET 252, 252L all with a grade of "C" or better.
Corequisite: ET 260L.

Analysis and design of solid-state electronic circuits using diodes, bipolar, unijunction and field-effect devices.

(Lecture-Discussion 2 hours) Letter grade only (A-F).

260L. Solid State Electronics I Laboratory (1)

Prerequisites: ET 252, 252L all with a grade of "C" or better.
Corequisite: ET 260.

Laboratory exercises in breadboarding and measurements of solid-state circuits utilizing all types of electronic measuring equipment.

(Laboratory 3 hours) Letter grade only (A-F).

264. Industrial Tooling (1)

Prerequisites: ET 170 with a grade of "C" or better.
Corequisite: ET 264L.

Design of tools for production. Typical tooling problems include working drawings and hardware.

(Lecture-Discussion 1 hour) Letter grade only (A-F).

264L. Industrial Tooling Laboratory (1)

Prerequisites: ET 170 with a grade of "C" or better.
Corequisite: ET 264.

Laboratory experiments in tool design in relation to mass part production.

(Laboratory 3 hours) Letter grade only (A-F).

286. Introduction to Object-Oriented Programming (2)

Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 286L.

Introduction to an object-oriented programming language (C++).
Problem analysis and software development methodology.
Emphasis on applications to technology

(Lec-Discussion 2 hrs) Letter grade only (A-F).

286L. Introduction to Object-Oriented Programming Laboratory (1)

Prerequisites: ET 205, 205L all with a grade of "C" or better.
Corequisite: ET 286.

Introduction to an object-oriented programming language (C++).
Problem analysis and software development methodology.
Emphasis on applications to technology.

Letter grade only (A-F). (Laboratory 3 hours)

UPPER DIVISION

301. Engineering Materials (2)

Prerequisites: CHEM 111A with a grade of "C" or better.
Corequisite: ET 301L.

Study of physical and mechanical properties and applications of engineering materials.

Letter grade only (A-F). (Lecture-Discussion 2 hours)

301L. Engineering Materials Laboratory (1)

Prerequisites: CHEM 111A with a grade of "C" or better.
Corequisite: ET 301.

Laboratory investigation and experiments in the application of engineering materials. Field trips.

Letter grade only (A-F). (Lab 3 hrs)

302. Industrial Electricity (2)

Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 302L.

Overview of electrical principles and applications in electrical manufacturing industries including instrumentation and power distribution.

Letter grade only (A-F). (Lecture 2 hours) May not be used for credit for the ECET program.

302L. Industrial Electricity Laboratory (1)

Prerequisite: PHYS 100B with a grade of "C" or better.
Corequisite: ET 302.

Overview of laboratory techniques in electrical engineering technology and applications in the industry.

Letter grade only (A-F). (Laboratory 3 hours) May not be used for credit for the ECET program.

304. Applied Mechanics Strength of Materials (2)

Prerequisite: ET 204 with a grade of "C" or better.

Analysis of strength and rigidity of structural members in resisting applied forces, stress, strain, shear, moment, deflections, combined stresses, connections, and moment distribution.

Letter grade only (A-F). (Lecture-Discussion 1 hour, Activity 2 hours)

307. Industrial Safety (2)

Prerequisite: Junior Standing.

Survey of industrial safety administration, engineering and management. Emphasis is placed on the role of the first line supervisor in establishing and maintaining a safe, healthful work environment for employees. Introduction to supporting computer resources used in the safety field.

Letter grade only (A-F). (Lecture-Discussion 2 hours)

309. Industrial Communications and Leadership (3)

Prerequisites: ET 101 with a grade of "C" or better.

English Composition. Principles, theories of industrial communications and management for engineering technology. Management functions of planning, organizing, motivating, leading, controlling and staffing in technical environment. Intro decision support models. Written/oral technical information; communication forms and procedures of industry, with computer applications.

(Lecture-Discussion, 3 hours) Letter grade only (A-F).

311. Quality Engineering Technology (3)

Prerequisites: ET 202, 202L all with a grade of "C" or better.

Junior standing. Quality engineering technology principles and practices in industry, including management concepts, inspection practices, costs of quality and testing.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

312. Statistical Quality Control (3)

Prerequisite: ET 311 all with a grade of "C" or better.

Statistical process control; including use of statistical methods for analysis and improvement of product quality, control charts, linear correlation; sampling procedures, stratification, cause and effect analysis, process capability and introduction to design of experiments.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

313. Quality Assurance, Inspection Measurement and Testing (2)

Prerequisite: ET 311 with a grade of "C" or better.
Corequisite: ET 313L.

Theory and application of inspection procedures, instrument calibration, precision measurements including theory and application of non-destructive testing of materials for quality control.

Letter grade only (A-F).

313L. Quality Assurance, Inspection Measurement and Testing Laboratory (1)

Prerequisite: ET 311 with a grade of "C" or better.
Corequisite: ET 313.

Laboratory experiments; instrument calibration including standards and precision measurements including the use of non destructive test equipment for quality control.

(Laboratory 3 hours) Letter grade only (A-F)

Engineering Technology Courses (E T)

319. Environmental Regulations and Compliance (3)

Analysis of federal and local administration of environmental laws, including the National Environmental Policy Act of 1969 and litigation of that act in the courts. Special attention paid to California and comparison of the environmental regulation policies of California.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

335. Engineering Materials and Processes I (3)

Corequisite: ET 335L.

Examination of engineering materials and manufacturing processes including the study of: Phase diagrams; heat treatment; metal casting processes; welding and soldering; corrosion, powder metallurgy, electronic fabrication; tribology, friction, wear, lubrication; surface treatment, coating and cleaning.

(Lecture - Discussion 3 hours) Letter grade only (A-F).

335L. Engineering Materials Processes I Laboratory (1)

Corequisite: ET 335.

Laboratory exercises in engineering materials and manufacturing processes including the study of: Phase diagram; heat treatment; casting; metallography and electronic manufacturing processes.

(Laboratory 3 hours) Letter grade only (A-F).

341. Solid State Electronics II (2)

Prerequisites: ENGR 203, 203L, ET 260, 260L all with a grade of "C" or better.

Corequisite: ET 341L.

Miller's Theorem, integrated circuits, feedback, operational amplifiers, Fourier series, distortion, modulation, phase-locked loops, linear and non-linear circuits, and breadboarding.

(Lec-Discussion 2 hrs) Letter grade only (A-F).

341L. Solid State Electronics II Laboratory (1)

Prerequisites: ENGR 203, 203L, ET 260, 260L all with a grade of "C" or better.

Corequisite: ET 341.

Laboratory exercises in design and measurement of various circuits using operational amplifiers, comparators, regulators, silicon controlled rectifiers, frequency mixers and phase-locked loops.

(Lab 3 hours) Letter grade only (A-F).

350. Motors and Generators (2)

Prerequisites: ET 252, 252L all with a grade of "C" or better.

Corequisite: ET 350L.

Study of electric rotating machinery, its theories, principles, design and applications in automation industries.

(Lecture-Problems 1 hour) Letter grade only (A-F).

350L. Motors and Generators Laboratory (1)

Prerequisite: ET 252 252L all with a grade of "C" or better.

Corequisite: ET 350.

Laboratory exercises in applications and design of rotating machines. Topics covered are DC machines, synchronous machines, servomotor, step motor, and control circuits.

(Laboratory 3 hours) Letter grade only (A-F).

360. Control Instrumentation (2)

Prerequisites: ET 260, 260L all with a grade of "C" or better.

Corequisite: ET 360L.

Application and basic design of analog and digital control instrumentation for industrial processes. Physical and electrical properties of thermal, mechanical and optical transducers with associated signal conditioning.

(Lecture-Problems 2 hours) Letter grade only (A-F).

360L. Control Instrumentation Laboratory (1)

Prerequisites: ET 260, 260L all with a grade of "C" or better.

Corequisite: ET 360.

Laboratory exercises in developing and measuring various control systems utilizing operational amplifiers, transducers, thermocouples, bridges, and various pressure devices.

(Laboratory 3 hours) Letter grade only (A-F).

363. Kinematics of Mechanisms (3)

Prerequisites: ET 170, ET 204 all with a grade of "C" or better.

Mathematical and graphical approaches to analyze the motion of mechanisms, for further machine development, through studies of displacement, velocity and acceleration of mechanical elements.

(Lecture-Discussion 2 hours, Activity 2 hours) Letter grade only (A-F).

365. Fluid Power and Control (2)

Prerequisite: ET 204 with a grade of "C" or better.

Corequisite: ET 365L.

Fundamentals and application of hydraulic, pneumatic and vacuum power as used in current manufacturing plants.

(Lecture-Discussion 2 hours) Letter grade only (A-F).

365L. Fluid Power and Control Laboratory (1)

Prerequisite: ET 204 with a grade of "C" or better.

Corequisite: ET 365.

Demonstration and operation of fluid power systems. Design and selection of components for specific applications. Computer data acquisition and analysis.

(Laboratory 3 hours) Letter grade only (A-F).

386. Introduction to Microprocessors (2)

Prerequisite: ET 286, 286L all with a grade of "C" or better.

Corequisite: ET 386L.

Theory and concepts of programming, hardware configuration, and functional capabilities of microcomputer systems including peripheral devices.

(Lecture-Problems 2 hours) Letter grade only (A-F).

386L. Introduction to Microprocessors Laboratory (1)

Prerequisites: ET 286, 286L all with a grade of "C" or better.

Corequisite: ET 386.

Laboratory exercises in programming microcomputers. Topics included are number systems, microcomputer structure, mnemonic, binary code, peripheral devices operations, stand alone operations, and system operations.

(Laboratory 3 hours) Letter grade only (A-F).

387. Robot Programming and Mechatronics (2)

Prerequisites: ET 205, 205L all with a grade of "C" or better.

Corequisite: ET 387L.

Basic concepts of robot manipulators, robot kinematics, robot programming languages. Applications of industrial robots, machine vision systems. Basic concepts of mechatronic systems: combine hardware, software, interface, and system integration to make an intelligent system. Sensors and actuators for robotics and mechatronic systems.

(Lecture-Problems 2 hours) Letter grade only (A-F).

387L. Robot Programming and Mechatronics Laboratory (1)

Prerequisites: ET 205, 205L all with a grade of "C" or better.

Corequisite: ET 387.

Laboratory exercises in industrial and educational robot operation and applications. Laboratory exercises on mechatronic systems. Robot systems and their computer language instructions will be used. The experiments include teach pendant programming, high level language programming, workcell applications, continuous path programming.

Letter grade only (A-F).

388. Technical Applications Using Programming Languages (2)

Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 388L.

Techniques for design and development of industrial programs that includes composite program design, module coupling/strength, program testing, top-down structured programming concepts and tools, object oriented programming, and memory management. Concepts are investigated and examined for use in solving complex problems.

(Lecture-problems 2 hours)

388L. Technical Applications Using Programming Languages Laboratory (1)

Prerequisites: ET 286, 286L all with a grade of "C" or better.
Corequisite: ET 388.

Techniques for design and development of industrial programs that includes composite program design, module coupling/strength, program testing, top-down structured programming concepts and tools, object oriented programming, and memory management. Concepts are investigated and examined for use in solving complex problems.

(Lab 3 hours)

390. Applied Computer-Aided Design and Manufacturing (2)

Prerequisites: ET 170, 205, 205L all with a grade of "C" or better.
Corequisite: ET 390L.

Roll of the computers in the manufacturing process, application of CAD/CAM systems, hardware and software components for automation, part programming for manufacturing, computer controlled manufacturing equipment, simulation, programming the factory.

(Lecture - Discussion 2 hours) Letter grade only (A-F).

390L. Applied Computer-Aided Design and Manufacturing Laboratory (1)

Prerequisites: ET 170, 205, 205L all with a grade of "C" or better.
Corequisite: ET 390.

Use of microcomputer based hardware and software to solve 2D and 3D modeling problems. Computer automation software packages. Also includes part programming and CAD/CAM data exchange exercises.

(Laboratory 3 hours) Letter grade only (A-F).

409. Selected Topics in Engineering Technology (1-3)

Prerequisites: Senior standing in ET, consent of instructor.

Advanced work of a technical nature within an area of specialization on an experimental or research basis.

Letter grade only (A-F). Topics announced in the *Schedule of Classes*.

- B. Electronics Technology
- C. Manufacturing Technology
- D. Quality Assurance
- E. Computer Technology
- F. Environmental Technology

410. Cost Engineering and Analysis (3)

Prerequisites: Economics course, Junior standing.

Introduction to the concepts of capital and operations budgets, capital acquisitions, economic evaluations of capital alternatives and factors of the time-value of money in industrial operations and construction industries.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

418. Production Methods and Process Improvement (3)

Prerequisite: ET 410 with a grade of "C" or better.

Simplification and improvement of manufacturing operations through the use of production analysis tools for optimum production economy. Also included is the investigation of production

automation applications for improving manufacturing process, quality and productivity.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

419. Design of Experiments (3)

Prerequisite: ET 312 with a grade of "C" or better.

Advanced statistical analysis applied to quality functions. Comparative and single factor experiments. Factorial designs and multiple regression.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

435. Engineering Materials and Processes II (3)

Prerequisites: ET 335, 335L all with a grade of "C" or better.
Corequisite: ET 435L.

Application of engineering materials and manufacturing processes including: rolling; forging; extrusion and drawing; sheet-metal forming; manufacturing of plastics and composites; material removal processes and rapid prototyping.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

435L. Engineering Materials and Processes II Laboratory (1)

Prerequisites: ET 335, 335L all with a grade of "C" or better.
Corequisite: ET 435.

Continuation of ET 335L. Laboratory exercises in: welding processes; machining processes; metal forming; manufacturing of composite materials.

(Laboratory 3 hours) Letter grade only (A-F).

441. Theory of Electronic Control (3)

Prerequisites: ET 360, 360L all with a grade of "C" or better.

Procedures for the design, preparation, and evaluation of electronic systems that control manufacturing and production processes, simulation analysis for sensing, programming, and actuating operations.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

442. Computer Circuits (2)

Prerequisites: ET 255, 255L all with a grade of "C" or better.
Corequisite ET 442L.

Introduction to digital hardware design. Combinational/sequential logic circuits and systems and application of integrated circuits to logic controls. Programmable logic devices, Field-programmable gate array, Circuit synthesis, and analysis.

(Lecture-Problems 2 hours) Letter grade only (A-F).

442L. Computer Circuits Laboratory (1)

Prerequisites: ET 255, 255L all with a grade of "C" or better.
Corequisite ET 442.

Laboratory study of digital computer circuits design and implementation. Standard designing and trouble-shooting procedures will be discussed. Topics covered are multivibrator, register, counter, decoder, arithmetic circuits, and memory.

(Laboratory 3 hours) Letter grade only (A-F).

444. Telecommunications (3)

Prerequisites: ET 360, 360L all with a grade of "C" or better.

National Communication Network, decibels, transmission units, transmission lines, characteristic impedance, loading systems, lattice networks, PCM, Nyquist Criterion, Bessel functions, coaxial cable, fiber optics, microwave, impedance matching, and Smith chart.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

445. Microelectronics (2)

Prerequisites: ET 350, 350L all with a grade of "C" or better.
Corequisite: ET 445L.

Design, processing and applications of monolithic and hybrid microcircuits for analog and digital systems.

(Lecture 2 hours) Letter grade only (A-F).

Engineering Technology Courses (E T)

445L. Microelectronics Laboratory (1)

Prerequisites: ET 350, 350L all with a grade of "C" or better.
Corequisite: ET 445.

Laboratory exercises in the processing of thick-film and thin-film materials, ultrasonic and thermocompression wire bonding and laser resistive trimming. Practical application and equipment utilization is emphasized.

(Laboratory 3 hours) Letter grade only (A-F).

447. Industrial Applications of Electronic Circuits (2)

Prerequisites: ET 341, 341L all with a grade of "C" or better.
Corequisite: ET 447L.

An in-depth study of the applications of important electronic circuit concepts in industry. Analysis of circuits and how they work in industrial applications. Techniques for troubleshooting of design circuits. Biomedical electronic circuits which have industrial applications are emphasized.

(Lecture-Discussion 2 hours) Letter grade only (A-F).

447L. Industrial Applications of Electronic Circuits Laboratory (1)

Prerequisites: ET 341, 341L all with a grade of "C" or better.
Corequisite: ET 447.

Laboratory exercises include constructing circuits which have important applications in industry. Troubleshooting methodology emphasized throughout. Assignments focus on biomedical electronic circuits which have industrial applications.

(Laboratory 3 hours) Letter grade only (A-F).

460. Electronics Project Design and Development (2)

Prerequisites: ET 341, 341L all with a grade of "C" or better and senior standing.
Corequisite: ET 460L.

Laboratory exercises in electronics project design and development. Topics include: product planning, implementation planning, proposal and approvals, prototyping, system integration, packaging, overall testing, and reporting. Formal demonstration, oral presentation on finished product and written report on the final design.

This capstone course is open to Electronics Technology majors only. Letter grade only (A-F). (Lecture-Discussion 2 hours)

460L. Electronics Project Design and Development Laboratory (1)

Prerequisites: 341, 341L all with a grade of "C" or better and senior standing.
Corequisite: ET 460.

Laboratory exercises in electronics project design and development. Topics include: product planning, implementation planning, proposal and approvals, prototyping, system integration, packaging, overall testing, and reporting. Formal demonstration, oral presentation on finished product and written report on the final design.

Letter grade only (A-F). (Laboratory 3 hours)

461. Management of Manufacturing Operations (3)

Prerequisite: ET 410 with a grade of "C" or better.

Application of analytical planning and control techniques to the resources of industry including the physical plant, equipment, personnel, inventories and supplies use in the production of products and services.

(Lecture-Discussion 3 hrs) Letter grade only (A-F).

476. Environmental Impact (3)

Prerequisite: BIOL 306 with a grade of "C" or better.

Required components of environmental impact reports and assessments and the processes involved in their preparation.

Special emphasis is placed on the biological portions of EIRs and impact on flora and fauna.

(Lecture-Discussion 3 hours) Letter grade only (A-F).

486. Data Structures (2)

Prerequisites: ET 388, 388L all with a grade of "C" or better.
Corequisite: ET 486L.

Data structures and applications. Choice and implementation of appropriate data structures for applications. Treatment of arrays, lists, stacks, queues, lined lists, trees, and assorted algorithms. Introduction to search and sorting. File organization techniques.

(Lecture-Problems 2 hours) Letter grade only (A-F).

486L. Data Structures Laboratory (1)

Prerequisites: ET 388, 388L all with a grade of "C" or better.
Corequisite: ET 486.

Laboratory exercises in data structures and applications. A recursive programming language will be used.

(Laboratory 3 hours) Letter grade only (A-F).

487. Introduction to Data Communications and Networking (2)

Prerequisites: ET 286, 286L, 386, 386L or equivalents all with a grade of "C" or better.
Corequisite: ET 487L.

Introduction to data communications fundamentals, peer-to-peer and client/server network models. Hardware and software technology, Protocols, networks, relational database technology, and security. Example applications, tools and development environments, Groupware, middleware. A design project and class presentation is required.

(Lecture-discussion 2 hours) Letter grade only (A-F).

487L. Introduction to Data Communications and Networking Laboratory (1)

Prerequisites: ET 286, 286L, 386, 386L or equivalents all with a grade of "C" or better.
Corequisite: ET 487.

Laboratory and programming exercises introducing the students to data communications and Networking technology. Protocols, networks, relational database technology, and security. Applications using software/hardware tools and development environments.

(Laboratory 3 hours) Letter grade only (A-F).

488. Microcomputer Systems (2)

Prerequisites: ET 386, 386L all with a grade of "C" or better.
Corequisite: ET 488L.

Study of available microprocessors and microcomputer systems. Topics cover microcomputer architecture, software structure, assembly language, central processing unit, input/output, memory manipulation, and interfacing applications in Engineering Technology.

(Lecture-problems 2 hours) Letter grade only (A-F).

488L. Microcomputer Systems Laboratory (1)

Prerequisites: ET 386, 386L all with a grade of "C" or better.
Corequisite: ET 488.

Laboratory experience in microcomputer architecture, assembly language programming, and interfacing applications in Engineering Technology. Topics covered are central processing unit function, memory organization, and input/output operation. Available microcomputer systems will be used. Applications in Engineering Technology.

(Laboratory 3 hours) Letter grade only (A-F).

489. Computer Interfacing (2)

Prerequisites: ET 442, 442L, 488, 488L all with a grade of "C" or better.

Corequisite: ET 489L.

Study of theories and techniques that are used in peripheral control and interfacing. Topics covered are serial interfacing, Parallel

interfacing, timing, handshaking, A/D converters, buffering, and UARTs.

(Lecture-Discussion 2 hours) Letter grade only (A-F).

489L. Computer Interfacing Laboratory (1)

Prerequisites: ET 442, 442L, 488, 488L all with a grade of "C" or better.

Corequisite: ET 489.

Laboratory exercises in computer interfacing applications and design. Available computer system and its assembly language instructions will be used.

(Laboratory 3 hours) Letter grade only (A-F).

491. Embedded Processors and Systems (2)

Prerequisites: ET 489, 489L all with a grade of "C" or better.

Corequisite: ET 491L.

Embedded microprocessors, embedded systems, development concepts, principles, and applications. Hardware/software tradeoffs, interfacing issues, memory sizing, timing, code and power optimization issues. Application requirements, platform selection, RISC vs. CISC issues, co-processors vs. ASIC's.

(Lecture-discussion 2 hours) Letter grade only (A-F).

491L. Embedded Processors and Systems Laboratory (1)

Prerequisites: ET 489, 489L all with a grade of "C" or better.

Corequisite: ET 491.

Laboratory exercises on embedded system development. Emphasis will be on application requirements, platform selection, interfacing, memory sizing, timing, code and power optimization. Use of development environments and evaluation boards.

(Laboratory 3 hours) Letter grade only (A-F).

492. Computer Controlled Industrial Systems (2)

Prerequisites: ET 286, 286L all with a grade of "C" or better.

Corequisite: ET 492L.

Concepts of computer-based control of industrial systems and data acquisition. Signals and measurements, noise, resolution, signal conditioning. Software and hardware for data acquisition and control.

(Lecture-discussion, 2 hours) Letter grade only (A-F).

492L. Computer Controlled Industrial Systems Laboratory (1)

Prerequisites: ET 286, 286L all with a grade of "C" or better.

Corequisite: ET 492.

Laboratory exercises on computer-based control of industrial systems and data acquisition. Software and hardware for data acquisition and control. Emphasis placed on object-oriented languages and creation of graphical user interfaces for data acquisition, display and control.

(Laboratory, 1 hour) Letter grade only (A-F).

494. Applied Systems Development Project (2)

Prerequisites: ET 386, 386L, 487, 487L all with a grade of "C" or better.

Corequisite: ET 494L.

Systems development concepts, principles, and practices to a comprehensive systems development project. Hands-on approach is used to analyze, design and document a realistic system.

Actual use of project management, interviewing, forms analysis, structured methods, behavioral dynamics, walk-throughs, report writing, and presentations.

(Lecture-Discussion 2 hours) Letter grade only (A-F).

494L. Applied Systems Development Project Laboratory (1)

Prerequisites: ET 386, 386L, 487, 487L all with a grade of "C" or better.

Corequisite: ET 494.

Laboratory exercises on applied system development. Emphasis will be on systems development concepts, principles, and practices to a comprehensive systems development project.

(Laboratory 3 hours) Letter grade only (A-F).

497. Computer Network Technology (2)

Prerequisites: ET 487, 487L all with a grade of "C" or better.

Corequisite: ET 497L.

Hardware and software technology as it relates to computer networking. LAN, WAN environments and access methods, Ethernet, ATM, Bridges, routers, gateways and intelligent hubs. Networking protocols. Security, Load balancing, and the use of simulation tools in designing networks.

(Lecture-discussion 2 hours) Letter grade only (A-F).

497L. Computer Network Technology Laboratory (1)

Prerequisites: ET 487, 487L all with a grade of "C" or better.

Corequisite: ET 497.

Laboratory exercises using hardware and software technology related to computer networking. Internetworking laboratory, Ethernet, ATM, Bridges, routers, gateways, and intelligent hubs. Security, Load balancing, and the use of simulation tools.

(Laboratory 3 hours) Letter grade only (A-F).

498. Manufacturing Engineering Technology Capstone Project (3)

Prerequisite: Senior standing.

Group project involving analysis, design, tooling and production processes for product manufacture. Economic, market and capital requirements, manpower analysis. Written reports and oral presentations required.

(Lecture 2 hours, Activity 2 hours) Letter grade only (A-F).

ENGLISH

College of Liberal Arts

Department Chair: Eileen S. Klink

Department Office: McIntosh Humanities Bldg. (MHB), Rm. 419
Telephone: (562) 985-4223
FAX: (562) 985-2369

Faculty: Sarah J. Arroyo, Elyse M. Blankley, Susan Carlile, Timothy Caron, Stephen Cooper, Gene L. Dinielli, Araceli Esparza, Brian H. Finney, Paul Gilmore, Lisa Glatt, Suzanne A. Greenberg, W. Gary Griswold, George Hart, Robert M. Hertz, Wilhelmina Hotchkiss, Helen C. Hu, Neil Hultgren, Lloyd E. Kermode, Eileen S. Klink, Beth Lau, Gerald I. Locklin (Emeritus), Dennis López, Ilan Mitchell-Smith, William Mohr, Alosi Moloi (Emeritus), Norbert Schürer, Patricia Seyburn, Nancy S. Sheley, Ronald J. Strahl, Martine van Elk, Dianne L. Vipond, Charles H. Webb, Frederick Wegener, Mark L. Wiley, Mark Williams, Rafael J. Zepeda, Carol Zitzer-Comfort

Office Manager: Lisa Behrendt

Career Possibilities

Advertising • Entertainment • Journalism • Management
• Law • Marketing • Mass Media (film, radio, television)
• Politics • Professional Writing and Editing (creative or technical) • Public Relations • Teaching • Publishing (Some of these require additional education or experience. For more information, see www.careers.csulb.edu.)

Scholarships

The Department of English annually gives many scholarships and awards to outstanding undergraduate and graduate students. Information about these scholarships and awards is available from the Department office at the beginning of the spring semester.

Undergraduate Programs

Bachelor of Arts in English

Program planners for each option are available in the Department office. Students should consult with Department faculty advisors when choosing a program in English and regularly as they progress towards their degrees.

The Department of English can refer students to one of the coordinating faculty advisors. Regular office hours for all English faculty are posted near the Department office, and information sheets are available detailing which faculty members regularly advise for specific options.

ENGL 100, a general education foundation course, is not part of any English option. Some options permit or require courses from other departments; if approved by a faculty advisor, options may also include other courses outside English. Because some courses meet requirements in several options, students can often change options with no significant loss of credit towards the required total; students also regularly double major in two options in English.

In addition to the degree requirements for the Bachelor of Arts in English, English majors must meet the following requirements for University graduation:

1. Each lower division course counted towards the English major must be completed with a grade of “C” or better. A

course in which a grade lower than a “C” is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite.

2. ENGL380, required of all English majors, must be completed with a grade of “C” or better. If a grade lower than a “C” is received, ENGL 380 must be retaken and successfully completed with a grade of “C” or better prior to enrolling in any course for which it is a prerequisite.

Option in Creative Writing (120 units)

The Creative Writing option is designed for students who wish to write as well as study fiction, poetry, plays, or media scripts. Exposure to traditional and recent literature is also of significant value for anyone seeking to master the forms and conventions of writing creatively for the literary marketplace.

This option consists of 45 units, 31 of which must be taken in the upper division, including the following:
Lower Division:

Take all of the following:

ENGL 180 Appreciation of Literature (3)
Prerequisite/Corequisite: One GE Foundation course.

ENGL 250A Survey of English Literature (4)
Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 250B Survey of English Literature (4)
Prerequisites: ENGL 100; GE Foundation requirements.

Take one of the following:

ENGL 204 Introduction to Creative Writing: Creative Nonfiction (3)
Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 205 Introduction to Creative Writing: Fiction (3)
Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 206 Introduction to Creative Writing: Poetry (3)
Prerequisites: ENGL 100; GE Foundation requirements.

Upper Division:

Take the following:

ENGL 380 Approaches to English Studies (4)
Prerequisite: ENGL 180 or equivalent.

Take nine units from the following:

ENGL 404, 405, 406, 407, 499

Take three classes chosen from the following classes in recent literature, literary genres, and literary criticism:

ENGL 385, 386, 459, 466, 467A/B, 469, 474, 475, 476A/B, 477A/B, 478, 479

Take electives to make up a total of 45 units chosen from the classes listed above and/or any upper-division English courses.

Option in English Education (120 units)

The Option in English Education is designed for prospective secondary English teachers and satisfies the state-mandated requirement in subject matter competence for the Single Subject Teaching Credential. This 52-unit option combines a 40-unit core with a specified emphasis in one of nine areas. All nine areas of emphasis require that students complete the 40-unit core requirements specified here and take the additional 12 units of breadth

and perspective as indicated below. English Education emphases should not be confused with BA options or majors in English or other departments, which have significantly different requirements.

Core Requirements

Take all of the following:

ENGL 310 Applied Composition (4)
Prerequisite: ENGL 101 or 317 or a baccalaureate degree.

ENGL 320 English Grammar (4)
Prerequisite: None

ENGL 363 Shakespeare I (4)
Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 375 American Ethnic Writers (3)
Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 380 Approaches to English Studies (4)
Prerequisite: ENGL 180 or equivalent.

ENGL 410 Theories of Writing and Literacy (3)
Prerequisite: ENGL 309 or 310 or consent of instructor.

ENGL 482 Literature for Adolescents (4)
Prerequisite: One college course in literature.

LING 339 Linguistics for Crosscultural Academic Development in Secondary School Settings (3)
Prerequisites: None

Take one of the following:

ENGL 250A Survey of English Literature (4)
Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 250B Survey of English Literature (4)
Prerequisites: ENGL 100; GE Foundation requirements.

Take one of the following:

ENGL 270A Survey of American Literature (4)
Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 270B Survey of American Literature (4)
Prerequisites: ENGL 100; GE Foundation requirements.

Take one of the following:

CWL 100, 124, 132, 320I, 346, 404, 452/552, CLSC101

General Education courses that meet California Commission for Teacher Credentialing Recommendations are:

Take three units from the following:

THEA 113, 122, 324I

Take three units from the following:

COMM 130, 335.

Breadth and Perspective

Africana Studies Emphasis

Take all of the following:

AFRS 140 Introduction to African-American Literature (3)
Prerequisite/Corequisite: One GE Foundation course.

AFRS 415 International Black Children's Literature (3)
Prerequisites: None

Take three units from the following:

AFRS 343A, 343B

Take three units from the following:

AFRS 180, 205, 240, 346.

Communication Studies Emphasis

Take the following:

COMM 355 Communication in the Classroom (3)

Take nine units from the following:

COMM 309, 331, 335, 352, 358, 411.

Creative Writing Emphasis

Take six units from the following:

ENGL 404, 405, 406, 407

Take six units from the following:

ENGL 385, 386, 459, 463, 467A/B, 474, 475, 476A/B, 477A/B, 478.

Journalism Emphasis

Take all of the following:

JOUR 120 Writing Across the Media (3)
Prerequisite: None

JOUR 305 Media Design (3)
Prerequisites: JOUR 3105.

JOUR 311 Reporting and Information Gathering (3)
Prerequisites: JOUR 120 with a grade of "C" or better.

Take three units from the following:

JOUR 430, 431

Language and Linguistics Emphasis

Take three units from the following:

LING 420, 421, 433

Take three units from the following:

LING 485, 486; EDP 485

Take three units from the following:

LING 425, 472; ANTH 421

Take three units from the following:

ENGL 435; LING 460

Literacy and Composition Emphasis

Take all of the following:

ENGL 435 Teaching Composition (3)
Prerequisite: Consent of instructor.

ENGL 436 Theories and Practices of Reading (3)
Prerequisites: None

Take two of the following:

ENGL 300, 309, 317, 404, 405, 406, 407, 417, 418, 497; LING 460.

Literature Emphasis

Take three units from the ENGL 450 series

Take three units from the ENGL 470 series

Take three units from the following:

ENGL 318I, 385, 386, 398

Take three units from the following:

1. Any course in ENGL 440 series;
2. Any course in ENGL 450 series different from above;
3. Any course in ENGL 460 series;
4. Any course in ENGL 470 series different from above;
5. Any course in ENGL 480 series except ENGL 482 or 498.

Theatre Arts Emphasis

Take all of the following:

THEA 101 Fundamentals of Script Analysis (3)
Prerequisites: None

THEA 114A Fundamentals of Acting (3)
Prerequisites: None

THEA 221 History of Theatre and Drama to 1660 (3)
Prerequisite: THEA 101 or concurrent enrollment or consent of instructor.

THEA 374 Fundamentals of Directing (3)
Prerequisites: THEA 101 and 114A or consent of instructor.

World Literature Emphasis

Take three units from the following:

CWL 101, 132, 452; CLSC 101

Take three units from the following:

CWL 330A, 330B

Take three units from the following:

CWL 103, 104, 334, 402, 403, 406, 440

Take three units from the following:

CWL 414I, 422I, 431, 432, 437, 438; CLSC 311I, 312I, 420I.

Single Subject Teaching Credential in English

In addition to meeting the subject matter competence requirement for the Single Subject Teaching Credential in English, prospective English teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the website (www.ced.csulb.edu/single-subject) for a description of professional preparation requirements, courses, and application procedures. Prospective students should consult the department's English Education Advisor early to plan their program.

Option in Literature (120 units)

The Literature option is designed for students who desire a thorough grounding in English and American literature and is particularly recommended for those planning on graduate study in English.

This option consists of 46 units, 27 of which must be taken in the upper division, including the following:

Lower Division:

Take all of the following:

ENGL 180 Appreciation of Literature (3)

Prerequisite/Corequisite: One GE Foundation course.

ENGL 250A Survey of English Literature (4)

Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 250B Survey of English Literature (4)

Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 270A Survey of American Literature (4)

Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 270B Survey of American Literature (4)

Prerequisites: ENGL 100; GE Foundation requirements.

Upper Division:

Take all of the following:

ENGL 363 Shakespeare I (4)

Prerequisites: ENGL 100; GE Foundation requirements.

ENGL 380 Approaches to English Studies (4)

Prerequisite: ENGL 180 or equivalent.

Take either two from the ENGL 450 series or one from the ENGL 450 series and one from the ENGL 460 series (excluding ENGL 469); one of these two courses must be in English literature before 1900

Take one course from 470 series (excluding ENGL 479)

Take one senior seminar (ENGL 469, 479, 489)

Take electives to make up a total of 46 units

Option in Rhetoric and Composition (120 units)

The Rhetoric and Composition option is designed for students who desire to write for multiple readers and to analyze and interpret texts. This option prepares students for teaching on virtually all levels, for graduate study in English, and for professions that require intensive writing and communication skills.

This option consists of 45 units, 32 of which must be upper division, including the following:

Lower Division:

Take the following:

ENGL 180 Appreciation of Literature (or equivalent) (3)

Prerequisite/Corequisite: One GE Foundation course.

Take two of the following:

ENGL 250A, 250B, 270A, 270B

Upper Division:

Take the following:

ENGL 380 Approaches to English Studies (4)

Prerequisite: ENGL 180 or equivalent.

Take two of the following:

ENGL 300, 317, 410, and 435

Take seven of the following:

ENGL 310, 320, 337, 363, 404, 411, 416, 417, 418, 419, 423, 426, 436, 488, and 497

Take upper-division English course electives to reach a total of 45 units.

Note: Students are strongly encouraged to take ENGL 102 or an English-department equivalent at a transfer school for this option.

Option with Special Emphasis (120 units)

Some students wishing to major in English have special interests or career objectives so different from those for which the other options are designed that another pattern of courses would better serve their personal educational needs. For those students, the Special Emphasis option offers an opportunity to pursue individually designed 41-unit programs of study. Student programs may center on technical writing, for example, or other writing goals; they may focus on American or English literature or literature in a particular genre, a particular historical period, or a particular theme.

A Special Emphasis program may include courses outside the Department of English closely related to a student's focus in English studies. At least 21 units must be earned in the Department of English at CSULB and at least 21 units of the program must be upper division. For degrees with more than four courses in any single other department, students should consider a Special Major in the Interdisciplinary Studies Program.

Students wishing to take the Special Emphasis option must meet with the Department chair. Students must complete at least 15 upper-division units applicable to their Special Emphasis program after it has been officially approved.

Specific course requirements and limitations follow:

Take all of the following:

ENGL 180 Appreciation of Literature (3)

Prerequisite/Corequisite: One GE Foundation course

ENGL 380 Approaches to English Studies (4)

Prerequisite: ENGL 180 or equivalent.

Electives in English and related fields are needed to make up a total of 41 units. These electives may not include ENGL 100 or 101.

Minor in English

Creative Writing

Requires a minimum of 20 units including the following:

Take the following:

ENGL 180 Appreciation of Literature (3) (or equivalent)

Prerequisite/Corequisite: One GE Foundation course

Take three units from the following:

ENGL 204, 205, 206

Take three units from the following:

ENGL 404, 405, 406

Take three units from the following:

ENGL 385, 386

Take eight units from the following:

ENGL 359, 404, 405, 406, 407, 459, 466, 467A/B, 474, 475, 476, 477A/B, 499. (Note: ENGL 404, 405, 406 and 407 may be repeated for credit to a maximum of six units by consent of instructor.)

Literature

Requires a minimum of 20 units including the following:

Take the following:

ENGL 180 Appreciation of Literature (3) (or equivalent)

Prerequisite/Corequisite: One GE Foundation course.

Take eight units from the following:

ENGL 250A, 250B, 270A, 270B

Take nine units from upper-division literature classes in the English department (including at least one class at the 400 level).

Rhetoric and Composition

Requires a minimum of 20 units including the following:

Take all of the following:

ENGL 310 Applied Composition (4)

Prerequisite: ENGL 101 or 317 or a baccalaureate degree.

ENGL 497 Directed Studies in Composition (3)

Prerequisite: One upper-division writing course in English or consent of instructor.

LING 420 Phonology (3)

Prerequisites: Consent of instructor.

LING 421 Syntax (3)

Prerequisite: LING 325 or consent of instructor.

Recommended, 3 units of the following:

ENGL (or LING) 423 or 426

Special Emphasis

Requires a minimum of 21 units in a program developed, approved, and supervised in the same manner as the Special Emphasis Option.

Take the following:

ENGL 180 Appreciation of Literature (3) (or equivalent)

Prerequisite/Corequisite: One GE Foundation course

The rest of the program constructed in consultation with a faculty advisor.

At least nine upper-division units must be taken after program approval, and at least 11 units must be earned in the Department of English at CSULB.

Graduate Certificate in Teaching English to Speakers of Other Languages

This certificate is conducted by the Linguistics Department faculty. For requirements, please refer to the Linguistics section of this catalog.

Certificate in Technical and Professional Communication

The Department of English offers a Certificate in Technical and Professional Communication to students interested in careers in writing and editing. Application forms and advising materials may be obtained from the department office.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Prerequisites

1. Formal consultation with a faculty advisor in the Technical and Professional Communication (TPC) Certificate program;
2. Submission of an application to enter the program, supported by transcripts;
3. Upper division or post-baccalaureate standing at CSULB with a grade point average of at least 2.75 overall;
4. Admission to a degree program in this university or possession of a degree from an accredited university;
5. Successful completion of ENGL 317, Technical Communication, with a letter grade of "C" or higher.

General Requirements

1. A baccalaureate degree, which may be taken concurrently with the Certificate in Technical and Professional Communication;
2. A minimum of 24 units in courses approved for the Certificate Program at this University, preferably completed within 10 years of the first credit granted toward the Certificate (consult an advisor concerning any transfer or extension credit that may be allowable);
3. A letter grade of "C" or higher in every course in the Certificate program (a grade of "CR" is acceptable in no more than one course);
4. Completion of a program of courses in Areas I through IV, developed in consultation with an advisor in the Technical and Professional Communication Certificate program, and approved by the Program Director and the Dean of the College of Liberal Arts (or the Dean's designee);
5. Demonstrations (in or outside the program of courses) of competence in the use of computers and graphic media;
6. Development of a portfolio of reports, written and edited by the student during enrollment in the Certificate program, for review and approval by faculty in the Technical and Professional Communication Certificate program (required for a grade in ENGL 492A/B, Area IV).

Course Requirements

For each of the following courses, TPC Certificate students have been granted enrollment rights equal to those of students majoring in the Department offering the course. Substitutions are possible, especially in more advanced courses, with approval by the Program Director.

Area I: Technical and Professional Writing (9 units):

Take all of the following:

ENGL 417 Proposal Writing (3)

Prerequisite: GE Foundation requirements.

ENGL 418 Manual Writing (3)
Prerequisite: GE Foundation requirements.

Take one of the following:
ART 307; ENGL 419; GEOL 420; IS 301; JOUR 316,
319B

Area II: Language Studies (4 units):

Take one of the following:
ENGL 320 English Grammar (4)
Prerequisite: None

ENGL 416 Technical Editing (4)
Prerequisite: GE Foundation requirements.

Area III: Electives from the following (minimum 8 units):

Analytical Reading:
COMM 301; ENGL 380, 423, 488; GEOG 380; HIST
400I; NSCI 375I; PHIL 381I

Business/Professional Skills:
ACCT 201; BLAW 220; COMM 334, 335, 344; JOUR
370; MKTG 300, 330

Computer Applications:
CECS 174; JOUR 331; MGMT 426; NSCI 200; IS 300;
SOC 260

Creative Writing:
ENGL 404, 405, 406, 407; FEA 304, 404; THEA 380

Intercultural Communication:
ANTH 412I, 413; COMM 330; MKTG 480

Visual Communication:
ET 170; GEOG 200; JOUR 305; MAE 172

Area IV: Practical Writing (3 units):

ENGL 491 (1 or more units), ENGL 492A or 492B
(2 or more units). No grade in ENGL 492 will be
assigned without an approved portfolio, as indicated in
Paragraph 6, General Requirements.

1. A Bachelor of Arts degree in English from an accredited institution or a bachelor's degree from an accredited institution with at least 21 units of upper-division English courses that offer a broad coverage of English and American literature.

Any deficiencies will be determined by the Department Graduate Advisor in consultation with the Graduate Studies Committee. Courses used to remove course or unit deficiencies may not be included in the MA program.

2. A 3.3 GPA in upper-division English courses.

3. Applicants who do not have the required minimum GPA may take additional coursework to raise their GPA to the minimum. Applicants whose upper-division English GPA is at least 3.0 may be admitted to the MA program if they take the GRE General Test and achieve a minimum score of 580 in Verbal Reasoning and 5.0 in Analytical Writing. On August 1, 2011, the GRE revised the test and scoring system. For tests taken after this date, these applicants will need a minimum score of 158 in Verbal Reasoning and 5.0 in Analytical Writing.

4. All applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English must receive a minimum score of 600 on the Test of English as a Foreign Language (TOEFL) (applicants taking the Computer-Based Test of English as a Foreign Language must present a score of 250 or above; applicants taking the Internet-Based Test of English as a Foreign Language must present a score of 100 or above).

After Admission to Program

Students must be formally admitted to the program before they can enroll in ENGL 696, which is prerequisite or corequisite to all other 600-level courses.

Advancement to Candidacy

1. The student must satisfy the general requirements of the University, including fulfilling the Graduation Writing Assessment Requirement (GWAR).
2. The student's MA program must be approved by a faculty graduate advisor, the Department Graduate Advisor, and the Department Chair before submission to the Associate Dean of Liberal Arts.
3. Advancement is possible after completion of six units toward the MA degree. Students must be advanced to candidacy at least one semester before they intend to graduate, before the deadline to file for graduation that semester. If a student is writing a thesis, he or she must be advanced before any thesis units are taken.

Requirements

1. A minimum of 30 units of graduate and approved upper-division courses (see MA Handbook and website for list of approved undergraduate courses) including 24 units in English;
2. A minimum of 20 units in the 600 series in English at this University, including ENGL 696, which is to be completed before or concurrently with other 600-series courses. (A student will not be granted credit for 600-series courses unless admitted to the MA program);
3. A minimum of one seminar in the 600 series in English literature before 1800;

Graduate Programs

The Department of English offers two graduate degrees, an MA in English and an MFA in Creative Writing. Teaching assistantships are available in both. In addition, the Department's tutoring program, the Writer's Resource Lab, employs a number of graduate and undergraduate students each semester. Application information may be obtained from the Department office, (562) 985-4223.

Master of Arts in English

The Department of English offers graduate study leading to the Master of Arts degree. The candidate must satisfy the general requirements stated in this catalog as well as the specific departmental requirements stated here and, more fully, in the Master of Arts brochure issued by the department (copies of which are available upon request). Applicants must submit to the University's Office of Admissions and Records a graduate application (available at that office or on-line). Applicants must also submit a set of transcripts from all colleges and universities attended to the Office of Enrollment Services. The deadline for submitting an application for Fall semester is May 1; the deadline to apply for Spring is October 15.

Prerequisites

An applicant may be admitted to the MA program in English only after satisfying University requirements for admission and the following prerequisites to this degree:

4. A foreign language requirement, which may be fulfilled in one of the following ways:
 - A. completing college course work in a foreign language equivalent to sophomore proficiency (normally 201B at this University) with "C" or better;
 - B. completing college course work in a foreign language equivalent to freshman proficiency (normally 101B at this University) with "C" or better and completing either ENGL 550 or ENGL 551 with "B" or better;
 - C. passing a special examination or demonstrating native proficiency in any foreign language accepted by the Graduate Studies Committee;
5. Successful completion of a final comprehensive examination in a specified specialty area. (Students who fail the examination may retake it once only.) A thesis may be written in lieu of the examination;
6. Appropriate filing for Graduation Check and for Diploma.

Master of Fine Arts in Creative Writing

The Master of Fine Arts degree in Creative Writing is the recognized terminal degree which offers the minimum professional training deemed necessary by the major schools in the United States for university and college teaching and for positions in the publishing industry. It is also the degree most frequently held by professional writers.

Criteria for Admission to the Program

1. Students applying for admission to the MFA degree program generally have completed a bachelor's or master's degree in English from an accredited institution with a 3.2 GPA in upper-division English courses, meet university admission requirements, and submit evidence of creative ability in fiction or poetry (10 pages poetry, 20-30 pages fiction). For each annual cycle, applications are due by January 15, when review will begin.
2. When an undergraduate degree has been completed in a program having different requirements from those of CSULB or in some field other than English, additional preparation may be required before the student can be considered for classified status in the degree program.
3. At the time of the student's conditional classification into the program, an examining diagnostic committee consisting of at least two instructors in the student's field of specialization and at least one other faculty member must approve and evaluate the student's work no later than the end of his/her first full year in residence and judge whether the student should continue in the program.
4. In order to obtain a full classified status, the student must obtain satisfactory evaluation from his/her committee at the end of the first full year in residence. Both the student's coursework and the student's portfolio will be evaluated.

The appeals procedure for unfavorable portfolio evaluation is as follows:

If the student feels that his/her work has been unfairly evaluated, that student has recourse any time to discuss the matter informally with the MFA Coordinator in order to resolve the issue. If the issue cannot be resolved on that basis, the following procedure shall be followed:

- A. The student shall present a written appeal to the MFA Coordinator.

- B. Within ten (10) working days of receipt of a written appeal by a student, the MFA Coordinator shall refer the appeal to an ad hoc committee consisting of three tenured creative writing faculty not involved with the issue.
- C. The committee shall meet in formal sessions holding hearings at separate times for the student and for the faculty involved to gather information and evidence relevant to the issue.
- D. After deliberation, the committee shall present its findings to the MFA Coordinator within thirty (30) working days from the origination of the committee. (Working days do not include periods of time between semesters.)
- E. The MFA Coordinator shall inform the concerned student in writing of the committee's decision.

5. Advancement to candidacy

- A. Attain fully classified status.
 - B. Remove all undergraduate deficiencies as determined by the graduate advisor, the department chair, and the dean of graduate studies.
 - C. Fulfill the GWAR.
 - D. Submit a program of courses for approval by the student's faculty advisor.
6. Up to 24 units of credit from a Master of Arts program in Creative Writing may be acceptable after review and approval by the faculty evaluation committee.

7. Requirements for the Master of Fine Arts in Creative Writing. The MFA degree is a sixty-unit degree normally requiring full-time residency. Course requirements are arranged according to the following structure.

- A. Core (32 units chosen in consultation with faculty advisor):
Take one of the following pairs in Year 1:

ENGL 505A Seminar in Fiction Writing (4)
Prerequisite: Admission to the MFA in Creative Writing.

ENGL 505B Seminar in Fiction Writing (4)
Prerequisites: Admission to the MFA in Creative Writing and ENGL 505A.

or

ENGL 506A Seminar in Poetry Writing (4)
Prerequisite: Admission to the MFA in Creative Writing.

ENGL 506B Seminar in Poetry Writing (4)
Prerequisites: Admission to the MFA in Creative Writing and ENGL 506A.

- Take one of the following pairs in Year 2:

ENGL 605A Advanced Seminar in Fiction Writing (4)
Prerequisites: Admission to the MFA in Creative Writing, ENGL 505A, and 505B.

ENGL 605B Advanced Seminar in Fiction Writing (4)
Prerequisites: Admission to the MFA in Creative Writing, ENGL 505A, 505B, and 605A.

or

ENGL 606A Advanced Seminar in Poetry Writing (4)
Prerequisites: Admission to the MFA in Creative Writing, ENGL 506A, and 506B.

ENGL 606B Advanced Seminar in Poetry Writing (4)
Prerequisites: Admission to the MFA in Creative Writing, ENGL 506A, 506B, and 606A.

- Take in both fall and spring of Year 2:

ENGL 590 Directed Reading (3), (3)

- Take both:

ENGL 696 Sem in Literary Criticism & Research (4)
Prerequisites: None

ENGL 698 Thesis (6)
Prerequisites: ENGL 696 and consent of instructor.

Electives: (28 units chosen in consultation with a faculty advisor) from 500- and 600-level English Department courses.

- B. Both fiction and poetry specializations share a common core of courses which offer study in literary history, theory, and research. The remainder of the courses offer students the opportunity to develop additional skills in their particular area of related interest. The program culminates in a major creative project (novel, short story collection, or poetry collection) of publishable quality.

Single Subject Teaching Credential in English

For information, refer to the undergraduate section in this department.

Courses (ESW) - Early Start Writing

1. Expectations: Writing in the University (1)

Prerequisite: EPT score of 137 or below.

A one-unit course in which students will improve their reading comprehension, critical thinking and written composition skills.

Does not count toward graduation, but does count toward financial aid. Credit/No credit grading.

1V. Expectations: Writing in the University (1)

Prerequisite: EPT score of 137 or below.

A one-unit course in which visiting students will improve their reading comprehension, critical thinking and written composition skills.

Does not count toward graduation, but does count toward financial aid. Credit/No credit grading.

Courses (ENGL)

To encourage clarity and uniformity in the reporting of scholarship, students in all English courses are expected to learn and use standard methods of citation and documentation. For literary and critical study, the standard format is the documentation system prescribed by the Modern Language Association, detailed in the *MLA Handbook* and simplified in many beginning textbooks in literary study. At the instructor's discretion, other methods may be used in courses in composition, technical communication, literacy studies, and other classes required for the English Education option.

LOWER DIVISION

Please check the section on "Application Procedures and Admissions Requirements" of this catalog for CSU system-wide writing proficiency requirements.

1E. Writing Skills (3)

Students who score 146 or below on the English Placement Test and who have not taken equivalent courses in another department are eligible for enrollment in this course.

Basic course in writing, offering intensive practice in every stage of writing process. Writing strategies at the level of word, sentence and paragraph. Methods for developing and organizing ideas in coherent essays. Conventional mechanics, spelling, and grammar.

Does not count toward graduation, but does count toward course load. Credit/No Credit grading only.

100S. Composition I (3)

Prerequisites: Students who score 146 or below on the English Placement Test and who have not taken equivalent courses in another department are eligible for enrollment in this course.

Composition I does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA. Must have a "C" or better to earn credit.

Basic course in writing, offering intensive practice in every stage of writing process from generating ideas to final proofreading, as well as to the developing stronger reading comprehension for specific writing tasks.

Same course as ASAM 100S, AFRS 100S, CHLS 104S. Not open for credit to students with credit in: ENGL 1, ASAM 1, AFRS 1, CHLS 1, ASAM 100S, AFRS 100S, CHLS 104S.

100. Composition II (3)

Prerequisites: Students who score 147 or above on the English Placement Test, credit in ENGL 100S (or its equivalent), are exempt from the EPT, or consent of the instructor.

Composition II does not count toward meeting the major requirements. It does count toward graduation and will be included in the overall GPA.

An expository writing course designed for first-year students. Satisfies one of the writing requirements for general education at CSULB. It emphasizes academic writing, focusing primarily on analytical reading and thesis-driven writing.

Same course as AFRS 100, ASAM 100, CHLS 104. Not open for credit to students with credit in: AFRS 100, ASAM 100, CHLS 104, AFRS 100, ASAM 100, CHLS 104.

101. Composition (3)

Prerequisite: ENGL 100.

Writing expository prose, with emphasis on the research paper.

102. Critical Reading and Writing (3)

Prerequisite: ENGL 100 with a minimum grade of "C."

Analytical reading and persuasive writing, with emphasis on logic and argumentation.

Not open for credit to students with credit in ENGL 200.

180. Appreciation of Literature (3)

Prerequisite/Corequisite: One GE Foundation course.

Study of works representing the scope and variety of themes and types of imaginative literature. Introduction to the major literary genres and to methods of critical expository writing.

Not open for credit to students with credit in ENGL 184.

204. Introduction to Creative Writing: Creative Nonfiction (3)

Prerequisites: ENGL 100; GE Foundation requirements.

Practice in the basic elements of creative nonfiction, including description, dialog, and framing.

205. Introduction to Creative Writing: Fiction (3)

Prerequisites: ENGL 100; GE Foundation requirements.

Practice in the basic elements of fiction writing: character sketch, plot development, description, dialog.

206. Introduction to Creative Writing: Poetry (3)

Prerequisites: ENGL 100; GE Foundation requirements.

Theory and techniques of poetry. Practice in creative work, with group discussions and individual conferences.

250A,B. Survey of English Literature (4,4)

Prerequisites: ENGL 100; GE Foundation requirements.

Representative selections from English writers to and since the late eighteenth century.

270A,B. Survey of American Literature (4,4)

Prerequisites: ENGL 100; GE Foundation requirements.

Representative selections from American writers to and since about 1865.

283. Science Fiction (3)

The literature of science fiction, from *Frankenstein* and H.G. Wells to the present, emphasizing the relevance of science and technology to literary fantasy.

UPPER DIVISION

ENGL 100 or its equivalent is a prerequisite for all upper-division courses.

An "I" next to a course number means the course is acceptable for Interdisciplinary Credit in General Education.

300. Advanced Composition (3)

Prerequisites: GE Foundation requirements and upper-division standing.

Study and apply rhetorical strategies of invention, arrangement, and style to write expository, analytic, and argumentative prose; examine how evidence is produced and presented in genres from different academic disciplines, from civic and workplace literacy, and from popular media.

301A. English Proficiency (3)

Prerequisites: ENGL 100 or equivalent.

Intermediate course in English usage with emphasis on building proficiency in oral and written language.

Enrollment limited to students needing language development beyond skills acquired in ENGL 100, as assessed by scores on the Writing Proficiency Exam. May be repeated to a maximum of 6 units. Not applicable to credit in any degree program of the Department of English.

301B. English Proficiency (3)

Prerequisites: ENGL 100 or equivalent.

Advanced course in English usage with emphasis on building proficiency in written language.

May be repeated to a maximum of 6 units. Not applicable to credit in any degree program of the Department of English. Enrollment limited to students needing language development beyond skills acquired in ENGL 100, as assessed by scores on the Writing Proficiency Exam. May be used to satisfy the GWAR.

309. Applied Composition: Explorations in Children's Writing (4)

Advanced composition course incorporating the study of the evolution of written discourse and emergence of rhetorical structures in the writing of pre-adolescents.

Includes a 40-hour tutorial/research component. Discussion/Laboratory.

310. Applied Composition (4)

Prerequisite: ENGL 101 or 317 or a baccalaureate degree.

Intensive practice in writing, correcting, and evaluating compositions, with specific reference to contemporary classroom situations and problems.

Includes a 30-hour tutorial component in which students work as composition tutors. Required for all English Education majors.

317. Technical Communication (3)

Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Expository writing on technical subjects dealt with in industry, science, government, and the academy. Introduction to long and short forms including reports, proposals, manuals, and journal articles, emphasizing the longer formal paper or technical report.

318I. Theory of Fiction and Film (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Examination of narrative methods and conventions of American and British fiction and film; consideration of relationships between artistic structure of fiction and film; study of theoretical and practical approaches to fiction and film.

Same course as FEA 318I. Not open for credit to students with credit in FEA 318I.

320. English Grammar (4)

Advanced study in the principles of English grammar.

337. Technology in the English Classroom (3)

Focuses on issues in use of computer-based technologies in society; basic components and operations of computer-based technology; computer applications/programs and video tape/film for teaching problem-solving, critical thinking, writing, and literature.

Meets Title 5 computer-education requirements for the Single Subject, Clear Teaching Credential in English and the Multiple Subject, Clear Teaching Credential with English Concentration.

340. American Indian Literature (3)

Prerequisite: GE Foundation requirements.

Analysis of the written and oral literacy traditions developed by American Indians. Range of works studied: oral history, tales, myths, song, prayer, poetry, short story, and novel.

Same course as AIS 340. Not open for credit to students with credit in AIS 340.

359. Postcolonial Literature (3)

Prerequisite: Upper-division standing.

Survey of English-language writers from former colonies of Great Britain who have made major contributions in all literary genres.

363. Shakespeare I (4)

Prerequisites: ENGL 100; GE Foundation requirements.

Principal plays of Shakespeare.

372I. Comedy in the United States (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Study of the history of American comedy from beginnings to present. Focuses on literature, but also on American traditions of humor on stage, in film, in song, and in signs. Explores theories of comedy.

375. American Ethnic Writers (3)

Prerequisites: ENGL 100; GE Foundation requirements.

Survey of American writers of various non-European ethnic backgrounds who have made major contributions in all literary genres.

380. Approaches to English Studies (4)

Prerequisite: ENGL 180 or equivalent.

Advanced course in English Studies covering research methods; approaches to literary, rhetorical, and pedagogical topics; critical and literary terminology; genre; and advanced skills in writing and analysis.

Note: English majors must consult with their advisors because this course should be taken by the first semester of the junior year.

382. Women and Literature (3)

Prerequisite: GE Foundation requirements.

Survey of literature by women authors writing in English across a range of historical periods; examination of works in various genres that present the complexity of women's lives and the challenges of female authorship; exploration of feminist critical approaches.

Same course as WGSS 382. Not open for credit to students with credit in W/ST 382 or WGSS 382.

Courses (ENGL)

384. Principles of Literary Study (3)

Prerequisite: ENGL 180.

Fundamental issues of literary study such as literary history; literary forms; themes and conventions; major critical approaches. Intense written practice in literary analysis.

385. The Short Story (3)

Prerequisites: ENGL 100; GE Foundation requirements.

Short story as a literary genre, with emphasis on analysis of individual stories.

386. Poetry (3)

Prerequisites: ENGL 100; GE Foundation requirements.

Poetry as a literary genre, with emphasis on analysis of individual poems.

398. Modern Drama (3)

Continental, English, and American drama from Ibsen to the present.

404. Creative Writing: Creative Nonfiction (3)

Prerequisite: ENGL 204 or consent of instructor.

Writing creative nonfiction, with a detailed study of published models and with an emphasis on the creative process.

May be repeated to a maximum of 6 units.

405. Creative Writing: Short Story (3)

Prerequisite: ENGL 205 or consent of instructor.

Writing short stories, with a detailed study of published models and with emphasis on the creative process.

May be repeated to a maximum of 6 units.

406. Creative Writing: Poetry (3)

Prerequisite: ENGL 206 or consent of instructor.

Writing poetry, with a detailed study of published models and with emphasis on the creative process.

May be repeated to a maximum of 6 units.

407. Creative Writing: Novel (3)

Prerequisite: Consent of instructor.

Writing long fiction, with a detailed study of published models and with emphasis on the creative process.

May be repeated to a maximum of 6 units.

410./510. Theories of Writing and Literacy (3)

Prerequisite: ENGL 309 or 310 or consent of instructor.

Focuses on several cross-disciplinary theories of producing written discourse. Studies how writing is learned, taught, viewed by the public, and used in social and academic interchange.

411./511. Research Methods in Rhetoric and Composition (4)

Introduction to interdisciplinary research methods in Rhetoric and Composition. Focuses on methods that have been motivating research since 1985, including archival, case study, ethnographic, historiographic, and teacher research. Intensive practice in conducting and writing research for interdisciplinary and/or public audiences.

416. Technical Editing (4)

Prerequisite: GE Foundation requirements.

Introduction to editing of written technical and business communication formats such as manuals, brochures, booklets, and newsletters. Teaches competence in the principles of sentence-level clarity and style, of factual accuracy, and of document design and production in professional settings.

417. Proposal Writing (3)

Prerequisite: GE Foundation requirements.

Writing of proposals in their various forms as letters, memos, grant applications.

418. Manual Writing (3)

Prerequisite: GE Foundation requirements.

Writing of original manuals of various types in technical and professional fields. Company publications will be studied as models.

419. Writing in Science, Social Science, and Technology (3)

Prerequisite: GE Foundation requirements.

Intensive practice in writing on topics in science and literature. Contemporary examples will be studied as models.

423./523. Semantics (3)

Study of meaning in language.

Same course as LING 423. Not open for credit to students with credit in LING 423.

426./526. History of the English Language (3)

Development of the English language from its beginnings to the present day.

Same course as LING 426. Not open for credit to students with credit in LING 426.

435. Teaching Composition (3)

Prerequisite: Consent of instructor.

Intensive examination and study of composition teaching practices, research and evaluation in public schools, including community colleges.

436. Theories and Practices of Reading (3)

Intensive investigation of theories and practices of reading with attention to how experienced and inexperienced readers construct texts.

441. Women Writers of the Harlem Renaissance (3)

Prerequisites: ENGL 100 and upper-division standing or consent of instructor.

Explores literature and lives of women authors of the American Harlem Renaissance of the 1920s. Examines critical reception, relative obscurity, and current re-discovery of these writers. Utilizes theoretical essays, biographical narratives, historical documents, and media images.

Same course as WGSS 441. Not open for credit to students with credit in W/ST 441 or WGSS 441.

442. Sexing Chicana Literature (3)

Prerequisites: ENGL100 and upper-division standing or consent of instructor.

Analyzes how Chicana authors explore race, class, and gender. Focuses on use of sexuality, particularly with regard to cultural and literary stereotypes vs. experience and aesthetic practice. Themes include desire, identity, empowerment through "traditional" roles, and violence and the body.

Same course as WGSS 442. Not open for credit to students with credit in W/ST 442 or WGSS 442.

444. Literature and Environment (3)

Prerequisites: GE Foundation, one or more Explorations courses, and upper-division standing.

Literature that focuses on the relationship between humans and the environment. Emphasis on how environmental texts represent nature, raise awareness of ecological issues, and encourage social change. Service learning requirement connects environmental literature with activism and community involvement.

451./554. Medieval Literature of the British Isles (3)

Representative selections of Old and Middle English prose and poetry read for the most part in modern English, including *Beowulf*, the romance, medieval drama, Chaucer, and the ballad.

452./552. Literature of the Renaissance (1500-1603) (3)

Prose and poetry of Marlowe, Sidney, Raleigh, Spenser, and other predecessors and contemporaries of Shakespeare, noting the influence of Humanism and the emergence of literary identity.

453./553. Literature of the Late Renaissance (1603-1660) (3)

Poetry and prose (chiefly non-dramatic) of Milton, Bacon, Jonson, Donne and the 'Metaphysicals' and their contemporaries.

455./555. English Literature of the Enlightenment (1660-1798) (3)

Prose and poetry (chiefly non-dramatic) of Swift, Dryden, Pope, Johnson, Boswell, and their contemporaries, with emphasis on major satires such as *Gulliver's Travels* and *The Rape of the Lock*.

456./556. English Literature of the Romantic Period (1798-1832) (3)

Poetry and prose (chiefly non-dramatic) of Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries, emphasizing the modern Romantic spirit, theories of literary art, and the concept of the self.

458./558. English Poetry and Prose of the Victorian Age (1832-1900) (3)

Poetry and prose of Tennyson, Browning, Arnold, Carlyle, Mill, and others, emphasizing literary, social, and political issues, and religious controversies.

459./559. English Literature of the Twentieth Century (1900-Present) (3)

Prose and poetry of Shaw, Conrad, Yeats, Lawrence, Joyce, Woolf, and others, emphasizing artistic experimentation and the development of modern value systems.

462./562. Chaucer (3)

Works of Geoffrey Chaucer in Middle English.

463. Shakespeare II (3)

Prerequisite: ENGL 363.

Advanced study of some of the plays of Shakespeare.

466./566. Irish Literature in English (3)

Major Irish authors from the Celtic Revival to the present. The literature will be placed in its historical and political contexts, paying particular attention to the relationship between politics and literature, the status of women, and questions of national identity.

467A,B./567A,B. The English Novel (3,3)

History and development of long prose fiction in the British Isles to and since 1832.

468./568. English Drama (3)

Readings from the history of English drama, excluding Shakespeare, including Marlowe, Jonson, and Restoration comedy.

469. Selected Topics - Major English Writers (4)

Prerequisites: At least senior standing and 12 units of upper-division ENGL (including ENGL 380).

Intensive study of one to three major English authors.

May be repeated to a maximum of 8 units with different authors, but no more than 4 units may be used to satisfy requirements for the English major. Topics announced in the *Schedule of Classes*.

- A. Jane Austen
- B. Samuel Beckett
- C. Aphra Behn
- D. The Brontës
- E. Samuel Taylor Coleridge
- F. Charles Dickens
- G. John Donne
- H. Lawrence Durrell
- I. George Eliot
- J. Thomas Stearns Eliot
- K. Edward Morgan Forster
- L. John Fowles

- M. Thomas Hardy
- N. James Joyce
- O. David Herbert Lawrence
- P. John Milton
- Q. George Bernard Shaw
- R. Edmund Spenser
- S. John Ronald Reuel Tolkien
- T. Rebecca West
- U. Oscar Wilde
- V. Virginia Woolf
- W. William Wordsworth
- X. William Butler Yeats
- Y. Boswell and Johnson
- Z. Marlowe, Marvell, and Milton

470. American Ethnic Literatures (3)

Prerequisite: ENGL 375 or consent of instructor.

Advanced course in the examination of issues in the field of American ethnic writing.

472./572. American Literature: 1820-1865 (3)

Major authors and works, along with newly recovered texts, from the period that is often called the "American Renaissance."

473./573. American Literature: 1865-1918 (3)

Developments in poetry, the novel, the short story, and non-fictional prose in the United States between the Civil War and World War I.

474./574. Twentieth-Century American Literature (3)

American literature from about 1914 to the present.

475./575. The American Short Story (3)

History and development of the short story and its criticism in the United States.

476A,B./576A,B. American Poetry (3,3)

History and development of poetry and its criticism in the United States to and since 1945.

477A,B./577A,B. The American Novel (3,3)

History and development of the novel and its criticism in the United States to and since the 1920s.

478./578. American Drama (3)

History and development of drama and its criticism in the United States.

479. Selected Topics - Major American Writers (4)

Prerequisites: At least senior standing and 12 units of upper-division ENGL (including ENGL 380).

Intensive study of one to three major American authors.

May be repeated to a maximum of 8 units with different authors, but no more than 4 units may be used to satisfy requirements for English majors. Topics announced in the *Schedule of Classes*.

- A. Emily Dickinson
- B. Louise Erdrich
- C. John Fante
- D. William Faulkner
- E. Nathaniel Hawthorne
- F. Henry James
- G. Nathaniel Hawthorne and Herman Melville
- H. Bobbie Ann Mason
- I. Herman Melville
- J. Toni Morrison
- K. Edgar Allan Poe
- L. Henry David Thoreau
- M. Edith Wharton
- N. Walt Whitman
- O. William Carlos Williams
- P. Richard Wright
- Q. Charles Brockden Brown and Thomas Jefferson
- R. Robinson Jeffers

Courses (ENGL)

481. Children's Literature (3)

Survey of literature suitable for children.

482. Literature for Adolescents (4)

Prerequisite: One college course in literature.

Survey of literature suitable for adolescents. Includes a 20-hour field experience in which students work with local secondary school students as reading mentors.

Required for all English Education majors.

488. Selected Topics in Rhetoric and Writing Studies (3)

Prerequisite: ENGL 100.

Intensive study of a special topic in the field of rhetoric, composition, and writing studies.

May be repeated to a maximum of 12 units with different topics in the same semester, but no more than 6 units may be applied to the English major. Topics announced in the *Schedule of Classes*.

- A. Advanced Argumentation
- B. Multimedia Composition
- C. (Post) Modern Persuasion
- D. Real World Writing

489. Selected Topics in Literatures Written in English (4)

Intensive study of a major topic in literatures written in English.

May be repeated to a maximum of 8 units with different topics in different semesters, but no more than 4 units may be used to satisfy requirements for English majors. Topics announced in the *Schedule of Classes*.

- A. Art and Literature of the Romantic Period
- B. The Beats
- C. Early Modern Women
- D. Literary Bloomsbury
- F. Literature of Los Angeles
- G. Metafiction
- H. Reason, Revolution, Romanticism

491. Applied Technical Writing (1-3)

Prerequisite: Admission to Certificate Program in Technical and Professional Communication.

Writing and editing technical reports and papers. Independent production of a report in a technical or scientific area under faculty supervision.

May be repeated to a maximum of 4 units.

492A-B. Internship Technical - Professional Writing and Editing (1-3)

Prerequisite: Admission to Certificate Program in Technical and Professional Communication.

At least 90 hours writing and editing with cooperating agencies and companies on- and off-campus under direction and with evaluation of faculty in consultation with supervisors of the participating agency or company.

May be repeated to a maximum of 4 units.

497. Directed Studies in Composition (3)

Prerequisite: One upper-division writing course in English or consent of instructor.

Theory and practice of writing and language instruction. Recommended for prospective K-12 and college-level teachers. On-site participation in an educational setting required as a basis for research project.

498. Selected Topics in English (3)

Intensive exploration of topics in language and literature.

May be repeated to a maximum of 12 units with different topics in the same semester, but no more than 6 units may be applied to the

English major. Topics announced in the *Schedule of Classes*. Course fee required if topic is offered abroad.

- A. Detective Fiction
- B. Teaching ESL Academic Writing
- C. Poetry and the Self

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study undertaken under supervision of a faculty member.

May be repeated to a maximum of 4 units. Not applicable toward the Master of Arts in English.

GRADUATE LEVEL

See Comparative World Literature and Classics Department for other course offerings applicable to the MA in English.

505A. Seminar in Fiction Writing (4)

Prerequisite: Admission to the MFA in Creative Writing.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

505B. Seminar in Fiction Writing (4)

Prerequisites: Admission to the MFA in Creative Writing and ENGL 505A.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

506A. Seminar in Poetry Writing (4)

Prerequisite: Admission to the MFA in Creative Writing.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

506B. Seminar in Poetry Writing (4)

Prerequisites: Admission to the MFA in Creative Writing and ENGL 506A.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

510./410. Theories of Writing and Literacy (3)

Prerequisite: ENGL 309 or 310 or consent of instructor.

Focuses on several cross-disciplinary theories of producing written discourse. Studies how writing is learned, taught, viewed by the public, and used in social and academic interchange.

Letter grade only (A-F).

511./411. Research Methods in Rhetoric and Composition (4)

Introduction to interdisciplinary research methods in Rhetoric and Composition. Focuses on methods that have been motivating research since 1985, including archival, case study, ethnographic, historiographic, and teacher research. Intensive practice in conducting and writing research for interdisciplinary and/or public audiences.

Letter grade only (A-F).

523./423. Semantics (3)

Study of meaning in language. Letter grade only (A-F).

526./426. History of the English Language (3)

Development of the English language from its beginnings to the present day.

Letter grade only (A-F).

535. Theories and Practices in Composition (3)

Prerequisite: ENGL 435 or consent of instructor.

Focuses on formation of composition studies in the latter half of the twentieth century. Studies relationships among theories, practices, and research concerned with the teaching of writing, particularly at the college level.

Letter grade only (A-F).

537. Selected Topics for In-Service Teachers (3)

Designed for in-service teachers. Intensive studies and research in special, timely topics related to the teaching of English.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

550. Old English Language and Literature (4)

Prerequisite: Consent of instructor.

Beowulf and other representative selections from Anglo-Saxon literature in the original language.

Letter grade only (A-F).

551. Middle English Language and Literature (4)

Prerequisite: Consent of instructor.

Chaucer and other representative selections from Middle English literature in the original language.

Letter grade only (A-F).

552./452. Literature of the Renaissance (1500-1603) (3)

Prose and poetry of Marlowe, Sidney, Raleigh, Spenser and other predecessors and contemporaries of Shakespeare, noting the influence of Humanism and the emergence of literary identity.

Letter grade only (A-F).

553./453. Literature of the Late Renaissance (1603-1660) (3)

Poetry and prose (chiefly non-dramatic) of Milton, Bacon, Jonson, Donne and the 'Metaphysicals' and their contemporaries.

Letter grade only (A-F).

554./451. Medieval Literature of the British Isles (3)

Representative selections of Old and Middle English prose and poetry read for the most part in modern English, including *Beowulf*, the romance, medieval drama, Chaucer, and the ballad.

Letter grade only (A-F).

555./455. English Literature of the Enlightenment (1660-1798) (3)

Prose and poetry (chiefly non-dramatic) of Swift, Dryden, Pope, Johnson, Boswell, and their contemporaries, with emphasis on major satires such as *Gulliver's Travels* and *The Rape of the Lock*.

Letter grade only (A-F).

556./456. English Literature of the Romantic Period (1798-1832) (3)

Poetry and prose (chiefly non-dramatic) of Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries, emphasizing the modern Romantic spirit, theories of literary art, and the concept of the self.

Letter grade only (A-F).

558./458. English Poetry and Prose of the Victorian Age (1832-1900) (3)

Poetry and prose of Tennyson, Browning, Arnold, Carlyle, Mill, and others, emphasizing literary, social and political issues, and religious controversies.

Letter grade only (A-F).

559./459. English Literature of the Twentieth Century (1900-Present) (3)

Prose and poetry of Shaw, Conrad, Yeats, Lawrence, Joyce, Woolf, and others, emphasizing artistic experimentation and the development of modern value systems.

Letter grade only (A-F).

562./462. Chaucer (3)

Works of Geoffrey Chaucer in Middle English.

Letter grade only (A-F).

566./466. Irish Literature in English (3)

Major Irish authors from the Celtic Revival to the present. The literature will be placed in its historical and political contexts, paying particular attention to the relationship between politics and literature, the status of women, and questions of national identity.

Letter grade only (A-F).

567A,B./467A,B. The English Novel (3,3)

History and development of long prose fiction in the British Isles to and since 1832.

Letter grade only (A-F).

568./468. English Drama (3)

Readings from the history of English drama, excluding Shakespeare, including Marlowe, Jonson, and Restoration comedy.

Letter grade only (A-F).

572./472. American Literature: 1820-1865 (3)

Major authors and works, along with newly recovered texts, from the period that is often called the "American Renaissance."

Letter grade only (A-F).

573./473. American Literature: 1865-1918 (3)

Developments in poetry, the novel, the short story, and non-fictional prose in the United States between the Civil War and World War I.

Letter grade only (A-F).

574./474. Twentieth-Century American Literature (3)

American literature from about 1914 to the present.

Letter grade only (A-F).

575./475. The American Short Story (3)

History and development of the short story and its criticism in the United States.

Letter grade only (A-F).

576A,B./476A,B. American Poetry (3,3)

History and development of poetry and its criticism in the United States to and since 1945.

Letter grade only (A-F).

577A,B./477A,B. The American Novel (3,3)

History and development of the novel and its criticism in the United States to and since the 1920s.

Letter grade only (A-F).

578./478. American Drama (3)

History and development of drama and its criticism in the United States.

Letter grade only (A-F).

590. Directed Reading (3)

Students are assigned a reading list developed with the assistance of faculty. Works are discussed with the instructor during a series of conferences. Comprehensive paper due at end of semester.

Taken for two semesters during student's second year of residency in MFA program. May be repeated to a maximum of 6 units. Letter grade only (A-F).

598. Directed Studies (1-3)

Prerequisites: Baccalaureate degree, consent of instructor.

Independent creative writing activity under the supervision of a creative writing faculty member.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

605A. Advanced Seminar in Fiction Writing (4)

Prerequisites: Admission to the MFA in Creative Writing, ENGL 505A, and 505B.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

Courses (ENGL)

605B. Advanced Seminar in Fiction Writing (4)

Prerequisites: Admission to the MFA in Creative Writing, ENGL 505A, 506B, and 605A.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

606A. Advanced Seminar in Poetry Writing (4)

Prerequisites: Admission to the MFA in Creative Writing, ENGL 506A, and 506B.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

606B. Advanced Seminar in Poetry Writing (4)

Prerequisites: Admission to the MFA in Creative Writing, ENGL 506A, 506B, and 606A.

Discussion, criticism, and detailed evaluation of works in progress.

Letter grade only (A-F).

652. Seminar in the English Renaissance (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in the literature of the period, chiefly Elizabethan.

Letter grade only (A-F).

653. Seminar in the Age of Milton (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in English literature of the Stuart and Commonwealth periods, including Milton.

Letter grade only (A-F).

655. Seminar in Restoration and Eighteenth-Century Literature (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in English literature of the Restoration and eighteenth century.

Letter grade only (A-F).

656. Seminar in Romantic Literature (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in English literature of the Romantic period.

Letter grade only (A-F).

657. Seminar in Victorian Literature (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in English literature of the Victorian period.

Letter grade only (A-F).

659. Seminar in Twentieth-Century English Literature (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in English literature from about 1900 to the present.

Letter grade only (A-F).

671. Digital Rhetoric (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies of consumption and production of digital media. Analyses relationships among rhetoric, writing, cultural studies, and technology; examines means of production transforming literate practice in humanities; and engages students in writing with digital media.

Letter grade only (A-F).

672. Seminar in the Nineteenth-Century American Renaissance (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in American literature from about 1820 to about 1865.

Letter grade only (A-F).

673. Seminar in American Realism (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in the development of realism in American literature.

Letter grade only (A-F).

674. Seminar in Twentieth-Century American Literature (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies of twentieth-century American writers.

Letter grade only (A-F).

681. Selected Topics - Seminar in Major Authors (4)

Prerequisite/Corequisite: ENGL 696.

Intensive studies in the works of one to three specific major authors.

Letter grade only (A-F). May be repeated to a maximum of 8 units with different authors in the same semester. Topics announced in the *Schedule of Classes*. Not open for credit to students with credit in ENGL 469 or 479 covering the same author.

- A. Geoffrey Chaucer
- B. Daniel Defoe
- C. William Faulkner
- D. John Fowles
- E. Robert Frost
- F. Robinson Jeffers
- G. Samuel Johnson
- H. James Joyce
- I. Thomas Malory
- J. Herman Melville
- K. Alexander Pope
- L. William Shakespeare
- M. Jonathan Swift
- N. Oscar Wilde
- O. William Butler Yeats
- P. Wallace Stevens and William Carlos Williams
- Q. J.R.R. Tolkien

683. Selected Topics - Seminar in English Studies (4)

Prerequisite/Corequisite: ENGL 696.

Intensive explorations of topics in English studies.

Letter grade only (A-F). May be repeated to a maximum of 8 units with different authors in the same semester. Topics announced in the *Schedule of Classes*.

- A. American Autobiography
- B. American Indian Literature
- C. American Jewish Literature
- D. American Women Writers, 1850-1900
- E. Autobiography
- F. Beowulf
- G. British Encounters with India, 1757-1857
- H. Current Issues in Rhetoric and Composition
- I. Ethnic American Fiction
- J. Feminism/Modernism
- K. History of Composition Instruction
- L. Medieval Drama
- M. The Novel and Postmodernism
- N. The Places and Spaces of Early English Drama
- O. Revision and Editing Processes
- Q. Teaching Basic Writing
- R. Teaching Literacy
- T. West Coast Writing after World War II

684. Seminar in Advanced Literary Theory (4)

Prerequisite: Completion of ENGL 696.

Intensive study in one or more of the principal theories of literature.

Letter grade only (A-F).

685. Seminar in Rhetorical History and Theory (4)

Prerequisite/Corequisite: ENGL 696.

Intensive study of rhetorical history and theory from ancient to contemporary times.

Letter grade only (A-F).

696. Seminar in Literary Criticism and Research (4)

Study of major critical approaches to literature and basic literary research methods. Introduction to the discipline of literary criticism, various critical methodologies, techniques of bibliography and research, and important literary reference works. Writing of critical research papers.

Students not allowed to take ENGL 696 unless admitted to MA program. (English MA candidate may not be enrolled in any other 600 course without completion of or concurrent enrollment in ENGL 696.) Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisites: ENGL 696 and consent of instructor.

Individual research or intensive study under the guidance of a faculty member.

Letter grade only (A-F).

698. Thesis (1-6)

Prerequisites: ENGL 696 and consent of instructor.

Planning, preparation, and completion of a thesis under supervision of a faculty committee.

Must be advanced to candidacy. Must be taken for a total of 6 units.

American Language Program

American Language Program (ALP) courses are for non-native speakers of English. ALI courses are recommended for international students (students on F-1 visas). ALP courses are recommended for all other non-native speakers of English.

Courses (ALP)

145. American Language Advanced I (3)

Prerequisite: Non-native speakers who score 137 or below on the English Placement Test, or 500 or below on the Exam in English as a Second Language, and who have not taken equivalent writing courses in another department, are eligible for enrollment.

Counts toward elective credit for undergraduates. Does not count toward graduation for graduate students, but does count toward course load credit.

Basic course in writing, offering intensive practice in every stage of the writing process. Writing strategies at the level of word, sentence, and paragraph. Conventional mechanics, spelling, and the grammar of standard edited written English.

150. American Language Advanced I (3)

Prerequisite: Non-native speakers who score 138-150 on the English Placement Test, or 501 through 550 on the Exam in English as a Second Language, or successful completion of ALI/ALP 145 with a grade of "C" or better.

Counts toward elective credit for undergraduates. Does not count toward graduation for graduate students, but does count toward course load credit.

Includes critical/analytical reading and expository writing with emphasis on longer essays. Analysis and practice of standard rhetorical modes of essay development.

American Language Institute

For students who need English language training prior to enrolling at CSULB, provides professional instruction in all reading, writing, listening and speaking. Conditional admission to CSULB is available for qualified students.

NOTE: International students subject to Graduation Writing Assessment Requirement (GWAR) and EPT/ELM requirements as all CSULB students.

American Language Institute (ALI) courses are for non-native speakers of English. ALI courses are recommended for international students (students on F1 visas). ALP courses are recommended for all other non-native speakers of English.

Courses (ALI)

145. American Language Advanced I (3)

Prerequisite: Non-native speakers who score 137 or below on the English Placement Test, or 500 or below on the Exam in English as a Second Language, and who have not taken equivalent writing courses in another department, are eligible for enrollment.

Counts toward elective credit for undergraduates. Does not count toward graduation for graduate students, but does count toward course load credit.

Basic course in writing, intensive practice in every stage of writing process from generating ideas to final proofreading. Reviews and teaches organizational strategies and includes strategies for paragraph and sentence development and for making appropriate word choices. Teaches conventional mechanics, spelling and the grammar of standard edited written English.

150. American Language Advanced I (3)

Prerequisite: Non-native speakers who score 138-150 on the English Placement Test, or 501 through 550 on the Exam in English as a Second Language, or successful completion of ALI/ALP 145 with a grade of "C" or better.

Counts toward elective credit for undergraduates. Does not count toward graduation for graduate students, but does count toward course load credit.

Includes critical/analytical reading and expository writing with emphasis on longer essays. Analysis and practice of standard rhetorical modes of essay development.

ENVIRONMENTAL SCIENCE AND POLICY

College of Liberal Arts
College of Natural Sciences and Mathematics

Director: Christine M. Rodrigue

Department Office: FO2-205

Telephone: 562-985-8097

Website: <http://www.csulb.edu/programs/es-p>

Email: prog-esp@csulb.edu

Undergraduate Advisors: Austin Beahm

Administrative Support Coordinator: Carol Philipp

Faculty: Jake Alimahomed-Wilson (Sociology), Bengt J. Allen (Biological Sciences), Monica Argandona (ES&P), W. Frank Baber (Graduate Center for Public Policy and Administration), Austin Beahm (Geography), Richard J. Behl (Geological Sciences), Stuart R. Berryhill (Chemistry and Biochemistry), Christopher Burnett (Journalism and Mass Communication), Suzanne Dallman (Geography), Stanley C. Finney (Geological Sciences), Elaine Frey (Economics), Darwin Hall (Economics), George Hart (English), Gregory J. Holk (Geological Sciences), Kevin M. Kelley (Biology), Paul Laris (Geography), Daniel O. Larson (Anthropology), Carl Lipo (Anthropology), Xeumei Liu (Economics), Christopher Lowe (Biological Sciences), Wade E. Martin (Economics), Andrew Z. Mason (Biological Sciences), Martin McCarthy (ES&P), Steve Mezyk (Chemistry), Jacqueline Mills (Geography), Hector Neff (Anthropology), Bruce Perry (Geological Sciences), Nancy Quam-Wickham (History), Christine M. Rodrigue (Geography), Lora Stevens (Geological Sciences), Dean Toji (Asian and Asian-American Studies), Reza Toossi (Mechanical and Aerospace Engineering), Dessie Underwood (Biological Sciences), Carla Weaver (Geological Sciences), Suzanne P. Wechsler (Geography), Christine Whitcraft (Biological Sciences), Angela Wranic (Geography and ES&P), Eric Zahn (ES&P)

Career Possibilities

Environmental Analyst • Teacher • Ecologist • Geochemist
• Environmental Impact Report Writer • Community Development Specialist • Urban Planner • Environmental Planner • Peace Corps • Non-Governmental Organization Activist • Mass Media (Journalism, Radio, Television)
• Environmental Advocate • Environmental Consultant
• Public Relations • Public Policy Administrator • Environmental Law • Environmental Health • Environmental Economics • Environmental Toxicology • Sustainable Development Specialist • Green Business (For more information, see www.careers.csulb.edu.)

Introduction

The Environmental Science and Policy (ES&P) degrees program is jointly housed in the College of Liberal Arts and the College of Natural Sciences and Mathematics, reflecting its inherent interdisciplinary nature. A Bachelor of Arts and a Bachelor of Science as well as a minor are available. See the ES&P web-page for details. We highly encourage B.A. students to double major or seek a minor in a closely related discipline such as anthropology, economics, geography, international studies or political science. Students in the B.S. degree program are encouraged to double major or seek a minor in anthropology, biology, chemistry, earth science, ecology, economics, geography, geology, or political science.

Bachelor of Arts in Environmental Science and Policy (120 units)

Requirements

Lower Division:

Take all of the following course:

BIOL 260 Biostatistics (3)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)

Prerequisite/Corequisite: MATH 103 or higher.

ES P 200 California Environmental Issues (3)

Prerequisites/Corequisites: GEOL 102, 104; BIOL 200; ECON 101 or 300.

GEOL 102 General Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 104 Geology Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

GEOL 280 Water Resources and Society (3)

Prerequisites: GEOL 102, 104. A grade of "C" or better in MATH 117, or four years of high school mathematics.

Take one of the following choices:

BIOL 200 General Biology (4)

Prerequisite: GE Foundation requirements.

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

Take one of the following courses:

CHEM 111A, 140; GEOL 191;

Take one of the following courses:

MATH 115, 119A, 122

*Take one of the following courses:

BIOL 100 or GEOG 140

or

Any Introductory Environmental Science or Studies course

Upper Division

Take all of the following courses:

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

ECON 310 Microeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ES P 300 Environmental Law and Policy (3)

Prerequisites: GE Foundation requirements; ECON 100 and 101, or ECON 300; POSC 100; and upper division standing.

ES P 400 Environmental Science and Policy Capstone Project (3)

Prerequisites: BIOL 350; ECON 462 (or 463 or 464); ES P 200, 300; GEOG 481 or 485; GEOL 300I.

GEOL 300I Earth Systems and Global Change (3)

Prerequisites: GE Foundation requirement, upper division standing, and CHEM 100 or CHEM 111A or GEOL 102 or GEOL 106 with a grade of "C" or better.

Take one of the following courses:

GEOG 473 Remote Sensing (4)

Prerequisites GEOG 200 (or equivalent) and GEOG 280 or consent of instructor.

GEOG 481 Geographic Information Science for Natural Sciences (4)

Prerequisites: Junior/Senior/Graduate standing; GEOG 140 or BIOL 153 or GEOL 102.

Take one course selected from the following:

POSC 328, 329, 431, 432

Take one course selected from the following:

ECON 462, 463, 464

Take one course selected from the following:

GEOG 442, 447, 455, 458

Take one course selected from the following:

HIST 464I, 482I; ENGL 444; ASAM 350; WGSS 424

Take one course selected from the following:

ANTH 450; BIOL 457, 459, ENGL 444; ESP 495; GEOG 443, 448, 486, 492; HIST 482I; NSCI 492

Additional 6 units of course work selected from courses approved as options satisfying upper division requirements above or from the following approved list of additional courses; all must be upper division or approved by the advisor.

Additional Approved Courses:

ANTH 301; BIOL 303, 450, 456; ECON 355, 403, 410, 434, 485, 486; ENGR 302I; ES P 490, 491, 499; GEOG 340, 355I, 400, 440, 441, 443, 444, 445, 452, 460, 471, 474, 475, 482, 487A, 488; GEOL 303, 339, 410; SOC 350, 355, 410I

Bachelor of Science in Environmental Science and Policy (120 units)

Requirements

Lower Division:

Take all the following courses:

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Introduction to Cell and Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

BIOL 213 Introduction to Ecology and Physiology (4)

Prerequisites: BIOL 211, 212, CHEM 111B, each with a grade of "C" or better.

BIOL 260 Biostatistics (3)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

ES P 200 California Environmental Issues (3)

Prerequisites/Corequisites: GEOL 102, 104; BIOL 200; ECON 101 or 300.

GEOL 102 General Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 104 Geology Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

GEOL 280 Water Resources and Society (3)

Prerequisites: GEOL 102, 104. A grade of "C" or better in MATH 117, or four years of high school mathematics.

MATH 119A (or 122) Survey of Calculus I (3)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

MATH 119B (or 123) Survey of Calculus II (3)

Prerequisite: MATH 119A or 122.

(BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11; also, if a transfer student took courses equivalent to BIOL 211, 212, or 213 at another institution without labs, they must take 212L, 213L, and 213L here)

Upper Division:

Take all the following courses:

BIOL 350 General Ecology (3)

Prerequisites: BIOL 211, 212, 213, 260; MATH 119A or 122 all with a grade of "C" or better. Chemistry and physics recommended.

CHEM 327 (or 320A or 322A) Fundamentals of Organic Chemistry (3)

Prerequisite: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

ECON 300 (or 100 & 101) Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

ECON 310 Microeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ES P 300 Environmental Law and Policy (3)

Prerequisites: GE Foundation requirements; ECON 100 and 101, or ECON 300; POSC 100; and upper division standing.

ES P 400 Environmental Science and Policy Capstone

Project (3)

Prerequisites: BIOL 350; ECON 462 (or 463 or 464); ES P 200, 300; GEOG 481 or 485; GEOL 300I.

GEOL 300I Earth Systems and Global Change (3)

Prerequisites: GE Foundation requirement, upper division standing, and CHEM 100 or CHEM 111A or GEOL 102 or GEOL 106 with a grade of "C" or better.

Take one of the following courses:

GEOG 481 Geographic Information Science for Natural

Sciences (4)

Prerequisites: Junior/Senior/Graduate standing; GEOG 140 or BIOL 153 or GEOL 102.

GEOG 485 Principles of Geographic Information Science

(4)

Prerequisites: GEOG 200 or equivalent; GEOG 380 and 482.

Take one course from the following:

ECON 462, 463, 464

Take 18 additional units selected from the following approved list, 8 units must be upper division or approved by the advisor.

Natural Science Track:

12 units must be in Biology, Microbiology, Environmental Science and Policy, Geology, Chemistry, Chemical Engineering, Mathematics and Statistics. Note: Within these disciplines, PHYS 100A,B (or 151, 152) are required.

Social Science Track:

12 units must be in Anthropology, Economics, Geography, or Mathematics/Statistics from the list below:

ANTH 140, 301, 450; BIOL 303, 313, 324, 340, 353, 427, 450, 451, 456, 457, 459, 464, 465, 467; CE 406; CHEM 251, 320B, 322B, 323A,B, 377A,B, 441A, 451; CH E 475; ENGR 302I; ECON 355, 403, 410, 434, 462, 463, 464, 485, 486; ES P 490, 491, 495, 499; GEOG 400, 440, 441, 442, 443, 444, 446, 452, 455, 458, 460, 473, 474, 475, 482, 484, 486, 487A, 488; GEOL 190, 250, 303, 339, 410, 443, 454, 456, 460, 461, 465, 466, 477; H SC 422; MATH 380 or STAT 380; MICR 200, 211; NSCI 492; PHYS 100A,B or PHYS 151, 152; STAT 381.

Minor in Environmental Science and Policy

This minor may be combined with any major at CSULB except the B.A. and B.S. in Environmental Science and Policy. It requires a minimum of 20 units (at least 9 of which must be upper division) of course work in Anthropology, Biology, Microbiology, Economics, Environmental Science and Policy, Geography, or Geology.

Prerequisites

Take all the following prerequisite courses (do not count toward the minor):

BIOL 200; ECON 300 (or 100 and 101); GEOL 102, 104.

Requirements

Take all the following courses:

ES P 200 California Environmental Issues (3)
Prerequisites/Corequisites: GEOL 102, 104; BIOL 200; ECON 101 or 300.

ES P 300 Environmental Law and Policy (3)
Prerequisites: GE Foundation requirements; ECON 100 and 101, or ECON 300; POSC 100; and upper division standing.

Take a minimum of 14 units from the following:

ANTH 140, 405, 481; BIOL 350, 353, 450, 451, 456, 457, 459, 464; MICR 303; ECON 306I, 462, 463, 464; ES P 400; GEOG 440, 442, 443, 444, 455, 458, 460, 487A; and GEOL 190, 280, 300I, 303, 465, 466, 477.

Environmental Science and Policy Courses (ES P)

LOWER DIVISION

200. California Environmental Issues (3)

Prerequisites/Corequisites: GEOL 102, 104; BIOL 200; ECON 101 or 300.

Introduction to the history, nature, status, and future of a major environmental issue in California. Biological, physical, and societal aspects will be examined and integrated with the goal of developing a plan to meet the challenges of the 21st Century.

Letter grade only (A-F). (Lecture 2 hrs., discussion 1 hr., and field trips.)

UPPER DIVISION

300. Environmental Law and Policy (3)

Prerequisites: GE Foundation requirements; ECON 100 and 101, or ECON 300; POSC 100; and upper division standing.

Property rights, federal and state roles in decision-making, rights and limits of both private parties and the broad public interest. Emphasis on science in decision-making, choices between regulations and incentives, and role of bureaucracy.

Letter grade only (A-F). (2 hrs lecture, 1 hr discussion).

400. Environmental Science and Policy Capstone Project (3)

Prerequisites: BIOL 350; ECON 462 (or 463 or 464); ES P 200, 300; GEOG 481 or 485; GEOL 300I.

An interdisciplinary evaluation of the physical, biological, social, economic, and legal dimensions of a local environmental issue. Examples include policies to control surface water run-off, policies for marine protected areas, dredging harbors, and developing, preserving, restoring wetlands and estuaries.

Letter grade only (A-F). (2 hrs lecture, 3 hr laboratory-field work).

490. Selected Topics in Environmental Science and Policy (3)

Prerequisite: Consent of instructor.

Topics of current interest in environmental science and policy selected for intensive development.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

491. Senior Thesis/Project in Environmental Science and Policy (1-6)

Prerequisites: Senior standing and consent of instructor.

Final completion of a thesis or research project.

May be repeated to a maximum of 6 units in different semesters. Letter grade only (A-F).

495. Environmental Science and Policy Internship (3)

Prerequisite: Consent of instructor.

Practical experience in an appropriate business, government, or non-profit organization.

May be repeated to a maximum of 6 units in different semesters. Credit/No credit grading only.

499. Environmental Science and Policy Directed Study (1-6)

Prerequisite: Consent of instructor.

Independent study under the supervision of a faculty member.

May be repeated to a maximum of 6 units in different semesters.

FAMILY AND CONSUMER SCIENCES

College of Health and Human Services

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001
Telephone / Fax: (562) 985-4484 / 985-4414
Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Accreditation

The Department of Family and Consumer Sciences is accredited by the American Association of Family and Consumer Sciences (AAFCS) (American Association of Family and Consumer Sciences, Council for Accreditation, 1555 King Street, Alexandria, VA 22314, phone: 703-706-4600). The Didactic Program in Dietetics and the Dietetic Internship are currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, phone: 312-899-0040, ext. 5400. The Hospitality Foodservice and Hotel Management program is accredited by the Accreditation Commission for Programs in Hospitality Administration. The Preschool and Toddler Study Laboratories are accredited by The National Association for the Education of Young Children. Family Studies Program is approved by the National Council on Family Relations to offer a program leading to Provisional Family Life Education Certification.

Undergraduate Programs

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Dietetics and Food Administration

This degree offers two options:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality, Foodservice and Hotel Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Graduate Programs

Master of Arts in Family and Consumer Sciences

This program is designed to prepare students with a background in program evaluation and administration, research methods, and application of advanced subject matter knowledge to enhance the quality of life of individuals, families, and communities. The advanced candidate selects either a thesis track or directed project track to facilitate a selected career path.

There are four specializations in this program:

- Consumer Affairs
- Family and Consumer Sciences Education
- Fashion Merchandising
- Hospitality Foodservice and Hotel Management

Interested students should contact the Department of Family and Consumer Sciences Graduate Coordinator at (562) 985-4484. Online information can be found at <http://www.csulb.edu/colleges/chhs/departments/fcs/programs/graduate/MADegree.htm>.

Admission

Prospective applicants must comply with University requirements for admission to graduate studies as outlined in this catalog. Students must concurrently submit application to the University Admissions and Records office and the Department. A cohort of students will be admitted each Fall semester.

Admission Requirements to the Department.

Admission to the Master of Arts in Family and Consumer Sciences is dependent upon approval by the Graduate Coordinator. The application requirements for prospective graduate students for the Master of Arts degree are:

1. At least a 3.0 grade-point cumulative undergraduate average.
2. A copy of the application submitted to the University Office of Admissions and Records.
3. Three letters of recommendation (preferably from previous instructors).
4. Additional materials that provide evidence of academic performance may be requested (at a later date) after review of applicant's file.
5. Approval by the Graduate Coordinator.
6. DEADLINES FOR RECEIPT OF APPLICATIONS TO THE DEPARTMENT GRADUATE COORDINATOR: MAY 1ST FOR FALL ADMISSIONS.

Prerequisites

1. Students are responsible for meeting all prerequisite requirements prior to enrolling in 500/600 level courses.
 - A. The Graduate Coordinator and/or faculty advisor will evaluate transcripts. The student who needs to complete prerequisite deficiencies must do so using a program of study developed with the specialization area faculty advisor and approved by the Graduate Coordinator.
 - B. The student who needs to pass the Test of English as a Foreign Language (TOEFL) must do so within one year of admission.
2. Students from other disciplines may be required to complete prerequisite courses before enrolling in 500/600 level courses.
3. Prerequisites for all courses carrying graduate credit must have been completed within five years of taking the graduate courses. If the prerequisite is outdated, the prerequisite(s) must be repeated or credit obtained by examination.
4. Students deficient in undergraduate preparation must take courses to remove these deficiencies at the discretion of faculty in the specified subject matter area and the Graduate Coordinator. Courses taken to remove deficiencies may not be included in the graduate program of study.

Retention

1. Maintain a 3.0 or better grade point average in all graduate work completed at CSULB and all graduate work transferred to meet graduate requirements.
2. Maintain satisfactory progress toward the degree objective.

Advancement to Candidacy

1. Satisfactory completion of the Writing Proficiency Examination/Graduate Writing Assessment Requirement (WPE/GWAR).
2. Minimum of 3.0 overall GPA and a 3.0 average in all units undertaken for the approval program of study.
3. Complete all the following courses: EDP 419; FCS 563, 600, 696
4. Approval of the Graduate Coordinator, and Associate Dean of the College of Health and Human Services.
5. Enrolled in the semester in which the Advancement to Candidacy takes place.

Requirements for Graduation

1. Completion of a minimum of 30 units of approved upper-division and graduate courses with a minimum of 21 units in FCS.
2. Completion of the following:

Take all the following courses:

EDP 419 Educational Statistics (3)

Prerequisites: Satisfactory completion of an undergraduate mathematics course suitable for general education math credit and, if required by the major, a lower-division statistics course.

FCS 563 Evaluation in Family and Consumer Sciences and Gerontology (3)

Prerequisites: Upper division or graduate course in statistics; FCS 696 (may be taken concurrently) or equivalent.

FCS 592 Internship in Family and Consumer Sciences/ Gerontology (3)

Prerequisites: Graduate standing and consent of instructor.

FCS 597 Independent Studies (2)

Prerequisites: A 400-level course in any of the Family and Consumer Sciences disciplines.

FCS 600 Seminar in Administration of Family and Consumer Sciences/Gerontology Programs (3)

Prerequisites: Graduate standing.

FCS 696 Research Methods (3)

Prerequisites: Upper-division course in statistics.

FCS 697 Directed Research (3)

Prerequisites: Advancement to candidacy.

Take one of the following courses:

FCS 692 Directed Project (4)

Prerequisites: FCS 697.

FCS 698 Thesis (4)

Prerequisites: FCS 697.

Complete 6 units of Advisor approved courses in the area of specialization (Consumer Affairs, Family and Consumer Sciences Education, Fashion Merchandising or Hospitality Foodservice and Hotel Management).

3. Completion of an oral presentation of the Thesis or Directed Project report.

Master of Science in Nutritional Science

This degree offers two emphases: Nutritional Science (Nutrition Therapy/Community Nutrition) and Food Science.

Admission Criteria

Prospective applicants must comply with University requirements for admission to graduate studies as outlined in this catalog. Students must concurrently submit applications to the University Admissions and Records Office and the Department of Family and Consumer Sciences.

Admission to the Master of Science in Nutritional Science is dependent upon approval by the Graduate Coordinator. The requirements for prospective graduate students for the Master of Science degree are:

1. A bachelor's degree with an undergraduate overall GPA of 3.0 and a GPA of 3.0 on the last 60 undergraduate units attempted.
2. A minimum score of 4 on the Analytical Writing section of the general GRE.
3. A passing score on the test of English as a Foreign Language (TOEFL) if the applicant's native language is not English and preparatory education was principally in a language other than English.
4. Submission of the following to the Graduate Coordinator in the Department of Family and Consumer Sciences:
 - A. A copy of the completed application submitted to the CSULB Office of Enrollment Services.
 - B. Three letters of recommendation with at least two from instructors who have direct knowledge of the applicant's scholastic ability and professional qualifications.
 - C. An official copy of the Graduate Record Examination (GRE) taken within the last 5 years.

THE POSTMARK DEADLINES FOR RECEIPT OF APPLICATIONS TO THE DEPARTMENT GRADUATE COORDINATOR ARE APRIL 1ST FOR FALL ADMISSIONS AND OCTOBER 15th FOR SPRING ADMISSIONS.

Prerequisites

1. Students are responsible for meeting all prerequisite

requirements prior to enrolling in 500/600 level courses. A program of study will be developed with the emphasis area faculty advisor and approved by the Graduate Coordinator.

2. Prerequisites for all courses carrying graduate credit must have been completed within five years of taking the graduate courses. If any prerequisite is outdated, it may be repeated or credit obtained by written examination.

Advancement to Candidacy

1. Complete 9 units of graduate courses, including FCS 696.
2. Maintain a 3.0 GPA for all course work attempted as a graduate student.
3. Complete a Program of Study in consultation with a faculty advisor.
4. Approval by the Graduate Coordinator of Family and Consumer Sciences and the Associate Dean of the College of Health and Human Services.
5. Enrolled in the semester in which the Advancement to Candidacy takes place.

Retention

1. Maintain a minimum of 3.0 GPA in all graduate work completed at CSULB and all graduate work transferred to meet graduate requirements.
2. Maintain satisfactory progress toward the degree objective.

Requirements

1. Completion of a minimum of 34-36 units depending on concurrent completion of the dietetic internship;
2. An advanced statistics course:
Take one of the following courses:
EDP 519, H SC 503, or a course approved by the faculty advisor;
3. At least 18 units of 500/600 level courses in Family and Consumer Sciences:
 - A. Nutritional Science without Dietetic Internship (34 units):
Take all of the following courses:
FCS 530A Carbohydrates, Lipids and Proteins (3)
Prerequisites: NUTR 436, 436L, BIOL 260.
FCS 530B Vitamins and Minerals (3)
Prerequisites: NUTR 436, 436L, BIOL 260.
FCS 531 Advanced Community Nutrition (3)
Prerequisites: NUTR 436 and 436L; NUTR 461.
FCS 636 Nutrition and the Media (3)
Prerequisites: Graduate standing, NUTR 331A or equivalent.
FCS 696 Research Methods (3)
Prerequisites: Upper-division course in statistics.
FCS 697 Directed Research (3)
Prerequisites: Advancement to candidacy.
Take one of the following courses:
FCS 692 Directed Project (4)
Prerequisites: FCS 697.
FCS 698 Thesis (4)
Prerequisites: FCS 697.
Take 9 units of advisor-approved area of specialization courses.
 - B. Nutritional Science with Dietetic Internship (36 units):
Take all of the following courses:
FCS 530A Carbohydrates, Lipids and Proteins (3)
Prerequisites: NUTR 436, 436L, BIOL 260.

- FCS 530B Vitamins and Minerals (3)
Prerequisites: NUTR 436, 436L, BIOL 260.
- FCS 531 Advanced Community Nutrition (3)
Prerequisites: NUTR 436 and 436L; NUTR 461.
- FCS 591A Professional Practicum in Dietetics (6)
Prerequisite: Admission in the Academy of Nutrition and Dietetics Accredited Dietetic Internship.
- FCS 591B Seminar in Dietetic Practice (2)
Corequisites: Enrollment in FCS 591A.
- FCS 636 Nutrition and the Media (3)
Prerequisites: Graduate standing, NUTR 331A or equivalent.
- FCS 696 Research Methods (3)
Prerequisites: Upper-division course in statistics.
- FCS 697 Directed Research (3)
Prerequisites: Advancement to candidacy.
- Take one of the following courses:
FCS 692 Directed Project (4)
Prerequisites: FCS 697.
FCS 698 Thesis (4)
Prerequisites: FCS 697.
- Take 3 units of advisor-approved area of specialization courses.

C. Food Science (34 units):

- Take all of the following courses:
FCS 530A Carbohydrates, Lipids and Proteins (3)
Prerequisites: NUTR 436, 436L, BIOL 260.
FCS 530B Vitamins and Minerals (3)
Prerequisites: NUTR 436, 436L, BIOL 260.
FCS 532 Food Analysis (3)
Prerequisites: CHEM 327, FSCI 332 or equivalent.
FCS 535 Food Processing, Preservation & Packaging (3)
Prerequisites: FSCI 332 or consent of instructor.
FCS 592 Internship in FCS/Gerontology (3)
Prerequisites: Graduate standing and consent of instructor.
FCS 597 Independent Study (1-3)
Prerequisites: A 400-level course in any of the Family and Consumer Sciences disciplines.
FCS 696 Research Methods (3)
Prerequisites: Upper-division course in statistics.
FCS 697 Directed Research (3)
Prerequisites: Advancement to candidacy.
- Take one of the following courses:
FCS 692 Directed Project (4)
Prerequisites: FCS 697
FCS 698 Thesis (4)
Prerequisites: FCS 697.
- Take 6 units of advisor-approved area of specialization courses.

4. A written Thesis or a Directed Project
5. Oral presentation of the Thesis or Directed Project.

Academy of Nutrition and Dietetics Accredited Dietetic Internship

The department offers a combined Master of Science in Nutritional Science and Dietetic Internship (DI) supervised practice. The DI is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). Upon successful completion of the DI, the student will be eligible to write the Registration Examination for Dietitians.

The DI's mission is to provide contemporary training of entry-level nutrition professionals who will become valued

leaders in multi-ethnic communities, healthcare programs and food production settings for the years 2012-2022. The two major goals of the DI are:

1. To prepare entry-level dietitians who can apply the science of nutrition for the well-being of individuals throughout the lifecycle, and
2. To prepare graduates who are dedicated and confident in their profession.

The Dietetic Internship has a "Nutrition Across the Life Cycle Communication" (NALCC) Concentration. The concentration is designed to develop unique communication, education and health promotion skills. These skills will enhance the ability of graduates to interview, counsel, and guide individuals with nutrition decisions and eating behaviors at all ages of individuals across the life cycle. In addition, the concentration prepares graduates with the ability to develop health promotion and chronic disease prevention programs for individuals and groups.

The DI provides 1,200 hours of practicum experience (FCS 591A: Professional Practicum in Dietetics) within a broad array of disciplines including nutrition therapy, foodservice systems management, community and business / entrepreneurial nutrition. The DI is conducted off campus at a variety of excellent facilities including, but not limited to, medical centers, health departments, school districts and community service organizations.

The student must enroll in a full academic year of two semesters and two additional sessions in the summer (sessions I and II) following the academic year. The student enrolls in 11 units of FCS 591A each fall and spring semester, and enrolls in 7 units of FCS 591A in the summer following the academic year.

During the fall and spring, concurrent enrollment is required in the 1-unit graduate seminar (FCS 591B: Seminar in Dietetic Practice). This is the didactic course supporting the practicum and constitutes 276 hours of class time.

Admission Requirements

1. Completion of a ACEND accredited Didactic Program in Dietetics with an original Verification Statement from the Didactic Program Director;
2. Earned baccalaureate degree;
3. GPA 3.0 minimum on a 4.0 scale required on the last 60 units of courses completed;
4. Related volunteer or work experience in the United States;
5. Graduate standing in the CSULB Master of Science, Nutritional Science program;

NOTE: Dietetic Internship applicants must apply on or before February 1st to the MS Nutritional Science with Internship degree program to coincide with the Fall admission to the DI program.

6. Completion of the Dietetic Internship Centralized Application System (DICAS) application by February 1st;
7. Additional application materials to Dietetic Internship Director by February 1st which includes a nutrition-related experience worksheet and a GPA calculation sheet (both forms can be downloaded from the DI website: www.csulb.edu/dieteticinternship); and,
8. Interview with Program Director and review committee.

Program Completion

The student will complete the DI when the following has been achieved:

1. Completion of 1,200 hours of practicum (FCS 591A) with a minimum of satisfactory performance as evaluated by preceptors and receiving a credit grade in the course;
2. Completion of the Seminar in Dietetic Practice: FCS 591B with a grade of B or higher; and,
3. Completion of two of the three designated graduate courses, FCS 530A, 531 or 636 or equivalent with a grade of "B" or higher.

When the student meets these requirements, he/she will receive a ACEND Verification Statement signed by the DI Director. The graduate will then be eligible to write the Registered Dietitian exam.

Graduates of the Dietetic Internship receive a total of 14 units towards their M.S. in Nutritional Science degree. This includes 6 units from the two required graduate courses of 3 units each, 2 units from FCS 591B (1 unit each semester) and 6 units from FCS 591A (3 units each semester).

Completion of the M.S. degree is not a requirement for completion of the Dietetic Internship, but is optional and typically takes an additional one to two years to complete.

Students can view details of the dietetic internship at www.csulb.edu/dieteticinternship.

Career opportunities include employment as a professional such as clinical dietitian; nutrition consultant; entrepreneur; community nutritionist; media spokesperson or marketing manager in the food industry; foodservice manager in hospitals, medical centers, schools, universities, businesses, restaurants or hotels; researcher in the medical, food production or food manufacturing industries, and inspector in the food industry.

Single Subject Teaching Credential in Home Economics

For information, refer to the undergraduate section in Family and Consumer Sciences Education.

Family and Consumer Sciences Courses (FCS)

UPPER DIVISION

492G. Internship in Gerontology (3)

Prerequisites: Student must be a Gerontology Certificate candidate; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of the Gerontology program director; and GERN 400I, ANTH 454, PSY 365 or HDEV 357I. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. Same course as GERN 492G. Not open for credit to students with credit in GERN 492G. (Seminar 3 hours)

GRADUATE LEVEL

502. Child and Family Law (3)

Prerequisites: CDFS 3121 and upper division standing.

Establishment, conduct, and termination of marital and non-marital family relationships, including the rights and duties of the parties involved. Topics include marital disillusionment, child custody issues, property rights, domestic violence, adoption, support, genetic testing, and new trends in family law.

Letter grade only (A-F). (Lecture-discussion 3 hours)

511. Theories in Family and Consumer Sciences (3)

Prerequisite: Admission to a graduate program in Family and Consumer Sciences or closely related field.

Major contributors and historical and philosophical trends in Family and Consumer Sciences. Theory construction and empirical verification of hypotheses. Contemporary theories spanning the areas in Family and Consumer Sciences.

Letter grade only (A-F).

518. Parent Education (3)

Prerequisites: At least six units of upper division child development and family studies or equivalent courses.

Principles and techniques for working with parents in community and school programs. Assessment of needs and development of programs for adults in a variety of social and cultural settings.

520. Personal Finance for the Aging (3)

Prerequisites: 400-level course in Consumer Affairs or consent of instructor.

Personal finance as applied to the aging population.

Letter grade only (A-F). Same course as GERN 520. Not open for credit to students with credit in GERN 520. (Lecture-discussion 3 hours)

525. Personal Financial Planning Analyses (3)

Prerequisites: CAFF 223 or consent of instructor.

Analysis and protection of personal and family resources; planning and forecasting goals; development of financial strategies utilizing insurance, investment, tax management, pensions, wills and trusts.

Letter grade only (A-F).

526. Family Financial Problems (3)

Prerequisites: CAFF 223 or consent of instructor.

Theory and practice in the diagnosis of family financial crises; selecting alternative solutions; constructing practical methods for the prevention of family financial problems.

Letter grade only (A-F). (2 hours discussion, 3 hours laboratory).

529. Consumer Protection (3)

Prerequisites: Upper Division course in consumer affairs or consent of instructor.

Concepts of consumer protection with analysis of a myriad of resources available for individuals and families with consumer problems.

Letter grade only (A-F). (Seminar 3 hours)

530A. Carbohydrates, Lipids and Proteins (3)

Prerequisites: NUTR 436, 436L, BIOL 260.

Nutritional, metabolic and clinical aspects of carbohydrates, lipids and proteins. Current knowledge of interactions between macronutrients and assessment of needs.

Letter grade only (A-F). (Seminar 3 hours)

530B. Vitamins and Minerals (3)

Prerequisites: NUTR 436, 436L, BIOL 260.

Nutritional, metabolic and clinical aspects of vitamins and minerals. Current knowledge of interactions between micro- and macro-nutrients. Principles of nutritional status assessment and determination of needs.

Letter grade only (A-F). (Seminar 3 hours)

531. Advanced Community Nutrition (3)

Prerequisites: NUTR 436 and 436L; NUTR 461.

Program planning and evaluation with emphasis on major nutrition-related public health problems among target populations. Protocol development, collection and analysis of data. Verbal and written communications.

Letter grade only (A-F). (Lecture-discussion 3 hours)

532. Food Analysis (3)

Prerequisites: CHEM 327, FSCI 332 or equivalent.

Application of scientific methods of food analysis. Consideration of manner in which such variables as ingredients, proportions, and techniques in food preparation affect the quality of products. Experimental laboratory problems.

Letter grade only (A-F). Course fee may be required. (Seminar 2 hours, Laboratory 3 hours)

533. Recent Advances in Food Science (3)

Prerequisites: FSCI 432 or consent of instructor.

New developments in food processing, techniques of food preservation and, chemical additives. Food and water sanitation. Methods of standardization, preservation, and evaluation of quality. Retention of nutritive value, flavor, appearance, and safety of foods.

Letter grade only (A-F). (Seminar 3 hours)

534. Advanced Latino Nutrition, Health and Chronic Disease Prevention (3)

Prerequisite: Open to students enrolled in graduate programs in Family and Consumer Sciences, Health Science, or related fields.

Explores nutrition-related and contextual factors associated with the high rates of chronic disease among diverse Latino-specific subpopulations and provides culturally relevant strategies for prevention.

Letter grade only (A-F). Same course as HSC 534. Not open for credit to students with credit in HSC 534.

535. Food Processing, Preservation and Packaging (3)

Prerequisites: FSCI 332 or consent of instructor.

Methods and technological aspects in food processing, preservation and packaging. Application of principles and assessment of nutrition. Evaluation of chemical additives. Microbiological aspects of food safety.

(Lecture-discussion 2 hours, Laboratory 3 hours)

536. Advanced Nutrition (3)

Prerequisites: NUTR 331B; CHEM 448; CHEM 449 (may be taken concurrently).

Metabolism of proteins, fats, carbohydrates, minerals and vitamins; interrelationship of nutrients; principles of determining nutritional requirements of individuals.

Letter grade only (A-F).

537. Culturally Responsive Nutrition Promotion for Latinos (3)

Prerequisites: Open to students enrolled in graduate programs in Family and Consumer Sciences, Health Science or related field.

Explores the need and methods to develop culturally and linguistically relevant nutrition education with a focus on the Latino population. Students will analyze, evaluate, and create culturally competent nutrition interventions for the Latino community.

Letter grade only (A-F). Same course as HSC 537. Not open to students with credit in HSC 537.

538. Medical Nutrition Therapy (3)

Prerequisites: NUTR 436; NUTR 436L (may be taken concurrently).

The nutrition care process is applied to specific pathophysiological conditions. The application of this process includes nutrition assessment, nutrition diagnosis, nutrition intervention, and nutrition monitoring and evaluation.

Letter grade only (A-F).

539. Nutrition and Aging (3)

Prerequisites: NUTR 132 or BIOL 207 or 301 or GERN 4001 or consent of instructor.

Nutritional needs as related to physiological changes that occur during aging. Factors that influence food intake and nutritional status of the elderly. Diet adaptation for chronic diseases commonly found in older adults.

Letter grade only (A-F). Same course as GERN 539. Not open for credit for students with credit in GERN 439, GERN 539 or NUTR 439.

555. Global Perspectives in Fashion Merchandising (3)

Prerequisites: FMD 351 and 355, MKTG 300, and Graduate standing, or consent of instructor.

Application of merchandising concepts for the budgeting, buying, promoting, and selling of fashion apparel and accessories in global retail organizations.

Letter grade only (A-F).

558. Fashion Product Development (3)

Prerequisites: FMD 353, Graduate standing, or consent of the instructor.

The process of designing and engineering fashion products to be serviceable, producible, salable, and profitable for various consumer market segments.

Letter grade only (A-F).

563. Evaluation in Family and Consumer Sciences and Gerontology (3)

Prerequisites: Upper division or graduate course in statistics; FCS 696 (may be taken concurrently) or equivalent.

Principles, design, and methods of program evaluation for use by Family and Consumer Sciences and Gerontology professionals. Selection and development of instrumentation for data collection and interpretation and methods of reporting.

Letter grade only (A-F). Same course as GERN 563. Not open for credit to students with credit in GERN 563. (Seminar 3 hours).

568. Nutrition for Exercise and Performance (3)

Prerequisites: NUTR 132, KIN 301 for the KIN Fitness option and the KIN Exercise Science option or BIOL 207 for the Nutrition and Dietetics option.

Explores the role nutrients play in exercise and performance enhancement. Topics include evaluation of energy needs during physical activity, examination of weight management practices, assessment of nutritional status, and investigation of contemporary dietary issues related to exercise.

Letter grade only (A-F). Same course as KIN 568. Not open for credit to students with credit in KIN 568. Open to all graduate Kinesiology students in the the Adapted Physical Education, Coaching and Student Athlete Development, Pedagogical Studies (for K-12 teachers), Sport Management, Individualized Studies, Exercise Science, Exercise Physiology and Nutrition, Sport and Exercise Psychology, and Sports Medicine and Injury Studies options and M.S. students in the Nutritional Science without Dietetic Internship, Nutritional Science with Dietetic Internship, and Food Science emphases and/or consent of instructor.

574. Cost Control in Hospitality Foodservice and Hotel Management (3)

Prerequisites: HFHM 275 or 276 or consent of instructor

Financial management of food, labor, supplies, and other operational costs; procedures for controlling purchasing, receiving, storing, and issuing of food, beverage, and supplies; inventory and security management; computer applications; and analysis of financial reports in hospitality foodservice and hotel industry.

Letter grade only (A-F). (Lecture/Discussion 3 hours).

577. Foodservice Administration (3)

Prerequisites: HFHM 276 or 375 or consent of instructor

Principles of organization and administration in commercial

and non-commercial foodservice operations are explored. Includes food purchasing, receiving, storage, inventory control, marketing, organizational management, human resource management, productivity, financial management, and quality management as applied to the foodservice industry. Fieldtrips required.

Letter grade only (A-F). (Discussion 3 units)

591A. Professional Practicum in Dietetics (11)

Prerequisite: Admission in the Academy of Nutrition and Dietetics Accredited Dietetic Internship.

Supervised practicum at contracted facilities to meet performance standards and qualify for the national registration examination.

Credit/No Credit grading only. 11 units for each of 2 consecutive semesters.

591B. Seminar in Dietetic Practice (1)

Corequisite: Enrollment in FCS 591A.

Oral and written presentations of annotated bibliographies and a clinical case study, reports of professional meetings, examinations and field trips.

Letter grade only (A-F). 1 unit for each of 2 consecutive semesters. (Seminar 1 hour).

592. Internship in Family and Consumer Sciences/ Gerontology (3)

Prerequisites: Graduate standing and consent of instructor.

Field experience in which student assumes a self directed responsible role in an agency, business or other community setting.

Letter grade only (A-F). May be repeated to a maximum of 6 units. (Seminar 3 hours)

597. Independent Study (1-3)

Prerequisite: A 400-level course in any of the Family and Consumer Sciences disciplines.

Varied learning activities utilized to achieve competency related to Family and Consumer Sciences not offered in regular course. Written report required.

(Projects)

600. Seminar in Administration of Family and Consumer Sciences/Gerontology Programs (3)

Prerequisite: Graduate standing.

Application of administration, management and leadership theories to family and consumer sciences/gerontology programs. Decision-making, organizational structures and evaluation concepts included.

Letter grade only (A-F). Same course as GERN 600. Not open for credit to students with credit in GERN 600.

636. Nutrition and the Media (3)

Prerequisites: Graduate standing, NUTR 331A or equivalent.

Basic skills for analyzing and communicating reliable nutrition messages for print and visual media; translating evidenced-based research into consumer messages.

Letter grade only (A-F). (Lecture-activity 3 hours)

655A. Literature Review and Research in Family and Consumer Sciences (3)

Prerequisite. ED P 419.

Critical analyses of the current professional literature, theory, practice and research. The research process including conceptualization of the problem, literature search and review. The legal and ethical aspects of research are stressed.

Letter grade only (A-F). (Seminar 3 hours)

692. Directed Project (4)

Prerequisite: FCS 697.

Will acquire experiential skills under the guidance of a faculty advisor and supervisor/ preceptor at an approved project site. Will identify problems, design and assess a project or conduct research. Results will be presented in a thesis-style report.

Letter grade only (A-F)

696. Research Methods (3)

Prerequisite: Upper-division course in statistics.

Methodological approaches to contemporary research issues in Family and Consumer Sciences. Focuses on the design, development, and implementation of a formal research-designed project.

Letter grade only (A-F). Same course as GERN 696. Not open for credit to students with credit in GERN 696. (Seminar 3 hours).

697. Directed Research (3)

Prerequisite: Advancement to candidacy.

Students work under supervision of the thesis/directed project chair and with other committee members to complete a proposal for the thesis or directed project.

Letter grade only (A-F).

698. Thesis (4)

Prerequisite: FCS 697.

Planning, preparation and completion of a thesis related to the family and consumer sciences field.

Letter grade only (A-F).

FAMILY AND CONSUMER SCIENCES EDUCATION

College of Health and Human Services
Department of Family and Consumer Sciences

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001
Telephone / Fax: (562) 985-4484 / 985-4414
Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Career Possibilities

Positions in Cooperative Extension Services and Community Service Agencies • Home Economics/Family and Consumer Sciences Teachers in Secondary Schools • Educational Program Specialists in Business, Industry and Government • Teaching Youth and Adults in Various Educational Settings. (For more information, see www.careers.csulb.edu.) Positions as instructors in adult education or community colleges provide excellent careers for graduates with a Family and Consumer Sciences Education Option who obtain the appropriate credentials and education above the B.A. degree.

Undergraduate Programs

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Dietetics and Food Administration

This degree offers two options:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Arts in Family and Consumer Sciences

Option in Family and Consumer Sciences Education (120 units)

This option meets the new state standards for subject matter competence for the Home Economics credential and has been approved by the California Commission on teacher Credentialing. Students who earn a Home Economics Single Subject Teaching Credential will be prepared to teach in middle, junior, and senior high schools, and in adult or career and technical education programs and community colleges.

Requirements

Take all the following courses:

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

COMM 130 Essentials of Public Speaking (3)

Prerequisites: None.

ED P 301 Child Development and Learning: Cross-Cultural Perspective (3)

Prerequisites: None.

EDSS 300H Introduction to Teaching (3)

Prerequisites: Advanced sophomore or junior standing.

HSC 411B Health Science for Secondary Teachers (3)

Prerequisites: Upper-division standing. Corequisite: Current CPR Certification required.

CAFF 223 Personal & Family Financial Management (3)

Prerequisites: GE Foundation requirements.

CAFF 226 Consumer Life Skill (3)

Prerequisites: GE Foundation requirements.

CAFF 321I Family & Consumer Resource Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

CAFF 322 Family Housing and the Urban Community (3)

Prerequisites: Upper-division standing.

CDFS 211 Guiding Young Children (3)

Prerequisites: A grade of "C" or better in PSY 100 or SOC 100 or CDFS 111.

CDFS 312I Family and Personal Development (3)

Prerequisites: GE Foundation requirements; PSY 100 or SOC 100 or ANTH 120I upper division standing; or consent of instructor.

ETEC 444 Computer Technology in Education, Level I (3)

Prerequisites: Course design assumes familiarity with topics introduced in ETEC 110.

FMD 296 Computer Applications for Family and Consumer Sciences Professions (3)

Prerequisites: ETEC 444.

FCSE 299 Introduction to FCS (1)

Prerequisites: None.

FCSE 492D Internship in FCS Education (3)
Prerequisites: Senior standing; overall 2.5 GPA or a 3.0 major GPA; approval of a Family and Consumer Sciences Education faculty advisor.

FCSE 497 Directed Studies (3)
Prerequisites: Upper division standing, consent of instructor.

FCSE 499 Professionalism and Leadership in FCS (2)
Prerequisites: FCSE 299, CAFF 3211, 12 units of upper division course work in Family and Consumer Sciences.

FMD 154 Fundamentals of Apparel Production (3)
Prerequisites: None.

FMD 251 Fashion Strategies for Consumers (3)
Prerequisites: GE Foundation requirements.

FMD 253 Introductory Textiles (3)
Prerequisites: None.

HFHM 173 Applied Foodservice Sanitation (1)
Prerequisites: None.

HFHM 235 Principles of Food Preparation (3)
Prerequisites: None.

HFHM 275 Food Production Systems I (3)
Prerequisites: NUTR 132 and HFHM 235.

NUTR 132 Introductory Nutrition (3)
Prerequisites/Corequisites: One Foundation course.

Take one the following courses:

SOC 100 Principles of Sociology (3)
Prerequisites/Corequisites: A GE Foundation course.

ANTH 120 Introduction to Cultural Anthropology (3)
Prerequisites/Corequisites: Any GE Foundation course.

Take 12 units of one of the following concentrations:

Child Development and Education Occupations:

CDFS 214 Environments for Preschool Children (3)
Prerequisites: A grade of "C" or better in CDFS 111; or consent of instructor.

CDFS 414 Fieldwork with Preschool Children (3)
Prerequisites: A grade of "C" or better in CDFS 111, 211, 214; or consent of instructor.

CDFS 416A Introduction to Administration and Supervision of Child Development Programs (3)
Prerequisites: A grade of "C" or better in CDFS 414 or 415; or consent of instructor.

CDFS 416B Applications of Administration and Supervision of Child Development Programs (3)
Prerequisites: A grade of "C" or better in CDFS 416A; or consent of instructor.

Fashion Design, Manufacturing and Merchandising:

FMD 155 Introduction to the Fashion Industry (3)
Prerequisites: None.

FMD 351 Fashion Promotion and Sales (3)
Prerequisites: A grade of "C" or better in FMD 258, FMD 296.

FMD 355 Fashion Buying (3)
Prerequisites: Computer Proficiency Exam passage; a grade of "C" or better in ACCT 201, FMD 155, and FMD 258.

FMD 451 The Fashion Customer (3)
Prerequisites: A grade of "C" or better in FMD 351.

Foodservice and Hospitality:

HFHM 170 Introduction to Hospitality Foodservice and Hotel Management (3)
Prerequisites: None.

HFHM 375 Food Production Systems II (3)
Prerequisites: HFHM 173 and 275; or 276; or consent of instructor.

HFHM 474 Cost Control in Hospitality Foodservice and Hotel Management (3)
Prerequisites: HFHM 275 or 276 or consent of instructor.

HFHM 477 Foodservice Administration (3)
Prerequisites: HFHM 276 or 375 or consent of instructor.

The following substitutions or waivers have been approved for students in the FCSE program of study:

1. FMD 258 is waived in FMD 351 and FMD 355.
2. ACCT 201 is waived in FMD 355.
3. EDP 301 is substituted for CDFS 111 in all of the courses for which CDFS 111 is a prerequisite: CDFS 211, 214, 414, 416A, 416B.
4. ETEC 444 is substituted for IS 233 in FMD 355.

Single Subject Teaching Credential in Home Economics

In addition to meeting the subject matter competence requirement for the Single Subject Teaching Credential in Home Economics, prospective Family and Consumer Sciences teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures. Prospective students should consult the department's Family and Consumer Sciences Credential Advisor early to plan their program.

Family and Consumer Sciences Education Courses (FCSE)

299. Introduction to Family and Consumer Sciences (1)

Must be taken during first semester as Family and Consumer Sciences or Dietetics and Food Administration major. Provides a general overview of Family and Consumer Sciences as a discipline of study and a profession. Examines historical and philosophical perspectives and considers issues, trends, and career opportunities within each option in the department.

Letter grade only (A-F). (Lecture-discussion 1 hour)

486. Instructional Strategies for Family and Consumer Sciences Professionals (3)

Prerequisite: Senior standing.

Must be taken in one of the last two semesters prior to graduation. Utilize the principles and concepts of each area of Family and Consumer Sciences in developing and implementing a variety of learning experiences appropriate for providing instruction to individuals or groups in informal education, business, government agencies, or other community settings.

Letter grade only (A-F).

490. Selected Topics in Family and Consumer Sciences Education (1-3)

Group investigation of selected topics.

May be repeated to a maximum of 9 units. Topics announced in the *Schedule of Classes*. (Seminar 1-3 hours)

- A. New York Fashion Study Tour (course fee may be required)
- B. Children and Families in New Zealand and in the U.S.: A Comparative Study Child U.S. and N.Z.

492D. Internship in Family and Consumer Sciences Education (3)

Prerequisites: Student must be a Family and Consumer Sciences Education major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a Family and Consumer Sciences Education faculty advisor. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. Students receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)

497. Directed Studies (1-3)

Prerequisites: Upper division standing, consent of instructor.

Independent study under the supervision of a faculty member. Exploration/experience in areas not a part of any regular course.

May be repeated to a maximum of 6 units.

499. Professionalism and Leadership in Family and Consumer Sciences (2)

Prerequisites: FCSE 299, CAFF 3211, 12 units of upper division course work in Family and Consumer Sciences. Must be taken in one of the last two semesters prior to graduation.

Analysis of contemporary issues, public policies and future directions of FCS as discipline of study and a profession with integrated specializations.

Letter grade only (A-F). (Lecture-Discussion 2 hours)

FASHION MERCHANDISING AND DESIGN

College of Health and Human Services
Department of Family and Consumer Sciences

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001
Telephone / Fax: (562) 985-4484 / 985-4414

Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Career Possibilities

Promotions Specialists • Product Developers • National Promotions Directors • Costume Designers • Designers • Sales Representatives • Buyers • Visual Promotion Directors • Textile Testers (For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Dietetics and Food Administration

This degree offers two options:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality, Foodservice and Hotel Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Option in Fashion Merchandising (120 units)

Take all of the following courses:

CAFF 321I Family and Consumer Resource Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

CHEM 100 Chemistry and Today's World (4)

Prerequisites: One GE Foundation course (GE categories A1, A2, A3 or B2).

ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

FCSE 299 Intro to Family and Consumer Sciences (1)

Prerequisites: None.

FCSE 499 Professionalism & Leadership in FCS (2)

Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course work in Family and Consumer Sciences.

FMD 155 Introduction to the Fashion Industry (3)

Prerequisites: None.

FMD 251 Fashion Strategies for Consumers (3)

Prerequisites: GE Foundation requirements.

FMD 253 Introductory Textiles (3)

Prerequisites: None.

FMD 255 Fashion Industry Ethics and Social

Responsibility (3)

Prerequisites: A grade of "C" or better in FMD 155.

FMD 258 Fashion Merchandising and Design

Practicum (3)

Prerequisites: A grade of "C" or better in FMD 154 or 252, 155, 251.

FMD 350 Fashion Forecasting (3)

Prerequisites: A grade of "C" or better in FMD 258 and FMD 296.

FMD 351 Fashion Promotion and Sales (3)

Prerequisites: A grade of "C" or better in FMD 258, FMD 296.

FMD 353 Intermediate Textiles (3)

Prerequisites: A grade of "C" or better in CHEM 100, FMD 253, and FMD 296.

FMD 355 Fashion Buying (3)

Prerequisites: Computer Proficiency Exam passage; a grade of "C" or better in ACCT 201, FMD 155, and FMD 258.

FMD 451 The Fashion Customer (3)

Prerequisites: A grade of "C" or better in FMD 351.

FMD 455 International Fashion Retailing(3)

Prerequisites: A grade of "C" or better in FMD 351; senior standing.

FMD 457 Global Sourcing for the Fashion Industry (3)

Prerequisites: A grade of "C" or better in ECON 100; senior standing.

FMD 492E Internship in Fashion Merchandising (3)

Prerequisites: A grade of "C" or better in FMD 451, 455, or 457. Senior standing, a 2.5 overall GPA or a 3.0 major GPA, approval of a FMD faculty advisor and consent of instructor.

Take three of the following courses:

FCSE 490B New York Fashion Study Tour

Prerequisites: None.

FCSE 490 Selected Topics in Family and Consumer

Sciences Education (1-3)

Prerequisites: None.

FCSE 497 Directed Study

Prerequisites: Upper division standing, consent of instructor.

FMD 356 Fashion Retail Management (3)

Prerequisites: A grade of "C" or better in FMD 355.

FMD 450 Cultural Perspectives of Dress (3)

Prerequisites: GE Foundation requirements; a grade of "C" or better in ANTH 120 or SOC 100 or 142 and upper-division standing.

FMD 456 Historic Perspectives of Fashion

Prerequisites: A grade of "C" or better in FMD 251, FMD 253 and in AH 111A or HIST 131; senior standing.

FMD advisor approved fashion study abroad course

Take one of the following courses:

HIST 131 Early Western Civilization (3)

Corequisites: ENGL 101.

AH 111A Foundation Art History I (3)

Prerequisites: One GE Foundation course.

Take one of the following courses:

SOC 100 Principles of Sociology (3)

Prerequisites/Corequisites: A GE Foundation course.

SOC 142 Social Trends and Problems (3)

Prerequisites/Corequisites: ENGL 100 or PSY 130 or equivalent.

ANTH 120 Introduction to Cultural Anthropology (3)

Prerequisites/Corequisites: Any GE Foundation course.

Take one of the following courses:

FMD 296 Computer Applications for Family and

Consumer Sciences Professions (3)

Prerequisites: Family and Consumer Sciences Education majors: ETEC 444; Fashion Merchandising majors: a grade of "C" or better in FMD 154 or 252, and 155; and Computer Proficiency Exam passage; Textiles and Clothing majors: A grade of "C" or better in FMD 152, 154, and 155; and Computer Proficiency Exam passage.

ART 149 Foundation Computer Art (3)

Prerequisites: ART 130.

Take one of the following courses:

FMD 154 Fundamentals of Apparel Production (3)

Prerequisites: None.

FMD 252 Analysis, Evaluation and Comparison of Ready-To-Wear (3)

Prerequisites: None.

Each course on the student's program planner must be completed with a grade of "C" or better. In addition, a course which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Minor in Fashion Merchandising

Take 18 units including the following:

FMD 155 Introduction to the Fashion Industry (3)

Prerequisites: None.

FMD 252 Analysis, Evaluation and Comparison of Ready-to-Wear (3)

Prerequisites: None.

Take one of the following

FMD 455 International Fashion Retailing (3)

Prerequisites: A grade of "C" or better in FMD 351; senior standing.

FMD 457 International Textiles and Apparel (3)

Prerequisites: A grade of "C" or better in ECON 100; senior standing.

Take 9 units (at least 6 upper-division units) from the following:

FMD 251, 253, 351, 355, 492E as approved by a Fashion Merchandising and Design faculty advisor.

Adhere to prerequisites below, some fulfill GE requirements:

1. Prerequisites for FMD 351: FMD 258 and FMD 296.
2. Prerequisites for FMD 355: ELM passage, ACCT 201; FMD 155, 258; and Computer Proficiency Exam passage, or consent of instructor.
3. Prerequisites for FMD 455: FMD 351, senior standing.
4. Prerequisites for FMD 457: A grade of "C" or better in ECON 100 (fulfills G.E. Category D2b) and FMD 353, senior standing.
5. Prerequisites for FMD 492E: FMD 451, 455 or 457.

The Minor in Fashion Merchandising is available to any non-Fashion Merchandising and Design major.

Option in Textiles and Clothing (120 units)

Take all of the following courses:

CAFF 321I Family and Consumer Resource Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

CHEM 100 Chemistry and Today's World (4)

Prerequisites: One GE Foundation course (GE categories A1, A2, A3 or B2).

ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

FCSE 299 Intro to Family and Consumer Sciences (1)

Prerequisites: None.

FCSE 499 Professionalism and Leadership in Family and Consumer Sciences (2)

Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course work in Family and Consumer Sciences.

FMD 152 Quick Sketch for Fashion (1)

Prerequisites: None.

FMD 154 Fundamentals of Apparel Production (3)

Prerequisites: None.

FMD 155 Introduction to the Fashion Industry (3)

Prerequisites: None.

FMD 251 Fashion Strategies for Consumers (3)

Prerequisites: GE Foundation requirements.

FMD 253 Introductory Textiles (3)

Prerequisites: None.

FMD 256 Intermediate Apparel Production (3)

Prerequisites: A grade of "C" or better in FMD 154, 155 or 251.

FMD 257 Introduction to Apparel Flat Pattern (3)

Prerequisites: A grade of "C" or better in FMD 154, 155 or 251.

FMD 258 Fashion Merchandising and Design

Practicum (3)

Prerequisites: A grade of "C" or better in FMD 154 or 252, 155, 251.

FMD 353 Intermediate Textiles (3)

Prerequisites: A grade of "C" or better in CHEM 100, FMD 253, and FMD 296.

FMD 354 Apparel Tailoring (3)

Prerequisites: FMD 256 and 257.

FMD 357 Advanced Apparel Flat Pattern (3)

Prerequisites: A grade of "C" or better in FMD 253 and 354.

FMD 359 Advanced Computer Applications for Fashion (2)

Prerequisites: FMD 296 and FMD 152 which must be completed with a grade of "C" or better in each. Open only to Textiles and Clothing majors.

FMD 452 Apparel Draping (3)

Prerequisites: A grade of "C" or better in FMD 353, 357 and 359.

FMD 454 Experimental Apparel Design (3)

Prerequisites: A grade of "C" or better in FMD 452.

FMD 456 Historic Perspectives of Fashion (3)

Prerequisites: A grade of "C" or better in FMD 251, FMD 253 and in AH 111A or HIST 131; senior standing.

FMD 457 Global Sourcing for the Fashion Industry (3)

Prerequisites: A grade of "C" or better in ECON 100; senior standing.

FMD 458 Fashion Product Development (3)

Prerequisites: A grade of "C" or better in FMD 296 and FMD 353; senior standing.

FMD 459 Computerized Apparel Flat Pattern (3)

Prerequisites: A grade of "C" or better in FMD 357, 359.

FMD 492M Internship in Apparel Design (3)

Prerequisites: A grade of "C" or better in FMD 452 or 454. Must have senior standing, a 2.5 overall GPA or a 3.0 major GPA, approval of a faculty advisor in Fashion Merchandising and Design and consent of instructor.

Take one of the following courses:

HIST 131 Early Western Civilization (3)

Corequisite: ENGL 100.

AH 111A Foundation Art History I (3)

Prerequisites: One GE Foundation course.

Take one of the following courses:

SOC 100 Principles of Sociology (3)

Prerequisites/Corequisites: A GE Foundation course.

SOC 142 Social Trends and Problems (3)

Prerequisites/Corequisites: ENGL 100 or PSY 130 or equivalent.

ANTH 120 Introduction to Cultural Anthropology (3)

Prerequisites/Corequisites: Any GE Foundation course.

Take one of the following courses:

FMD 296 Computer Applications for Family and

Consumer Sciences Professions (3)

Prerequisites: Family and Consumer Sciences Education majors: ETEC 444; Fashion Merchandising majors: a grade of "C" or better in FMD 154 or 252, and 155; and Computer Proficiency Exam passage; Textiles and Clothing majors: A grade of "C" or better in FMD 152, 154, and 155; and Computer Proficiency Exam passage.

ART 149 Foundation Computer Art (3)

Prerequisites: ART 130.

Each course on the student's program planner must be completed with a grade of "C" or better. In addition, a course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Minor in Textiles

Take 18 units including the following:

Take all the following courses:

FMD 155 Introduction to the Fashion Industry (3)

Prerequisites: None.

FMD 253 Introductory Textiles (3)

Prerequisites: None.

FMD 353 Intermediate Textiles (3)

Prerequisites: A grade of "C" or better in CHEM 100, FMD 253, and FMD 296.

FMD 457 International Textiles and Apparel (3)

Prerequisites: A grade of "C" or better in ECON 100; senior standing.

FMD 458 Fashion Product Development (3)

Prerequisites: A grade of "C" or better in FMD 296 and FMD 353; senior standing.

Take 3 units selected from the following:

FMD 450 Cultural Perspectives of Dress (3)

Prerequisites: GE Foundation requirements; a grade of "C" or better in ANTH 120 or SOC 100 or 142 and upper-division standing.

FMD 492E Internship in Fashion Merchandising (3)

Prerequisites: A grade of "C" or better in FMD 451, 455, or 457. Senior standing, a 2.5 overall GPA or a 3.0 major GPA, approval of a FMD faculty advisor and consent of instructor.

It is the student's responsibility to adhere to all prerequisites listed below. It should be noted that several prerequisites fulfill general education requirements.

1. Prerequisites for FMD 353: FMD 253, FMD 296 and CHEM 100 or 111A (fulfills G.E. Category B1b).
2. Prerequisites for FMD 450 (fulfills G.E. Category D2 and Global): Completion of GE Foundation courses; ANTH 120 or SOC 100 or 142 (fulfills G.E. Category D2) and upper division standing or consent of instructor .
3. Prerequisites for FMD 457: ECON 100 and 101 or ECON 300 (fulfills G.E. Category D2) and FMD 353, senior standing or consent of instructor .
4. Prerequisite for FMD 458: FMD 353, senior standing, or consent of instructor.
5. Prerequisite for FMD 492E: FMD 451, 455, or 457.

The Minor in Textiles is available to any non-Fashion Merchandising or Textiles and Clothing major.

Fashion Merchandising and Design Courses (FMD)

LOWER DIVISION

152. Quick Sketch for Fashion (1)

Technical drawings of garments and their design features.

Letter grade only (A-F). (3 hours activity)

154. Fundamentals of Apparel Production (3)

Analysis of the interrelationship of garment design and apparel construction. Application of theories and methods of apparel design to garment construction.

Letter grade only (A-F). Only open to these majors: Textiles and Clothing (FCS_BA05); Fashion Merchandising (FCS_BA04); and Family and Consumer Sciences Education (FCS_BA02). (Lecture-discussion 2 hours, Laboratory 3 hours)

155. Introduction to the Fashion Industry (3)

Organization, structure and interrelationship of industries and services that comprise the business of fashion: terminology, designers, trade organizations and publications. Professional opportunities explored.

Letter grade only (A-F). (Lecture-discussion 3 hours)

251. Fashion Strategies for Consumers (3)

Prerequisites: GE Foundation requirements.

Apparel selection for professional and personal needs based on design, culture and fashion. Wardrobe analysis and coordination; consumer clothing guidelines.

(Lecture-discussion 3 hours)

252. Analysis, Evaluation and Comparison of Ready-to-Wear (3)

Analysis of the quality of materials, design and construction in ready-to-wear garments and accessories; comparison of processes involved in manufacturing, concepts of sizing, principles of fit; aids in buying and selling.

(Lecture-discussion 3 hours)

253. Introductory Textiles (3)

A consumer-oriented approach to textile selection, use, and care. Provides a basis for a logical, consistent rationale in choosing apparel and interior textiles. Explores careers within the international textile industry.

Letter grade only (A-F). (Lecture-discussion 3 hours)

255. Fashion Industry Ethics and Social Responsibility (3)

Prerequisite: A grade of "C" or better in FMD 155.

Ethical issues within the fashion industry. Focus will be on decision-making processes which lead to outcomes that have ethical implications as well as potential consequences or benefits.

Letter grades only (A-F).

256. Intermediate Apparel Production (3)

Prerequisites: A grade of "C" or better in FMD 154, 155 or 251.

Continuation of construction techniques used in apparel production with concentration on current fabrics and techniques used in contemporary ready-to-wear.

(1 hour discussion, 6 hours laboratory).

257. Introduction to Apparel Flat Pattern (3)

Prerequisites: A grade of "C" or better in FMD 152, 154, 155 or 251.

Introduction to the design concept as it applies to flat pattern manipulation.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 3 hours)

258. Fashion Merchandising and Design Practicum (3)

Prerequisites: A grade of "C" or better in FMD 154 or 252, 155, 251.

Structured fashion retail work/learning experience designed to develop competencies in retail management or related fields. Students must obtain fashion retail sales position by first class period.

Letter grade only (A-F). (Lecture-activity 3 hours)

296. Computer Applications for Family and Consumer Sciences Professions (3)

Prerequisites: Family and Consumer Sciences Education majors: ETEC 444; Fashion Merchandising majors: a grade of "C" or better in FMD 154 or 252, and 155; and Computer Proficiency Exam passage; Textiles and Clothing majors: A grade of "C" or better in FMD 152, 154, and 155; and Computer Proficiency Exam passage.

Use of computer paint-style, illustration/processing software and scanners to develop proficiency in drawing and designing for the workplace. Work with clip art, make technical drawings, storyboards, and color/fabric cards.

Letter grade only (A-F). (1 hour lecture-discussion, 4 hours activity)
Not open to students with credit in: FCSE 296

UPPER DIVISION

350. Fashion Forecasting (3)

Prerequisites: A grade of "C" or better in FMD 258 and FMD 296.

Introduces the forecasting disciplines used in the fashion industries which support both short-term, tactical decisions and long-term strategic ones. Covers the process of gathering data then organizing, analyzing, and synthesizing them into actionable forecasts.

Letter grade only (A-F).

351. Fashion Promotion and Sales (3)

Prerequisites: A grade of "C" or better in FMD 258, FMD 296.

Concepts, practices and procedures related to fashion promotion. Includes planning, directing and evaluating promotion activities such as visual merchandising, special events, publicity, and personal and non-personal selling.

(Discussion 3 hours)

353. Intermediate Textiles (3)

Prerequisites: A grade of "C" or better in CHEM 100, FMD 253, and FMD 296.

Interrelationship of fiber, yarn, structure, fabric geometry and finishing treatments to the textile's appearance, comfort, durability and maintenance.

Letter grade only (A-F). (Lecture-discussion 2 hours, Lab 3 hours)

354. Apparel Tailoring (3)

Prerequisites: A grade of "C" or better in FMD 256 and 257.

Analysis of traditional and contemporary processes in the design and production of tailored apparel. Application of apparel design and production process for couture, ready-to-wear, and individually produced garments.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 3 hours)

355. Fashion Buying (3)

Prerequisites: Computer Proficiency Exam passage; a grade of "C" or better in ACCT 201, FMD 155, and FMD 258.

Concepts, practices and procedures as well as calculations and computer applications as they relate to apparel retail profit. Includes inventory methods, operating statements and purchase planning procedures.

Letter grade only (A-F). (3 hours lecture activity)

356. Fashion Retail Management (3)

Prerequisites: A grade of "C" or better in FMD 355.

Explores current retail environments, problem-solving, and decision-making strategies for retailing apparel and textiles products. Covers the importance of communication skills, human resource management, and other concepts impacting retail management such as target market analysis and assortment plans.

Letter grade only (A-F). (3 hours seminar)

357. Advanced Apparel Flat Pattern (3)

Prerequisites: A grade of "C" or better in FMD 253 and 354.

Exploration of the total design concept as it applies to pattern manipulation.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 3 hours)

359. Advanced Computer Applications for Fashion (2)

Prerequisites: FMD 296 and FMD 152 which must be completed with a grade of "C" or better in each. Open only to Textiles and Clothing majors.

Students refine their proficiency in drawing and designing apparel garments and fashion illustrations using computer paint-style and illustration software.

Letter grade only (A-F). (6 hours activity)

450. Cultural Perspectives of Dress (3)

Prerequisites: GE Foundation requirements; a grade of "C" or better in ANTH 120 or SOC 100 or 142 and upper-division standing.

Factors influencing design of textiles and apparel, techniques of textile and apparel production, and human behavior in the selection of dress in societies and cultural groups. Emphasis on symbolism of textiles and clothing designs as a communicative device for expressing social and cultural values. Impact of other cultures on western dress and impact of western dress on other apparel systems.

May be used to satisfy the GWAR. (Seminar 3 hours)

451. The Fashion Customer (3)

Prerequisites: A grade of "C" or better in FMD 351.

Overview of theories on behavior of fashion customers and impact on fashion marketing strategies. Practical application on how to identify specific needs of fashion customers. Examination of impact of marketplace on fashion customers and of laws which protect them.

Letter grade only (A-F). (3 hours lecture discussion)

452. Apparel Draping (3)

Prerequisites: A grade of "C" or better in FMD 353, 357, and 359.

Exploration of the total design concept as it applies to fabric manipulation.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 3 hours)

454. Experimental Apparel Design (3)

Prerequisites: A grade of "C" or better in FMD 452.

Exploration of clothing design and production through the experimental process. Individual investigation of the creative design process; evaluation of equipment; experiences with a variety of fabrics and techniques.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 3 hours)

455. International Fashion Retailing (3)

Prerequisites: A grade of "C" or better in FMD 351; senior standing.

Application of merchandising concepts for promotion and selling of fashion goods and apparel in global retail organizations.

Letter grade only (A-F). (Lecture/Discussion 3 hours)

456. Historic Perspectives of Fashion (3)

Prerequisites: A grade of "C" or better in FMD 251, FMD 253, and in AH 111A or HIST 131 ; senior standing.

Social, political, economic, geographic and religious forces that affect styles of fashion from antiquity to the present day. Emphasis is on the relationship of historic styles to current fashion. Primary focus is on the fashion influences of the western world.

Letter grade only (A-F). (Seminar 3 hours)

457. Global Sourcing for the Fashion Industry (3)

Prerequisites: A grade of "C" or better in ECON 100; senior standing.

Provides a framework whereby students critically examine the global textiles and apparel industry with emphasis on acquiring basic concepts of global trade. Current processes of globalization are analyzed including the importance of outsourcing.

Letter grade only (A-F). (Lecture-discussion, 3 hours)

458. Fashion Product Development (3)

Prerequisites: A grade of "C" or better in FMD 296 and FMD 353; senior standing. Only open to Textiles and Clothing majors (FCS_BA05). Open to Fashion Merchandising majors (FCS_BA04) by permit only.

The process of designing and engineering fashion products to be serviceable, producible, salable and profitable for various consumer market segments.

(Discussion 3 hours) Letter grade only (A-F).

459. Computerized Apparel Flat Pattern (3)

Prerequisites: A grade of "C" or better in FMD 357, 359.

Use of computer aided design software for apparel pattern development.

Letter grade only (A-F). Not open for credit to students with credit in FMD 352. (Laboratory 6 hours)

492E. Internship in Fashion Merchandising (3)

Prerequisites: A grade of "C" or better in FMD 451, 455, or 457. Student must be a major in Family and Consumer Sciences in the option of Fashion Merchandising; have senior standing, a 2.5 overall GPA or a 3.0 major GPA, approval of a faculty advisor in Fashion Merchandising and Design, and consent of instructor.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)

492M. Internship in Apparel Design (3)

Prerequisites: A grade of "C" or better in FMD 452 or 454. Student must be a major in Family and Consumer Sciences in the option of Textiles and Clothing; have senior standing, a 2.5 overall GPA or a 3.0 major GPA, approval of a faculty advisor in Fashion Merchandising and Design, and consent of instructor.

May be repeated for 6 units maximum. Letter grade only (A-F). (Seminar 3 hours)

FILM AND ELECTRONIC ARTS

College of the Arts

Department Chair: Micheal C. Pounds

Department Office: University Telecommunications Center (UTC), Room 104

Telephone: (562) 985-5404

Faculty: Jack Anderson, Tom Blomquist, Sharyn Blumenthal, Robert Finney (Emeritus), Brian Alan Lane, Jerry Mosher, Micheal C. Pounds, Jose Sanchez-H.

Administrative Coordinator: Donna Thomas

Instructional Support Technician: Steve Hubbert

Information Technology Consultant: Robert Rhyu

Career Possibilities

Technical Director • Sound Effects Technician • Film Editor • Producer • Director • Screenwriter • Script Reader • Studio Operations Engineer • Sales Representative for Video Equipment • Teacher • Media Specialist • Public Relations Specialist • Sound Technician • Filmmaker • Cinema Photographer • Costume Designer • Production Coordinator (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Film and Electronic Arts is an innovative program that emphasizes both theory and practice. Focusing upon the integration of media and the arts, as well as upon the impact of technology on our culture, the curriculum is designed to provide technical skills while developing a foundation in the arts and the humanities.

The faculty provides a diversity of expertise and interests which cross traditional media lines while integrating the traditional film, audio, and video production modes. Theory and aesthetics are taught as an integral part of the development of production skills.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Supplemental Screening Criteria

1. Before the first semester as a declared major, students must complete FEA 299 with a grade of "C" or higher.
2. Students must *attempt* to fulfill the Graduation Writing Assessment Requirement (GWAR) by the end of the semester in which FEA 299 is completed.
3. Completion of ART 110 or AH 111B.

Students who fail to meet the supplemental screening criteria may not continue in the major and may re-apply only once in accordance with University policy regarding impacted majors.

Bachelor of Arts Film and Electronic Arts

Students must complete all requirements, prerequisites, and electives in residence at the upper division level.

Option in Theory and Practice of Cinema (120 units)

51 units required for the major.

Students are admitted to this option by virtue of meeting the Admission Requirements and Supplemental Screening Criteria listed above.

Requirements

1. Lower Division Core

Take the following courses:

FEA 205 Film History (3)

Prerequisites: Major status, FEA 299.

FEA 206 History of Broadcasting (3)

Prerequisites: Pre-major or major status

FEA 299 Media Aesthetics (3)

Prerequisites: Pre-major or major status.

2. Upper Division Core

Take the following courses:

FEA 302 Film Theory I: Classical (3)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

FEA 303 Film and Electronic Media Writing (3)

Prerequisites: Major status, FEA 299 with "B" or better and or consent of instructor.

FEA 401 Film Theory II: Contemporary (3)

Prerequisites: FEA 205 and 302 or consent of instructor.

3. Culture and Media

Take three of the following:

FEA 310, 315, 317, 318I, 380, 394, 412, 486I

4. International Cinema

Take three of the following:

FEA 392A, 392B, 392C, 392D; only one of the following may be used to meet this requirement: FEA 454/ITAL 454, FEA 456/FREN 456, FEA 457/GERM 480, FEA 458/RUSS 428, SPAN 428.

5. Tracks of Specialization

Select one of the following 15-unit tracks. Courses in any track may be applied as electives in other tracks. See an advisor to determine the most relevant electives for your track.

A. Critical Practice

Take the following course:

FEA 322 Diverse Media: Writing and Production (3)

Prerequisites: Major status or consent of instructor.

FEA 410 Film Criticism Practicum (3)

Prerequisite: FEA 205 and 302 or consent of instructor.

Take one of the following courses:

FEA 318I Theory of Fiction and Film (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

FEA 394 American Film Genres (3)

Prerequisites: FEA 205 and 302 or consent of instructor.

Take one of the following courses:

FEA 315 Theory of New Media (3)

Prerequisites: FEA 205 and 206, or consent of instructor.

FEA 486I Alternative Media (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Take three additional units of FEA elective

B. Documentary Production

Take the following courses:

Recommended for fall semester, Senior Year:

FEA 380 Documentary History and Theory (3)
Prerequisites: FEA 206 and 302 or consent of instructor.

FEA 381 Directing the Documentary (3)
Prerequisite: FEA 336; Corequisite: FEA 380.

FEA 382 Digital Documentary Production I (3)
Prerequisites: FEA 336 or consent of instructor.

Recommended for spring semester, Senior Year:

FEA 383 Digital Documentary Production II (3)
Prerequisites: FEA 382 or consent of instructor.

Take three additional units of FEA elective

C. Screenwriting

Take the following courses:

FEA 318I Theory of Fiction and Film (3)
Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

FEA 404 (Fall) Advanced Scriptwriting for Film and Electronic Media (3)
Prerequisites: FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better, or consent of instructor.

FEA 404 (Spring) Advanced Scriptwriting for Film and Electronic Media (3)
Prerequisites: FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better, or consent of instructor.

Take one of the following courses:

FEA 405 Comedy Writing (3)
FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better or consent of instructor.

FEA 408 Writing the Screen Adaptation (3)
Prerequisites: FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better or consent of instructor.

Take three additional units of FEA elective

D. Editing

Take the following courses:

FEA 309 Production I: Cinematography (3)
Prerequisite: Admission to Option in Narrative Production.

FEA 415 Media Editing (3)
Prerequisites: Admission to the Option in Film/Video Production or consent of instructor.

FEA 416 Advanced Media Editing (3)
Prerequisites: FEA 415, Admission to Option in Film/Video Production or consent of instructor.

Take one course from the following:

FEA 307, 322, 338, 339, 360

Take three additional units of FEA elective

E. Audio

Take the following courses:

FEA 307 Audio Production (3)
Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

FEA 320 Sound Design (3)
Prerequisite: Major status, FEA 307.

FEA 325 Audio Activity (2)
Prerequisites: Major status, FEA 299 with "B" or better or consent of instructor.

FEA 355 Audio-Video-Film Activity (1)
Prerequisites: Major status, FEA 299 with "B" or better or consent of instructor.

Take one course from the following:

FEA 322, 338, 339, 360

Take three additional units of FEA elective

F. Broadcast Production

Take the following courses: FEA 338 Television Studio Production (3)

Prerequisites: Major status, FEA 299 with "C" or better or equivalent or consent of instructor.

FEA 360 Independent Television Field Production (3)
Prerequisites: FEA 338 or consent of instructor

FEA 438 Television Studio Directing (3)
Prerequisite: FEA 338 or consent of instructor

Take one course from the following:

FEA 307, 322, 327, 339, 375

Take three additional units of FEA elective

G. Production Management

Take the following courses:

FEA 327 Production Management I (3)
Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

FEA 427 Production Management II (3)
Prerequisite: FEA 327.

Take one of the following courses:

FEA 375 Producing and the Business of TV (3)
Prerequisites: GE Foundation requirements and upper division standing.

FEA 376 Film and E-Media Sales and Promotion (3)
Prerequisites: Major status, FEA 299 with "B" or better or consent of instructor.

Take one of the following courses:

FEA 339 Commercials for Electronic Media (3)
Prerequisites: Junior/Senior standing or consent of instructor.

FEA 360 Independent Television Field Production (3)
Prerequisites: FEA 338 or consent of instructor

Take three additional units of FEA elective

Option in Narrative Production (120 units)

51 units required for the major.

Students meeting the requirements for admission to the major may apply for admission into the production option by presenting a portfolio to the department in January of their sophomore year, or in subsequent Januarys. Admission to the option will be in the Fall semester only. Portfolios will be comprised of 1) a statement of purpose, 2) a critical analysis of a film or television show, 3) a sample of creative work (either writing, visual art or a short film or video) and 4) two letters of recommendation. Although a transfer student may apply to the FEA production option prior to learning whether or not they have been admitted to the university, they cannot be accepted into the option until they have been officially admitted to the university. The Film and Electronic Arts Department is not involved in the university admissions process.

Students admitted to this option are required to maintain a minimum 2.5 GPA average in all major course work in order to retain their place in the option. Students admitted to the option are also required to abide by the rules and regulations as specified in the FEA Department's Policies and Procedures handbook, which is available for purchase through the department.

Students may apply to the FEA Option in Narrative Production when they have completed a minimum of 56 units, but may not apply after they have completed more than a maximum of 88 units.

Requirements

Lower Division Core

Take the following course during the pre-major year:

FEA 299 Media Aesthetics (3)
Prerequisites: Pre-major or major status.

Take the following courses:

FEA 205 Film History (3)
Prerequisites: Major status, FEA 299.

FEA 206 History of Broadcasting (3)
Prerequisites: Pre-major or major status

Take the following courses in the following sequence:

1. Fall Semester of Junior Year:

FEA 303 Film and Electronic Media Writing (3)
Prerequisites: Major status, FEA 299 with "B" or better and or consent of instructor.

FEA 307 Audio Production (3)
Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

FEA 309 Production I: Cinematography (3)
Prerequisite: Admission to Option in Narrative Production.

FEA 415 Media Editing (3)
Prerequisites: Admission to the Option in Film/Video Production or consent of instructor.

2. Spring Semester of Junior Year:

FEA 302 Film Theory I: Classical (3)
Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

FEA 304 Writing the Short Script (3)
Prerequisites: Major status, FEA 299 with "B" or better or consent of instructor.

FEA 328 Film and Video Lighting (3)
Prerequisites: FEA 309. Priority enrollment given to students in Narrative Production Option.

FEA 336 Production II: Film Production (3)
Prerequisite: Admission to Option in Narrative Production;
Corequisite: FEA 328

3. At the end of their junior year, students must select a two-semester track of specialization for their senior year.

A. Production and Directing

Take the following courses in the Fall:

FEA 327 Production Management I (3)
Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

FEA 340 Production III: Advanced Production A (3)
Prerequisites: FEA 336 and approved enrollment in Advanced Narrative Production Track. Experience in group production of original films and videos.

FEA 344 Directing (3) (may be taken in junior year)
Prerequisite: Admission to the Option in Narrative Production.

Take the following courses in the Spring:

FEA 342 Production IV: Advanced Production B (3)
Prerequisites: FEA 340 and approved enrollment in Advanced Narrative Production Track.

FEA 375 Producing and the Business of TV (3)
Prerequisites: GE Foundation requirements and upper division standing.

Take one international cinema course from the following courses:

FEA 392A, 392B, 392C, 392D, FEA 454/ITAL 454,
FEA 456/FREN 456, FEA 457/GERM 480, FEA
458/RUSS 428, SPAN 428

B. Cinematography

Take the following courses in the Fall:

FEA 341 Advanced Cinematography I (3)
Prerequisites: FEA 328 and 336 and approved enrollment in Advanced Cinematography Track.

FEA 344 Directing (3) (may be taken junior year)
Prerequisite: Admission to the Option in Narrative Production.

Take one international cinema course from the following:

FEA 392A, 392B, 392C, 392D, FEA 454/ITAL 454,
FEA 456/FREN 456, FEA 457/GERM 480, FEA 458/
RUSS 428, SPAN 428.

Take the following course in the Spring:

FEA 343 Advanced Cinematography II (3)
Prerequisites: FEA 341 and approved enrollment in Advanced Cinematography Track.

Take one of the following courses:

FEA 320 Sound Design (3)
Prerequisite: Major status, FEA 307.

FEA 327 Production Management I (3)
Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Take three additional units of FEA elective

Minor in Film and Electronic Arts

Total Units Required: 21 units.

Students are admitted to the minor after having completed a minimum of 30 units of college-level course work including all 12 units of General Education Foundation courses with a cumulative GPA of 2.5 or higher.

Requirements

1. Complete the following course with a "C" or better:

FEA 299 Media Aesthetics (3)
Prerequisites: Pre-major or major status.

2. Complete all the following courses:

FEA 206 History of Broadcasting (3)
Prerequisites: Pre-major or major status

FEA 303 Film and Electronic Media Writing (3)
Prerequisites: Major status, FEA 299 with "B" or better and or consent of instructor.

FEA 310 Film and Culture (3)
Prerequisites: GE Foundation requirement.

3. Complete 9 units of electives from the following:

FEA 205, 302, 304, 307, 312, 314, 316, 318I, 320, 325,
327, 337, 338, 360, 375, 376, 380, 392, 394, 412, 427,
437, 486I, 490.

Students should consult a departmental advisor regarding ways by which elective units can be grouped into specialized tracks. For example, a basic management skills set might include 327, 375 and 427; a basic sound mixing skill set would include 307 and 320; a documentary track would include 380, 382, and 383.

Courses (FEA)

LOWER DIVISION

205. Film History (3)

Prerequisites: Major status, FEA 299.

Historical development of cinema.

Letter grade only (A-F).

206. History of Broadcasting (3)

Prerequisites: Pre-major or major status

Historical development of broadcasting media and technology, with examination of interrelationships between forms, industry, social trends, and culture.

Not open for credit to students with credit in FEA 300. Letter grade only (A-F).

299. Media Aesthetics (3)

Prerequisites: Pre-major or major status.

Study of aesthetic principle governing media productions. Emphasis on relationships between various art forms and development of critical vocabulary.

Letter grade only (A-F). Not open for credit to students with credit in FEA 399.

UPPER DIVISION

302. Film Theory I: Classical (3)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Introduction to classical and critical theories of film analysis including Formalism, Realism, Classical Hollywood Cinema, the Auteur Theory, Art Cinema, Genre Studies, and Structuralism.

Letter grade only (A-F).

303. Film and Electronic Media Writing (3)

Prerequisites: Major status, FEA 299 with "C" or better and or consent of instructor.

Study of scripting and other writing skills unique to audio, video, and film.

Letter grade only (A-F).

304. Writing the Short Script (3)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Scriptwriting with emphasis on adaptation and dramatic fiction.

Letter grade only (A-F). Course fee may be required.

307. Audio Production (3)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Basic principles and techniques of audio production.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

309. Production I: Cinematography (3)

Prerequisite: Admission to Option in Narrative Production.

Basic principles of cinematography and lighting.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

310. Film and Culture (3)

Prerequisites: GE Foundation requirement.

Examines how film impacts culture, using a variety of viewpoints from contemporary critical and cultural studies.

312. Television Programming Symposium (3)

Discussion and analysis of creative problems in television industry, current local and network programs. Interviews with visiting executives, producers, directors, writers, performers and technicians.

May be repeated to a maximum of 6 units, only 3 units may be used as credit toward major.

314. Theatrical Film Symposium (3)

Lectures and discussions of creative problems in motion picture industry; current films; interviews with visiting producers, directors, writers, performers and technicians.

315. Theory of New Media (3)

Prerequisites: FEA 205 and 206, or consent of instructor.

Examines the artistic and cultural impact of digital media technologies.

Letter grade only (A-F).

316. Mass Media and Popular Culture (3)

Prerequisite: GE Foundation requirement.

Theory and functions of mass media in America. Enduring issues and unresolved problems of media. Impact of mass culture on a mass-mediated society.

317. Women in the History of U.S. Film (3)

History of women as they are represented, presented as images, or constructed in the development of U.S. film. Theory and analysis of film from a feminist perspective.

Same course as WGSS 316. Not open for credit to students with credit in W/ST 316 or WGSS 316.

318. Theory of Fiction and Film (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Examination of narrative methods and conventions of American and British fiction and methods and conventions of film; consideration of relationships between artistic structure of fiction and film; study of theoretical and practical approaches to fiction and film.

Same course as ENGL 318I. Not open for credit to students with credit in ENGL 318I.

320. Sound Design (3)

Prerequisite: Major status, FEA 307.

Examination of the basic aesthetic and technical principles of sound design for film and video production.

Letter grade only (A-F). (6 hours activity)

322. Diverse Media: Writing and Production (3)

Prerequisites: Major status or consent of instructor.

Workshop in professional writing and production of film, television, theatre, and diverse media. Working as a group, students develop, and exhibit creative works. Provides a professional production experience covering various genres and formats.

Not open for credit to students with credit in FEA 403. Letter grade only (A-F). Course fee may be required. May be repeated to a maximum of 6 units in different semesters.

325. Audio Activity (2)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Group and individual experience in audio production. Specific assignments determined in consultation with instructor.

Credit/No Credit grading only. May be repeated to a maximum of 4 units in different semesters. (4 hours activity)

327. Production Management I (3)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Examines the process of producing independent feature-length films, focusing on the producer's role from development stage to beginning level of pre-production. Topics include copyright and contract law, business structures, and script analysis and breakdown.

Letter grade only (A-F).

328. Film and Video Lighting (3)

Prerequisites: FEA 309. Priority enrollment given to students in Narrative Production Option.

Examination of the basic aesthetic and technical principles of film and video lighting. Students will explore various creative lighting styles and techniques through lectures and practical exercises.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

335. University Television Activity (2)

Prerequisites: Consent of instructor.

Experience in administration and production of video projects at the University Television facility.

Credit/No Credit grading only. May be repeated to a maximum of 4 units. (4 hours activity)

336. Production II: Film Production (3)

Prerequisite: Admission to Option in Narrative Production;
Corequisite: FEA 328

Preparation for the advanced level of film and video production through research and exercises designed to develop essential filmmaking and video graphic skills.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

337. Digital Arts Production (3)

Prerequisite: Major status or consent of instructor

Techniques and concepts involved in production of visual effects, computer animation, and interactive media. Through screenings, fieldtrips and hands-on production, students explore art and science of digital graphics, 2D-compositing, and 3D-animation. Culminates in development of digital elements for student production.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

338. Television Studio Production (3)

Prerequisites: Prerequisites: Major status, FEA 299 with "C" or better or equivalent or consent of instructor.

Course will provide an introduction to principles, techniques and technologies of television studio production, with emphasis on multiple camera approaches to interview, sitcom, music performance and public affairs programs.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

339. Commercials for Electronic Media (3)

Prerequisites: Junior/Senior standing or consent of instructor.

Experience of creating, writing and producing commercials that entertain, demonstrate and motivate the target audience.

Letter grade only (A-F).

340. Production III: Advanced Production A (3)

Prerequisites: FEA 336 and approved enrollment in Advanced Narrative Production Track. Experience in group production of original films and videos.

Emphasis is on narrative short projects. Students are required to collaborate with advanced cinematography students in FEA 341.

Letter grade only (A-F). (6 hours activity)

341. Advanced Cinematography I (3)

Prerequisites: FEA 328 and 336 and approved enrollment in Advanced Cinematography Track.

Designed to further student's understanding of art and craft of cinematography, especially lighting, exposure, composition, lenses, film stocks, video formats, filters, telecine, and lab procedures. Students are required to shoot and crew on advanced narrative projects produced in FEA 340.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

342. Production IV: Advanced Production B (3)

Prerequisites: FEA 340 and approved enrollment in Advanced Narrative Production Track.

Experience in post production and completion of original films and videos resulting in public exhibition. Emphasis is on film editing.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

343. Advanced Cinematography II (3)

Prerequisites: FEA 341 and approved enrollment in Advanced Cinematography Track.

Designed to further student's understanding of art and craft of cinematography. Emphasis is on individual research into specific issues of film and video image making and production of short film and video projects in support of research.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

344. Directing (3)

Prerequisite: Admission to the Option in Narrative Production.

Theory and practical experience in directing of narrative film. Emphasis on directing actors in fictional work.

Letter grade only (A-F).

346I. The European Cinema of Communism, Fascism and Resistance (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses and upper division standing.

Focuses on European cinema of the twentieth century as a manifestation of totalitarian and ideological movements preceding, in-between and following the two world wars. The ensuing and ongoing resistance movements will also be examined.

Same course as HIST 346I, RGR 346I. Not open for credit to students with credit in HIST 346I, RGR 346I. (2 hrs sem, 2 hrs activity)

350. Hollywood Does Rome (3)

Prerequisites: CLSC 100 or 101 or 202 or consent of instructor.

An investigation of the filmmaker's motives and the methods they have used to portray the ancient Romans from the beginnings of cinema to the present. Topics include "imaging" the past, the 'power' of the image, community and society, cultural imperialism, film theory, the 'language' of myth, and reception theory.

Same course as CLSC 350. Not open for credit to students with credit in CLSC 350.

355. Audio-Video-Film Activity (1)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Group and individual experience in areas of audio-video-film production, and broadcast education. Specific assignments determined in consultation with instructor.

Credit/No Credit grading only. May be repeated to a maximum of 2 units. (2 hours activity)

360. Independent Television Field Production (3)

Prerequisites: FEA 338 or consent of Instructor

Introduction to the creative and managerial requirements of independent television program production. Direct experience with field production for an independent television production company that supplies ongoing cable programming.

Letter grade only (A-F). (6 hours activity)

363. International Electronic Media Systems (3)

Prerequisites: FEA 206 or consent of instructor.

Comparative analysis of internal and external electronic media systems with emphasis on their motives, origins, technologies, and programming. Consideration of political, economic, regulatory constraints, and potential impact of new technologies.

Letter grade only (A-F).

364. Global Electronic Media Communication (3)

Prerequisites: FEA 206 or consent of instructor.

Study of international electronic media systems targeted toward other nations with emphasis on their cultural, economic, and political influences. Focus on the impact of new technologies on cross border communication.

Letter grade only (A-F).

373. Electronic Media Programming (3).

Prerequisites: FEA 206 or consent of instructor.

Principles and practices of programming for electronic media networks, television and radio stations, and local cable systems. Analysis of relationship between programming, promotion, and profit.

Letter grade only (A-F).

375. Producing and the Business of Television (3)

Prerequisites: GE Foundation requirements and upper division standing.

Examines the TV producer's role as business leader as well as creator of programming concepts. Topics include program development and positioning, sales presentations, ratings, entertainment law, rights and licensing, negotiating, agents, and labor issues.

Letter grade only (A-F).

376. Film and Electronic Media Sales and Promotion (3)

Prerequisites: Major status, FEA 299 with "C" or better or consent of instructor.

Study of marketing, promotion, and sales among film distributors, production companies, program suppliers, broadcast networks, cable systems, local radio, television, and cable operators. Theory and application of media research principles, promotion strategies. Development of selling skills.

Letter grade only (A-F).

380. Documentary History and Theory (3)

Prerequisites: FEA 206 and 302 or consent of instructor.

Critical study of history, methods, and aesthetics of documentary production. Focus on problems of representation, objectivity, and personal style.

Letter grade only (A-F).

381. Directing the Documentary (3)

Prerequisite: FEA 336; Corequisite: FEA 380.

Exploration of theory and practice of documentary filmmaking. Emphasis on relationship between documentary and fiction film. Production requirement will include shooting and editing a 5-10 minute documentary film/video.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

382. Digital Documentary Production I (3)

Prerequisites: FEA 336 or consent of instructor.

Theory and practice researching, structuring, writing, directing and producing a comprehensive digital video documentary (to be completed in FEA 383) with equal emphasis on the interview and visual storytelling.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

383. Digital Documentary Production II (3)

Prerequisites: FEA 382 or consent of instructor.

Theory and practice producing and editing a comprehensive digital video documentary with special emphasis on narration, sound effects, and music. This will entail the completion through post-production of videos begun in FEA 382.

Letter grade only. Course fee may be required. (6 hours activity)

392. Selected Topics in International Cinema (3)

Prerequisites: FEA 205 and 302 or consent of instructor.

Variable topics explore domain of international cinema.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

- A. European Cinema Before 1960
- B. European Cinema After 1960
- C. Latin American Cinema

D. Japanese Cinema

E. Spanish Cinema

(Same course as SPAN 428. Not open for credit to students with credit in SPAN 428)

394. American Film Genres (3)

Prerequisites: FEA 205 and 302 or consent of instructor.

Historical and critical examination of Hollywood film genres. Places genre analysis and theory within sociocultural perspective. Genres include Western, film noir, science fiction/horror, detective/gangster, musical, war films, screwball comedy, and family melodrama.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters.

401./501. Film Theory II: Contemporary (3)

Prerequisites: FEA 205 and 302 or consent of instructor.

Study of contemporary theoretical models of film analysis and evaluation. Topics include: Spectatorship, Post-Structuralism, Feminism, Psychoanalytic Theory, Narratology, Cultural Studies, Postcolonialism, Queer Theory, Postmodernism, and Reception Studies.

Letter grade only (A-F).

404. Advanced Scriptwriting for Film and Electronic Media (3)

Prerequisites: FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better, or consent of instructor.

Writing dramatic and comedic screenplays and teleplays. Includes study of produced models with emphasis on the creative process.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

405./505. Comedy Writing (3)

FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better or consent of instructor.

Study of a variety of historical and contemporary models. Practice in the creation of print pieces; stand-up routines; scripts for television, film, and other media. Heavy focus on comedy as social, political, and technological criticism.

Letter grade only (A-F).

408./508. Writing the Screen Adaptation (3)

Prerequisites: FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better or consent of instructor.

Writing script adaptations, with a study of adaptation theory and successful adaptational models.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

410. Film Criticism Practicum (3)

Prerequisite: FEA 205 and 302 or consent of instructor.

Writing film criticism for print and electronic distribution. Focus on critical methodologies, writing for diverse publications and audiences, and uses of criticism in film marketing and reception.

Letter grade only (A-F).

412. American Television and African Americans (3)

Prerequisites: FEA 206 and 310 or consent of instructor.

Comparative examination of the depiction of African Americans in American network and syndicated television in a variety of types of programs.

Letter grade only (A-F).

415. Media Editing (3)

Prerequisites: Admission to the Option in Film/Video Production or consent of instructor.

Principles of non-linear editing in post-production.

Letter grade only (A-F). (6 hours activity)

416. Advanced Media Editing (3)

Prerequisites: FEA 415, Admission to Option in Film/Video Production or consent of instructor.

Advanced course in which students edit a project from dailies to final master, using new AVID Media Composer HD, Final Cut Pro, and principles of Hi-Def.

Letter grade only (A-F). (6 hours activity)

427. Production Management II (3)

Prerequisite: FEA 327.

Examines the process of producing independent feature-length films, focusing on the producer's role from pre-production to distribution. Topics include budgeting, hiring employees, and supervising production and post-production.

Letter grade only (A-F).

437. 3D Computer Animation (3)

Prerequisites: FEA Majors only, FEA 337 or permission of instructor.

Techniques and concepts in the production of 3D computer animation for short and feature length productions, visual effects and games.

Letter grade only (A-F). (6 hours activity)

438. Television Studio Directing (3)

Prerequisite: FEA 338 or consent of instructor

Advanced seminar expanding on the principles, techniques, and technologies of television studio production. Emphasis on multiple camera directing of interview, sitcom, music performance, and public affairs programs.

Letter grade only (A-F). Course fee may be required. (6 hours activity)

454. Italian Cinema (3)

Historical and critical examination of Italian cinema.

Letter grade only (A-F). Same course as ITAL 454. Not open for credit to students with credit in ITAL 454. (2 hrs seminar, 2 hrs activity)

456. French Cinema (3)

Historical and critical examination of French cinema.

Letter grade only (A-F). Same course as FREN 456. Not open for credit to students with credit in FREN 456. (2 hrs sem, 2 hrs activity)

457. German Cinema (3)

Acquaint students with art of the medium, and history of German film, particularly as it is realized through work of the artist most responsible for its success or failure, in this case, the director.

Letter grade only (A-F) Same course as GERM 480. Not open for credit to students with credit in GERM 480. (2 hrs sem, 2 hrs activity)

458. Russian Cinema (3)

Prerequisites: Upper division standing.

Focuses on socio-political and aesthetic aspects of Russian Cinema, delineating following periods: Soviet Silent Cinema, Stalinist Cinema, Cinema under Thaw, Cinema under Brezhnev and contemporary cinema.

Letter grade only (A-F). Same course as RUSS 428. Not open for credit to students with credit in RUSS 428. (2 hrs sem, 2 hrs activity)

486I. Alternative Media (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Critical study of censorship and suppression of information in mainstream media by governmental and corporate entities. Focus on importance of freedom information and access to diverse viewpoints. Students research environmental, multicultural, peace, and other issues utilizing alternative media.

490./590. Selected Topics in Film and Electronic Arts (3)

Prerequisite: Major status.

Topics of current interest in radio-television-film selected for intensive development.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics; only 6 units may be applied toward the B.A. Topics announced in the *Schedule of Classes*.

492. Internship (3)

Prerequisites: Senior standing in major or consent of instructor.

Students intern with cooperating media facilities.

Credit/No Credit grading only. May be repeated to a maximum of 6 units. (6 hours lab)

498./598. Advanced Seminar (3)

Prerequisites: FEA 299 with a "C" or better and senior standing in the FEA major.

Intensive study of significant issues in film and electronic media.

Letter grade only (A-F).

499./599. Special Projects in Film and Electronic Arts (1-3)

Prerequisites: Major status, FEA 299 with a "C" or better.

Research into an area of special interest to the student, culminating in a research paper or production. Productions will be limited by equipment and facilities available during any term.

GRADUATE LEVEL

501./401.Film Theory II: Contemporary (3)

Prerequisites: FEA 205 and 302 or consent of instructor.

Study of contemporary theoretical models of film analysis and evaluation. Topics include: Spectorship, Post-Structuralism, Feminism, Psychoanalytic Theory, Narratology, Cultural Studies, Postcolonialism, Queer Theory, Postmodernism, and Reception Studies.

Letter grade only (A-F).

505./405. Comedy Writing (3)

FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better or consent of instructor.

Study of a variety of historical and contemporary models. Practice in the creation of print pieces; stand-up routines; scripts for television, film, and other media. Heavy focus on comedy as social, political, and technological criticism.

Letter grade only (A-F).

508./408. Writing the Screen Adaptation (3)

Prerequisites: FEA 303 or 304 with a "C" or better or ENGL 405 or 407 with a "C" or better or consent of instructor.

Writing script adaptations, with study of adaptation theory and successful adaptational models.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

590./490. Selected Topics in Film and Electronic Arts (3)

Prerequisites: Major status; conditional classified status in the MFA (Screenwriting) or conditional classified or consent of instructor.

Topics of current interest in film and electronic arts selected for intensive development.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics, only 6 units may be applied toward the B.A. Topics announced in the *Schedule of Classes*.

598./498. Advanced Seminar (3)

Prerequisites: FEA 299 with a "C" or better and senior standing in the FEA major; conditional classified status in the MFA (Screenwriting) or consent of instructor.

Intensive study of significant issues in film and electronic arts.

Letter grade only (A-F).

599./499. Special Projects in Film and Electronic Arts (3)

Prerequisites: Major status, FEA 299 with a "C" or better; conditional classified status in the MFA (Screenwriting) or conditional classified or consent of instructor.

Research into an area of special interest to the student, culminating in a research paper or production. Productions will be limited by equipment and facilities available during any term.

604A. Graduate Seminar in Dramatic Writing (3)

Open to graduate students only and consent of instructor.

Advanced seminar and intensive workshop in creative writing, reading, criticism, media history, and aesthetics. From a thematic basis, course covers prose, poetry, and all formats and genres of omni media, leading students from text-for-print creativity to text-for-performance and screen/film/video art.

Letter grade only (A-F).

604B. Graduate Seminar in Dramatic Writing (3)

Prerequisites: FEA 604A and consent of instructor.

Advanced workshop in intensive thematic and creative consciousness, writing, criticism, media history, aesthetics, and instructional paradigms, as students write, workshop, revise, and complete a long-form screenplay.

Letter grade only (A-F).

604C. Graduate Seminar in Dramatic Writing (3)

Prerequisites: FEA 604A and 604B, or consent of instructor.

Advanced workshop in intensive and practical creative writing for collaborative media. Long-form screenplay developed and drafted to completion by class as a group, then submitted to industry professionals, and finally revised pursuant to creative commentary and business necessity.

Letter grade only (A-F).

604D. Graduate Seminar in Dramatic Writing (3)

Prerequisites: FEA 604A, 604B, 604C, and consent of instructor.

Advanced seminar and intensive workshop in creative writing, reading, criticism, media history, aesthetics, and the teaching of a creative writing curriculum. Course leads students to completion of their Thesis Project Proposals.

Letter grade only (A-F).

FINANCE

College of Business Administration

Department Chair: S. V. Le

Department Office: College of Business Administration 420
Telephone: (562) 985-4569
Website: www.csulb.edu/colleges/cba/finance/

Faculty: Peter Ammermann, Pia Bandyopadhyay, Hamdi Bilici (Emeritus), Cindy Chen, S. V. Le, Yulong Ma, Chanwit Phengpis, Thomas A. Rhee, Darshan L. Sachdeva, Jasmine Yur-Austin

Administrative Support Coordinator: Lashon Dumas-Jackson
For MBA with Specialization in Finance, see Business Administration, Graduate Programs.

Career Possibilities

Financial Analyst • Bank Manager • Credit Manager
• Securities Broker • Securities Company Manager •
Securities Analyst • Real Estate Agent • Property Manager •
Appraiser • Assessor, Contract Administrator • Underwriter
• College Professor (Some of these, and other careers,
require additional education or experience. For more
information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Science in Business Administration

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

In order to graduate with an undergraduate business degree from CSULB, a student must complete a minimum of 120 units. A majority of the upper division business courses, including economics and statistics, must be completed at this university. For details, refer to the CBA Policy on Course Transfers/Substitutions.

1. Lower Division:

Take all of the following:

ACCT 201 Elementary Financial Accounting (3)
Prerequisite: None

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher; one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

MATH 115 Calculus for Business (3)
Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

STAT 108 Statistics for Everyday Life (3)
Prerequisite: None

2. Critical Thinking Course Requirements:

Choose one of the following:

PHIL 170 Critical Reasoning (3)
Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

IS 100 Information Technology Literacy (3)
Prerequisite: None

3. All business and pre-business majors shall demonstrate computer literacy and competency prior to taking junior and senior level courses. Requires one of the following:

A. Passing score (70%) on the Computer Proficiency Examination (CPE).

B. With Credit (Cr) or "C" or better grade in a transfer equivalent course, complete:
IS 233 Introduction to Computer Systems and Applications (3)
Prerequisite: None

4. Upper Division:

A. Take all of the following:

CBA 300 International Business (3)
Prerequisite: None

ACCT 310 Cost Accounting for Managers (3)
Prerequisites: ACCT 201 or equivalent.

ECON 333 Managerial Economics (3)
Prerequisites: ECON 100, 101; MATH 115 or 122.

FIN 300 Business Finance (3)
Prerequisite: None

BLAW 320 Legal and Regulatory Environment of Business (3)
Prerequisite: None

IS 300 Management Information Systems (3)
Prerequisite: IS 233 or equivalent.

IS 301 Business Communications (3)
Prerequisite: None

IS 310 Business Statistics (3)
Prerequisite: MATH 114.

HRM 360 Organizational Behavior (3)
Prerequisite: None

MGMT 300 Principles of Management (3)
Prerequisite: None

MKTG 300 Marketing (3)
Prerequisite: None

B. The following Capstone course must be taken at CSULB as a senior and after the upper-division prerequisite core courses have been completed (ACCT 310, FIN 300, MGMT 300, MKTG 300, IS 301):

MGMT 425 Business Strategy and Policy (3)
Prerequisites: ACCT 310 or 320; MGMT 300, MKTG 300, FIN 300, IS 301.

C. Completion of option requirements.

5. Elective courses to total 120 units. Students are encouraged to select electives for expansion of knowledge and intellectual interests as well as for preparation for business employment.

Option in Finance (120 units)

The Finance option provides an understanding of the role of finance in the corporate and international environment and an understanding of investments at both the corporate and personal level. This option provides an understanding of the role of finance in a business context, including the development of a comprehension of business ethics.

Core Requirements

Take the following courses:

FIN 300 Business Finance (3)

Prerequisite: None

Take the following courses:

FIN 350 Investment Principals (3)

Prerequisite: FIN 300, ACCT 201.

FIN 400 Intermediate Financial Management (3)

Prerequisites: FIN 300, ACCT 201, IS 301

Select 3 additional courses, with at least 2 courses at the 400-level, from the following courses:

FIN 310, 330, 340, 360, 370, 410, 450, 460, 470 ,
480, 485, 487, 490, 495, 497, 499A, 499B

Minor in Finance

For Non-Business Students only.

Requirements

- Students must have Junior standing.
- Students will be allowed to declare the Finance minor after completing FIN 300 with letter grade "C" or better.
- Students must complete the following three core courses prior to taking any other Finance courses:

FIN 300 Business Finance (3)

Prerequisite: None

FIN 350 Investment Principals (3)

Prerequisite: FIN 300, ACCT 201.

ACCT 201 Elementary Financial Accounting (3)

Prerequisite: None

NOTE: The IS 301 prerequisite requirement is waived for the minor.

Students must complete three additional courses (9 additional units) from among the various Finance courses, with at least two courses (6 units) being taken at the 400 level:

FIN 310, 330, 340, 360, 370, 400, 450, 460, 470, 480,
485, 490.

Courses (FIN)

UPPER DIVISION

300. Business Finance (3)

Introductory course for all business majors. Integration of computer applications and management information systems in (1) Time Value of Money, Risk, Valuation, Cost of Capital; (2) Capital Budgeting; (3) Long-Term Financing Decisions; (4) Working Capital Policy and Management; (5) Financial Analysis and Planning; (6) International Finance; (7) Special topics including Mergers, Acquisition and Bankruptcy.

Letter grade only (A-F).

309I. The Consumer in the Legal and Economic Environment (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses; upper-division standing.

Incorporates an integrated coverage of the economic, legal, ethical and regulatory environment of consumers in avoiding and resolving disputes regarding fraudulent transactions, financial matters, personal and real property contracts, torts, credit and investment issues, and family relationships. Team taught.

(Lecture-Discussion 3 hours.) Same course as BLAW 309I and CAFF 309I. Not open for credit to students with credit in CAFF

309I and BLAW 309I.

310. Personal Finance (3)

Financial analysis planning and management for the individual. Topics include owning and financing a home, minimizing taxes, goals and strategies for investing, budgeting, savings plans, controlling expenses and credit usage, determining insurance needs, and planning retirement.

Letter grade only (A-F).

330. Insurance Principles (3)

Principles of risk-bearing and insurance. Life and property-liability insurance needs of the individual. Types of carriers and insurance markets; organization and functions of carriers; industry regulation.

Letter grade only (A-F).

340. Real Estate Principles (3)

Real estate markets, institutions and activities from the perspective of the decision makers involved in real estate. Fundamental physical, legal, regulatory, economic, mathematical and taxation considerations influencing real estate decision and values. Brokerage, property management, appraisal and counseling.

Letter grade only (A-F).

350. Investment Principles (3)

Prerequisite: FIN 300, ACCT 201.

Investment markets and transactions; sources of investment information; return vs. risk; margin trading and short selling; investment planning; investing in equities and fixed income securities; speculative tax-sheltered investments; gold and other tangibles; portfolio management. Demonstrations and use of microcomputer technology.

Letter grade only (A-F). Course fee may be required.

360. Capital Markets (3)

Capital formation, rates, markets and institutions. Flow of fund analysis, intermediation, interest rate structures, risks and liquidity. Management of financial institutions.

Letter grade only (A-F).

370. Working Capital Management and Cash Budgeting (3)

Prerequisite: FIN 300.

An introduction to working capital management and policy issues in general and how to manage short-term assets and liabilities in particular. Cash forecasting and budgeting and short-term investing and financing will be the focus of the course.

Letter grade only (A-F).

400. Intermediate Financial Management (3)

Prerequisites: ACCT 310 or 202; FIN 300, and IS 301

Intermediate-level lecture-discussion course in corporate finance. Topics include: cash budgeting, capital budgeting, business acquisition and mergers, cost of capital, and international finance.

Letter grade only (A-F).

410. Microstructure on Institution Services (3)

Prerequisites: FIN 300, I S 301.

Capital markets ranging from securities trading to corporate financing through private placement and/or public offerings. In-class trading simulations. Various market trading structures; various financing techniques as permitted under the SEC regulations. Use of simulation software.

Letter grade only (A-F).

450. Portfolio Analysis (3)

Prerequisite: FIN 350, IS 301.

Microcomputer technology to perform security analysis including bonds and the bond market, stocks and the stock market, security valuation, fundamental and technical analysis, portfolio

management and risk-reward relationships. Microcomputer software programs that perform security analysis and portfolio management using numerous databases.

Letter grade only (A-F). Course fee may be required.

460. Management in Financial Institutions (3)

Prerequisites: FIN 300, I S 301.

Students will be introduced to management of banks and other depository financial institutions. Banking trends and introductory topics, Asset and Liability Management, Capital adequacy and Management of Investment portfolios will be the main focus of the course.

Letter grade only (A-F).

470. Seminar in Financial Management (3)

Prerequisites: FIN 400, I S 301.

Designed to enhance comprehension of finance theories through case studies. The subject of each designed case is related to specific finance subjects including estimation of cost of capital, resource allocation and capital budgeting, IPOs, stock repurchase, dividend policy, agency cost, and merger and acquisition.

Letter grade only (A-F).

480. Derivatives (3)

Prerequisites: FIN 350, IS 301.

Exchanges, operation of firms, trading mechanics, and construction of a personal-risk profile analysis. Traditional decision variables, including construction of a 2-asset portfolio. Bias in futures prices, theory of storage price, ledger and speculator behavior, and stochastic nature of futures prices.

Letter grade only (A-F). Course fee may be required.

485. Fixed Income Securities (3)

Prerequisites: FIN 350, I S 301.

The course analyzes fixed income securities, option embedded fixed income securities and interest rate derivatives. Usual duration and convexity analysis, and the interest rate stochastic processes and other forecasting techniques will be studied. New breeds of fixed income securities, various collateralized bond obligations and other asset backed securities, and interest rate arbitrage techniques will be introduced.

Letter grade only (A-F).

487. Mathematical Modeling in Finance (3)

Prerequisites: FIN 350, FIN 400, IS 301

Various mathematical and statistical tools will be used in building financial models. Basic mathematical and statistical tools and how these quantitative tools can be utilized in real world valuation models will be demonstrated. The course also applies the languages to the implementation of various quantitative financial models.

Letter grade only (A-F).

490. International Finance (3)

Prerequisites: FIN 300, IS 301

International trade theories, international payments; currency value fluctuations and exchange rates; international capital markets; roles of developing countries; international institutions and multinational enterprises. Individual research required.

Letter grade only (A-F).

495. Selected Topics in Finance (1-3)

Prerequisites: FIN 350, FIN 400, consent of instructor, IS 301.

Intensive study of current topics of interest in finance.

Letter grade only (A-F).

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

497. Directed Studies (1-3)

Prerequisites: FIN 350, FIN 400 and consent of instructor

Individual projects, study and research of advanced nature in finance.

Letter grade only (A-F).

499A-B. Applied Portfolio Management (3-3)

Prerequisites: FIN 499A: FIN 350, 400, 450 (either or both FIN 400 and 450 may be taken concurrently), IS 301, and consent of instructor; FIN 499B: FIN 499A and consent of instructor. FIN 499A to be offered in Fall and accepted students must enroll in FIN 499B in Spring.

Participation in management of actual investment portfolio. Research, monitor, and analyze securities and make, buy and sell recommendations for a student-managed investment fund. Contribute to publication of semi-annual fund report. Market, sector and firm analysis with presentations and outside research.

Letter grade only (A-F).

FOOD SCIENCE

College of Health and Human Services
Department of Family and Consumer Sciences

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001
Telephone / Fax: (562) 985-4484 / 985-4414
Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Career Possibilities

Principal Food Scientist • Research Associate • Food and Packaging Engineer • Quality Assurance Manager • Research and Development Chemist • Quality Control Chemist • Laboratory Supervisor • Plant Manager • Food and Drug or USDA Inspector • Food Product Evaluator • Food and Ingredient Sales Representative • Research and Product Development, Food Formulation and Processing • Consumer Safety • Sensory Evaluation • Quality Assurance • Government Organization • Food Ingredient Sales and Marketing

(Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality, Foodservice and Hotel Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog

Bachelor of Science in Dietetics and Food Administration

This degree offers two options:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Option in Food Science (120 units)

The Food Science curriculum has an interdisciplinary focus which includes food science, food processing, sensory evaluation, nutrition, chemistry, and microbiology, plus a variety of supporting course work in related disciplines. All courses are designed to develop an understanding of the physical and chemical nature of foods and how it relates to the food industry and consumer safety. The food industry careers awaiting graduates offer diverse opportunities as the world supply expands with technological developments.

Prerequisites

Take the following course or a passing score on the Chemistry Placement Examination:

CHEM 101 Introduction to General Chemistry (4)
Prerequisites/Corequisites: MATH 113 or 117 or 119A or 122.

Requirements

Take all of the following courses:

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination (credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination), and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended.

CHEM 327 Fundamentals of Organic Chemistry (3)

Prerequisites: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

CHEM 448 Fundamentals of Biological Chemistry (3)

Prerequisites: CHEM 327 or 322B either with a grade of "C" or better.

MATH 113 Precalculus Algebra (3)

Prerequisites: Appropriate ELM score, ELM exemption or MAPB 11.

MICR 200 General Microbiology (4)

Prerequisites: CHEM 111A or 140 with a grade of "C" or better and GE Foundation requirements.

MICR 429 Epidemiology of Infectious Diseases (3)

Prerequisites: BIOL 260; MICR 320, 322; all of a grade of "C" or better. (Undergraduates enroll in MICR 429; graduates enroll in MICR 529.)

CAFF 321I Family and Consumer Resource

Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

FCSE 299 Introduction to FCS (1)

Prerequisites: None.

FCSE 486 Instructional Strategies for Family and Consumer Sciences Professionals (3)
Prerequisites: Senior standing.

FCSE 499 Professionalism and Leadership in FCS (2)
Prerequisites: FCSE 299, CAFF 321, 12 units of upper division course work in Family and Consumer Sciences.

FSCI 332 Food Science (3)
Prerequisites: CHEM 327; HFHM 235; MICR 200 or equivalent.

FSCI 338 Introduction to Food Processing (3)
Prerequisites: FSCI 332.

FSCI 432 Food Analysis (3)
Prerequisites: CHEM 327, FSCI 332 or equivalent.

FSCI 435 Food Processing, Preservation and Packaging (3)
Prerequisites: FSCI 332 or consent of instructor.

FSCI 492F Internship in Food Science (3)
Prerequisites: Senior standing; a 2.5 overall GPA or a 3.0 major GPA; approval of faculty advisor in Food Science; and FSCI 332.

HFHM 235 Principles of Food Preparation (3)
Prerequisites: None.

NUTR 132 Introductory Nutrition (3)
Prerequisites/Corequisites: One Foundation course.

NUTR 234 Orientation Dietetics and Food Administration (2)
Prerequisites: None.

NUTR 331A Fundamentals of Human Nutrition (3)
Prerequisites: NUTR 132, BIOL 207, CHEM 302 or 327 or equivalent.

NUTR 336 Cultural Aspects of Food and Nutrition (3)
Prerequisites: PSY 100 or SOC 100 or ANTH 120 or equivalent; NUTR 132.

Take one of the following courses:

ED P 419 Educational Statistics (3)
Prerequisites: Satisfactory completion of an undergraduate mathematics course suitable for general education math credit and, if required by the major, a lower-division statistics course.

H SC 403 Community Health Statistics (3)
Prerequisites: GE Math and SOC 250 or PSY 210 or equivalent.

Take one of the following courses:

ENGL 101 Composition (3)
Prerequisites: ENGL 100.

ENGL 317 Technical Communication (3)
Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Take one of the following courses:

PSY 100 General Psychology (3)
Prerequisites/Corequisites: GE A1 requirement.

SOC 100 Principles of Sociology (3)
Prerequisites/Corequisites: A GE Foundation course.

Take 9 units from the following courses:

CHEM 111B; FCSE 497; NUTR 331B; HFHM 275, 477; IS 233.

Minor in Food Science

Preparation for employment in the Food Science Industry may be developed through completion of this program of study. Eighteen units including:

Take all the following:

FSCI 332 Food Science (3)
Prerequisites: CHEM 327; HFHM 235; MICR 200 or equivalent.

FSCI 338 Introduction to Food Processing (3)
Prerequisites: FSCI 332.

FSCI 432 Food Analysis (3)
Prerequisites: CHEM 327, FSCI 332 or equivalent.

FSCI 435 Food Processing, Preservation and Packaging (3)
Prerequisites: FSCI 332 or consent of instructor.

FSCI 492F Internship in Food Science (3)
Prerequisites: Senior standing; a 2.5 overall GPA or a 3.0 major GPA; approval of faculty advisor in Food Science; and FSCI 332.

Take 3 units from the following:

FCSE 497 Directed Studies
Prerequisites: Upper division standing, consent of instructor.

MICR 429 Epidemiology of Infectious Diseases
Prerequisites: BIOL 260; MICR 320, 322; all of "C" grade or better.

NUTR 336 Cultural Aspects of Food and Nutrition (3)
Prerequisites: PSY 100 or SOC 100 or ANTH 120 or equivalent; NUTR 132.

Adhere to prerequisites below, some fulfill GE requirements:

1. CHEM 111A is a prerequisite for CHEM 327;
2. HFHM 235, CHEM 327, and MICR 200 are prerequisites for FSCI 332;
3. FSCI 332 is a prerequisite for FSCI 338, 432, 435, and 492F;
4. PSY 100 or SOC 100 or ANTH 120 or equivalent and NUTR 132 are prerequisites for NUTR 336;
5. BIOL 260, MICR 320 & 322 are prerequisites for MICR 429.

The Minor in Food Science is available to any non-Food Science major.

Food Science Courses (FSCI)

UPPER DIVISION

330. Dairy Science (2)

Prerequisites: NUTR 132, HFHM 235.

Study of dairy science from chemical microbiological, processing, nutritional values, and economic standpoints. Integration of recent technology as implemented to feature marketed dairy products both traditional and contemporary.

(Lecture-discussion 2 hours.)

332. Food Science (3)

Prerequisites: CHEM 327; HFHM 235; MICR 200 or equivalent.

Composition and structure of foods: chemical changes in foods that affect their color, flavor, texture, aroma, and nutritive quality during processing and preparation; techniques for food preservation.

Course fee may be required. (Lecture-discussion 2 hours, laboratory 3 hours.)

338. Introduction to Food Processing (3)

Prerequisites: FSCI 332.

Study of industrial concepts of food processing. Raw agricultural commodities through the production phases to a final product acceptable to consumers. (The course may include limited visitations to food preparation sites.)

(Lecture-discussion 3 hours.)

432. Food Analysis (3)

Prerequisites: CHEM 327, FSCI 332 or equivalent.

Application of scientific methods of food analysis. Ingredients, proportions, and techniques in food preparation affect the quality of products. Experimental laboratory problems.

Letter grade only (A-F). Course fee may be required. (Seminar 2 hours, Laboratory 3 hours.)

435. Food Processing, Preservation and Packaging (3)

Prerequisites: FSCI 332 or consent of instructor.

Methods and technological aspects in food processing, preservation and packaging. Application of principles and assessment of nutrition. Evaluation of chemical additives. Microbiological aspects of food.

(Lecture - discussion 2 hours, laboratory 3 hours.)

469. Food Product Development (1)

Prerequisites: FSCI 332, or consent of instructor.

Industrial concepts and technology as they apply to food product development and formulation. Includes principles of new product development, ingredient replacements, and product improvements. Development of a prototype, ingredient interaction, and product cost analysis.

Letter grade only (A-F). (Seminar 1 hour)

492F. Internship in Food Science (3)

Prerequisites: Student must be a Family and Consumer Sciences: Food Science major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Food Science; and FSCI 332. Each prerequisite course must be completed with a grade of "C" or better.

Field experience in which student assumes a pre-professional role in professional setting. Objectives by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for a maximum of 6 units. (Seminar 3 hours)

FRENCH

College of Liberal Arts

Department of Romance, German, Russian Languages and Literatures

Department Chair: Lisa Vollendorf

Directors: Jean-Jacques Jura

RGRLL Language Coordinator: Markus Muller

Single Subject Coordinator for L.O.T.E.: Jean-Jacques Jura

Department Office: Academic Services, Room 309
Telephone: (562) 985-4318

Faculty: Laura Ceia-Minjares, Clorinda Donato, Stephen Fleck, Aparna Nayak-Guercio, Jean-Jacques Jura, Najib Redouane

Administrative Support Coordinator: Cerise Dragicevich

Students desiring information should contact the department office for referral to one of the faculty advisors: Credential advisor or current Program Director.

Career Possibilities

Arts Management • Art Historian • Customs Inspector • Immigration Officer • Importer/Exporter • Foreign Service Officer • International Marketing Representative • Travel Guide • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Translator • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Learning French makes you eligible for study and travel abroad in the International Programs of the California State University System. We are happy to assist you in including a study abroad experience into your program of language and literary study. Students are encouraged to participate in work/study abroad options.

Undergraduate Programs

Bachelor of Arts in French and Francophone Studies (120 units)

The major in French consists of 36 upper-division units in the 300-400 level courses indicated below. The number of lower-division units will depend on the amount of French studied previously in high school or college, since students with prior study of French may enter at advanced standing (usually second or third year). The major program satisfies the subject matter competence requirement for the Single Subject teaching credential in French, but credential candidates must take FREN 414 (Phonetics). Major students should be mindful of the Department's second language requirement: two college years or equivalent of a second foreign language, other than English. The Department also recommends inclusion of specified history courses in the program of study. These courses offer additional enrichment to the cultural component of the student's course of study.

Completion of the French major meets the subject matter competence requirement for the Single Subject Teaching Credential in French. Prospective students should consult the undergraduate French Advisor and the Languages Other Than English (LOTE) Program Advisor early to plan their program.

Prerequisite

Lower Division:

FREN 214 Intermediate Conversation (3)
Prerequisite: FREN 101B.

(Does not count toward the required 36 units)

Requirements

Upper Division (minimum 36 units):

Take all of the following courses:

FREN 312A Advanced French I (3)
Prerequisite: Upper division standing in French or equivalent.

FREN 312B Advanced French II (3)
Prerequisite: Upper division standing in French or equivalent.

FREN 314 Advanced Conversation (3)
Prerequisite: FREN 214 or consent of instructor.

FREN 335 Survey of French Literature I (3)
Prerequisite: Upper division standing in French.

FREN 336 Survey of French Literature II (3)
Prerequisite: Upper division standing in French.

FREN 337 Survey of French Literature III: 20th Century French and Francophone Literatures (3)
Prerequisites: Upper division standing in French.

FREN 411 Advanced French Syntax & Composition (3)
Prerequisites: FREN 312A-B or equivalent.

FREN 440 French Civilization (3)
Prerequisites: FREN 312A-B; Corequisite: FREN 335 or 336 or consent of instructor.

FREN 480 Senior Seminar: Self and Society (3)
Prerequisites: FREN 335, 336 or 337 and two 400-level French courses, or consent of instructor.

Take three courses from the following:

FREN 414, 456, 460, 462, 470, 471, 472, 474, 475, 476, 477, 479, 490; RGR 346I, 400I, 450I.

Candidates for the teaching credential must take FREN 414.

Department Requirement:

Two years of a second foreign language at college level or equivalent is required of all majors.

Departmental Recommendation:

Students specializing in French should include the following courses in their program of study: HIST 131, 132, and one or more of the following: HIST 335, 336, 337. A selection from the following courses would also be appropriate: HIST 332, 333; RGR 346I, 450I.

Single Subject Teaching Credential in French

Completion of the French major meets the subject matter competence requirement for the Single Subject Teaching Credential in French. Prospective students should consult the undergraduate French Advisor and the Languages Other Than English (LOTE) Credential Program Advisor early to plan their program.

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective teachers of French are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

Requirements

Same as the BA in French but include the following:

FREN 414 French Phonetics (3)

Prerequisites: FREN 312 A-B or consent of instructor.

Interdisciplinary Option (120 units)

Directors/Advisors: Clorinda Donato, Stephen Fleck, Jean-Jacques Jura
Program Office - AS 309

Requirements

Lower Division:

Take the following course:

FREN 214 Intermediate Conversation (3)

Prerequisite: FREN 101B.

Upper Division:

A minimum of forty-five (45) units of upper division courses.

Take all of the following courses (21 units):

FREN 312A Advanced French I (3)

Prerequisite: Upper division standing in French or equivalent.

FREN 312B Advanced French II (3)

Prerequisite: Upper division standing in French or equivalent.

FREN 335 Survey of French Literature I (3)

Prerequisite: Upper division standing in French.

FREN 336 Survey of French Literature II (3)

Prerequisite: Upper division standing in French.

FREN 337 Survey of French Literature III: 20th Century French and Francophone Literatures (3)

Prerequisites: Upper division standing in French.

FREN 411 Advanced French Syntax & Composition (3)

Prerequisites: FREN 312A-B or equivalent.

FREN 440 French Civilization (3)

Prerequisites: FREN 312A-B; Corequisite: FREN 335 or 336 or consent of instructor.

However, with the program director's consent, the requirement of FREN 214, 312A, 312B, and 314 may be waived.

Nine units of electives selected from the following courses:

FREN 456, 460, 462, 470, 471, 472, 474, 475A-B-C-D-E, 477, 479, 480, 490.

Twelve units from one of the following content areas:

Africana Studies: AFRS 304, 337, 343A, 343B, 380, 460;

Art History: AH 311, 427, 436, 437, 438, 439, 448, 449, 450;

History, Francophone: HIST 391, 392, 435, 491;

History French/European: HIST 319, 332, 333, 334, 335, 336, 337, 338, 339, 340;

Philosophy: PHIL 361I, 405I, 413, 417, 418, 484, 455;

Social Sciences:

A) *Political Science*: POSC 303, 353, 401, 455;

B) *International Studies*: I/ST 319I, 320;

C) *Women's, Gender and Sexuality Studies*:

WGSS 300, 312, 401I, 455;

D) *Geography*: GEOG 306, 308I, 309I, 316.

Minor in French and Francophone Studies

A minimum of 20 units which must include all of the following:

FREN 312A Advanced French I (3)

Prerequisite: Upper division standing in French or equivalent.

FREN 312B Advanced French II (3)

Prerequisite: Upper division standing in French or equivalent.

FREN 314 Advanced Conversation (3)

Prerequisite: FREN 214 or consent of instructor.

FREN 411 Advanced French Syntax & Composition (3)

Prerequisites: FREN 312A-B or equivalent.

Take at least one other upper-division course in French to make a minimum total of 15 upper-division units.

The Minor in French is available to any non-French major.

GRADUATE PROGRAMS

Master of Arts in French and Francophone Studies

Prerequisites AGAPE

1. A bachelor of arts degree in French, or:
2. A bachelor's degree with a minimum of 24 upper-division units in French, comparable to those required of a major in French at this University. Deficiencies will be determined by the advisor after consultation with the student and study of transcript records.

Advancement to Candidacy

1. Approval of the graduate program by the graduate advisor, the faculty advisor and/or departmental committee, and the College of Liberal Arts Associate Dean of Graduate Studies.
2. The candidate should file for advancement upon completion of 6 units and preferably no more than 9 units on the program. A 3.0 GPA is required.
3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).

Requirements

1. Completion of a minimum of 30 units of approved upper division and graduate courses, with a minimum of 24 units in the 500 and 600 series in French;
2. Specifically required courses include:

FREN 580* Self and Society (3)

Prerequisites: FREN 335, 336 or 337 and two 400-level French courses, or consent of instructor.

FREN 696* Research Methodology & Critical Theory (3)

Prerequisite: Graduate standing required.

*students with a BA in French from CSULB see advisor

3. Two years of one of the following languages: Italian, Portuguese, Spanish, German, or Russian, or pass an examination at intermediate level in one of those languages. Major or minor in a second foreign language may be

used to fulfill this requirement, upon approval by the Department. For other languages, consult the Graduate Advisor:

- Maintain a GPA of at least "B" (3.0) in the major;
- Pass comprehensive examinations on the Graduate Reading List in three areas to be selected by student upon consultation with Graduate Advisor;
- No more than six units of transfer graduate credits are allowed, subject to approval by the Graduate Advisor. No more than six units of International Programs course work may be credited toward the 24-unit French requirement for the MA at this university;
- Teaching Associates must take RGR 601, Teaching Methodology. These units do not count toward the required 30 units for completion of the MA.

Single Subject Teaching Credential in French

For information, refer to the undergraduate section in this department.

French Courses (FREN)

LOWER DIVISION

100A. Fundamentals of French for Spanish Speakers (4)

Prerequisite: Two semesters of college Spanish or 3 years of high school or be native or heritage speaker of Spanish.

Introductory course on the fundamental skills of speaking, reading, writing and comprehending French with an emphasis on the structural similarities between French and Spanish. Not open to heritage speakers or native speakers of French.

Not open for credit to students with credit in FREN 102, 102A or 101A.

100B. Fundamentals of French for Spanish Speakers (4)

Prerequisites: FREN100A; or FREN 101A with 2 semesters of college Spanish or 3 years of high school Spanish; or be heritage or native speakers of Spanish.

Introductory course on the fundamental skills of speaking, reading, writing and comprehending French with an emphasis on the structural similarities between French and Spanish.

Not open to heritage speakers or native speakers of French. Not open for credit to students with credit in FREN 101B or FREN 102B.

101A. Fundamentals of French (4)

Prerequisite/Corequisite: Any Foundation course.

Introduction to fundamental skills of speaking, oral comprehension, reading, and writing. For those who are beginning the study of French or who have had one year of high school French.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of French.

101B. Fundamentals of French (4)

Prerequisite/Corequisite: FREN 101A or two years of high school French or equivalent. Corequisite: Any Foundation course.

Fundamental skills of speaking, oral comprehension, reading and writing.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of French.

200. Intermediate French for Spanish Speakers (6)

Prerequisites: FREN 100B or FREN 101B or 3 years of high school French and 2 years of college Spanish or be native or heritage Spanish speaker.

Two semesters of intermediate French are covered in one semester in this intensive hybrid (blended) course designed for students who are either native or heritage speakers of Spanish or have at least intermediate- to advanced-level proficiency in Spanish. Not open to heritage speakers or native speakers of French.

Not open for credit to students with credit in FREN 201A, FREN 201B or FREN 202.

201A. Intermediate French (4)

Prerequisite: FREN 101B or three years of high school French or equivalent, GE Foundation requirement (or entering competency equivalent to FREN 101B and completion of concurrent enrollment in at least one Foundation course).

Continued development in speaking, oral comprehension, reading and writing skills.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of French.

201B. Intermediate French (4)

Prerequisite: FREN 201A or four years of high school French or equivalent, GE Foundation requirement (or entering competency equivalent to FREN 201A and completion or concurrent enrollment in at least one Foundation course).

Continued development in speaking, oral comprehension, reading and writing skills.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of French.

214. Intermediate Conversation (3)

Prerequisite: FREN 101B.

Should be taken concurrently with FREN 201A or 201B. Designed to develop basic conversational skills and to prepare for more advanced work in FREN 314.

Letter grade only (A-F).

UPPER DIVISION

312A. Advanced French I (3)

Prerequisite: Upper division standing in French or equivalent.

Review of grammatical principles with regular exercises and composition work for the development of increased mastery of the written language.

312B. Advanced French II (3)

Prerequisite: Upper division standing in French or equivalent.

Review of grammatical principles with regular exercises and composition work for the development of increased mastery of the written language.

314. Advanced Conversation (3)

Prerequisite: FREN 214 or consent of instructor.

Continuation of FREN 214.

Letter grade only (A-F).

335. Survey of French Literature I (3)

Prerequisite: Upper division standing in French.

From the Middle Ages through the Seventeenth Century.

336. Survey of French Literature II (3)

Prerequisite: Upper division standing in French.

Eighteenth to Twentieth Century.

337. Survey of French Literature III: Twentieth Century French and Francophone Literatures (3)

Prerequisites: Upper division standing in French.
Survey of Twentieth-Century and Francophone literatures.

411. Advanced French Syntax and Composition (3)

Prerequisites: FREN 312A-B or equivalent.
Special emphasis on the writing of compositions and developing an awareness of French style, as well as advanced syntax.

414. French Phonetics (3)

Prerequisites: FREN 312 A-B or consent of instructor.
General concepts of linguistic science. Linguistics applied to the study and teaching of the French language. Articulatory phonetics as a means to form native French pronunciation habits with emphasis upon the difficulties encountered by speakers of American English.

423./523. Introduction to French Linguistics (3)

Prerequisites: Completion of FREN 312AB and 411.
Presents an overview of French linguistics: Phonology, morphology and syntax. The course also focuses on the application of linguistic knowledge of French to the teaching of French at the high school level in the U.S.

440. French Civilization (3)

Prerequisites: FREN 312A-B; Corequisite: FREN 335 or 336 or consent of instructor.
Significant aspects of French art, culture and social institutions.

456. French Cinema (3)

Prerequisite: Senior standing or consent of instructor.
Acquaint students with the art of the medium, particularly as it is realized through the work of the artist most responsible for its success or failure, in this case the director.
Letter grade only (A-F). Same course as FEA 456. Not open for credit to students with credit in FEA 456. (2 hrs sem, 2 hrs activity)

460./560. The Art of Translation (3)

Prerequisites: Upper division or graduate standing. Consent of instructor for third-year students.
Cover translation of French texts into English and of English texts French, as well as theories of translation and their implications. Translations may be published in *The Translators' French Quarter*, a journal of the RGRLL Department.
May be repeated to a maximum of 6 units.

462./562. Reading French Women Writers (3)

Prerequisites: FREN 335, 336, and 337 (Surveys of French Literature I, II, and III) or consent of instructor.
Covers literary production of women who wrote and write literature in France. French feminism, the question of "écriture féminine" and gender will also be discussed. Does not cover Francophone women writers.
May be repeated to a maximum of 6 units.

470./570. French Literature of the Middle Ages (3)

Prerequisites: FREN 335, 336 or consent of instructor.
Study of representative drama, poetry and prose of the period. Texts in modern French.

471./571. French Literature of the Renaissance (3)

Prerequisites: FREN 335, 336 or consent of instructor.
Study of representative drama, poetry and prose of the 16th Century.

472./572. French Literature of the Seventeenth Century (3)

Prerequisites: FREN 335, 336 or consent of instructor.
Study of representative drama, poetry and prose of the century.

474./574. The Age of Enlightenment (3)

Prerequisites: FREN 335, 336 or consent of instructor.
Study of representative writers and thinkers of the century. Drama, poetry and prose.

475./575. Selected Topics - Seminar in Francophone Literature (3)

Prerequisites: FREN 337 or consent of instructor.
May be repeated to a maximum of 15 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.
A. Africa
B. Caribbean
C. Maghreb
D. Quebec
E. Switzerland

476./576. French Comic Traditions (3)

Prerequisites: FREN 335, 336, 337 or consent of instructor.
Historical overview of French comedic forms; close reading of selected works; elements of comic theory. Includes works such as medieval farce, Molière's different comic genres, Beaumarchais, Feydeau and absurdist dramatists such as Jarry and Ionesco, as well as film comedies.
Letter grade only (A-F).

477./577. French Literature of the Nineteenth Century (3)

Prerequisites: FREN 335, 336 or consent of instructor.
Study of representative writers of the century. Drama, poetry and prose.

479./579. French Literature of the Twentieth Century (3)

Prerequisites: FREN 335, 336 or consent of instructor.
Study of representative writers of the century. Drama, poetry and prose.

480./580. Senior Seminar: Self and Society (3)

Prerequisites: FREN 335, 336 or 337 and two 400-level French courses, or consent of instructor.
Integrative seminar examining a wide variety of literary works, ranging from Medieval through twentieth-century Francophone classic texts, and some films with strong literary connections. Emphasis on historical, critical and philosophical writings concerning issues in French-speaking cultures.
Letter grade only (A-F).

490./590. Selected Topics in French (1-3)

Study of a particular topic in French literature, language, or culture.
May be repeated to a maximum of 12 units with different topics. Topics announced in the *Schedule of Classes*.

494. Internship in French (1-3)

Prerequisites: Consent of instructor and department chair.
Field work in French, supplemented by readings and tutorials under direction of a faculty. Internships, small group discussion/teaching, and other assignments directed by a supervising faculty member.
May be repeated to a maximum of 6 units. No more than 3 units may be applied to the major in French.

499. Directed Studies (1-3)

Prerequisites: Consent of instructor and department chair.
Independent study undertaken under the supervision of a faculty member.
May be repeated to 3 units provided the material is not the same. May be repeated to a maximum of 6 units with prior consent of department

GRADUATE LEVEL

523./423. Introduction to French Linguistics (3)

Prerequisites: Completion of FREN 312A/B and 411.

Presents overview of French linguistics: Phonology, morphology and syntax. Focuses on application of linguistic knowledge of French to teaching French at high school level in U.S.

556. French Cinema (3)

Prerequisite: Graduate standing or consent of instructor

Overview of most important movements, genres and directors in the history of French cinema. Socio-political, cultural and aesthetic analysis will be adopted in investigating films from the inception of the medium to present times.

Letter grade only (A-F). Taught in English or in French when needed. (2 hrs seminar, 2 hrs activity)

560./460. The Art of Translation (3)

Prerequisites: Upper division or graduate standing. Consent of instructor for third-year students.

Covers translation of French texts into English and of English texts French, as well as theories of translation and their implications. Translations may be published in *The Translators' French Quarter*, a journal of the RGRL Department.

562./462. Reading French Women Writers (3)

Prerequisites: FREN 335, 336, and 337 (Surveys of French Literature I, II, and III) or consent of instructor.

Covers literary production of women who wrote and write literature in France. French feminism, the question of "écriture féminine" and gender discussed. Does not cover Francophone women writers.

May be repeated to a maximum of 6 units.

570./470. French Literature of the Middle Ages (3)

Prerequisites: FREN 335, 336 or consent of instructor.

Study of representative drama, poetry and prose of the period. Texts in modern French.

Letter grade only (A-F).

571./471. French Literature of the Renaissance (3)

Prerequisites: FREN 335, 336 or consent of instructor.

Study of representative drama, poetry and prose of the 16th Century.

Letter grade only (A-F).

572./472. French Literature of the Seventeenth Century (3)

Prerequisites: FREN 335, 336 or consent of instructor.

Study of representative drama, poetry and prose of the century.

Letter grade only (A-F).

574./474. The Age of Enlightenment (3)

Prerequisites: FREN 335, 336 or consent of instructor.

Study of representative writers and thinkers of the century. Drama, poetry and prose.

Letter grade only (A-F).

575./475. Selected Topics - Seminar in Francophone Literature (3)

Prerequisites: FREN 337 or consent of instructor.

May be repeated to a maximum of 15 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

- A. Africa
- B. Caribbean
- C. Literature from the Maghreb
- D. Quebec
- E. Switzerland

576./476. French Comic Traditions (3)

Prerequisites: FREN 335, 336, 337 or consent of instructor.

Historical overview of French comedic forms; close reading of selected works; elements of comic theory. Includes works such as medieval farce, Molière's different comic genres, Beaumarchais, Feydeau and absurdist dramatists such as Jarry and Ionesco, as well as film comedies.

Letter grade only (A-F).

577./477. French Literature of the Nineteenth Century (3)

Prerequisites: FREN 335, 336 or consent of instructor.

Study of representative writers of the century. Drama, poetry and prose.

Letter grade only (A-F).

579./479. French Literature of the Twentieth Century (3)

Prerequisites: FREN 335, 336 or consent of instructor.

Study of representative writers of the century. Drama, poetry and prose.

Letter grade only (A-F).

580./480. Self and Society (3)

Prerequisites: FREN 335, 336 or 337 and two 400-level French courses, or consent of instructor.

Integrative seminar examining a wide variety of literary works, ranging from Medieval through twentieth-century Francophone classic texts, and some films with strong literary connections. Emphasis on historical, critical and philosophical writings concerning issues in French-speaking cultures.

Letter grade only (A-F).

590./490. Selected Topics in French (1-3)

Study of a particular topic in French literature, language, or culture.

May be repeated to a maximum of 12 units with different topics. Topics announced in the *Schedule of Classes*.

599. Directed Studies (1-3)

Prerequisite: Graduate standing with baccalaureate degree or equivalent.

Graduate-level in-depth study on selected topics under supervision of a graduate faculty. Topic and study outline of work undertaken to be on file in department. Enrollment contingent upon approval of department chair and faculty member.

Letter grade only (A-F). May be repeated for a maximum of 6 units with different topics in the same semester.

604. Selected Topics - Seminar in a Century of French Literature (3)

Prerequisite: Corresponding 400/500-level century survey course or consent of instructor.

Intensive studies in one of the following topics.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

E. French Literature Seminar: Medieval to 18th Century

F. French Literature Seminar: 19th-20th Century

688. Seminar in French Literature or Culture (3)

Prerequisite: Graduate standing in French.

Intensive study of a specific aspect of French literature or culture. Subjects announced in the *Schedule of Classes*.

Letter grade only (A-F).

696. Research Methodology and Critical Theory (3)

Prerequisite: Graduate standing required.

Introduction to methods of research/critical theory. Course familiarizes students with techniques and terminology of critical theory in the French tradition. Focus on theoretical issues such as "production" of meaning in texts, its relation to power, politics, ethics, and pleasure.

Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Consent of department chair.

Individual study under the guidance of a faculty member.

May be repeated to a maximum of 3 units. Letter grade only (A-F).

698. Thesis (2-6)

Planning, preparation, and completion of thesis in French for the master's degree. With consent of graduate advisor only.

GEOGRAPHY

College of Liberal Arts

Department Chair: Paul Laris

Department Office: Liberal Arts 4 (LA), Room 106

Telephone: (562) 985-4977 / (562) 985-8432

Website: <http://www.csulb.edu/geography>

Faculty: Hyowon Ban, James R. Curtis, Suzanne Dallman, Christine L. Jocoy, Paul Laris, Christopher T. Lee, Jacqueline Mills, Christine M. Rodrigue, Dmitrii Sidorov, Deborah Thien, Suzanne P. Wechsler

Advisors:

Undergraduate: Suzanne Dallman

Graduate: Deborah Thien

Administrative Support Coordinator: Magdalena Munoz

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Urban Planner • Cartographer • Computer Mapping
• Regional, Urban and Environmental Planner •
Natural Resources Manager • Environmental Monitor •
Transportation Planner • Travel Counselor/Agent • Real
Estate Appraiser • Environmental Analyst • Intelligence
Analyst • Marketing Analyst • Community Development
Specialist • Demographer • Recreation Resource Planner
• Industrial Development Specialist • GIS Specialist •
Climatologist • Ecologist • Environmental Impact Report
Writer • Teacher

Introduction

Geography focuses on the spatial organization of human and physical landscapes, the interactions between human society and the physical environment, as well as on the meanings that people bring to their place in the world.

The Department offers the Bachelor of Arts and Master of Arts degrees, Geography Minor, and two certificates. For further information, go to the department or visit <http://www.csulb.edu/colleges/cla/departments/geography>. For the Master of Arts degree in Geography, candidates are responsible for the general requirements stated in this catalog as well as the specific departmental requirements contained in the Geography Master of Arts Handbook.

Undergraduate Programs

Bachelor of Arts in Geography (120 units)

Requirements

A grade of "C" or better must be achieved in all upper division Geography courses. The Geography major requires at least 39 units of which at least 9 must be at the 400 level. Lower Division (12 units):

Take all of the following courses:

GEOG 200 Introduction to Research Methods for Geographers (3)
Prerequisite: None

GEOG 280 Intro Geospatial Techniques (3)

Prerequisite: None

Take one of the following courses:

GEOG 130 Introduction to Climatology (4)

Prerequisite: One G.E. Foundation course (One B.2. and one A.1 course recommended)

GEOG 140 Introduction to Physical Geography (3)

Prerequisite/Corequisite: One G.E. Foundation course.

Take one of the following courses:

GEOG 100 World Regional Geography (3)

Prerequisite/Corequisite: One G.E. Foundation course

GEOG 120 Geography of Human Diversity in U.S. (3)

Prerequisite/Corequisite: One G.E. Foundation course.

GEOG 160 Introduction to Human Geography (3)

Prerequisite/Corequisite: One G.E. Foundation course.

Upper Division (27 units)

Take all of the following courses:

GEOG 340 Environmental Geography (3)

Prerequisite: GEOG 130 or 140 or GEOL 280.

GEOG 360 Human Geography (3)

Prerequisites: GEOG 100, 120, or 160.

GEOG 380 Map Interpretation and Analysis (3)

Prerequisite: None

Take one Regional course (see list below)

Take 3 courses in one of the following concentrations:

Environmental/Physical Geography, Human Geography, Geospatial Techniques, or Global/Regional Studies

Major Concentrations

Students are urged to complete courses in each cluster and to seek the advice of the undergraduate advisor and other faculty to identify courses that are best suited to meet their educational and career objectives. In addition, programs may be tailored to meet the needs of individual students especially those choosing to double-major.

Environmental/Physical Geography:

GEOG 355I, 440, 442, 443, 444, 445, 447, 448, 455, 458, 481.

Human Geography:

GEOG 301I, 319I, 352, 357I, 402, 446, 452, 460, 462 (also WGSS 462), 464, 465, 467, 468, 470, 471 (also HCA 471).

Geospatial Techniques:

GEOG 400, 402, 473, 474, 475, 482, 484, 485, 486, 487A, 487B, 488.

Global and Regional Studies:

Global Studies Courses:

GEOG 319I, 352, 355I, 452, 460, 464, 468, 470.

Regional Courses:

GEOG 304, 306, 308I, 309I, 313I, 314I, 315I, 316, 318, 321, 322

Additional Courses

The following courses may be included in the above concentrations with approval of the Undergraduate Advisor: GEOG 492, 494, 497.

Minor in Geography

The Minor in Geography is available to any non-Geography major. Requires a minimum of 18 units.

Take one of the following courses:

GEOG 130 Introduction to Climatology (4)
Prerequisite: One G.E. Foundation course (One B.2. and one A.1 course recommended)

GEOG 140 Introduction to Physical Geography (3)
Prerequisite/Corequisite: One G.E. Foundation course.

Take one of the following courses:

GEOG 100 World Regional Geography (3)
Prerequisite/Corequisite: One G.E. Foundation course

GEOG 120 Geography of Human Diversity in U.S. (3)
Prerequisite/Corequisite: One G.E. Foundation course.

GEOG 160 Introduction to Human Geography (3)
Prerequisite/Corequisite: One G.E. Foundation course.

Take one of the following courses:

GEOG 280 Intro Geospatial Techniques (3)
Prerequisite: None

GEOG 380 Map Interpretation and Analysis (3)
Prerequisite: None

Take at least 9 units of upper division courses with at least one course selected from the 400 series.

Certificate in Geographic Information Science

Co-Directors: Christopher Lee, Suzanne Wechsler

This certificate provides experience in quantitative spatial analysis using Geographic Information Systems, working with remotely sensed imagery and field-derived data, and effective communication through maps. The certificate serves as a supplement to standard degree programs. A brochure describing the GIScience Certificate is available in the department or on-line at www.csulb.edu/geography.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Requirements

1. A bachelor's degree, which may be earned concurrently.
2. Consultation with the certificate advisor in the Geography Department.
3. Satisfactory completion of prerequisites (9 units):
 - GEOG 200 Introduction to Research Methods for Geographers (3)
Prerequisite: None
 - GEOG 280 Intro Geospatial Techniques (3)
Prerequisite: None
 - GEOG 380 Map Interpretation and Analysis (3)
Prerequisite: None
4. A minimum of 23 units distributed as follows:
 - A. Core Courses. Take all the following courses:
 - GEOG 400 Geographical Analysis (4)
Prerequisite: GEOG 200 or any introductory statistics course or consent of instructor.
 - GEOG 473 Remote Sensing (4)
Prerequisites GEOG 200 (or equivalent) and GEOG 280 or consent of instructor.
 - GEOG 485/585 Principles of Geographic Information Science (4)
Prerequisites: GEOG 200 or equivalent and GEOG 280; or consent of instructor.

B. Specialization (three courses):

Students are encouraged to select a specialization in one of the following three areas, although courses can be selected between categories with advisor approval.

Geographic Information Systems:

GEOG 487A/587A, 487B/587B, 488/588

Remote Sensing: GEOG 474, 475

Cartography: GEOG 482, 484/584

The following courses may be substituted for the above courses with advisor consent: GEOG 481, 492, 494, 497, 697, 680. Substitutions may also be made for courses in database, computer programming, surveying and/or web design and visualization with approval from the Certificate Advisor.

Certificate in Urban Studies

The Urban Studies Certificate, housed in the Department of Geography, takes an interdisciplinary approach. Students take a core of courses in Geography and take courses from one of two concentrations (Urban Theory and Practice or Applied Urban Geography). For further information, go to www.csulb.edu/geography.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Requirements

1. A bachelor's degree, which may be earned concurrently.
 2. Consultation with the undergraduate advisor in the Geography Department.
 3. A minimum of 23 units distributed as follows:
 - Core requirements (6 units):
Take the following courses:
 - GEOG 301I The Urban Scene (3)
Prerequisites: GE Foundation requirement, one or more Exploration courses, and upper division standing.
 - GEOG 464 Urban Geography (3)
Prerequisite: GEOG 100, 120, or 160 or consent of instructor; GEOG 360 recommended.
 - Concentration Requirement (minimum 17 units)
Choose One Option:
 - Concentration A - Applied Urban Geography:* GEOG 446, 467, 485*, 487B; and one of the following: ASAM 435; CHLS 470I, CAFF 322, 422; GEOG 471 or HCA 471.
 - Concentration B - Urban Theory and Practice:* Take six of the following courses: GEOG 467, 468; HIST 469, 474I; ANTH 416; POSC 327; CHLS 421; WGSS 432; DESN 367.
- *Students must also take GEOG 280 before enrolling in this course. This course is a prerequisite and does not count toward the Certificate.

Graduate Programs

Master of Arts in Geography

Prerequisites

1. A bachelor's degree in geography; or,
2. A bachelor's degree with 24 units of upper division courses substantially equivalent to those required for a geography major at this University; or,
3. A bachelor's degree in a related discipline with 24 units of upper division courses in a combination of geography and approved courses in related disciplines,

4. Completion of introductory methods course,
5. An undergraduate GPA of 3.0 ("B") or better in geography, or alternative evidence of ability to do graduate work,
6. Completion of Graduate Record Examination (GRE),
7. File with the department a declaration of intent to seek the master's degree in geography.

Advancement to Candidacy

1. See the Geography Graduate Student Handbook;
2. See the general University requirements.

Requirements

1. Completion of courses required to remove foundational and prerequisite deficiencies (see prerequisites above),
2. Fulfillment of the Graduation Writing Assessment Requirement (GWAR),
3. Completion of 30 units of approved upper division and graduate courses. A minimum of 24 units of Geography courses. A minimum of 18 units of 500 and 600-level courses

Take the following two courses:

GEOG 596 Geographic Thought and Literature (3)
Prerequisite: Consent of instructor.

GEOG 696 Seminar in Geographical Research Methods (3)
Prerequisites: GEOG 596, graduate standing in geography, and consent instructor.

Take one advanced geographic methods course, approved by the Thesis Advisory Committee Chair, from the following:

GEOG 400 Geographical Analysis (4)
Prerequisite: GEOG 200 or any introductory statistics course or consent of instructor.

GEOG 474 Intro to Digital Image Processing (4)
Prerequisite: GEOG 473 or consent of instructor.

GEOG 502 Qualitative Geographic Analysis (4)
Prerequisite: GEOG 360 or consent of instructor.

GEOG 575 Geographical Applications in Remote Sensing (4)
Prerequisites: GEOG 140, 160, 473, and 474.

GEOG 584 Advanced Concepts in Presentation Cartography (4)
Prerequisite: GEOG 482 or consent of instructor.

GEOG 586 Field Methods in Landscape Analysis (4)
Prerequisite: GEOG 340 or consent of instructor.

GEOG 587A Applications of GIS: Environment and Natural Resources (4)
Prerequisites: GEOG 485 or 585 or consent of instructor.

GEOG 587B Applications of Geographic Information Science: Urban and Economic (4)
Prerequisite: GEOG 485 or 585 or consent of instructor.

GEOG 588 Advanced Topics in GIS (4)
Prerequisites: GEOG 485/585 and one of the following: 487A/587A, 487B/587B, 482, 484; or consent of instructor.

Take 2 topical seminars (each of the following seminars may be taken with credit twice to meet this requirement), from the following:

GEOG 640 Seminar in Physical Geography (3)
Prerequisite: Consent of instructor.

GEOG 650 Seminar in Cultural Geography (3)
Prerequisite: Consent of instructor.

GEOG 666 Seminar in Urban Geography (3)
Prerequisite: Consent of instructor.

GEOG 680 Seminar in Geospatial Science (3)
Prerequisite: Consent of instructor.

Take 6 units of thesis:

GEOG 698 Thesis (6)
Prerequisite: Consent of instructor.

4. A "B" or better in two core courses:

GEOG 596 Geographic Thought and Literature (3)
Prerequisite: Consent of instructor.

GEOG 696 Seminar in Geographical Research Methods (3)
Prerequisites: GEOG 596, graduate standing in geography, and consent instructor.

General

492. Internship in Applied Geography
494. Selected Topics in Geography
497. Directed Studies

Global and Regional

GLOBAL:

- 319I. International Development
352. Geography of Travel and Tourism
355I. International Environmental Issues
452. Geography of the Global Economy
468. World Cities/Cities of the World
470. Political Geography

REGIONAL:

100. World Regional Geography
304. California
306. United States and Canada
308I. Africa South of the Sahara
309I. The Middle East and North Africa
313I. Southeast Asia
314I. South Asia
315I. East Asia
316. Europe
318. Russia and Its Neighbors
321. Geography of Mexico, Central America and the Caribbean
322. Geography of South America

Human Geography

120. Geography of Human Diversity in the United States
160. Introduction to Human Geography
301I. Urban Life and Problems
319I. International Development
352. Geography of Travel and Tourism
357I. Sacred Geographies
360. Human Geography
381. Maps and Civilization
446. Land Use Planning
452. Geography of the Global Economy
460. Population Geography
462. Feminist Geography
464. Urban Geography
465./565. Social Geography
467./567. Urban Geography: Metropolitan Problems
468. World Cities/Cities of the World
470. Political Geography
471. Geographic Information Science (GIS) for Health

Environmental/Physical Geography

130. Introduction to Climatology
140. Introduction to Physical Geography
340. Environmental Geography
355I. International Environmental Issues
440./540. Land and Water Environments
442. Biogeography
443. Watersheds: Processes and Management
444. Climatology
445. Palaeoclimatology
447. Landscape Restoration
448. Environmental Assessment
455. People As Agents of Environmental Change
458./558. Hazards and Risk Management
481. Geographic Information Science for Natural Sciences

Methods and Techniques

These courses develop skills in graphic and statistical communication and field analysis which are used within the various sub-fields of the discipline.

200. Introduction to Research Methods for Geographers
280. Introduction to Geospatial Techniques
380. Map Interpretation and Analysis
400. Geographical Analysis
402. Qualitative Geographic Analysis
482. Thematic Map Design for Presentation and GIS
473. Remote Sensing
474. Introduction to Digital Image Processing
475. Geographical Application Remote Sensing
484./584. Advanced Concepts in Presentation Cartography
485./585. Introduction to Geographic Information Systems
486. Field Methods in Landscape Analysis
487A./587A. Applications of GIS: Environment and Natural Resources
487B./587B. Applications of GIS: Urban and Economic
488. Geographic Information Systems

Geography Courses (GEOG)

LOWER DIVISION

100. World Regional Geography (3)

Prerequisite/Corequisite: One G.E. Foundation course.

Through a spatial approach, introduction to the world's geographic realms and examination of their cultural, population and political dynamics, resources and economic development, patterns of settlement and environmental elements.

120. Geography of Human Diversity in the United States (3)

Prerequisite/Corequisite: One G.E. Foundation course.

Examines America's Human Diversity from a geographic perspective focusing on the spatial distribution and organization of race/ethnicity and gender/sexuality groups across the U.S.'s rural and urban cultural landscapes while emphasizing the spatial politics of inclusion and exclusion.

130. Introduction to Climatology (4)

Prerequisite: One G.E. Foundation course (One B.2. and one A.1 course recommended)

Introduction to Earth's atmosphere, weather processes, global climate patterns, drivers of climate change and their interactions with the biotic and abiotic environment. Analysis of how human

activities affect weather and climate processes and the patterns of global climate impacts.

Letter grade only (A-F). (3 hours lecture, 2 hours field activity)

140. Introduction to Physical Geography (3)

Prerequisite/Corequisite: One G.E. Foundation course.

Systematic study of the physical environment including human-environmental interaction, environmental hazards, and natural resources.

160. Introduction to Human Geography (3)

Prerequisite/Corequisite: One G.E. Foundation course.

Geographic aspects of culture, including the past and present social, political and economic factors that are related to human perception, organization and use of the environment.

200. Introduction to Research Methods for Geographers (3)

Introduction to the scientific method in geography, with an emphasis on basic quantitative and qualitative techniques and their applications.

Not open for credit to student with credit in first course in statistics. (2 hours lecture, 2 hours laboratory).

250. Early World Historical Geography (4)

Prerequisites: Open only to Integrated Teacher Education Program (ITEP) students.

Emergence and changing nature of urban life, cultural and technological diffusions, and variations in the intensity of contact and exchange among cultures and civilizations over time. Geographic and historical factors, such as location and place, human/environment interactions, migrations, and diffusion.

Same course as HIST 250. Not open for credit to students with credit in HIST 250.

280. Introduction to Geospatial Techniques (3)

Introduction to geospatial techniques, which include geographic information science (GIS), cartography, global positioning systems (GPS), and remote sensing. Students will be introduced to the geographic concepts required for spatial analysis.

(3 hours lecture)

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course.

301I. The Urban Scene (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses, and upper division standing.

Analysis of urban life-styles; land use and design; population trends; conflicts in the increasingly multicultural urban setting; housing and community development; suburban-central city relationships; human utilization of urban life spaces; opinions of landmark urbanists; and future trends.

Same course as U/ST 301I. Not open for credit to students with credit in U/ST 301I or SOC 419.

304. California (3)

California's diverse natural and cultural environment with emphasis upon social and economic problems and the human response to environmental hazards.

306. United States and Canada (3)

Prerequisites: GE Foundation requirement.

Common social, economic and political interests of the major human use regions of the United States and Canada. Describes and interprets the culture patterns of each region in relation to the natural settings in which they have developed.

Geography Courses (GEOG)

308I. Africa South of the Sahara (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Human and environmental settings of Africa South of Sahara and the ecological, cultural, demographic, economic settlement and political relationships that characterize them.

309I. The Middle East and North Africa (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Human and physical settings of the Middle East and North Africa and the cultural, economic, settlement, and political relationships that characterize them stressing those factors which underlie the region's instability and global importance.

313I. Southeast Asia (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses and upper division standing.

Cross-cultural examination of the characteristics and problems found across Southeast Asia, specifically, environmental and cultural patterns, historical development of the spatial organization of society, demographic and other dynamics of social change, and issues of socio-economic and political development.

Letter grade only (A-F).

314I. South Asia (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses and upper division standing.

Cross-cultural examination of the various characteristics and problems found across the region of South Asia. Specific foci are environmental and cultural patterns, the historical development of the spatial organization of society, demographic and other dynamics of social change related to issues of socio-economic and political development.

Letter grade only (A-F).

315I. East Asia (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses and upper division standing.

Cross-cultural examination of the characteristics and problems found across East Asia, specifically, environmental and cultural patterns, historical development of the spatial organization of society, demographic and other dynamics of social change, and issues of socio-economic and political development.

Letter grade only (A-F).

316. Europe (3)

Prerequisites: GE Foundation requirement.

The human and physical patterns of Europe. Current cultural conditions and environmental problems.

318. Russia and Its Neighbors (3)

Prerequisite: GE Foundation requirement.

Systematic and regional study of the physical, economic and cultural geography of the countries of the former Soviet Union.

319I. International Development (3)

Prerequisites: GE Foundation requirement, one Explorations course, upper-division standing.

Theoretical and practical analysis of social, political, and economic development and alternative developmental models. Contemporary and historical comparisons of how "developed" and "developing" areas of the world have confronted various economic, social, and political challenges.

Same course as I/ST 319I. Not open for credit to students with credit in I/ST 319I.

321. Geography of Mexico, Central America and the Caribbean (3)

Prerequisites: GE Foundation requirements.

Examines Mexico, Central America and the Caribbean from a regional geographical perspective. Utilizing both historical and contemporary points of view, it identifies and interprets the distinguishing environmental, demographic, cultural, social, economic, and geopolitical characteristics of the region.

Not open to students who have taken GEOG 320I. Letter grade only (A-F).

322. Geography of South America (3)

Prerequisites: GE Foundation requirements.

Examines South American from a regional geographical perspective. Utilizing both historical and contemporary points of view, it identifies and interprets the distinguishing environmental, demographic, cultural, social, economic, and geopolitical characteristics of the region.

Not open for credit to students who have credit in GEOG 320I. Letter grade only (A-F).

340. Environmental Geography (3)

Prerequisite: GEOG 130 or GEOG 140 or GEOL 280.

Examines interrelationships between society and land and water environments. Focuses on critical analysis of contemporary environmental issues in American West, including both physical and human factors.

Letter grade only (A-F).

352. Geography of Travel and Tourism (3)

Historical and contemporary spatial characteristics and dimensions of tourism activity. Tourism, destinations, travel patterns, environmental and economic impacts, and analysis of regional tourism patterns.

355I. International Environmental Issues (3)

Prerequisites: GE Foundation requirement, one Explorations course, and upper division standing.

Examines the deterioration, destruction, maintenance and restoration of environmental systems and resources. Identifies and analyzes major environmental problems that have international dimensions. Investigates ongoing and potential efforts to resolve them.

Same course as I/ST355I. Not open for credit to students with credit in I/ST 355I.

357I. Sacred Geographies (3)

Prerequisites: Completion of GE Foundation, one or more Exploration courses and upper division status.

Comparative exploration of sacred spaces across the world. Examines the social, political, and religious processes that create places of ritual and reverence by linking the individual to the communal experience of place.

Letter grade only (A-F).

360. Human Geography (3)

Prerequisites: GEOG 100, 120, or 160.

Introduces breadth of research across subfields of human geography through examination of various contemporary topics, such as migration, globalization, cultural landscapes, urbanization, politics, agricultural practices, and development.

Letter grade only (A-F).

380. Map Interpretation and Analysis (3)

Interpretation and understanding of maps as graphic communication with emphasis on critical analysis, symbolization, scale, projection.

(Lecture, problems 3 hours)

381. Maps and Civilization (3)

Maps and Civilization examines the role maps play in different cultures. Drawing upon the disciplines of cartography, geography, history, art, and science, it explores maps in Western and non-

Western cultures; conventional and alternative cartographies; and mapping activities of men and women.

Letter grade only (A-F).

400. Geographical Analysis (4)

Prerequisite: GEOG 200 or any introductory statistics course or consent of instructor.

Examination of advanced quantitative techniques employed by geographers in analysis of spatial phenomena. Topics covered include multivariate statistical methods as models for geographical analysis. Emphasis on the application of these techniques in geographical research, using statistical software.

(3 hours seminar and 2 hours laboratory).

402. Qualitative Geographic Analysis (4)

Prerequisite: GEOG 360 or consent of instructor.

Examines qualitative geographic methodologies and methods through the theoretical frameworks that geographers employ in their research. Introduces survey, interview, and focus group techniques, textual analysis, participant observation, and ethnography. Includes a hands-on research experience.

(4 hours discussion). Letter grade only (A-F).

440./540. Land and Water Resources (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Examines interrelationships between land and water as components of the human environment. Focus is on management, use and human impacts, with an emphasis on water resources.

Letter grade only (A-F). (Lecture-discussion)

441./541. The Geography of Mars (4)

Prerequisite/Corequisite: GEOG 130 or 140 or GEOL 102 and GEOG 280 or consent of instructor.

Introduction to the geography of Mars, providing a physical regionalization of the Martian surface and climate and an understanding of underlying tectonic, geomorphic, and meteorological processes. The course reviews remote sensing fundamentals and data sources for geographical analysis of Mars.

Letter grade only (A-F). (3 hours seminar, 2 hours activity).

442. Biogeography (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Theories and methods of mapping plant and animal distributions, spatial interaction of species with environmental limiting factors, and the human role in temporal and spatial variation of ecosystems.

Letter grade only (A-F). (Lec-problems; field experience)

443. Watersheds: Processes and Management (4)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Basic principles of watershed hydrology, including hydrologic processes, runoff behavior, precipitation patterns and watershed models. Evaluation of water quality elements such as nonpoint source pollution. Laboratory and field exercises will include hydrologic data collection, processing and evaluation.

Letter grade only (A-F). (3 hours Lecture, 2 hours Laboratory)

444. Climatology (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Descriptive and explanatory analysis of elements and controls of climate. Climates of world emphasis on California and North America.

Letter grade only (A-F). (Lecture, problems 3 hours)

445. Palaeoclimatology (4)

Prerequisites: ESP 200 or GEOG 340 and GEOG 200 (or equivalent) or consent of instructor.

Methods and theories used in reconstructing and dating climates of the past 2 million years, using such proxies as sediment sequences, packrat middens, ice cores, tree rings, corals, and documentary data. Causes of environmental change and human interactions are analyzed.

Letter grade only (A-F). (Lecture 3 hours, lab activities 2 hours)

446. Land Use Planning (3)

Examines land use planning, issues and responses concerning land use; coastal zones; environmental resource management; urban growth; design and aesthetics; planning parameters for residences, parks, conservation areas, shopping centers, and industrial areas; urban and regional revitalization, and transportation.

Not open for credit to students with credit in U/ST 446

447. Landscape Restoration (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Explores philosophical, political, and ecological issues associated with restoring degraded landscapes. Analysis of theoretical works, scientific research, planning documents and case studies. Examines potential for restoring natural landscapes.

Letter grade only (A-F).

448./548. Environmental Assessment (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Introduction to the policy framework and techniques for assessing impacts on various aspects of the biological and physical environment. The course is a survey of multiple topics involving various types of environmental assessment, including data collection, processing and evaluation.

Letter grade only (A-F). (Undergraduates register in GEOG 448; graduates register in 548.) (3 hours lecture, activity)

452. Geography of the Global Economy (3)

Prerequisite: GEOG 360 or consent of instructor.

Examines globalization processes that create integration of world's economic, political, and cultural systems, but operate unevenly across space and time. Focuses on impact on people and places around the world.

(Lecture, problems) Letter grade only (A-F).

455. People As Agents of Environmental Change (3)

Prerequisite: GEOG 340 or consent of instructor.

Examines human impact on biophysical environment from long-term and global perspective. Explores regional and global implications of these changes on people and environments. Examines different theories for explaining major human forces that drive environmental change.

Letter grade only (A-F). (Lecture 3 hours)

458./558. Hazards and Risk Management (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Broad overview of hazards and disasters, whether natural or technological, emphasizing the physical and social dynamics that interact to produce hazard, the spatial and temporal distributions of various hazards, and policy options for disaster preparation, loss reduction, and community resilience.

Letter grade only (A-F).

460. Population Geography (3)

Prerequisite: GEOG 360 or consent of instructor.

Introduction to geographic study of population. Includes growth and distribution of world population; results of changing births, deaths, and migration; variations in population composition; related problems such as food supplies and environmental deterioration.

Letter grade only (A-F).

462. Feminist Geography (3)

Prerequisite: GEOG 360 or consent of instructor.

An introduction to feminist geography. Critically engage with international research on topics such as geographies of emotion, care and health; femininities and masculinities; feminist post-structural theories and philosophies; and feminist methodological approaches to geographical research.

Letter grade only (A-F). Same course as WGSS 462. Not open for credit to students with credit in WGSS 462

Geography Courses (GEOG)

464. Urban Geography (3)

Prerequisite: GEOG 100, 120, or 160 or consent of instructor; GEOG 360 recommended.

Examines the theories, concepts, and techniques that geographers use to explain the origin, growth, functions, and character of cities, including their location, internal organization, economic functions, transportation systems, social and cultural processes, and built and physical environments.

Not open for credit for students with credit in GEOG 366. Letter grade only (A-F).

465./565. Social Geography (3)

Prerequisite: GEOG 360 or consent of instructor.

The geographies of society, including various methodological and theoretical approaches to social geography. Topics may include socio-spatial inequality, crime, housing, religious systems, medical and health geography, feminist geography, the geography of sexuality, the geography of race, or poststructuralist geography.

Letter grade only (A-F).

467./567. Urban Geography: Metropolitan Problems (3)

Prerequisite: GEOG 360 or consent of instructor.

Geographic components of metropolitan problems and their solutions. Problems related to transportation systems, housing, evolution of ghettos, urban perception and behavioral patterns will be discussed in terms of theoretical and practically applied urban planning solutions.

Letter grade only (A-F). (Lecture, problems 3 hrs)

468. World Cities/Cities of the World (3)

Prerequisite: GEOG 360 or consent of instructor.

Comparative examination of major world cities within the context of their regional and national urban systems. Compares and contrasts cities of developed and developing worlds. Explores divergent urbanization patterns and world city development in major cultural realms.

Letter grade only (A-F).

470. Political Geography (3)

Prerequisite: GEOG 360 or consent of instructor.

Comparative study of the earth's politically organized regions and related systems. Varied approaches are explored, such as power analysis, genetic analysis, and functional analysis of political units. Stresses political geographic concepts used in analyzing the viability of states and nations.

Letter grade only (A-F). (Lecture, problems)

471. Geographic Information Science (GIS) For Health (3)

Prerequisite: GEOG 200 or SOC 250 or equivalent.

An Introduction to the fundamentals of Geographic Information Science and systems (GIS) including concepts and skills in spatial reasoning and spatial thinking. Explores GIS in spatial query, problem analysis and decision support using health-related applications. Lecture/discussion and Laboratory (2 hours seminar, 2 hours computer laboratory)

Letter grade only (A-F). Same course as HCA 471. Not open for credit to students with credit in HCA 471.

473. Remote Sensing (4)

Prerequisites GEOG 200 (or equivalent) and GEOG 280 or consent of instructor.

Processing and interpretation of aerial photographs and digital satellite imagery. Topics include the electromagnetic spectrum, energy-matter interactions, sensor characteristics, and the acquisition, processing and interpretation of imagery for

applications including the analysis of vegetation dynamics, surface hydrology and urban environments.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

474. Introduction to Digital Image Processing (4)

Prerequisite: GEOG 473 or consent of instructor.

Provides a background to the principles and concepts of digital image processing and the extraction of information from digital satellite data with focus various enhancement and extraction techniques, specifically, within the visible and near-infrared portions of the electromagnetic spectrum.

Letter grade only (A-F). (Seminar 3 hours; Laboratory 2 hours).

475. Geographical Applications in Remote Sensing (4)

Prerequisites: GEOG 140, 160, 473, and 474.

Focuses on remote sensing applications. Students will be introduced to sophisticated imagery and analysis techniques, as applied to weather and fire modeling, arid lands environmental problems, or the urban environment.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

481. Geographic Information Science for Natural Sciences (4)

Prerequisites: Junior/Senior/Graduate standing; GEOG 140 or BIOL 153 or GEOL 102.

Introduces fundamentals of geographic information science and systems (GIS) to non-geography students, including concepts and skills in spatial reasoning and spatial thinking. Explores GIS in spatial query, problem analysis and decision support, using biologic, geologic, and ecologic applications.

(2 hours of seminar, 2 hours of computer laboratory)

482. Map Design for Presentation and GIS (4)

Prerequisites: GEOG 200 or equivalent and 380 or consent of instructor.

Theory and techniques in the creation of thematic maps including design, generalization, and symbolization, with an emphasis on computer presentation methods.

(Seminar 3 hours, laboratory 2 hours).

484./584. Advanced Concepts in Presentation Cartography (4)

Prerequisite: GEOG 482 or consent of instructor.

Advanced theory and techniques for presentation cartography including communication, visualization, terrain representation, animation, and color.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

485./585. Principles of Geographic Information Science (4)

Prerequisites: GEOG 200 or equivalent and GEOG 280; or consent of instructor.

Fundamental concepts and techniques of geographic information systems and science are introduced. Emphasizes spatial analyses to address spatial questions.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

486. Field Methods in Landscape Analysis (4)

Prerequisite: GEOG 340 or consent of instructor.

Introduction to field techniques, including formulation of field plans, recording direct observation, field mapping, sampling techniques, interviewing, and organizing and evaluating data for presentation.

Letter grade only (A-F). (Lecture-discussion 1 hour, supervised field work 6 hours)

487A. Applications of Geographic Information Science (GIS): Environment and Natural Resources (4)

Prerequisites: GEOG 485 or 585 or consent of instructor.

Use of Geographic Information Systems and science for spatial query, problem analysis, spatial modeling and decision support in

natural resource assessment. Students with background in GIS are introduced to environmental applications. Emphasizes use of raster GIS.

(3 hours Lecture, 2 hours Laboratory)

487B. Applications of Geographic Information Science (GIS): Urban and Economic (4)

Prerequisites: GEOG 485 or 585 or consent of instructor.

Builds on introductory knowledge of Geographic Information Systems, spatial analysis and spatial data and focuses on urban and economic applications and analyses.

(3 hours Lecture, 2 hours Laboratory)

488./588. Advanced Topics in Geographic Information Science (4)

Prerequisites: GEOG 485 and one of the following: GEOG 487A, 487B, 482, 484; or consent of instructor.

Advanced concepts in geographic information systems and techniques are introduced and their applications in geography and related disciplines explored.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

492. Internship in Applied Geography (3)

Prerequisites: Geography major with upper division or graduate standing, prior geography coursework or equivalent recommended, and consent of instructor.

Community-based placement to enhance professional preparation in applied geography.

May be repeated to a maximum of 6 units; a second semester experience shall differ substantially from first semester experience. Undergraduates may elect Credit/No Credit or letter grading; letter grading only is required for graduate students. Student will work under faculty supervision.

494. Selected Topics in Geography (1-3)

Prerequisite: Consent of instructor.

Application of geographical concepts and methodology to selected contemporary problems.

May be repeated to a maximum of 6 units with consent of department chair. Topics announced in the *Schedule of Classes*. May not be credited toward the major in geography without written department consent in advance of enrollment.

495. Field Training in Geospatial Techniques (1-6)

Prerequisites: GEOG 140, 473, 485 or consent of instructor

In this advanced applied geography course students will enhance their knowledge of geospatial techniques (geographic information science, remote sensing) and apply these skills to address geographic and spatial questions through a combination of intense hands-on field work and data analyses.

Letter grade only (A-F). (3 - 18 hours Activity)

497. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Individually directed studies of special problems in geography.

May be repeated to a maximum of 6 units with consent of department chairperson. May not be credited toward the major in geography without written department consent in advance of enrollment.

GRADUATE LEVEL

500. Multivariate Geographical Analysis (4)

Prerequisites: GEOG 200 or any introductory statistics course or consent of instructor.

Examination of advanced multivariate statistical techniques employed by geographers in analysis of spatial phenomena. Emphasis on applications in geographical research, using spreadsheet and statistical software.

Letter grade only (A-F). (3 hours seminar, 2 hours laboratory)

502. Qualitative Geographic Analysis (4)

Prerequisite: GEOG 360 or consent of instructor.

Examines qualitative geographic methodologies and methods through the theoretical frameworks that geographers employ in their research. Introduces survey, interview, and focus group techniques, textual analysis, participant observation, and ethnography. Includes a hands-on research experience.

(4 hours discussion). Letter grade only (A-F).

540./440. Land and Water Resources (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Examines interrelationships between land and water as components of the human environment. Focus is on management, use and human impacts, with an emphasis on water resources.

Letter grade only (A-F). (Lecture-discussion)

541./441. The Geography of Mars (4)

Prerequisite/Corequisite: GEOG 130 or 140 or GEOL 102 and GEOG 280 or consent of instructor, and graduate student standing.

Introduction to the geography of Mars, providing a physical regionalization of the Martian surface and climate and an understanding of underlying tectonic, geomorphic, and meteorological processes. The course reviews remote sensing fundamentals and data sources for geographical analysis of Mars.

Letter grade only (A-F). (3 hours seminar, 2 hours activity)

543. Watersheds: Processes and Management (4)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Basic principles of watershed hydrology, including hydrologic processes, runoff behavior, precipitation patterns and watershed models. Evaluation of water quality elements such as nonpoint source pollution. Laboratory and field exercises will include hydrologic data collection, processing and evaluation.

Letter grade only (A-F). (3 hours Lecture, 2 hours Laboratory)

545. Palaeoclimatology (4)

Prerequisites: ESP 200 or GEOG 340 and 200 (or equivalent) or consent of instructor.

Reconstructing and dating past climates, climate changes, and their environmental impacts, using such proxies as sediment sequences, packrat middens, ice cores, tree rings, corals, and documentary data. Earth's changing orbital parameters, internal forcing mechanisms, and human factors are analyzed.

Letter grade only (A-F). (Lecture 3 hours, lab activities 2 hours)

548./448. Environmental Assessment (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Introduction to the policy framework and techniques for assessing impacts on various aspects of the biological and physical environment. The course is a survey of multiple topics involving various types of environmental assessment, including data collection, processing and evaluation. (Undergraduates register in GEOG 448; graduates register in 548).

Letter grade only (A-F). (3 hours lecture, activity)

558./458. Hazards and Risk Management (3)

Prerequisite: ESP 200 or GEOG 340 or consent of instructor.

Broad overview of hazards and disasters, whether natural or technological, emphasizing the physical and social dynamics that interact to produce hazard, the spatial and temporal distributions of various hazards, and policy options for disaster preparation, loss reduction, and community resilience.

Letter grade only (A-F).

565./465. Social Geography (3)

Prerequisite: GEOG 360 or consent of instructor.

The geographies of society, including various methodological and theoretical approaches to social geography. Topics may include socio-spatial inequality, crime, housing, religious systems, medical and health geography, feminist geography, the geography of sexuality, the geography of race, or poststructuralist geography.

Letter grade only (A-F).

Geography Courses (GEOG)

567./467. Urban Geography: Metropolitan Problems (3)

Prerequisite: GEOG 360 or consent of instructor.

Geographic components of metropolitan problems and their solutions. Problems related to transportation systems, housing, evolution of ghettos, urban perception and behavioral patterns will be discussed in terms of theoretical and practically applied urban planning solutions.

(Lecture, problems 3 hrs) Letter grade only (A-F).

575. Geographical Applications in Remote Sensing (4)

Prerequisites: GEOG 140, 160, 473, and 474.

Focuses on remote sensing applications. Students will be introduced to sophisticated imagery and analysis techniques, as applied to weather and fire modeling, arid lands environmental problems, or the urban environment.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

584./484. Advanced Concepts in Presentation Cartography (4)

Prerequisite: GEOG 482 or consent of instructor.

Advanced theory and techniques for presentation cartography including communication, visualization, terrain representation, animation, and color.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

585./485. Principles of Geographic Information Science (4)

Prerequisites: GEOG 200 or equivalent and GEOG 280 or consent of instructor

Fundamental concepts and techniques of geographic information systems and science are introduced. Emphasizes spatial analyses to address spatial questions.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

586. Field Methods in Landscape Analysis (4)

Prerequisite: GEOG 340 or consent of instructor.

Introduction to field techniques, including formulation of field plans, recording direct observation, field mapping, sampling techniques, interviewing, and organizing and evaluating data for presentation.

(Seminar 1 hour; Field Work 6 hours). Letter grade only (A-F).

587A. Applications of Geographic Information Science (GIS): Environment and Natural Resources (4)

Prerequisites: GEOG 485 or 585 or consent of instructor.

The use of Geographic Information Systems and science for spatial query, problem analysis, spatial modeling and decision support in natural resource assessment. Students who possess a background in GIS are introduced to environmental applications. Emphasizes the use of raster GIS.

(3 hours Lecture, 2 hours of Laboratory)

587B. Applications of Geographic Information Science (GIS): Urban and Economic (4)

Prerequisite: GEOG 485 or 585 or consent of instructor.

Builds on introductory knowledge of Geographic Information Systems, spatial analysis and spatial data and focuses on urban and economic applications and analyses.

(3 hours Lecture, 2 hours Computer Laboratory)

588./488. Advanced Topics in Geographic Information Science (4)

Prerequisites: GEOG 485/585 and one of the following: 487A/587A, 487B/587B, 482, 484; or consent of instructor.

Advanced concepts in geographic information systems and

techniques are introduced and their applications in geography and related discipline explored.

(Seminar 3 hours; Laboratory 2 hours). Letter grade only (A-F).

596. Geographic Thought and Literature (3)

Prerequisite: Consent of instructor.

Proseminar in the history of 20th century Anglophone geographic thought with emphasis on the theoretical and interdisciplinary perspectives current in the field today.

Letter grade only (A-F).

640. Seminar in Physical Geography (3)

Prerequisite: Consent of instructor.

Physical/environmental issues and problems.

May be repeated to a maximum of 6 units with consent of departmental advisor. Letter grade only (A-F).

650. Seminar in Cultural Geography (3)

Prerequisite: Consent of instructor.

Systematic investigation of human occupancy in its varied environmental and regional settings.

May be repeated to a maximum of 6 units with consent of department advisor. Letter grade only (A-F).

666. Seminar in Urban Geography (3)

Prerequisite: Consent of instructor.

Geographic concepts and techniques of research applied to specific urban areas.

May be repeated to a maximum of 6 units with consent of department advisor. Letter grade only (A-F).

680. Seminar in Geospatial Science (3)

Prerequisite: Consent of instructor.

Application of geographic concepts and methodology to selected cartographic, GIS, remote sensing, and spatial analytic problems.

May be repeated to a maximum of 6 units with consent of departmental advisor. Letter grade only (A-F).

696. Seminar in Geographical Research Methods (3)

Prerequisites: GEOG 596, graduate standing in geography, and consent instructor.

Critical survey of contemporary methodologies available for framing research in geography, emphasizing the connection between research models, research questions, and the selection and limitations of particular methods, techniques, and data.

Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Consent of instructor.

Research in geography supervised on an individual basis.

Letter grade only (A-F).

698. Thesis (1-6)

Prerequisite: Consent of instructor.

Planning, preparation and completion of thesis for the master's degree.

Urban and Regional Studies Courses (U/ST)

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course.

3011. The Urban Scene (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Analysis of urban life-styles; land use and design; population trends; conflicts in the increasingly multicultural urban setting; housing and community development; suburban-central city relationships; human utilization of urban life spaces; opinions of landmark urbanists; and future trends.

Same course as GEOG 3011. Not open for credit to students with credit in GEOG 3011 or SOC 419.

Geographic Information Science Courses (GISC)

601. Introduction to Spatial Concepts (1)

Provides requisite theoretical and conceptual foundations in geographic information science.

Letter grade only (A-F). A grade of "C" or better is required for students to progress in the MS GISci program.

602. GIS Applications (3)

Prerequisites: GISC 601

Explores use of geographic information systems for spatial query, analysis, and modeling in natural and human environments. Focuses on analytic techniques and software tools for GIS-based management and problem solving.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

603. Cartographic Visualization (3)

Prerequisites: GISC 601 or consent of advisor

Provides advanced theory and techniques for presentation cartography including communication, visualization, terrain representation, animation, and color.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

604. GIS Data and Databases (3)

Prerequisites: GISC 601 or consent of advisor

Components of GIS data, geospatial databases and database design are reviewed. Topics include topology, data storage, data management and mechanisms for disseminating spatial data, including server technologies.

Letter grade only (A-F). 2 hours lecture, 2 hours lab)

605. GIS Programming (3)

Prerequisites: GISC 601

Provides training in the use of GIS-relevant programming languages. Students will learn fundamentals of object oriented programming, application development, basic coding, and will complete a project where they develop a GIS utility.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

606. Applied Remote Sensing (3)

Prerequisites: GISC 601 or consent of advisor

Principles and concepts of remote sensing and digital image processing are presented and applied. Students extract information from satellite and other data sources, focusing on enhancement and extraction techniques within the visible and near-infrared portions of the electromagnetic spectrum.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

607. Project Orientation and Support (1)

Prerequisites: GISC 601, 602, 603, 604, 605, 606 and 3 CCPE Science Plus courses, or consent of advisor

Introduces team-based research projects including a review of various research methods, responsible research conduct and project deliverables.

Letter grade only (A-F). (1 hour lecture) A grade of "C" or better is required for students to progress to GISC 608.

608. Applied Project (4)

Prerequisites: GISC 601, 602, 603, 604, 605, 606, a grade of "C" or better in 607, 3 CCPE Science Plus courses, or consent of advisor

Students demonstrate analytical, technical, business and interpersonal competencies acquired through the program in a team-based learning experience. Teams collaborate on an applied research project supervised by faculty and the project internship sponsor. A spatial problem is addressed and deliverable(s) produced.

Letter grade only (A-F).

GEOLOGICAL SCIENCES

College of Natural Sciences and Mathematics

Department Chair: Robert D. Francis

Department Office: Hall of Science (HSCI) 322
Telephone/FAX: (562) 985-4809 / (562) 985-8638
Website: <http://geology.cnsm.ad.csulb.edu/index-shtml>

Faculty: Matthew Becker, Richard J. Behl, Stanley C. Finney, Robert D. Francis, Roswitha B. Grannell, Gregory J. Holk, Thomas Kely, Nathan Onderdonk, Lora Stevens

Administrative Support Coordinator: Margaret Costello

Advisors:

Undergraduate: Thomas Kely
Credential: James Kiesel, Tim Williamson
Graduate: Gregory J. Holk

Students desiring information should contact the Department Office for referral to one of the faculty advisors.

Career Possibilities

Geologist • Geophysicist • Hydrologist • Mineralogist • Paleontologist • Seismologist • Geophysical Prospector • Laboratory Assistant • Soils Engineer • Stratigrapher • Crystallographer • Geodesist • Environmental Analyst • Oceanographer • Teacher • Petrologist • Ecologist • Geochemist (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.) Various entry-level trainee positions in business and industry are available for graduates regardless of academic discipline.

Introduction

The Geological Sciences includes the study of the solid earth, the hydrosphere, and the atmosphere. All Earth Science and Geology majors must contact the Undergraduate Advisor prior to the first semester in residence.

The Geological Sciences Department participates in the Southern California Marine Institute for our marine geology, oceanography, seismic studies. See the Ocean Studies Institute section of this *Catalog* for additional information.

Academic Advising and Facilitated Enrollment into Classes

All entering students who declare a major in a degree program offered by this department need to contact the College of Natural Sciences and Mathematics' Academic Advising Center (HSCI 164) and participate in the College's Science Safari to Success (for first time freshmen) or EONS (Enrollment and Orientation in the Natural Sciences and Mathematics for transfer students) Program. These programs are held in July for those starting in the Fall Semester and in January for those starting in the Spring Semester. Department advisors will be available to provide an overview of the students' chosen baccalaureate degree program, to assist with academic advisement, to provide information on the many career opportunities available, and to aid students in enrolling in classes. Contact the Jensen Student Access to Sciences and Mathematics Center (HSCI 164) or department office for additional information.

Concurrent and/or Summer Enrollment at Another College

Students who wish to take course work at a community or another college to meet curricular requirements while enrolled as undergraduates in the College of Natural Sciences and Mathematics must petition the appropriate Department for prior approval to earn credit for specific courses. This policy applies to concurrent enrollment or summer enrollment. University policy must also be complied with; see 'Concurrent Enrollment' and 'Transfer of Undergraduate Credit' in this *Catalog*. Courses not receiving prior approval will not be accepted for credit by the Department.

Undergraduate Programs

Bachelor of Science in Geology (120-126 units)

The bachelor of science degree program is intended to provide a thorough background in the geological sciences for those planning to pursue careers in industry or to do graduate study. The program explores the fundamental geological processes, cultivates skills in integrative three-dimensional geological thinking, provides laboratory and field experience, and stimulates interest in the many subdisciplines of the geological sciences.

Within the broad field of geology, students may elect to follow any one of five emphases: General Geology, Petroleum Geology, Stratigraphy/Sedimentology, Geochemistry/Mineralogy-Petrology, and Structural Geology/Tectonics. Each student should contact the undergraduate advisor for assistance in planning the degree program.

Geology majors must receive a grade of "C" or better in all courses required for the major. A minimum of 120-126 units is required for the bachelor of science degree in the various emphases in geology. Emphases other than General Geology are based on the General Geology emphasis, but have structured electives and other variations from that plan. Transfer students should attempt to fulfill, prior to transferring, the appropriate lower division curricular requirements as outlined in later sections. Particular attention should be paid to fulfilling the lower division math, chemistry, physics, and biology requirements.

Lower Division:

Take all of the following

GEOL 102 General Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 104 Geology Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

- GEOL 240 Historical Geology (4)
Prerequisite: GEOL 106 or both GEOL 102, 104.
- GEOL 250 Introduction to Field Petrology and Geological Field Techniques (3)
Prerequisites: GEOL 102 with 104 or 105; or GEOL 106; all with grades of "C" or better. Corequisite: GEOL 240.
- GEOL 273 Computer Statistical Methods in Geology (4)
Prerequisites: GEOL 240, MATH 117 or 122. An elementary background in computers is recommended.
- BIOL 200 General Biology (4)
Prerequisite: G.E. Foundation requirements.
- CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).
- CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.
- MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.
- PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.
- PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Upper Division:

Take all of the following

- GEOL 322 Crystallography, Mineralogy and Optical Methods (5)
Prerequisites: GEOL 250; CHEM 101 or 111A.
- GEOL 341 Paleontology and Biostratigraphy (4)
Prerequisites: GEOL 240 and BIOL 200.
- GEOL 350 Spring Field Geology (2)
Prerequisites: GEOL 250 and 443 with grades of "C" or better. Prerequisite/Corequisite: GEOL 433.
- GEOL 428 Igneous and Metamorphic Petrology and Petrography (4)
Prerequisites: GEOL 322; CHEM 111A, B.
- GEOL 433 Structural Geology (4)
Prerequisites: GEOL 250, 322; PHYS 151.
- GEOL 443 Stratigraphy/Sedimentology (4)
Prerequisites: GEOL 240, 322.
- GEOL 450 Summer Field Geology (4)
Prerequisites: GEOL 350, 428, 433, and 443.
- GEOL 460 Introduction to Geophysics (3)
Prerequisites: PHYS 151, 152; MATH 123; and GEOL 273.
- GEOL 461 Introduction to Geochemistry (3)
Prerequisites: CHEM 111A,B and MATH 123.

Additional required courses for the various emphases are listed below.

- General Geology (120 units):
Six units electives (normally at upper division) approved in advance by the undergraduate advisor.
- Petroleum Geology (123 units):
MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

- GEOL 420 Geowriting (3)
Prerequisites: Upper division or graduate standing in the College of Natural Sciences and Mathematics; ENGL 100 or equivalent; a course in geology; consent of instructor.

- GEOL 471 Petroleum Geology & Well Log Analysis (4)
Prerequisites: GEOL 240, 443.

- Stratigraphy/Sedimentology (122 units):
GEOL 364 Intro to Geological Oceanography (2)
Prerequisites: GEOL 102 or 160; and CHEM 111A or MATH 122, or consent of instructor.
GEOL 420 Geowriting (3)
Prerequisites: Upper division or graduate standing in the College of Natural Sciences and Mathematics; ENGL 100 or equivalent; a course in geology; consent of instructor.
GEOL 424 Sedimentary Petrology (4)
Prerequisites: GEOL 322 and 443.
- Geochemistry/Mineralogy-Petrology (126 units):
MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.
CHEM 371A Physical Chemistry: Thermodynamics and Kinetics (3)
Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), MATH 224 (may be taken concurrently).
CHEM 371B Physical Chemistry: Quantum Mechanics and Spectroscopy (3)
Prerequisites: CHEM 251, MATH 123, PHYS 152 (all with a grade of "C" or better), and MATH 224 (may be taken concurrently).
- Structural Geology/Tectonics (122 units):
GEOL 430 Seminar in Structural Geology and Tectonics (3)
Prerequisite: GEOL 433.
GEOL 462 Physics and Chemistry of the Earth's Interior (3)
Prerequisites: GEOL 240, 428; PHYS 152.
MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.
MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123. Not open to Freshmen.

Minor in Geology

The Minor in Geology is available to any non-Geology major.

Twenty units in geology courses that must include:

Lower Division:

Take all of the following

- GEOL 102 General Geology (3)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.
- GEOL 104 Geology Laboratory (1)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.
- GEOL 240 Historical Geology (4)
Prerequisite: GEOL 106 or both GEOL 102, 104.

Upper Division:

Take at least 9 additional units of geology approved in advance by the Undergraduate Advisor.

Bachelor of Science in Earth Science (122-129 units)

The Earth Science program prepares students to understand the natural environment, earth resources, land and ocean use, pollution, geology of the sea floor, and other areas of critical importance to present and future world problems. Career-oriented interdisciplinary emphases are offered in Geohydrology/Environmental Geology, Engineering Geology, Exploration Geophysics, and Marine Geology/Oceanography.

Earth Science majors must receive a grade of "C" or better in all courses required for the major. As outlined below, a minimum of 122 units is required for the various emphases in Earth Science.

Lower Division:

Take all of the following

GEOL 102 General Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 104 Geology Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

GEOL 240 Historical Geology (4)

Prerequisite: GEOL 106 or both GEOL 102, 104.

GEOL 250 Introduction to Field Petrology and Geological Field Techniques (3)

Prerequisites: GEOL 102 with 104 or 105; or GEOL 106; all with grades of "C" or better. Corequisite: GEOL 240.

GEOL 273 Computer Statistical Methods in Geology (4)

Prerequisites: GEOL 240, MATH 117 or 122. An elementary background in computers is recommended.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Additional required courses for the various emphases are listed below.

Upper Division:

Take all of the following

GEOL 322 Crystallography, Mineralogy and Optical Methods (5)

Prerequisites: GEOL 250; CHEM 101 or 111A.

GEOL 350 Spring Field Geology (2)

Prerequisites: GEOL 250 and 443 with grades of "C" or better. Prerequisite/Corequisite: GEOL 433.

GEOL 428 Igneous and Metamorphic Petrology and Petrography (4)

Prerequisites: GEOL 322; CHEM 111A, B.

GEOL 433 Structural Geology (4)

Prerequisites: GEOL 250, 322; PHYS 151.

GEOL 443 Stratigraphy/Sedimentology (4)

Prerequisites: GEOL 240, 322.

GEOL 460 Introduction to Geophysics (3)

Prerequisites: PHYS 151, 152; MATH 123; and GEOL 273.

Additional required courses for the various emphases are listed below.

1. Geohydrology/Environmental Geology (122 units):

C E 205 Analytical Mechanics I (Statics) (3)

Prerequisite: PHYS 151. Prerequisite/Corequisite: MATH 123.

C E 335 Fluid Mechanics (3)

Prerequisites: MATH 224 and C E 205.

C E 336 Fluid Mechanics Laboratory (1)

Prerequisite: ENGL 100 or equivalent. Prerequisite or corequisite: C E 335.

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

ES P 300I Environmental Law and Policy (3)

Prerequisites: GE Foundation requirements; ECON 100 and 101, or ECON 300; POSC 100; and upper division standing.

GEOL 450 Summer Field Geology (4)

Prerequisites: GEOL 350, 428, 433, and 443.

GEOL 461 Introduction to Geochemistry (3)

Prerequisites: CHEM 111A,B and MATH 123.

GEOL 477 Hydrogeology (3)

Prerequisites: GEOL 102, 104; CHEM 111B; PHYS 152; MATH 123.

MICR 200 General Microbiology for Health

Professionals (4)

Prerequisites: CHEM 111A or 140 with a grade of "C" or better and GE Foundation requirements.

2. Engineering Geology (129 units):

C E 205 Analytical Mechanics I (Statics) (3)

Prerequisite: PHYS 151. Prerequisite/Corequisite: MATH 123.

C E 345 Geotechnical Engineering I (3)

Corequisites: MAE 373; GEOL 370. Prerequisite: Consent of Department Undergraduate Advisor.

C E 346 Geotechnical Engineering Laboratory (1)

Prerequisite: ENGL 100 or equivalent. Corequisite: CE 345.

C E 445 Geotechnical Engineering II (3)

Prerequisites: CE 345, 346.

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

GEOL 444 Engineering Geology (4)

Prerequisites: GEOL 250, 273, 322; MATH 122, 123; CHEM 111A,B; PHYS 151, 152.

GEOL 450 Summer Field Geology (4)

Prerequisites: GEOL 350, 428, 433, and 443.

GEOL 477 Hydrogeology (3)

Prerequisites: GEOL 102, 104; CHEM 111B; PHYS 152; MATH 123.

MAE 373 Mechanics of Deformable Bodies (3)

Prerequisite: CE 205.

3. Exploration Geophysics (126 units):

BIOL 200 General Biology (4)

Prerequisite: G.E. Foundation requirements.

GEOL 462 Physics & Chemistry of Earth's Interior (3)

Prerequisites: GEOL 240, 428; PHYS 152.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

MATH 370A Applied Mathematics I (3)

Prerequisites: MATH 123. Not open to Freshmen.

PHYS 310 Analytic Mechanics I (3)

Prerequisite: PHYS 151. Corequisite: MATH 364A or 370A.

PHYS 340A Electricity and Magnetism I (3)
Prerequisites: PHYS 152, 310. Prerequisite/Corequisite:
MATH 370A or 364A.

Take 8 units in consultation with undergraduate advisor

4. Marine Geology/Oceanography (122 units):
- BIOL 200 General Biology (4)
Prerequisite: G.E. Foundation requirements.
 - CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.
 - GEOL 341 Paleontology and Biostratigraphy (4)
Prerequisites: GEOL 240 and BIOL 200.
 - GEOL 364 Intro to Geological Oceanography (2)
Prerequisites: GEOL 102 or 160; and CHEM 111A or MATH 122, or consent of instructor.
 - GEOL 461 Introduction to Geochemistry (3)
Prerequisites: CHEM 111A,B and MATH 123.
 - GEOL 465 Physical and Chemical Oceanography (3)
Prerequisites: CHEM 111B; PHYS 100B, and upper division standing in the College of Natural Sciences and Mathematics or Engineering.
 - GEOL 466 Oceanography Lab and Ocean Studies (1)
Prerequisite/Corequisite: GEOL 465.
 - GEOL 496 Investigations in Geology and Other Earth Sciences (1-4)
Prerequisites: Senior standing in geology, earth science or related fields, completion of an upper division course in geology or earth science in the area of the topics chosen and approval of the topic chosen by the Geological Sciences faculty.

Geoscience Concentration

The Geosciences Concentration meets the subject matter competence requirement for the Single Subject Teaching Credential in Geosciences. Prospective students should consult the Single Subject Science Education Advisor in the Department of Science Education early to plan their program.

Requirements

Lower Division:

Take all of the following

- ASTR 100 Astronomy (3)
Corequisites: One course from General Education Category B.2 and ASTR 100L.
- BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.
- BIOL 212 Intro to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.
- BIOL 213 Introduction to Ecology and Physiology (4)
Prerequisites: BIOL 211, 212, CHEM 111B all with a grade of "C" or better.
- CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination . (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).
- CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

GEOL 102 General Geology (3)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 104 Geology Laboratory (1)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

GEOL 160 Introduction to Oceanography (3)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

GEOL 273 Computer & Statistical Methods in Geology (4)
Prerequisites: GEOL 240, MATH 117 or 122. An elementary background in computers is recommended.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Upper Division:

Take all of the following

- GEOL 341 Paleontology and Biostratigraphy (4)
Prerequisites: GEOL 240 and BIOL 200.
- GEOL 428 Igneous and Metamorphic Petrology and Petrography (4)
Prerequisites: GEOL 322; CHEM 111A, B.
- GEOL 433 Structural Geology (4)
Prerequisites: GEOL 250, 322; PHYS 151.
- GEOL 443 Stratigraphy/Sedimentology (4)
Prerequisites: GEOL 240, 322.
- GEOL 450 Summer Field Geology (4)
Prerequisites: GEOL 350, 428, 433, and 443.
- SCED 403 Integrated Science (3)
Prerequisites: Completion of all credential breadth requirements for the Single Subject Teaching Credential Program in Science, three-fourths of the credential specializations courses, and consent of instructor.

Single Subject Teaching Credential in Geosciences

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective Geosciences teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete many of the credential program courses, except for student teaching, as an undergraduate. Courses may also be started as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

The Geosciences Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

GRADUATE PROGRAMS

Master of Science in Geology

The Department of Geological Sciences offers a comprehensive program of courses coupled with appropriate thesis projects leading to the Master of Science in Geology. Within geology, students specialize in any of a number of sub-disciplines including engineering geology, environmental geochemistry, geology, hydrogeology, marine geology, mineralogy and petrology, paleontology, petroleum geology, sedimentology, stratigraphy, structural and field geology, and volcanology. In addition, a formal emphasis in geophysics is available. Students may include in their studies courses offered by other departments at CSULB.

Emphasis in Geophysics

The emphasis in geophysics is available for students wishing to specialize in the application of geophysical principles to the solution of problems in engineering geology, geohydrology, structural geology, tectonics, petroleum geology, and mineral exploration. Students are expected to have completed the equivalent of course work required for the B.S. in Earth Science, Geophysics emphasis, and additionally to complete M.S. requirements with a program of geophysical course work approved in advance by both the graduate advisor and a geophysics advisor. Appropriate B.S. programs which provide training suitable for completion of the M.S. in Geology, Geophysics Emphasis, include Civil and Electrical Engineering, Physics, Mathematics, and Geology in addition to Geophysics, although some deficiencies will exist in these alternate programs. Confer with the graduate advisor about this program.

Offshore Resources

The Department has access to an ocean-going research vessel, support staff, and dockside facilities of the Southern California Marine Institute (SCMI), a consortium of several California State University campuses, University of Southern California, and Occidental College.

Admission to the Program

The basic requirement for admission to the graduate program is possession of a bachelor's degree or equivalent in geology, or a closely related field. The final curriculum requirements for the Master of Science Degree are set by the Thesis Committee at Advancement to Candidacy, but the following undergraduate courses are considered an essential foundation for the program: (1) two courses in calculus, (2) two courses in general chemistry, (3) two courses in calculus-based physics, (4) a course in physical geology, (5) a course in historical geology, (6) mineralogy, (7) sedimentology/stratigraphy, (8) structural geology, (9) a course in field methods or a field camp. Students who are missing some of this course work may be admitted to the program but will be expected to remove deficiencies or present acceptable alternatives prior to Advancement to Candidacy. Students who are missing the general science and math requirements are recommended to complete an undergraduate degree in Geological Sciences or a closely related field before applying to the Graduate Program.

In addition to the above course work requirements, students are required to take the General test of the

Graduate Record Examination and to submit three letters of recommendation prior to entry.

Prospective graduate students in the geological sciences, including CSULB graduates, must formally apply for admission to CSULB as described previously in this Catalog and must also apply directly to the Department of Geological Sciences. All applicants must submit the following documents directly to the Department no later than April 1 for the fall semester or November 1 for the spring semester to receive full consideration for admission and financial support:

1. Department Application Form, available from the Department Office and on the Department's website;
2. Official transcripts of all college level academic work including that done at CSULB, in addition to those transcripts required for general graduate admission to CSULB;
3. Three letters of recommendation from persons familiar with the applicant's academic performance and research potential. Instructions, including forms to be used for these letters, are included in the Department application form, available from the Department's website;
4. Official reports of scores on the General test of the Graduate Record Examination.

A limited number of teaching and research assistantships are available to fund graduate studies in the Department of Geological Sciences. Applicants wishing to secure research assistantships are encouraged to make direct contact with faculty in their area of research interest.

Johnson-Conrey Graduate Fellowship

The Johnson-Conrey Graduate Fellowship is awarded to the most highly qualified incoming Geological Sciences graduate students each year. The Fellowship, which provides \$15,000 per year for two years, is competitive, and is awarded by the Department based on students' Application materials. Up to two Fellowships are awarded each year.

Initiation of Graduate Study

Students are responsible for all University and Department regulations governing master's degrees as outlined in this *Catalog*. The regulations governing the degree are those in effect at the time of advancement to candidacy. Until that time, students are governed by the most current *Catalog*. The advising of incoming graduate students is carried out by the graduate advisor, who explains the requirements of the program and carries out initial academic advising. It is required that the student arrange for this initial advising before or during his/her first semester.

All entering students must take GEOL 500 (Introductory Graduate Seminar) during their first Fall semester. This course consists of faculty-given seminars that introduce to new students the faculty and their research. One purpose of this is to encourage the student to find a thesis topic and thesis advisor by the end of the second semester. This is done with the help of the graduate advisor once the student has chosen a sub-discipline or option in which to specialize.

Students are required to maintain a GPA of 3.0 or higher at all times. If at any time a student's GPA drops below 3.0, that student will immediately be placed on probation for a maximum of two semesters. If the student does not bring the GPA back up to 3.0 during the probationary period, he/she will not be allowed to continue as a graduate student in this Department. In order for a student to regain status in the

Department after failing to maintain this academic standard, he/she must formally reapply for Department admission.

Advancement to Candidacy

A student must have been advanced to candidacy before initiating formal thesis research necessary to complete the M.S. degree. Students are expected to be advanced by the end of their fourth semester. Students may petition the Department for an extension of the four semester time limit on a semester by semester basis. Students should be aware, however, that they are at risk of not receiving credit toward their graduate programs for research started or courses taken prior to advancement. Students must have fulfilled the Graduation Writing Assessment Requirement (GWAR) and have advanced to candidacy before they apply for graduation. Requests to graduate must be received during the preceding May for Spring/Summer graduation or preceding December for Fall graduation. Filings after the deadlines are not accepted.

Before advancement can proceed, a thesis topic, committee, and graduate program consisting of at least 30 units (see below) must be established by the student and the prospective thesis committee chair. In addition, the following requirements must be met:

1. Prior completion of all deficiencies and incompletes. This includes courses required in the undergraduate major for the emphasis in which the student is pursuing graduate research, as well as additional courses specified by the thesis advisor.
2. Completion of six units of graduate level courses with a 3.0 or higher grade point average and attainment of a 3.0 or higher grade point average in all upper division and graduate work attempted, as well as in courses to be listed in the student's graduate academic program (see below).
3. A passing grade in GEOL 500.
4. Satisfying the Graduation Writing Assessment Requirement (GWAR).
5. Successful completion of an oral qualifying examination given by the student's thesis committee, and acceptance of a written proposal for the thesis research. The student's thesis topic will be the subject of the examination.

Once the above requirements are met, advancement to candidacy proceeds with approval of the committee, graduate advisor, Department Chair and Associate Dean in the College of Natural Sciences and Mathematics. After the student has been advanced, no course work in addition to that specified in the graduate program may be required of the student. In order for a student to change thesis chair/director, topic, committee members, or courses in the graduate program, approvals must be obtained. Under some circumstances this may mean that additional courses are required.

Requirements of Graduate Academic Program

The graduate academic program consists of at least 30 units of courses and is finalized when the student advances to candidacy. Although courses that will eventually become part of the student's academic program may be taken before advancement, it is strongly recommended that students make up any undergraduate deficiencies first, and

then advance as early as possible. The program proposed by the thesis committee chair and the student must be approved by the thesis committee, Graduate Advisor, Department Chair, and Associate Dean. Six units of GEOL 698 (Thesis) must be taken as part of the program. Directed Research, GEOL 697, may account for up to three units, but normally cannot be taken before the student completes 12 units of the graduate program with a grade point average of 3.0 or higher.

A minimum of 18 units of 500 or 600 level courses, including Thesis, must be completed; the remaining units (12 or less) may be 300, 400, 500, or 600 level courses, although courses at 300 level in the Department may not be used in the program. Units may be taken at other universities if suitable courses are not offered at CSULB. Appropriate courses from related areas in science, mathematics, or engineering may be substituted within limits with consent of the Department.

Thesis Defense

All M.S. students are required to submit a thesis that conforms to the University and Department guidelines. The thesis should document the systematic study of a significant geological problem; evidence originality and critical, independent thinking; and conform to appropriate and accepted organization, format, and writing style. Each student should discuss thesis format with his/her thesis committee chair.

All M.S. students are also required to present the results of their research orally. With prior approval, this presentation can take one of many possible formats, including a departmental seminar, a presentation at a regional or national meeting, or a formal thesis defense. The student must schedule his/her presentation at least two weeks in advance, and with the approval of the thesis committee. The date of the presentation must precede the semester's thesis submission deadline for which the student plans to graduate.

Single Subject Teaching Credential in Geosciences

For information, refer to the undergraduate section in this department.

Courses (GEOL)

LOWER DIVISION

102. General Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

Broad based introductory study of geology. Broad based introductory study of geology. Structure, composition, distribution, and modification of earth materials and elementary geologic history of the Earth.

Concurrent enrollment in GEOL 104 or 105 recommended. (Lecture, demonstration 3 hrs.)

104. Geology Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

Laboratory study of earth materials.

(Laboratory 3 hrs.)

105. Geology Field Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.

Field trips to areas of geologic significance and field study of earth materials.

May be repeated to a maximum of 3 units with consent of instructor. (Field trips, 6 days per unit.) Course fee may be required for bus trips.

106. Earth Science for Teachers (4)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics, including algebra, geometry, and intermediate algebra or the equivalent.

Introduction to earth science including geology, oceanography, meteorology, solar system and astronomy. Scientific method addressed. Methods of teaching science to K-8 pupils.

Letter grade only (A-F). (Lecture, demonstration 3 hours., laboratory 3 hrs., field trips.)

110. Natural Disasters (3)

Prerequisites/Corequisites: Courses that fulfill the GE A.1 and B.2 requirements. Corequisite: GEOL 110L is recommended.

Introductory study of Earth's natural processes that severely impact humans. Includes study of processes causing natural disasters such as earthquakes, volcanic eruptions, landslides, floods, tornadoes, hurricanes, tsunamis, and asteroid impacts.

(Lecture 3 hrs.)

110L. Natural Disasters Laboratory (1)

Prerequisites/Corequisites: Courses that fulfill the GE A.1 and B.2 requirements. Corequisite: GEOL 110.

Laboratory analysis of geological data and field observations of geologic features associated with natural disasters.

Course fee may be required. (Laboratory 3 hrs, field trips).

160. Introduction to Oceanography (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

Origin and extent of oceans, nature of ocean floor, and cause and effect of currents, tides, and waves; and life in the ocean.

(Lecture, discussion 3 hrs.)

160L. Introduction to Oceanography Laboratory (1)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra (MAPB 7) or the equivalent; and previous credit or concurrent registration in GEOL 160.

Field and laboratory study of marine environment. Analysis of maps, plus shore and on-water trips for experience in use of oceanographic instruments. Analysis and interpretation of results.

(Laboratory-field 3 hrs.) Course fee may be required.

190. Environmental Geology (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

Interrelationships between humans and hazards: landslides, floods, erosion, subsidence, volcanism, earthquakes, and seismic sea waves. Origin of resources and impacts of resource development: water, soils, and energy. Waste and waste disposal.

(Lecture 3 hrs.)

191. Air and Water Pollution (3)

Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.

Survey course dealing with the causes and nature of pollution in

the air, groundwater, fresh water lakes and streams, and the ocean. Effects of air and water pollution on the environment.

(Lecture 3 hrs.)

240. Historical Geology (4)

Prerequisite: GEOL 106 or both GEOL 102, 104.

History of earth and evolution of animals and plants.

(Lecture 3 hrs., laboratory 3 hrs., field trips.)

250. Introduction to Field Petrology and Geological Field Techniques (3)

Prerequisites: GEOL 102 with 104 or 105; or GEOL 106; all with grades of "C" or better. Corequisite: GEOL 240.

Identification and description of igneous, sedimentary, and metamorphic rocks in the field. Development of fundamental geological field techniques: recording, collection, and interpretation of geological field data. Creation and interpretation of geological maps, writing technical reports, and construction of geological illustrations.

Letter grade only (A-F). (Lecture 1 hour, weekend field trips.)

273. Computer and Statistical Methods in Geology (4)

Prerequisites: GEOL 240, MATH 117 or 122. An elementary background in computers is recommended.

Introduction to statistical theory, computer programming, and the use of computer-based statistical and graphical packages as applied to problem-solving in the geological sciences.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 6 hrs., field trips.) Course fee may be required.

280. Water Resources and Society (3)

Prerequisites: GEOL 102, 104. A grade of "C" or better in MATH 117, or four years of high school mathematics.

Hydrologic, geologic, and other factors controlling groundwater and surface water occurrence, movement, quality, and contamination. Environmental effects of groundwater and surface water contamination.

(Lecture 3 hours; field trips)

UPPER DIVISION

300I. Earth Systems and Global Change (3)

Prerequisites: GE Foundation requirement, upper division standing, and CHEM 100 or CHEM 111A or GEOL 102 or GEOL 106 with a grade of "C" or better.

Interaction of Earth's systems (biosphere, lithosphere, hydrosphere, cryosphere, and atmosphere) and links between life, oceans, climate, and the solid earth. This approach is used to understand important issues confronting society regarding climatic and environmental change.

Letter grade only (A-F). (Lecture 3 hrs.)

303. Coastal Systems and Human Impacts (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses, and upper-division standing; BIOL 200; GEOL 102 or 160.

Natural processes impacting human activities in coastal zone and human influence on natural processes. Includes global warming, sea level rise, El Nino, port development, ocean outfalls and water quality, fisheries, and coastal erosion.

May not apply units towards elective requirements of Geology and Earth Science majors. Letter grade only (A-F). Not open for credit to students with credit in BIOL 303. (Lecture 3 hrs.)

322. Crystallography, Mineralogy and Optical Methods (5)

Prerequisites: GEOL 250; CHEM 101 or 111A.

Morphological and structural crystallography, crystal structure, chemistry, classification, origin, occurrence, and association of minerals reviewed. Analysis and identification of minerals by megascopic, qualitative, chemical, and instrumental means. Optical properties of minerals reviewed including nature of light. Petrographic microscope used.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 6 hrs., field trip)

339. Introduction to Geomorphology (3)

Prerequisites: GEOL 102 with 104 or 105; or GEOL 106; or GEOG 140.

Study of landforms and processes producing and modifying them. Emphasis on mechanics of geomorphic processes and relationships between properties of earth materials and forces applied to them by gravity, wind, ice, water, waves, and humans. Conceptual basis of geomorphology addressed.

Designed for Geology, Geography, Biology, Anthropology, and Civil Engineering majors. Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs., field trips).

341. Paleontology and Biostratigraphy (4)

Prerequisites: GEOL 240 and BIOL 200.

Morphologic, systematic, and ecologic aspects of invertebrate fossils; methods and techniques in collection, preparation, illustration, and description of fossils; uses of fossils in stratigraphic work; principles of biostratigraphy.

(Lecture 3 hrs., laboratory 3 hrs., fieldtrips) Course fee may be required.

350. Spring Field Geology (2)

Prerequisites: GEOL 250 and 443 with grades of "C" or better. Prerequisite/Corequisite: GEOL 433.

Development of proficiency in geological mapping skills. Construction of stratigraphic columns and structural cross sections.

Letter grade only (A-F). (Field trips, 5 days per unit)

364. Introduction to Geological Oceanography (2)

Prerequisites: GEOL 102 or 160; and CHEM 111A or MATH 122, or consent of instructor.

Topography and structure of ocean floor. Waves, currents, and tides as agents of sedimentation. Geological processes effect on the sea floor environment. Tectonic and sedimentary history of ocean basins and continental margins. Shipboard techniques in marine geology.

(Lecture 2 hrs.; sea trips.)

370. Geology for Engineers (2)

Prerequisites: MAE 172, CE 130.

Earth processes and materials which influence the design, construction and operation of engineering works, construction materials. Not open for credit to geology majors.

(Lecture 2 hrs., field trips.)

410./510. Biogeochemical Cycles (3)

Prerequisites: GEOL 102, 300I or 461; BIOL 200 or 211A,B or BIOL 211, 211L, 212, 212L, 213, and 213L; MATH 122; CHEM 111A, B; or GEOL 191. (Undergraduates enroll in GEOL 410; graduates enroll in GEOL 510.)

Study of carbon, nitrogen, phosphorus, iron, and sulfur cycles among the bio-, hydro-, and geospheres with an emphasis on transfer rates, mass balance, and residence times. Evaluation of processes and interactions among key ecosystems (wetlands, rivers, ocean, lakes, estuaries).

Letter grade only (A-F). (Lecture 3 hrs.)

420. Geowriting (3)

Prerequisites: Upper division or graduate standing in the College of Natural Sciences and Mathematics; ENGL 100 or equivalent; a course in geology; consent of instructor.

Writing for scientific audience; writing scientific content at an advanced level emphasized. Journal article and abstracts reviewed. Includes handling descriptive scientific data, distinction between data and interpretation, logic and argument, clarity of style, and writing for specific audiences. Extensive writing. Enrollment limited.

Letter grade only (A-F). (Lecture 3 hrs.)

424./524. Sedimentary Petrology (4)

Prerequisites: GEOL 322 and 443. (Undergraduates enroll in GEOL 424; graduates enroll in GEOL 524.)

Microscopic and macroscopic study of the origin and diagenesis of sedimentary rocks. Identification of grain types, textures, structures, and cements emphasizing provenance, paleotectonics, paleoenvironmental reconstructions, and post-depositional alteration.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

428. Igneous and Metamorphic Petrology and Petrography (4)

Prerequisites: GEOL 322; CHEM 111A, B.

Magmatic and metamorphic rock bodies and systems characteristics, including mineralogical and chemical aspects. Fabrics' origin, evolution of igneous and metamorphic rocks, modeling of magma genesis. Microscopic, hand specimen and x-ray analysis of rocks, including fabric and mineral content.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 6 hrs., and field trips)

430./530. Seminar in Structural Geology and Tectonics (3)

Prerequisite: GEOL 433. (Undergraduates enroll in GEOL 430; graduates enroll in GEOL 530.)

Review of analysis, interpretation and origin of geologic structures, mechanics of rock deformation and of large scale crustal deformation.

(Lecture 2 hrs., laboratory 3 hrs.; field trips.)

431./531. Tectonic Geomorphology (4)

Prerequisite: GEOL 433. (Undergraduates enroll in GEOL 431; graduates enroll in GEOL 531.)

Observation and analysis of Earth surface processes, and development of landforms and landscape. Interaction between surficial processes and tectonic, biologic, hydrologic, climatic, and atmospheric processes. Tectonic generated landforms, earthquake hazards evaluated, and geomorphic assessment. Assessing problems including landforms and environmental hazards.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 6 hrs., field trips.)

433. Structural Geology (4)

Prerequisites: GEOL 250, 322; PHYS 151.

Theories/principles of structural geology, orogenesis, and tectonics. Planar/linear structures in naturally deformed rocks. Description, classification, interpretation, and kinematic and dynamic analysis of faults/folds. Field measurement, analysis and mapping of structures. Deformation, strength, fracture, and rheological properties of rocks.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs., required field trips)

443. Stratigraphy/Sedimentology (4)

Prerequisites: GEOL 240, 322.

Introduction to sedimentology and stratigraphy, flow mechanics and sedimentary structures, laboratory and field methods for the description and classification of sedimentary rocks, depositional systems, sequence stratigraphy, subsurface stratigraphic methods, sedimentation and tectonics, and preparation of sedimentologic field reports.

Not open for credit to students with credit in GEOL 343. Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs., required field trips)

444./544. Engineering Geology (4)

Prerequisites: GEOL 250, 273, 322; MATH 122, 123; CHEM 111A,B; PHYS 151, 152. (Undergraduates enroll in GEOL 444; graduates enroll in GEOL 544.)

In depth study of the fundamentals of engineering geology and related hazards. Evaluation of aggregate, cement and grouts. Soil and rock engineering characteristics.

Letter grade only (A-F). (Lecture 3 hrs, laboratory 3 hrs.; field trips.)

450. Summer Field Geology (4)

Prerequisites: GEOL 350, 428, 433, and 443.

Four weeks of geological field mapping at a selected area. Preparation of geological reports of the field problems.

Course fee may be required. (Lecture as needed, daily field work)

454./554. Environmental Geochemistry (3)

Prerequisites: CHEM 111B and consent of instructor.

Geochemical cycles. Human interference with cycles. Trace elements, health and agriculture. Clay mineral reactions. Groundwater chemistry. Reading and discussion of research articles; projects in environmental geochemistry.

Letter grade only (A-F). (Lecture 3 hrs., field trips.)

460. Introduction to Geophysics (3)

Prerequisites: PHYS 151, 152; MATH 123; and GEOL 273.

Introduction to geophysics; principles and processes; methods of investigation.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs., field trips.)

461. Introduction to Geochemistry (3)

Prerequisites: CHEM 111A,B and MATH 123.

Abundance and migration of elements in the earth; chemical processes in evolution of earth and its crust including geochemistry of organic compounds.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

462. Physics and Chemistry of the Earth's Interior (3)

Prerequisites: GEOL 240, 428; PHYS 152.

Structure and composition of the Earth's interior. Origin and evolution of the Earth. Review of geophysical data, petrologic analyses, and other types of evidence for Earth structure and compositional models.

Letter grade only (A-F). (Lecture 3 hrs.)

465./565. Physical and Chemical Oceanography (3)

Prerequisites: CHEM 111B; PHYS 100B, and upper division standing in the College of Natural Sciences and Mathematics or Engineering. (Undergraduates enroll in GEOL 465; graduates enroll in GEOL 565.)

Physics and chemistry of the oceans, carbon cycle; minor and trace elements in sea water, nutrients, water masses and currents; physical concepts and interpretative theories related to ocean circulation.

(Lecture 3 hrs.)

466. Oceanography Laboratory and Ocean Studies (1)

Prerequisite/Corequisite: GEOL 465.

Analysis and interpretation of oceanographic data, acquisition of data at sea on field trip, and post-cruise analysis and presentation of results.

Not open for credit to students with credit in GEOL 462. (Laboratory 3 hrs., sea trips.)

471. Petroleum Geology and Well Log Analysis (4)

Prerequisites: GEOL 240, 443.

Geological application in exploration and production of petroleum, including uses of surface and subsurface techniques. Basic well logging techniques employed, including data collection, reduction, interpretation, and integration among various logging methods as well as with surface geology and geophysical data.

(Lecture 2 hrs., laboratory 6 hrs., field trips.)

474./574. Physical Hydrology (3)

Prerequisites: GEOL 102, MATH 122; PHYS 151. (Undergraduates enroll in GEOL 474; graduates enroll in GEOL 574.)

Quantitative study of the terrestrial water cycle; prediction and measurement of precipitation, surface water, soil water, and groundwater.

Letter grade only (A-F). (Lecture 2 hrs, lab/field trips 3 hrs)

477./577. Hydrogeology (4)

Prerequisites: GEOL 102, 104; CHEM 111B; PHYS 152; MATH 123. (Undergraduates enroll in GEOL 477; graduates enroll in GEOL 577.)

Groundwater flow, occurrence, development, chemistry, and contamination. Elementary groundwater flow theory. Well hydraulics.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

486./586. Engineering Geophysics (3)

Prerequisite/Corequisite: GEOL 460. (Undergraduates enroll in GEOL 486; graduates enroll in GEOL 586.)

Applying geophysical techniques to geology and hydrogeology problems. Geophysical techniques, and identification and utilization of specialized techniques. Case histories in site evaluations, subsiding areas, basement topography mapping, seawater problems, water table mapping, groundwater contamination, and subsurface cavities detection.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.; field trips.) Course fee may be required.

489. Current Topics in Geological Sciences (3)

Prerequisite: Consent of instructor.

Topics of current interest in the geological sciences selected for intensive development.

May be repeated to a maximum of 6 units. Field trips may be required. (Lecture 2 hrs., laboratory 3 hrs.)

B. Urban Geology

490. Current Topics in Geological Sciences (1-3)

Prerequisite: Consent of instructor.

Topics of current interest in the geological sciences selected for intensive development.

May be repeated to a maximum of 6 units. Field trips may be required.

496. Investigations in Geology and Other Earth Sciences (1-4)

Prerequisites: Senior standing in geology, earth science or related fields, completion of an upper division course in geology or earth science in the area of the topics chosen and approval of the topic chosen by the Geological Sciences faculty.

Supervised research in geology or the other earth sciences. Field trips may be required.

GRADUATE LEVEL

500. Introductory Graduate Seminar (1)

Prerequisite: Graduate standing.

Introduction to graduate policies and faculty research in Geological Sciences. Abstracts on faculty presentation required of all students.

Course cannot be counted for program requirements for the M.S degree in Geology. Credit/No Credit grading only. May be repeated to a maximum of 3 units. (Seminar 1 hr.)

510./410. Biogeochemical Cycles (3)

Prerequisites: GEOL 102, 300I or 461; BIOL 200 or BIOL 211A,B or BIOL 211, 211L, 212, 212L, 213, and 213L; MATH 122; CHEM 111A, B; or GEOL 191. (Undergraduates enroll in GEOL 410; graduates enroll in GEOL 510.)

Study of carbon, nitrogen, phosphorus, iron, and sulfur cycles among the bio-, hydro-, and geospheres with an emphasis on transfer rates, mass balance, and residence times. Evaluation of processes and interactions among key ecosystems (wetlands, rivers, ocean, lakes, estuaries).

Letter grade only (A-F). (Lecture 3 hrs.)

524./424. Sedimentary Petrology (4)

Prerequisites: GEOL 322 and 443. (Undergraduates enroll in GEOL 424; graduates enroll in GEOL 524.)

Microscopic and macroscopic study of the origin and diagenesis of sedimentary rocks. Identification of grain types, textures,

structures, and cements emphasizing provenance, paleotectonics, paleoenvironmental reconstructions, and post-depositional alteration.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

530./430. Seminar in Structural Geology and Tectonics (3)

Prerequisite: GEOL 433. (Undergraduates enroll in GEOL 430; graduates enroll in GEOL 530.)

Review of analysis, interpretation and origin of geologic structures, mechanics of rock deformation and of large scale crustal deformation.

(Lecture 2 hrs., laboratory 3 hrs.; field trips.)

531./431. Tectonic Geomorphology (4)

Prerequisite: GEOL 433. (Undergraduates enroll in GEOL 431; graduates enroll in GEOL 531.)

Observation and analysis of Earth surface processes, and development of landforms and landscape. Interaction between surficial processes and tectonic, biologic, hydrologic, climatic, and atmospheric processes. Tectonic generated landforms, earthquake hazards evaluated, and geomorphic assessment. Assessing problems including landforms and environmental hazards.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 6 hrs., field trips.)

537. California Geology (3)

Prerequisites: GEOL 433, 450.

Examination of recent theories concerning evolution of California's geological provinces; geological, geochemical, and geophysical evidence for these theories.

Letter grade only (A-F). (Lecture 3 hrs., field trips.)

544./444. Engineering Geology (4)

Prerequisites: GEOL 250, 273, 322; MATH 122, 123; CHEM 111A-B; PHYS 151, 152. (Undergraduates enroll in GEOL 444; graduates enroll in GEOL 544.)

In depth study of the fundamentals of engineering geology and related hazards. Evaluation of aggregate, cement and grouts. Soil and rock engineering characteristics.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.; field trips.)

554./454. Environmental Geochemistry (3)

Prerequisites: CHEM 111B and consent of instructor.

Geochemical cycles. Human interference with cycles. Trace elements, health and agriculture. Clay mineral reactions. Groundwater chemistry. Reading and discussion of research articles; projects in environmental geochemistry.

Letter grade only (A-F). (Lecture 3 hrs., field trips)

565./465. Physical and Chemical Oceanography (3)

Prerequisites: CHEM 111B; PHYS 152 or 100B, and upper division standing in the College of Natural Sciences and Mathematics or Engineering. (Undergraduates enroll in GEOL 465; graduates enroll in GEOL 565.)

Physics and chemistry of the oceans, carbon cycle; minor and trace elements in sea water, nutrients, water masses and currents; physical concepts and interpretative theories related to ocean circulation.

(Lecture 3 hrs.)

570. Special Topics in Geology (3)

Prerequisite: Consent of instructor.

Investigation of selected topics in geology. May be repeated to a maximum of 9 units toward any single degree with different topics. Seminars with field trips as appropriate.

Letter grade only (A-F). (Seminar, 3 hrs.) May be repeated to a maximum of 9 units with different topics in different semesters.

571. Contaminant Hydrogeology (3)

Prerequisites: GEOL 102, 104, 477/577; CHEM 111B; PHYS 152; MATH 123.

Study and prediction of groundwater pollution transport, reaction, and remediation.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

574./474. Physical Hydrology (3)

Prerequisites: GEOL 102, MATH 122; PHYS 151. (Undergraduates enroll in GEOL 474; graduates enroll in GEOL 574.)

Quantitative study of the terrestrial water cycle; prediction and measurement of precipitation, surface water, soil water, and ground water.

Letter grade only (A-F). (Lecture 2 hrs, lab/field trips 3 hrs)

575. Advanced Topics in Sedimentology (3)

Prerequisite: Consent of instructor.

Investigation of topics in sedimentology such as depositional facies analysis, basin evolution, coastal processes, fluvial processes, advanced stratigraphic analysis, and tectonics and sedimentation.

Content varies from year to year. May be repeated to a maximum of 9 units toward any single degree with different topics in different semesters. Letter grade (A-F). Seminars with field trips as appropriate. (Seminar 3 hrs.)

577./477. Hydrogeology (4)

Prerequisites: GEOL 102, 104; CHEM 111B; PHYS 152; MATH 123. (Undergraduates enroll in GEOL 477; graduates enroll in GEOL 577.)

Groundwater flow, occurrence, development, chemistry, and contamination. Elementary groundwater flow theory. Well hydraulics.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

579. Applied Groundwater Monitoring (4)

Prerequisites: GEOL 102, 104, 477/577; PHYS 152; MATH 123. MATH 370A recommended.

Numerical modeling of groundwater flow and mass transport. Emphasis is on creation of numerical models from conceptual models of geology derived from geologic mapping and sampling.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

586./486. Engineering Geophysics (3)

Prerequisite/Corequisite: GEOL 460. (Undergraduates enroll in GEOL 486; graduates enroll in GEOL 586.)

Applying geophysical techniques to geology and hydrogeology problems. Geophysical techniques, and identification and utilization of specialized techniques. Case histories in site evaluations, subsiding areas, basement topography mapping, seawater problems, water table mapping, groundwater contamination, and subsurface cavities detection.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.; field trips.) Course fee may be required.

695. Directed Reading (1-3)

Survey of information in published or unpublished geological literature or databases on a designated topic, under the direction of a faculty member. Written reports prepared from these readings.

May be repeated to a maximum of 4 units toward any single degree with different topics in different semesters. Limited to 3 units per semester. Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Consent of instructor.

Research on a specific subject in geology. Topic for study to be approved and directed by a faculty member in geological sciences.

Letter grade only (A-F).

698. Thesis (1-6)

Prerequisites: Advanced to candidacy for M.S. in Geology, consent of Graduate Committee and graduate advisor.

Either laboratory or field investigations, or both, for a total of six semester units to culminate in an approved thesis.

Letter grade only (A-F).

GERMAN

College of Liberal Arts

Department of Romance, German, Russian Languages and Literatures

Department Chair: Lisa Vollendorf

Program Director: Jeffrey High

RGRLL Language Coordinator: Markus Muller

Single Subject Coordinator for L.O.T.E.: Jean-Jacques Jura

Department Office: Academic Services, Room 309

Telephone: (562) 985-4318

Faculty: Nele Hempel-Lamer, Jeffrey High

Administrative Support Coordinator: Cerise Dragicevich

Students desiring information should contact the department office for referral to one of the faculty advisors. Credential advisors, Undergraduate Advisor, Graduate Advisor.

Career Possibilities

Customs Officer • Immigration Officer • Importer/Exporter
• Foreign Service Officer • International Marketing Representative • Travel Professional • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Teacher Professor • Translator • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

German Studies promotes a double major of German and Engineering as well as offering a BA in German Studies with a concentration/certificate in Administration of Travel and Tourism. It also maintains exchange programs with the University of Bielefeld, Essen, Oldenburg, Freiburg (Switzerland), Salzburg (Austria), and all the universities in Baden Württemberg. German students are also eligible to participate in the German-American Business Student Workshop with the Polytechnic University Hamburg, Germany.

Undergraduate Programs

Bachelor of Arts in German (120 units)

In this program, efforts are made to accommodate needs of students who simultaneously pursue many majors including Business, Engineering, or a certificate in Travel and Tourism.

Completion of the German major (plus 3 additional units) meets the subject matter competence requirement for the Single Subject Teaching Credential in German. Prospective students should consult the undergraduate German Advisor and the Languages Other Than English (LOTE) Program Advisor early to plan their program.

Requirements

Lower Division:

One year of intermediate German or equivalent. Students who have completed sufficient high-school German may

take upper-division courses as soon as lower-division requirements have been met. Native speakers of German may not enroll for credit in 101A/B or 201A/B.

Upper Division (minimum 33 units, 36 for Single Subject):

Take all of the following courses:

GERM 301 Fiction and Fact: Short Texts (3)

Prerequisite: GERM 201B or equivalent. Intensive practice and the consolidation of the basic language skills: reading comprehension, composition, and conversation.

GERM 302 Language of the German Media (3)

Prerequisite: GERM 201B or equivalent.

GERM 415 Survey of German Literature and

Culture I (3)

Prerequisite: GE Foundation requirements.

GERM 416 Survey of German Literature and

Culture II (3)

Prerequisite: GE Foundation requirements.

Take 12 units of the following literature and culture courses taught in German:

GERM 430, 440, 450, 458, 459, 460, and 498

Department Recommendations:

- Consult with the major advisor for course selection.
- Studies or an internship in a German-speaking country and will assist in such plans.

Single Subject Teaching Credential in German

Completion of the German major meets the subject matter competence requirement for the Single Subject Teaching Credential in German. Prospective students should consult the undergraduate German Advisor and the Languages Other Than English (LOTE) Credential Program Advisor early to plan their program.

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective teachers of German are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

Requirements

Same as the BA in German but include the following:

GERM 303 German Phonetics (3) (or equivalent)

Prerequisite: Upper-division standing in German or consent of instructor.

GERM 410 History & Stories: German Civilization (3) (or equivalent)

Prerequisite: Upper-division standing in German.

Minor in German

A minimum of 20 upper division units. The Minor in German is available to any non-German major.

Take the following courses:

GERM 301 Fiction and Fact: Short Texts (3)
Prerequisite: GERM 201B or equivalent. Intensive practice and the consolidation of the basic language skills: reading comprehension, composition, and conversation.

GERM 302 Language of the German Media (3)
Prerequisite: GERM 201B or equivalent.

GERM 415 Survey of German Literature & Culture I (3)
Prerequisite: GE Foundation requirements.

GERM 416 Survey of German Literature & Culture II (3)
Prerequisite: GE Foundation requirements.

Graduate Programs

Master of Arts in German

Students are encouraged to study at German-speaking universities and the program assists with overseas study plans. For graduate students interested in multimedia teaching technology, the program provides special projects and practical opportunities. Teaching Assistantships are available.

Prerequisites

1. A bachelor of arts degree in German or:
2. A bachelor's degree with a minimum of 24 units of upper-division courses in German. These courses must be comparable to those required of a major in German at the University. Deficiencies will be determined by the department.

Advancement to Candidacy

Advancement to Candidacy should take place upon completion of at least six units, preferably no more than nine units applicable to the program, with at least a 3.0 GPA.

The program will request advancement to candidacy only after she/he has filed a transcript of credits or a change-of-objective form, completed the prerequisites, and fulfillment of the Graduation Writing Assessment Requirement (GWAR).

The student graduate program must be approved by the graduate advisor, departmental committee, and the College of Liberal Arts Associate Dean of Graduate Studies.

Requirements

1. Completion of a minimum of 30 units of approved upper-division and graduate courses with 24 units in German;
2. A minimum of 18 units in the 500 and 600 series taken at the CSULB campus in German which must include the following:
GERM 510. The Faces of United Germany: Past, Present, and Future (3)
3. A reading knowledge of French, Italian, Latin, Russian, or Spanish. Another language may be substituted only under special circumstance. In some cases, students may require as many as 16 additional credits to fulfill the second language requirement;
4. A comprehensive examination or, with permission of a Graduate Advisor, a thesis.

Single Subject Teaching Credential in German

For information, refer to the undergraduate section in this department.

German Courses (GERM)

LOWER DIVISION

101A. Fundamentals of German (4)

Prerequisite/Corequisite: Any GE Foundation course.

Introduction to fundamental skills of speaking, oral comprehension, reading, and writing. For those beginning the study of German or have had one year of high school German or equivalent.

Transfers and new students: placement exam strongly recommended. For further information, refer to department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage or native speakers of German.

101B. Fundamentals of German (4)

Prerequisite: GERM 101A or two years of high school German or equivalent. Corequisite: Any Foundation course.

Fundamental skills of speaking, oral comprehension, reading and writing.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of German.

201A. Intermediate German (4)

Prerequisite: GERM 101B or three years of high school German or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the Department of RGRLL website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of German.

201B. Intermediate German (4)

Prerequisite: GERM 201A or four years of high school German or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills.

Transfers and new students: placement exam strongly recommended. For further information, refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only, and is not open to heritage speakers or native speakers of German.

204. German for Reading Knowledge (3)

Prerequisites: GERM 101A,B or equivalent or consent of instructor.

Concentrates on essentials for translation and is designed chiefly for students in any field who are preparing for reading exams in German.

UPPER DIVISION

301. Fiction and Fact: Short Texts (3)

Prerequisite: GERM 201B or equivalent. Intensive practice and the consolidation of the basic language skills: reading comprehension, composition, and conversation.

Emphasis on reading, comprehension, vocabulary building, and idiomatic usage.

302. Language of the German Media (3)

Prerequisite: GERM 201B or equivalent.

Intensive practice and the consolidation of basic skills: reading, comprehension, composition, and conversation. Emphasis on composition, oral reports, and discussion.

303. German Phonetics (3)

Prerequisite: Upper-division standing in German or consent of instructor.

General concepts of linguistic science. Linguistics applied to the study and teaching of the German language. Articulatory phonetics as a means to form native German pronunciation habits with emphasis upon the difficulties encountered by speakers of American English.

305. Advanced German Conversation (3)

Prerequisite: Upper-division standing in German.

Intensive practice of spoken German with stress on vocabulary building, pronunciation, intonation, and oral comprehension.

Letter grading only (A-F). May be repeated to a maximum of 6 units.

306. Translating German to English (3)

Prerequisite: Upper-division standing in German or consent of instructor.

The preparation of translations from German texts of wide-ranging subject matter.

370. German Literature in English (3)

Study of significant German writers. German literary movements, or a specific literary genre in English translation.

May be repeatable for 6 units in different semesters. Not open for credit to students with credit in GERM 470.

380I. Contemporary Germany, Society, and Culture (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Germany today presents a unique case study for difficulties and complexity of a unification process. Aspects of historical and cultural legacy and the social and political reality are approached through factual texts and fiction. Taught in English.

398. Selected Topics in German (3)

Prerequisite: Upper-division standing in German or consent of instructor.

Exploration of topics in language, culture, and literature.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

401. Advanced German Syntax and Composition (3)

Prerequisite: GERM 301, 302. Practice in developing a style and vocabulary suitable for the writing of reports and essays on cultural and literary topics.

May be repeated to a maximum of 6 units.

410. History and Stories: German Civilization (3)

Prerequisite: Upper-division standing in German.

Historical development of important German institutions, customs and thought.

415. Survey of German Literature and Culture I (3)

Prerequisite: GE Foundation requirements.

German literature from the Middle Ages to the time of Goethe as related to the other arts, to philosophy, and to the social and political institutions of the time.

416. Survey of German Literature and Culture II (3)

Prerequisite: GE Foundation requirements.

German literature from Romanticism to the present as related to the other arts, to philosophy, and to the social and political institutions of the time.

430./530. German Poetry (3)

Prerequisite: Upper-division standing in German.

German poetry from the Baroque to the present.

440. German Novella in Context (3)

Prerequisite: Upper-division standing in German.

The German Novella as a separate literary genre, represented by Goethe, Tieck, Kleist, Keller, Meyer, Storm, Spielhagen, Hesse, Kafka, Thomas Mann, and others.

450./550. Reason, Revolution, Reaction (3)

Prerequisite: Upper-division standing in German.

Literary trends of the 18th century, with emphasis on Lessing, Wieland, Klopstock, Herder, Goethe and Schiller and the authors from "Sturm und Drang" to Romanticism.

Letter grade only (A-F).

458. Road to Modernity (3)

Prerequisite: Upper-division standing in German.

Representative literary works of the "Biedermeier," "Junges Deutschland" and "Poetischer Realismus" against the background of the historical, philosophical, and cultural movements of the times.

Letter grade only (A-F).

459./559. German Literature from 1890-1945 (3)

Prerequisite: Upper-division standing in German.

Major German prose, drama, and poetry from Naturalism to the end of World War II.

May be repeatable for 6 units in different semesters.

460./560. Two Perspectives: 1945 to 1990 (3)

Prerequisite: Upper-division standing in German.

Significant contemporary German writers of prose, drama and poetry in the context of the divided Germany.

Letter grade only (A-F).

480. German Cinema (3)

Acquaint students with the art of the medium, and the history of German film, particularly as it is realized through the work of the artist most responsible for its success or failure, in this case, the director.

Letter grade only (A-F). Same course as FEA 457. Not open for credit to students with credit in FEA 457. (2 hrs seminar, 2 hrs activity)

494. Internship in German (1-3)

Prerequisites: Consent of instructor and department chair.

Field work in German, supplemented by readings and tutorials under the direction of a faculty member. Internships, small group discussion/teaching, and other assignments directed by a supervising faculty member.

May be repeated to a maximum of 6 units. No more than 3 units may be applied to the major in German.

498. Selected Topics in German (3)

Prerequisites: Senior standing in German or consent of instructor.

Exploration of topics in language, culture, and literature.

May be repeated to a maximum of 9 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

499. Directed Studies (1-6)

Prerequisite: Consent of instructor.

Independent study undertaken under the supervision of a faculty member.

GRADUATE LEVEL

510. The Faces of United Germany: Past, Present, and Future (3)

Prerequisite: Admission to the Graduate

Program in German or consent of Graduate Advisor in the German Studies. The course locates the present concentration of international research in the discipline and requires individual research, presentation of findings, and a substantive paper.

Letter grade only (A-F).

530./430. German Poetry (3)

Prerequisite: Graduate standing in German.

German poetry from the Baroque to the present.

Letter grade only (A-F).

540. German Novella (3)

Prerequisite: Graduate standing in German.

The German Novella as a separate literary genre, represented by Goethe, Tieck, Kleist, Keller, Meyer, Storm, Spielhagen, Hesse, Kafka, Thomas Mann, and others.

Not open for credit to students with credit in GERM 541. Letter grade only (A-F).

550./450. Reason, Revolution and Romantic Thought (3)

Prerequisite: Upper-division standing in German.

Literary trends of the 18th century, with emphasis on Lessing, Wieland, Klopstock, Herder, Goethe and Schiller and authors from "Sturm und Drang" to Romanticism.

Letter grade only (A-F).

558. Road to Modernity (3)

Prerequisite: Upper-division standing in German.

Representative literary works of the "Biedermeier," "Junges Deutschland" and "Poetischer Realismus" against the background of the historical, philosophical, and cultural movements of the times.

Letter grade only (A-F).

559./459. German Literature from 1890-1945 (3)

Prerequisite: Upper-division standing in German. Major .

German prose, drama, and poetry from Naturalism to the end of World War II.

May be repeatable for 6 units in different semesters.

560./460. Two Perspectives: 1945 to 1990 (3)

Prerequisite: Upper-division standing in German.

Significant contemporary German writers of prose, drama and poetry in the context of the divided Germany.

Letter grade only (A-F).

590. Theoretical Approaches (3)

Prerequisite: B.A. in German or equivalent.

Evaluation of various methods in interpreting a literary work of art; different levels of interpretation; concepts of literary movements; complexity of structure related to content; literary appreciation; introduction to bibliographical aids.

May be repeated to a maximum of 9 units with different topics.

Letter grade only (A-F).

598. Selected Topics in German (3)

Prerequisites: B.A. in German or equivalent.

Exploration of topics in language, culture and literature.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics in different semesters. Topics announced in the *Schedule of Classes*. Students with credit in GERM 511 may only have a total of 9 units of GERM 511 and GERM 598 combined.

599. Directed Studies (1-3)

Prerequisites: Graduate standing.

Consent of instructor and chairperson or graduate advisor.

Selected topics in German to be pursued in depth.

May be repeated to a maximum of 6 units with different topics.

Letter grade only (A-F).

653. Selected Topics - Seminar in a Century of German Literature (3)

Letter grade only (A-F). May be repeated to a maximum of 9 units in different topics in different semesters. Topics announced in the *Schedule of Classes*.

A. Century of German Literature

B. 17th Century Baroque

C. 18th Century Classicism

F. 20th Century German Literature

697. Directed Research (1-3)

Prerequisite: Consent of graduate advisor.

Required of all candidates for the master of arts in German who do not choose to write a thesis.

Letter grade only (A-F).

698. Thesis (1-4)

Prerequisite: Consent of graduate advisor.

Planning, preparation, and completion of a thesis. Does not count toward 30 units required for the M.A. degree.

GERONTOLOGY

College of Health and Human Services

Director: Barbara White

Department Office: Family and Consumer Sciences Faculty (FCS)
Addition, Room 014
Telephone / FAX: (562) 985-1582 / 985-4414
Email: bwhite@csulb.edu

Administrative Support Coordinators: Mikal Lok

Instructional Support Technician: Bonnie Rice

Faculty Interest Group: Cleothy Arellano, Lee Blecher, Kay Cerny, Young-Hee Cho, Maria Claver, Tom Crowe, Shelley Ericksen, Janet Fisher, Mohammed Forouzesh, Gail Frank, Robert Friis (emeritus), Agathi Glezakos, William Goeller, Sharon Guthrie, Judy Hails, Joellen Hartley, Carol Itatani, Hazel Jackson (emerita), Mary Jacob (emerita), K. J. James, Maridith Janssen, Barry Lavay, Marge Lichty, Tracey Mayfield, Olfat Mohamed, Clyde Pentz, Marilyn Potts, Molly Ranney, Wendy Reiboldt, Pamela Roberts, Jan Schroeder, David Schult, Donna Schwab, Savitri Singh-Carlson, Lydia Sondhi, Monica Tenhunen, Kim-Phong Vu, Eileen Watson, Barbara White, Mary Wolfenbarger

Career Possibilities

General: social services agencies; health care institutions; government agencies; retirement communities; educational and research settings; professional organizations; business and industry; religious organizations; the arts and sciences.

Direct Service: developing programs; providing direct care; teaching in community settings; counseling; advising about estate planning, long-term care administration; advocating for older adults.

Indirect Service: analyzing issues related to older persons; planning, administering, and evaluating community-based and health related services; writing grants; teaching; advocating before legislative bodies; designing products; developing marketing strategies; consulting.

Introduction

Gerontology is the scientific study of the processes and phenomena of aging. The Gerontology Program's mission is to improve the lives of middle aged and older individuals; provide training, consultation and other services; and conduct research.

The Gerontology Program is enhanced by the Gerontology Faculty Interest Group, the Center for Successful Aging and a chapter of Sigma Phi Omega, The National Academic Honor and Professional Society in Gerontology. Students in the Gerontology Program are eligible for membership in Sigma Phi Omega.

The Center for Successful Aging is part of a complex of centers and organizations on the campus of California State University, Long Beach that are involved with aging-related issues. The Center is a transdisciplinary academic/community partnership to promote collaborative innovations in education, practice, policy development and research.

Master of Science in Gerontology

Interested students should contact Dr. Barbara White at 562-985-1582 or bwhite@csulb.edu

This program is designed to prepare students with a thorough background in existing theory and research in

gerontology, advanced principles of program management, and an enhancement to their baccalaureate preparation for their professional discipline.

Admission Requirements

1. Complete the application form to be admitted to the university with graduate standing;
2. Send the following materials to the Gerontology Program, in addition to those sent to the Office of Enrollment Services:
 - Three letters of recommendation reflecting academic potential, personal qualifications, sensitivity, and evidence of ability and motivation to work with older adults and professionals in the field of aging,
 - A current resumé, including education, employment, and volunteer activities,
 - A personal statement of interest in aging and career goals in the field.

Admission to the program is contingent on approval by the Gerontology Program Director.

Prerequisites

1. A bachelor's degree from an accredited institution.
2. Evidence of a 3.0 or better grade point average in all undergraduate work. Students with less than a 3.0 grade point average in the last 60 undergraduate semester or 90 quarter units attempted but with evidence of professional promise and experiential background may be admitted conditionally by action of the Program Director.
3. Successful completion of the following courses or their approved substitutes:
Take the following courses:
 - GERN 400I Perspectives on Gerontology (3) may be taken upon program admission
 - an approved upper-division statistics course may be taken within the first year of the program.

Retention

1. Maintain a 3.0 or better grade point average in all graduate work completed at CSULB and all approved graduate work transferred to meet graduate requirements.
2. Continuous satisfactory progress toward the degree objective.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy.
2. Fulfill the Graduation Writing Assessment Requirement (GWAR) (to be taken during the first term).
3. Complete a minimum of six units of graduate level coursework in gerontology.
4. Be enrolled during the term in which advancement to candidacy takes place.
5. Obtain approval for one's individual program plan from the Gerontology Program Director and then from the Associate Dean of the College of Health and Human Services.

Requirements

Thesis Option

Completion of a minimum of 37 units, with at least 28 units of 500 and/or 600 series in Gerontology, including:

Take all of the following courses:

GERN 500 Introduction to the Professional Practice of Gerontology (3)

Prerequisites/Corequisites: GERN 400I or equivalent; graduate standing or consent of instructor.

GERN 563 Evaluation in Family and Consumer Sciences and Gerontology (3)

Prerequisites: Upper division or graduate course in statistics; GERN 696 (may be taken concurrently) or equivalent.

GERN 582 Health Assessment of the Aging Client (3)

Prerequisites: GERN 400I or equivalent and graduate standing or consent of instructor.

GERN 592 Internship in Family and Consumer Sciences/Gerontology (3)

Prerequisites: Graduate standing and consent of instructor.

GERN 600 Seminar in Administration of Family and Consumer Sciences/Gerontology Programs (3)

Prerequisites: Graduate standing.

GERN 696 Research Methods (3)

Prerequisites: Upper-division course in statistics.

GERN 697 Directed Research (3)

Prerequisites: Advancement to candidacy, GERN 500-level courses in area of study, and GERN 696.

GERN 698 Thesis (4)

Prerequisites: GERN 697, advancement to candidacy.

A maximum of nine units may be taken outside of the major.

Directed Project Option

Completion of a minimum of 37 units with at least 28 units of 500 and/or 600 series in Gerontology, including:

GERN 500 Introduction to the Professional Practice of Gerontology (3)

Prerequisites/Corequisites: GERN 400I or equivalent; graduate standing or consent of instructor.

GERN 563 Evaluation in Family and Consumer Sciences and Gerontology (3)

Prerequisites: Upper division or graduate course in statistics; GERN 696 (may be taken concurrently) or equivalent.

GERN 582 Health Assessment of the Aging Client (3)

Prerequisites: GERN 400I or equivalent and graduate standing or consent of instructor.

GERN 592 Internship in Family and Consumer Sciences/Gerontology (3)

Prerequisites: Graduate standing and consent of instructor.

GERN 600 Seminar in Administration of Family and Consumer Sciences/Gerontology Programs (3)

Prerequisites: Graduate standing.

GERN 692 Gerontology Directed Project (4)

Prerequisites: GERN 697.

GERN 696 Research Methods (3)

Prerequisites: Upper-division course in statistics.

GERN 697 Directed Research (3)

Prerequisites: Advancement to candidacy, GERN 500-level courses in area of study, and GERN 696.

A maximum of nine units may be taken outside the major.

Certificate in Gerontology

Interested students should contact Dr. Maria Claver at 562-985-4495 or mclaver@csulb.edu

This program is designed to educate individuals as gerontology specialists within a major area of study. Graduates work in community programs, health services organizations, government agencies, and the private sector.

The Certificate in Gerontology may be earned in conjunction with a baccalaureate degree or awarded subsequent to earning a bachelor's degree. Be aware that this program is not eligible for Financial Aid unless pursued concurrently with a CSULB degree program. Up to six units of courses taken in the student's major department may be approved to satisfy certificate requirements as may general education and elective courses also used to complete the bachelor's degree if they contain appropriate gerontology content.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

1. Consult with the Gerontology Certificate Coordinator to add the Certificate in Gerontology to the major program of study.
2. A bachelor's degree in any major (may be taken concurrently)
3. A minimum GPA of 2.5
4. 24 units distributed as follows

A. Take 15 required units including the following:

GERN 400I Perspectives on Gerontology (3) (meets GE Capstone requirement)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

ANTH 454 Culture and Aging (3)

Prerequisites: None.

GERN 492G Internship in Gerontology (3)

Prerequisites: Senior standing; have a 2.5 GPA overall or a 3.0 major GPA; approval of the Gerontology Certificate Coordinator; and GERN 400I, ANTH 454, PSY 365 or HDEV 357I. Each prerequisite course must be completed with a grade of "C" or better.

Take one of the following:

BIOL 301 Biology of Human Aging (3)

Prerequisites: BIOL 200 or 205 or 207 all with a grade of "C" or better.

GERN 482/582 Health Assessment of the Aging Client (3)

Prerequisites: GERN 400I or equivalent and upper division standing or consent of instructor.

Take one of the following:

PSY 365 Psychology of Adult Development and Aging (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

HDEV 357I Approaches to Adulthood Through Aging (3) (meets GE Capstone requirement)

Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

- B. Take a minimum of nine units chosen in consultation with the Gerontology Certificate Coordinator from a list of approved elective courses (three to six units of appropriate coursework in the major field may partially

- fulfill this requirement). Three units may be fulfilled by taking GERN 497 or an approved substitute.
5. Application for the Certificate in Gerontology through completion of the appropriate Program Planner in consultation with the Gerontology Certificate Coordinator. This must be done in the semester prior to the completion of the certificate to assure timely issuance.

Courses (GERN)

UPPER DIVISION

400I. Perspectives on Gerontology (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

Multidisciplinary study of middle age and aging. Includes physiological, psychological, political, economic and sociological aspects. Effects of culture and environment on aging; history and demographics; health issues.

(Lecturer-discussion, 3 hours.)

420./520. Personal Finance for the Aging (3)

Prerequisites: 400-level course in Consumer Affairs or consent of instructor.

Personal finance as applied to the aging population.

Same course as CAFF 420. Not open for credit to students with credit in CAFF 420. (Lecture-discussion 3 hrs)

430./530. Aging and Dementia (3)

Prerequisites: GERN 400I, HDEV 357I or PSY 365, or graduate standing, or consent of instructor.

An examination of physiological, psychological, social and economic aspects of dementia and its impact on the individual, the family and society. Community resources, current research and policy issues are included, with a particular emphasis on Alzheimer's disease.

439./539. Nutrition and Aging (3)

Prerequisites: NUTR 132 or BIOL 207 or 301 or GERN 400I or consent of instructor.

Nutritional needs as related to physiological changes that occur during aging. Factors that influence food intake and nutritional status of the elderly. Diet adaptation for chronic diseases commonly found in older adults.

Letter grade only (A-F). Same course as NUTR 439. Not open for credit to students with credit in NUTR 439.

469./569. Disability, Culture and Society: Issues and Intervention (3)

Prerequisites: Senior or graduate standing.

Disability as a social construct. Examines policies and practices to understand the experience of disability. Includes historical and contemporary perspectives as well as future issues. Emphasis on social and clinical intervention methods as well as programs and resources.

Letter grade only (A-F). Same course as REC 469. Not open for credit to students with credit in REC 469 or SW 469.

474. Global Aging (3)

Prerequisite: GERN 400I.

Course Description: Examines aspects of individual and societal aging around the world, including demography of aging, cultural perspectives, work and retirement, social welfare, health care, morbidity and mortality, long term care, caregiving, and death and dying.

Not open for credit to students with credit in GERN 574. (Lecture-activity 3 units)

482. Health Assessment of the Aging Client (3)

Prerequisites: GERN 400I or equivalent and upper division standing or consent of instructor.

Assessment of the physical, psychological and social status of the aging client as they affect health and well-being. Focuses on working with aging clients in a variety of settings to identify actual or potential health-related problems using various techniques.

Same course as NRSRG 482. Not open for credit to students with credit in NRSRG 482. (Lecture-discussion, 3 hours)

485. Mental Health and Aging (3)

Prerequisites: GERN 400I, HDEV 357I or PSY 365, ANTH 454, and BIOL 401, or consent of instructor.

Mental health status of older adults over time and within subgroups. Societal responses affecting diagnoses and assessments of competence. Common mental health issues of older adults. Comparison of medical and non-medical therapeutics.

Fieldtrips may be required. (Seminar 3 hours)

492G. Internship in Gerontology (3)

Prerequisites: Student must be a Gerontology Certificate candidate; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of the Gerontology Certificate Coordinator; and GERN 400I, ANTH 454, PSY 365 or HDEV 357I. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. Same course as FCS 492G. Not open for credit to students with credit in FCS 492G (Seminar 3 hours)

497. Directed Studies (1-3)

Prerequisites: GERN 400I, ANTH 454, PSY 365, or HDEV 357I, upper-division standing and consent of program director.

Independent study under the supervision of a faculty member. Exploration and experience supplementing and/or complementing regular courses.

May be repeated to a maximum of 6 units.

499. Selected Topics in Gerontology (1-3)

Group investigation of topics of current interest in gerontology.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

GRADUATE LEVEL

500. Introduction to the Professional Practice of Gerontology (3)

Prerequisite/Corequisite: GERN 400I or equivalent; graduate standing or consent of instructor.

Graduate level introduction to the professional practice of Gerontology. Emphasis is on application of theoretical concepts, research in practice, ethics, career path exploration, and development of leadership career related skills and resources.

Letter grade only (A-F). (Seminar 2 hours, activity 2 hours)

520./420. Personal Finance for the Aging (3)

Prerequisites: 400-level course in Consumer Affairs or consent of instructor.

Personal finance as applied to the aging population.

Same course as FCS 520. Not open for credit to students with credit in FCS 520. Letter grade only (A-F). (Lecture-discussion 3 hours)

530./430. Aging and Dementia (3)

Prerequisites: GERN 400I, HDEV 357I or PSY 365, or graduate standing, or consent of instructor.

An examination of physiological, psychological, social and economic aspects of dementia and its impact on the individual, the family and society. Community resources, current research and policy issues are included, with a particular emphasis on Alzheimer's disease.

539./439. Nutrition and Aging (3)

Prerequisites: NUTR 132 or BIOL 207 or 301 or GERN 400I or consent of instructor.

Nutritional needs as related to physiological changes that occur during aging. Factors that influence food intake and nutritional status of the elderly. Diet adaptation for chronic diseases commonly found in older adults.

Letter grade only (A-F). Same course as FCS 539. Not open for credit for students with credit in NUTR 439, FCS 539, or GERN 439.

550. Social Policy and Aging (3)

Prerequisite: GERN 400I, HDEV 357I or PSY 365, and ANTH 454 or consent of instructor.

Major legislation and policies affecting older Americans. Analyses of policy information and change, kinds of data, and social forces that affect development and implementation of aging-related policies and legislation.

563. Evaluation in Family and Consumer Sciences and Gerontology (3)

Prerequisites: Upper division or graduate course in statistics; GERN 696 (may be taken concurrently) or equivalent.

Principles, design, and methods of program evaluation for use by Family and Consumer Sciences and Gerontology professionals. Selection and development of instrumentation for data collection and interpretation and methods of reporting.

Letter grade only (A-F). Same course as FCS 563. Not open for credit to students with credit in FCS 563. (Seminar 3 hours)

569./469. Disability, Culture and Society: Issues and Social Intervention (3)

Prerequisites: Senior or graduate standing.

Disability as a social construct. Examines policies and practices to understand the experience of disability. Includes historical and contemporary perspectives as well as future issues. Emphasis on social and clinical intervention methods as well as programs and resources.

Letter grade only (A-F). Same course as REC 569 and SW 569. Not open for credit to students with credit in REC 569 and SW 569.

574. Global Aging (3)

Prerequisite: Graduate standing

Examines aspects of individual and societal aging around the world, including demography of aging, cultural perspectives, work and retirement, social welfare, health care, morbidity and mortality, long term care, caregiving, and death and dying.

Letter grade only (A-F). Not open for credit to students with credit in GERN 474.

582. Health Assessment of the Aging Client (3)

Prerequisites: GERN 400I or equivalent and graduate standing or consent of instructor.

Assessment of the physical, psychological and social status of the aging client as they affect health and well-being. Focuses on working with aging clients in a variety of settings to identify actual or potential health-related problems using various techniques.

Letter grade only (A-F). Not open for credit to students with credit in GERN 482 or NRS 482.

592. Internship in Family and Consumer Sciences/ Gerontology (3)

Prerequisite: Graduate standing and consent of instructor.

Field experience in which student assumes a self directed responsible role in an agency, business or other community setting.

May be repeated to a maximum of 6 units. (Seminar 3 hours)
Letter grade only (A-F).

597. Independent Study (1-3)

Prerequisites: Graduate standing and consent of instructor.

Independent study under the supervision of a faculty member. Exploration or experience supplementing and/or complementing regular courses to meet student learning goals.

May be repeated for a maximum of six units in different semesters.
Letter grade only (A-F).

599. Selected Topics in Gerontology (1-3)

Prerequisites: Graduate standing

Group investigation of topics of current interest in gerontology.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

600. Seminar in Administration of Family and Consumer Sciences/Gerontology Programs (3)

Prerequisite: Graduate standing

Application of administration, management and leadership theories to family and consumer sciences/gerontology programs. Decision-making, organizational structures and evaluation concepts included.

Letter grade only (A-F). Same course as FCS 600. Not open for credit to student with credit in FCS 600.

610. Seminar in Current Issues, Trends and Research in Gerontology (3)

Prerequisite: Completion of all core courses except GERN 696, 697 or 698 any of which may be taken concurrently.

Students will undertake literature reviews and/or research to explore emerging issues, trends and research in the field of aging studies and/or update their information on the most current gerontological topics.

(Seminar 3 hours)

692. Gerontology Directed Project (4)

Prerequisite: GERN 697.

Students will acquire experiential skills under the guidance of a faculty advisor and supervisor/preceptor at an approved project site. Student will identify problems, design and assess a project or conduct research. Results will be presented in a thesis-style report.

Letter grade only (A-F).

696. Research Methods (3)

Prerequisite: Upper-division course in statistics.

Methodological approaches to contemporary research issues in Family and Consumer Sciences. Course focuses on the design, development, and implementation of a formal research-designed project.

Letter grade only (A-F). (Seminar 3 hours) Same course as FCS 696. Not open for credit to students with credit in FCS 696.

697. Directed Research (3)

Prerequisite: Advancement to candidacy, GERN 500-level courses in area of study, and GERN 696.

Independent investigation of research problems under the direction of a faculty member.

Letter grade only (A-F).

698. Thesis (4)

Prerequisite: GERN 697, advancement to candidacy.

Planning, preparation and completion of a thesis under supervision of a faculty member. Approval of thesis committee.

Letter grade only (A-F).

GLOBAL LOGISTICS

College of Liberal Arts
Department of Economics

Director: Kristen A. Monaco

Department Office: Social Science/Public Affairs (SS/PA), Rm 361A

Telephone: (562) 985-5061

Email: magl@csulb.edu

Website: www.csulb.edu/economics

FAX: (562) 985-5804

Graduate Advisor/Associate Director: Wade E. Martin

Faculty: Omer Benli, Elaine Frey, Jack Hou, Shui Lam, Joseph P. Magaddino, Wade E. Martin, Kristen A. Monaco, Khosrow Moshirvaziri, Chen Ng, Seiji S.C. Steimetz, Steve Yamarik, Guy Yamashiro

Faculty: Jake Alimahomed-Wilson (Sociology), Bengt J. Allen (Biological Sciences), Monica Argandona (ES&P), W. Frank Baber (Graduate Center for Public Policy and Administration), Austin Beahm (Geography), Richard J. Behl (Geological Sciences), Stuart R. Berryhill (Chemistry and Biochemistry), Christopher Burnett (Journalism and Mass Communication), Suzanne Dallman (Geography), Stanley C. Finney (Geological Sciences), Elaine Frey (Economics), Darwin Hall (Economics), George Hart (English), Gregory J. Holk (Geological Sciences), Kevin M. Kelley (Biology), Paul Laris (Geography), Daniel O. Larson (Anthropology), Carl Lipo (Anthropology), Xeumei Liu (Economics), Christopher Lowe (Biological Sciences), Wade E. Martin (Economics), Andrew Z. Mason (Biological Sciences), Martin McCarthy (ES&P), Steve Mezyk (Chemistry), Jacqueline Mills (Geography), Hector Neff (Anthropology), Bruce Perry (Geological Sciences), Nancy Quam-Wickham (History), Christine M. Rodrigue (Geography), Lora Stevens (Geological Sciences), Dean Toji (Asian and Asian-American Studies), Reza Toossi (Mechanical and Aerospace Engineering), Dessie Underwood (Biological Sciences), Carla Weaver (Geological Sciences), Suzanne P. Wechsler (Geography), Christine Whitcraft (Biological Sciences), Angela Wranic (Geography and ES&P), Eric Zahn (ES&P)

Career Possibilities

Environmental Analyst • Teacher • Ecologist • Geochemist
• Environmental Impact Report Writer • Community Development Specialist • Urban Planner • Environmental Planner • Peace Corps • Non-Governmental Organization Activist • Mass Media (Journalism, Radio, Television)
• Environmental Advocate • Environmental Consultant
• Public Relations • Public Policy Administrator • Environmental Law • Environmental Health • Environmental Economics • Environmental Toxicology • Sustainable Development Specialist • Green Business (For more information, see www.careers.csulb.edu.)

Master of Arts in Global Logistics

Prerequisites

1. A bachelor's degree with a grade-point average of 2.75 or better. A student whose overall grade-point average is less than 2.75, but who possesses a strong employment history in supply chain management or logistics or who possesses a recent record of academic excellence by completion of certificate or other coursework, may be admitted by special action of the Admissions Committee.

2. Students are required to submit: a completed application form; two letters of recommendation from members of the academic profession under whom the applicant studied or from individuals in positions of leadership with whom the applicant worked; and a statement of the applicant's interest in pursuing a career in global logistics. Students are also required to submit scores from the Graduate Record Examination (GRE).

Advancement to Candidacy

Satisfy the general requirements of the University for advancement to candidacy.

Requirements

Completion of a minimum of 33 units beyond the bachelor's degree and graduate coursework as follows:

- Core requirements (16 units), satisfactory completion of:
 - ECON 500 Business Economics (3)
Prerequisites: None
 - ECON 555 Transportation Economics (3)
Prerequisites: None
 - GLG 540 Benefit-Cost Analysis for Logistics (2)
Prerequisites: Consent of instructor.
 - GLG 556 Economics of Logistics Management (3)
Prerequisite: ECON 500.
 - GLG 560 Research Methods for Global Logistics (3)
Prerequisite: ECON 500.
 - GLG 570 International Trade & Finance for Logistics (2)
Prerequisites: Consent of instructor.
- Satisfactory completion of at least one course in each of the following four emphases (11 units):
 - Quantitative Analysis in Logistics, one of the following:
 - CECS 552 Computer Simulation and Modeling (3)
Prerequisites: EE 380 (or MATH 380) and CECS 326.
 - GLG 690 Selected Topics in Global Logistics (1-3)
Prerequisites: Consent of instructor.
 - Forecasting for Logistics, take the following:
 - GLG 520 Forecasting (2)
Prerequisites: GLG 560.
 - Advanced Topics in Logistics, one of the following:
 - GLG 530 Introduction to Optimization Methods in Transportation (3)
Prerequisites: ECON 500.
 - CECS 590 Selected Topics in Computer Science (3)
Prerequisites: Graduate standing and consent of instructor.
 - Seminar in Global Logistics, take the following:
 - ECON 666 Seminar in Transportation Economics (3)
Prerequisites: ECON 510, 511, 555, 585 and 586.
- Practical Applications of Logistics, take the following:
 - GLG 595 Field Studies Practicum in Logistics (3)
Prerequisites: Consent of instructor.
- Complete the following:
 - GLG 655 Seminar in Global Logistics (3)
Prerequisites: Completion of at least 27 units in the M.A.G.L.

Global Logistics Courses (GLG)

520. Forecasting (2)

Prerequisites: GLG 560.

A comprehensive introduction to forecasting in economics and business. Topics covered include statistical graphics, trends, seasonality, cycles, forecast construction, forecast evaluation and forecast combination.

Letter grade only (A-F).

530. Introduction to Optimization Methods in Transportation (3)

Prerequisites: ECON 500.

Optimization methods applied to transportation problems. Introduction to optimization, simple calculus-based function optimization, linear programming, simplex method and computer based solution of linear programming problems. Introduction to network flow, dynamic programming. Practical considerations for large problems; optimal and near optimal solutions.

Letter grade only (A-F).

540. Benefit-Cost Analysis for Logistics (2)

Prerequisites: Consent of instructor.

Introduces benefit-cost analysis. Discussion of private costs and benefits, social costs and benefits, and project analysis.

Letter grade only (A-F).

556. Economics of Logistics Management (3)

Prerequisite: ECON 500.

Analysis and design of domestic and international logistics systems. Topics include: transportation, warehousing, inventory control, materials management, systems design and organization.

Not open for credit to students with credit in ECON 556. Letter grade only (A-F).

560. Research Methods for Global Logistics (3)

Prerequisite: ECON 500.

Applications of research methods to topics in logistics. Topics include: developing a research question, performing a literature review, data collection, and statistical analysis.

Letter grade only (A-F).

570. International Trade and Finance for Logistics (2)

Prerequisites: Consent of instructor.

Examines theories of trade, tariffs, customs, foreign exchange market and international financial institutions.

Letter grade only (A-F).

595. Field Studies Practicum in Logistics (3)

Prerequisites: Consent of instructor.

Practical experience, at a management level, in an appropriate logistics firm.

Letter grade only (A-F)

655. Seminar in Global Logistics (3)

Prerequisites: Completion of at least 27 units in the M.A.G.L.

A capstone seminar in global logistics. Major research project to integrate knowledge of global logistics. Research paper and oral presentation of research.

Not open for credit to students with credit in ECON 655. Letter grade only (A-F).

690. Selected Topics in Global Logistics (1-3)

Prerequisites: Consent of instructor.

Topics of current interest in global logistics selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

HEALTH AND HUMAN SERVICES, COLLEGE OF

Dean: Kenneth I. Millar

Associate Dean: Sue Stanley

Associate Dean for Research: Gail Farmer

Director of Development: Tyson Reyes

Administrative Services Manager: Douglass Butler

Administrative Analyst: Germain Hernandez

Facilities Coordinator: Denysia O'Connell

Director of Technology: Javier Banuelos

Director of the Academic Advising and Resource Center:
Kimberly Machan

College Office: Engineering Technology Building (ET), Room 200
Telephone / FAX: (562) 985-4194 / (562) 985-7581
Website: www.csulb.edu/colleges/chhs/

Introduction

The College of Health and Human Services prepares students for careers in health, wellness, teacher preparation, and social and consumer services. Our accredited graduate and undergraduate programs offer state-of-the-art curriculum through which departments/schools provide optimal learning opportunities in the classroom, in the research laboratory, and in the community.

The College's two schools, nine departments, three programs, and twelve research centers are housed within twelve buildings on campus with state-of-the-art classrooms, laboratories, and clinics with equipment matching that of business/industry.

Programs at a Glance

Bachelor of Arts:

- Communicative Disorders
- Family and Consumer Sciences
- Kinesiology
- Recreation
- Social Work

Bachelor of Science:

- Athletic Training
- Criminal Justice
- Dietetics and Food Administration
- Health Care Administration
- Health Science
- Hospitality Foodservice and Hotel Management
- Kinesiology
- Nursing

Master of Arts:

- Communicative Disorders
- Family and Consumer Sciences
- Kinesiology

Master of Science:

- Criminal Justice
- Emergency Services Administration
- Gerontology
- Health Care Administration
- Health Science
- Kinesiology

Nursing

Nursing / Public Health

Nursing / Health Care Administration

Nutritional Science

Recreation Administration

Master of Physical Therapy

Master of Public Administration

Master of Public Health: Community Health Education

Master of Social Work

Doctor of Physical Therapy

Certificates

Administration of Campus Recreation and Student Service Programs

Administration of Outdoor Recreation Resources

Administration of Travel and Tourism

Gerontology

Health Care Administration

Kinesiotherapy

Management of Nonprofit and Volunteer Services

Nurse Practitioner (graduate)

Public Management Analyst (graduate)

Public Sector Employer-Employee Relations and Personnel Management (graduate)

Public Sector Financial Management (graduate)

Therapeutic Recreation

Transportation Policy and Planning (graduate)

Urban Executive Management (graduate)

Wilderness Studies

Credentials

Single Subject Teaching Credentials: Home Economics, Health Science, and Kinesiology/Physical Education. Consult the Single Subject Advisor as early as possible.

Services credentials are offered in Communicative Disorders (Public Education Speech-language Pathology), Nursing (Health Service School Nurse), and Social Work (Pupil Personnel – Child Welfare and Attendance).

Professional Accreditations

Programs in the College are accredited by the following state and national accrediting agencies:

American Association of Colleges of Nursing, American Association of Family and Consumer Sciences, American Dietetic Association, American Physical Therapy Association, American Public Works Association (APWA), American Speech Language and Hearing Association, Association of University Programs in Health Administration, California Commission for Teacher Credentialing, California Council on Parks and Recreation, California State Board of Registered Nursing, California Teaching Commission, Commission on Accreditation of Allied Health Education Programs, Council on Education for Public Health, Council on Hotel, Restaurant, and Institutional Education, Council on Social Work Education, National Association for the Education of Young Children, National Association of Schools of Public Affairs and Administration (NASPAA), National Council for

Accreditation of Teacher Education, National Recreation and Park Association Council on Accreditation, Western Institute of Nursing.

Special Interest Clubs

Archers, Army ROTC Association, Army ROTC Rangers (AROTC), California Nursing Student Association, Child and Family Associated Students (CAFAS, Family and Consumer Sciences), Criminal Justice Student Association, Fitness Club, Foodservice and Hotel Management Association (Family and Consumer Sciences), Health Care Administration Forum, Health Science Graduate Student Association, Kinesiology and Physical Education Majors Club, National Student Speech-Language-Hearing Association (Communicative Disorders), Peer Health Educators, Pershing Rifles (AROTC), Physical Therapy Student Association, Public Administration Student Association (PASA, Public Policy and Administration), Recreation and Leisure Studies Alumni Association (RALSAA), Recreation Society (Recreation and Leisure Studies), Social Dance Club, Consumer Affairs Student Association (Family and Consumer Sciences), Sports Medicine Club (Kinesiology), Student Affiliates of the American Kinesiotherapy Association (Kinesiology), Student Chapter of American Association of Family and Consumer Sciences, Student Dietetic Association (Family and Consumer Sciences), Student Food Science Society (Family and Consumer Sciences), Students Active in Community Health (Family and Consumer Sciences), Students in Fashion (Family and Consumer Sciences).

Professional and Honors Organizations

Alpha Phi Sigma (Criminal Justice), American College of Healthcare Executives, California Association for Health, EEta Sigma Delta (Hospitality Foodservice and Hotel Management, Family and Consumer Sciences), Eta Sigma Gamma (Health Science), Kappa Omicron Nu (Family and Consumer Sciences), Phi Epsilon Kappa (Kinesiology), Pi Alpha Alpha (Public Policy and Administration), Recreation and Dance (CAHPERD), Sigma Phi Omega (National Academic and Professional Society in Gerontology), Sigma Theta Tau (Iota Eta Chapter, Nursing).

College and Departmental Organizations

Asian Pacific Islanders Committee (Social Work), Associated Students of Social Work, California Nursing Student Association, Dunham/Cleveland Committee (Social Work), College of Health and Human Services Student Council, Gay, Lesbian, Transsexual, Transgender Committee (Social Work), Latino Student Network Committee (Social Work), National Association of Social Work Unit, Social Work Alumni Association.

Courses (HHS)

LOWER DIVISION

100. Skills for Living (3)

Development of skills necessary for achieving success as a student in any HHS major and ultimately as a professional. Additionally, HHS 100 is intended to improve student awareness of health and human services professions, career paths and disciplines.

Letter grade only (A-F). (Lecture-discussion, 3 hours) Team taught by College of Health and Human Services Faculty.

210. Introduction to Physical Therapy (3)

Corequisite: HHS 100.

Introduction and orientation to rehabilitation with special emphasis on physical therapy. Includes essentials for choosing between rehabilitation professions and preparation for admission to a professional physical therapy educational program.

Letter grade only (A-F). (Lecture/discussion 3 hours)

UPPER DIVISION

374. Professional Practice I: Professional Interactions (3)

Prerequisites: Consent of instructor

Self-awareness of how personality, learning preferences, and personal values affect professional interactions. Includes effective communication, conflict resolution, and eliciting patient values and goals. Also, communicating with patients who have experienced disability, sexual dysfunction, or issues with coping or dying.

Letter grade only (A-F). Lecture/Discussion 3 hours.

401. Applied Anatomy I (3)

Prerequisite: BIOL 208 or equivalent.

Advanced study of structure and function of neuromusculoskeletal systems with emphasis on surface contour, myology and joint structure and neurovascular supply. Regional emphasis includes upper extremity head, neck and thorax. Includes dissection laboratory and provided materials.

Letter grade only (A-F). (Lecture/discussion 2 hours, lab 3 hours)
Course fee may be required.

402. Applied Anatomy II (3)

Prerequisites: BIOL 208 or equivalent; "B" or better in HHS 401.

Continuation of HHS 401, with emphasis on normal anatomy of lower extremities, pelvis, and abdominal region.

Letter grade only (A-F). (Lecture/discussion 2 hours, lab 3 hours)
Course fee may be required.

403. Tissue Mechanics and Aging (3)

Prerequisites: "B" or better in HHS 401 and BIOL 341 and consent of instructor.

Advanced study of tissue (bone, muscle, dense fibrous connective tissue, cartilage, nerve) mechanics and pathomechanics including use, disuse and aging with application to joint mechanics and therapeutic procedures.

Letter grade only (A-F). (Lecture/discussion 3 hours)

460. Neuroanatomy (4)

Prerequisite: BIOL 341.

Investigation of human neuroanatomy with emphasis on the structure and function of the central nervous system (CNS), cranial nerves, and their connecting neural pathways relative to human function and movement. Neuroanatomical and vascular lesions will be discussed and correlated to common clinical conditions. Emphasis is on applying neuroanatomy for differential diagnosis.

Letter grade only (A-F). (Lecture/discussion 3 hours, lab 3 hours)

471. Pathology (3)

Prerequisite: BIOL 208; Corequisite: BIOL 341.

Advanced study of abnormal function as result of disease. Includes general pathology and selected pathologies encompassing cardiovascular, pulmonary, musculoskeletal, peripheral and central nervous system, and integumentary systems.

Letter grade only (A-F). (Lecture/discussion 3 hours)

497. Independent Studies (1-3)

Prerequisites: Consent of instructor, and for human dissection, one general introductory anatomy course, HHS 401 and 402.

Independent projects in any area of physical therapy. Human dissection is available as a special study.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

HEALTH CARE ADMINISTRATION

College of Health and Human Services

Department Chair: Tony Sinay

Department Office: Health and Human Services (HHS) 2, Room 118

Telephone: (562) 985-5694

Faculty: Erlyana Erlyana, Janice Frates, Brenda Freshman, Henry O'Lawrence, Grace Reynolds, Tony Sinay

Administrative Coordinator: Deby McGill

Career Possibilities

Provider Relations Director • Clinical Administrator • Financial Analyst • Director of Managed Care • Director of Nursing • Medical Facilities Section Director • Nursing Home Administrator • Medical Records Administrator • Social Welfare Administrator • Emergency Medical Services Coordinator • Public Health Director • Community Organization Director (For more information, see www.careers.csulb.edu.) Various entry-level trainee positions in the health care industry are available for graduates of undergraduate program.

Introduction

The mission of the Health Care Administration Department is to prepare professionals to manage, lead and improve a changing health care system. Our graduate and undergraduate programs are designed, and continually strive to improve their efforts, to meet the needs of the dynamic Southern California health care system, and to emphasize culturally appropriate patient-centered service delivery systems.

The department offers five programs:

1. Master of Science in Health Care Administration
2. Bachelor of Science in Health Care Administration
3. Master of Science in Nursing/Master of Science in Health Care Administration
4. Master of Science in Health Care Administration-Accelerated Program
5. Certificate in Health Care Administration

Accreditation

The graduate program is accredited by the Commission on Accreditation for Health Management Education (CAHME) and the undergraduate program is a fully certified member of the Association of University Programs in Health Administration (AUPHA).

Undergraduate Programs

Bachelor of Science in Health Care Administration (120 units)

Admission Requirements

Prerequisites

1. All students must complete a minimum of 13 semester units or the equivalent in prerequisite preparatory

course for the major: ACCT 201, ECON 101 or 300, SOC 250 (or equivalent) and BIOL 200 (or equivalent). These courses may be taken after admission to the program. Computer proficiency in word processing, spreadsheet, database and presentation software is expected. Business calculus (MATH 115) is recommended.

2. An overall grade point average of 2.0 or higher is required for entrance into the program. A minimum grade of "C" is required for each prerequisite course.

Graduation Requirements

1. Complete the requirements for General Education
2. Complete the prerequisite courses
3. Complete the major core course requirements:
 - HSC 150 Medical Terminology (1)
Prerequisites: None.
 - HSC 400 Principles of Epidemiology (3)
Prerequisites: HSC 301, 403.
 - HCA 300 The Health Care System (3)
Prerequisites: None.
 - HCA 312 Health Personnel Management (3)
Prerequisite: Open to Health Care Administration majors only.
Prerequisite/Corequisite: HCA 300.
 - HCA 340 Legal Aspects of Health Administration (3)
Prerequisite: Open to Health Care Administration majors only.
Prerequisite/Corequisite: HCA 300.
 - HCA 341 Financial Management of Health Care Institutions (3)
Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in ACCT 201.
Prerequisite/Corequisite: HCA 300.
 - HCA 353 Marketing for Health Services Organizations (3)
Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in ECON 101 or 300.
Prerequisite/Corequisite: HCA 300.
 - HCA 410 Health Management and Organization (3)
Prerequisites: Open to Health Care Administration majors only.
Prerequisite/Corequisite: HCA 300.
 - HCA 416 Management and Information Systems (3)
Prerequisite: Open to Health Care Administration majors only.
Prerequisite/Corequisite: HCA 300.
 - HCA 450 Quality Assurance of Health Care (3)
Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in HCA 300 and HCA 465.
 - HCA 465 Analysis and Evaluation of Health Care Services (3)
Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in PSY 210 or SOC 250 or equivalent.
Prerequisite/Corequisite: HCA 300.
 - HCA 480 Internship in Health Care Administration (3)
Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in HCA 300, 312, 341, 410, 465 and HSC 150.
 - HCA 481 Internship & Career Development in HCA (3)
Prerequisites: Open to Health Care Administration majors only and HCA 480.

4. Upper Division (required elective courses). A minimum of 9 additional units from the following:
HCA 320, 422I, 439, 417I, 451, 452, 457I, 470I, 471.
5. Complete electives as needed to total 120 semester units
6. Fulfill the Graduation Writing Assessment Requirement (GWAR)
7. Each major course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses for which it is not a prerequisite with approval of the Undergraduate Advisor.

Certificate in Health Care Administration

The Certificate in Health Care Administration is comparable to a minor of 18 semester units and, with prerequisite course work, may require up to 24 semester units for completion. Components of the program include the forms of organization and operation of health care systems, human resources management, leadership and development, financial management, and marketing. The Certificate may be combined with major programs from a variety of fields including, but not limited to, behavioral and natural sciences, humanities, health professions, business and public administration, and social work and is conferred as a post-baccalaureate certificate (or concurrently with the BS/BA). The courses taken for the certificate (with a grade of "B" or better) may apply toward the MS program at the discretion of the Program Director.

Health care administrators are usually prepared at the masters' degree level for job entry into upper management. There is, however, increased emphasis to prepare health care professionals to function as managers at other levels as well. Increasingly, physicians are also seeking preparation in the elements of management. These diverse groups use management skills in the health services and related fields. These include hospitals, nursing homes, health departments, health maintenance organizations, health planning and regulatory agencies, health management and review companies, group medical practices, health insurance firms, pharmaceutical and medical supply companies.

Students may only pursue the certificate program in combination with a CSULB degree program.

Admission Requirements

1. Admission to the University
2. A bachelor's or advanced degree with transcripts (conferred or expected)
3. Consultation with the Program Director
4. A minimum of 18 units is required and may include:
HCA 300, 312, 341*, 353+, 410 or the equivalent. At the graduate level HCA 502, 505, 510, 515, 530 or equivalent courses are considered for the certificate program.

* Prerequisite: ACCT 201

+ Prerequisite: ECON 101

Course substitutions may be made at the consent of the Director.

Graduate Programs

Master of Science in Health Care Administration

Graduates of HCA degree programs will achieve and demonstrate the following competencies: health care knowledge, leadership, presentation skills (oral communication), written communication skills, career marketability, teamwork, managing change, conceptual skills, managerial decision making, ethical decision making, information management, interpersonal skills, independence, creativity and critical thinking, analytical skills, planning, advocacy and conflict management.

Admission Requirements

Each interested individual should apply to the University at www.csumentor.edu; send official transcripts from an accredited institution to Enrollment Services and pay application fee online. Also, the candidate should prepare an application packet with the following documents and send it to the Department:

1. Baccalaureate degree from an accredited institution with a minimum of 9 units of course work that include: accounting, economics and statistics
2. An applicant must have an overall undergraduate grade point average of 3.0 or better. Those applicants with less than 3.0, but with acceptable evidence of professional potential shown through recent academic performance and experiential background, may be admitted by special action of the Department Admissions Committee
3. Fill out and submit an MSHCA Application Form (available on HCA website)
4. A current and complete resume including references
5. Statement of Purpose describing your career goals in Health Care Administration
6. Three letters of recommendation
7. Interview with member of faculty or Program Director may be required.

Prerequisites

1. Take the following course (or equivalent): ACCT 201
2. Take one of the following courses (or equivalent):
ECON 101, 300
3. Take an introductory statistics course or equivalent.
4. Submit a minimum score of 500 on a recent Graduate Management Admission Test (GMAT) or a total score of a minimum 1000 on the Graduate Record Examination (GRE).

Students should contact the Program Director for a determination of deficiencies and required remediation.

Graduation Requirements

1. Complete a minimum 45 units graduate-level course work.
2. Complete of all the following core courses:
HCA 502 The Health Care System (3)
Prerequisites: None.
HCA 503 Health Care Economics (3)
Prerequisites: ECON 101 or 300.

- HCA 505 Organization and Systems of Health Care (3)
Prerequisites: None.
- HCA 510 Human Resources Management in Health Care (3)
Prerequisites: None.
- HCA 515 Adv Financial Management in Health Care (3)
Prerequisites: ACCT 201 or 500.
- HCA 517 Adv Healthcare Info Systems Management (3)
Prerequisites: HCA 502, 503, 530 or consent of instructors.
- HCA 524 Adv Legal & Ethical Aspects of Health Admin (3)
Prerequisites: None.
- HCA 530 Strategic Planning/Marketing in Health Care (3)
Prerequisites/Corequisites: HCA 502.
- HCA 535 Quantitative Methods for Health Admin (3)
Prerequisites: Statistics.
- HCA 550 Continuous Quality Improvement in Health Services (3)
Prerequisites: HCA 502.
- HCA 698A Project Part I (3)
Prerequisites: Completion of all 500-level courses and advancement to candidacy, or consent of instructor.
- HCA 698B Project Part II (3)
Prerequisites: Completion of all HCA 500-level courses, HCA 698A and consent of the instructor.
- HSC 500 Principles of Epidemiology (3)
Prerequisites: HSC 301 and HSC 403.

3. Completion of any two of the following elective courses:
HCA 536, 537, 538, 539, 552 or 580.

Advancement to Candidacy

Students will be instructed to apply for advancement to candidacy after:

1. Completion of 6 units of core course work that applies to the degree with an average grade of "B" or better,
2. Fulfillment of the Graduation Writing Assessment Requirement (GWAR),
3. Approval of Program Director.

Accelerated Program

The Master in Health Care Administration Accelerated Program (MSHCA-AP) is designed to prepare working professionals for administrative positions in health care organizations which requires a minimum three years of work experience and combines online and weekend courses. The MSHCA-AP program requires 45 credit hours consisting of 15 core courses. The program offers foundation courses early and more advanced healthcare specific courses later in the program.

Accelerated Education Model

YEAR I

First Quarter-Fall

- Orientation - No Credit
1. HCA 503 Health Care Economics (3)
Prerequisites: ECON 101 or 300.
 2. HCA 505 Organization and Systems of Health Care (3)
Prerequisites: None.

Second Quarter-Winter

3. HCA 502 The Health Care System (3)
Prerequisites: None.
4. HSC 500 Principles of Epidemiology (3)
Prerequisites: HSC 301 and HSC 403.

Third Quarter-Spring

5. HCA 524 Advanced Legal and Ethical Aspects of Health Administration (3)
Prerequisites: None.
6. HCA 515 Adv Financial Management in Health Care (3)
Prerequisites: ACCT 201 or 500.

Fourth Quarter-Summer

7. HCA 535 Quantitative Methods for Health Admin (3)
Prerequisites: Statistics.
8. HCA 510 Human Resources Management in Health Care (3)
Prerequisites: None.

YEAR II

First Quarter-Fall

9. HCA 517 Advanced Healthcare Info Systems Management (3)
Prerequisites: HCA 502, 503, 530 or consent of instructors.
10. HCA 698A Project Part I (3)
Prerequisites: Completion of all 500-level courses and advancement to candidacy, or consent of instructor.

Second Quarter-Winter

11. HCA 537 Managed Care (3)
Prerequisites: HCA 300 or 502.
12. HCA 550 Continuous Quality Improvement in Health Services (3)
Prerequisites: HCA 502.

Third Quarter-Spring

13. HCA 698B Project Part II (3)
Prerequisites: Completion of all HCA 500-level courses, HCA 698A and consent of the instructor.
14. HCA 536 Hospital Management (3)
Prerequisites: HCA 505.

Fourth Quarter-Summer

15. HCA 530 Strategic Planning/Marketing in Health Care (3)
Prerequisites/Corequisites: HCA 502.

Master of Science in Nursing/Master of Science in Health Care Administration

For requirements, see description in the Nursing section of this catalog.

Courses (HCA)

LOWER DIVISION

101. Health Care Administration in Action (3)

Offers students opportunities to learn about health administration careers by hearing from and interacting with health care managers working in a variety of organizations, with a focus on those in the greater Long Beach area.

Letter grade only (A-F).

202. Introduction to Health Care in America (3)

Prerequisites: GE Foundation requirements.

US health care system with its delivery and financing mechanisms as well as the technical, economic, political and social forces responsible for changes in the health care system. Contemporary issues such as access, cost and quality, health disparities among minority groups as well as gender disparities including sexual orientation.

Letter grade only (A-F).

UPPER DIVISION

300. The Health Care System (3)

Overview and developmental summary of the American health care system and its driving forces: Organizational forms; financing mechanisms; principal industry stakeholders; professional groups and workforce issues; public health and government.

Letter grade only (A-F). Not open for credit to students with credit in: HCA 402.

312. Health Personnel Management (3)

Prerequisite: Open to Health Care Administration majors only.

Prerequisite/Corequisite: HCA 300.

The management of human resources in health care setting. Principles and methods of personnel work such as employee, recruitment, selection, retention, training, evaluation, and wage and salary administration, and labor management relations.

Letter grade only (A-F). (Lecture)

320. Operations Management in Health Administration (3)

Prerequisites: A grade of "C" or better in PSY 210 or SOC 250 or equivalent.

Prerequisite/Corequisite: HCA 300.

The application of the concepts and methods of operations management to health care organizational setting. Emphasis on planning and control in management process.

Letter grade only (A-F). (Lecture)

340. Legal Aspects of Health Administration (3)

Prerequisite: Open to Health Care Administration majors only.

Prerequisite/Corequisite: HCA 300.

Overview of health law issues. Government regulation including legal constraints; liability; negligence; patient rights; confidentiality; and corporate/administrative responsibility. Emphasis on business applications of health law.

Letter grade only (A-F). (Lecture)

341. Financial Management of Health Care Institutions (3)

Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in ACCT 201.

Prerequisite/Corequisite: HCA 300.

Application of the concepts of financial management within health care organizations, to include financial planning principles, reimbursement procedures, governmental regulation and legal restraints.

Letter grade only (A-F). (Lecture)

353. Marketing for Health Services Organizations (3)

Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in ECON 101 or 300.

Prerequisite/Corequisite: HCA 300.

Development of marketing strategies and analyses in a health care setting. Design of services to include pricing, communication, distribution channels, and client motivation and services.

Letter grade only (A-F).

410. Health Management and Organization (3)

Prerequisites: Open to Health Care Administration majors only.

Prerequisite/Corequisite: HCA 300.

Introduction to health care management practices and concepts. Planning, decision-making, influencing, controlling, effecting change. Effects of environment, technology and human behavior on organizational design.

Letter grade only (A-F). (Lecture)

416. Management and Information Systems (3)

Prerequisite: Open to Health Care Administration majors only.

Prerequisite/Corequisite: HCA 300.

Evaluation of concepts, analysis and design of management

information systems; management decision models, strategies for implementing system changes.

Letter grade only (A-F). (Lecture)

417I. Technology, Ethics, and Society (3)

Prerequisites: GE Foundation requirements, upper division standing, ENGL 100.

A framework for understanding the ways in which human societies transform themselves through technological innovation. Ethical questions concerning the social effects of technological change.

Letter grade only (A-F).

422I. Global Issues in Health Services (3)

Prerequisites: GE Foundation, one or more Exploration courses and upper division standing.

Examination of factors that impact global health; analysis of health care delivery systems and the governmental, economic, social and political forces that influence them.

Letter grade only (A-F). (Lecture)

439./539. Management Challenges in Long Term Care (3)

Prerequisite/Corequisite: HCA 300 or 502.

Functions and essential skills to manage LTC organizations and facilities: Institutional arrangements; Patient/family/community relations; workforce management; marketing; reimbursement.

Letter grade only (A-F). (Lecture)

450. Quality Assurance in Health Care (3)

Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in HCA 300 and HCA 465.

Basic elements of quality improvement and organizational responsibilities related to quality assurance. Data analysis for quality improvement, clinical practice guidelines, and future of healthcare quality.

Letter grade only (A-F). (Lecture)

451. Economics of Health (3)

Prerequisite: A grade of "C" or better in ECON 101 or 300.

Microeconomic principles and their application to healthcare such as opportunity cost, production of good health, demand for medical care, production and cost theory and cost-benefit analysis. Behavior of health care markets and organizations.

Letter grade only (A-F). (Lecture)

452./552. Medical Group Practice Management (3) F

Prerequisites/Corequisites: For undergraduates, HCA 300 and 341. For graduates HCA 502 and HCA 515.

Fundamental operational responsibilities of medical group administration today, with emphasis on finance, operations and management skills.

Letter grade only (A-F). (Lecture)

457I. Working Around the World (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, upper division standing.

The effects of religion, language and culture, political structure, economics, and physical environment on the development of the workplace and people's perceptions of work and occupations.

Letter grade only (A-F).

465. Analysis and Evaluation of Health Care Services (3)

Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in PSY 210 or SOC 250 or equivalent. Prerequisite/Corequisite: HCA 300.

Techniques of analysis and evaluation applied to health services with respect to organizing, staffing, financing and utilization. Emphasis on the analytic process, program evaluation, and report of findings.

Letter grade only (A-F).

470I. Latinas/Latinos: Health Status and Health Care Access (3)

Prerequisites: GE Foundation, one or more Exploration courses, upper division standing.

Interdisciplinary exploration of policies, epidemiologic, cultural factors influencing disease within Latino subpopulations, their impact upon efficient, equitable service delivery.

Letter grade only (A-F). Same course as CHLS 470I. Not open for credit to students with credit in CHLS 470I. (Lecture)

471. Geographic Information Science (GIS) for Health (3)

Prerequisite: GEOG 200 or SOC 250 or equivalent.

Introduction to the fundamentals of Geographic Information Science and Systems (GIS) including concepts and skills in spatial reasoning and spatial thinking. Explores GIS in spatial query, problem analysis and decision support using health-related applications. Lecture/discussion and Laboratory (2 hours lecture, 2 hours computer laboratory)

Letter grade only (A-F). Same course as GEOG 471. Not open for credit to students with credit in GEOG 471.

480./580. Internship in Health Care Administration (3)

Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in HCA 300, 312, 341, 410, 465 and HSC 150.

Minimum 120 hours of structured work experience in a health care organization, under direct supervision of a preceptor-employee.

Letter grade only (A-F).

481. Internship and Career Development in Health Care Administration (3)

Prerequisites: Open to Health Care Administration majors only and HCA 480.

A minimum of 120 hours of structured work experience in a health care organization, under the direct supervision of a preceptor-employee. Career development planning, job search and networking.

Letter grade only (A-F).

490. Selected Topics in Health Care Administration (1-3)

Topics of special interest in health care administration selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study of special topics under supervision of a faculty member.

May be repeated to a maximum of 6 units with approval of Health Care Administration Program Director. Letter grade only (A-F).

GRADUATE LEVEL

502. The Health Care System (3)

Overview, developmental summary of the American health care system and its driving forces. Major elements of the healthcare system; today's major health policy issues in a historical, economic and political context.

Letter grade only (A-F). (Lecture)

503. Health Care Economics (3)

Prerequisites: ECON 101 or 300

Application of economic principles to health care; the flow of funds through the health care system including physicians, hospitals, managed care, nursing home and pharmaceutical firms. Third party payment, asymmetric information, and behavior health care systems.

Letter grade only (A-F).

505. Organization and Systems of Health Care (3)

Analysis of operational activities and managerial functions essential to the health care delivery system, with emphasis on management and leadership influence on developing effective systems of care within various institutional arrangements.

Letter grade only (A-F). (Lecture)

510. Human Resources Management in Health Care (3)

Management of human resources in the health care system including human resource planning and staffing, training and development, performance appraisal, job design and analysis, and compensation.

Letter grade only (A-F).

515. Advanced Financial Management in Health Care (3)

Prerequisite: ACCT 201 or 500.

Financial environment, payment systems, discounted cash flow analysis, risk, financial statements, capital investments, and capital budgeting. Emphasis on decision making using accounting and finance theories, principles, concepts and techniques.

Letter grade only (A-F). (Lecture)

517. Advanced Healthcare Information Systems Management (3)

Prerequisites: HCA 502, 503, 530 or consent of instructor.

Broad overview of healthcare information systems; close examination of business needs for the information technology (IT) to deliver cost-effective quality health services.

Letter grade only (A-F). (Discussion)

524. Advanced Legal and Ethical Aspects of Health Administration (3)

Federal and state regulation of health care facilities, employees, patients and programs. Ethical and legal perspectives on malpractice, liability, contracts, informed consent, end-of-life decisions, reproductive health, medical records, confidentiality and required disclosures.

Letter grade only (A-F). (Lecture)

530. Strategic Planning and Marketing in Health Care (3)

Prerequisite/Corequisite: HCA 502.

Strategic planning based on analysis of analyses of secondary quantitative and qualitative data to study changes in technological, social, political, regulatory, and competitive aspects of the health care market.

Letter grade only (A-F).

535. Quantitative Methods for Health Administration (3)

Prerequisite: Statistics.

Application of quantitative and operations research techniques to problems in health care settings. Exposure to decision theory and control systems. Problem solving experiences in resource allocation, procedures, scheduling, forecasting, measurement and cybernetic control.

Letter grade only (A-F).

536. Hospital Management (3)

Prerequisite: HCA 505.

Analysis of hospitals by broad function and specific departments through cases, simulations and visits to develop familiarity with internal operations of acute care hospitals and skills in solving hospital operational problems.

Letter grade only (A-F). (Lecture)

537. Managed Care (3)

Prerequisite: HCA 300 or 502.

Orientation to the organization and administration of health maintenance organizations, preferred provider organizations and related enterprises. Legal and regulatory issues, marketing, utilization management, premium rating systems, information systems, case/disease management.

Letter grade only (A-F). (Seminar 3 hours)

538. Long Term Care Management (3)

Prerequisite: HCA 502.

Overview of long term care services and facilities. Analysis of forces influencing development of long term care in the US; specific organizational aspects affecting outcomes of services.

Letter grade only (A-F). (Lecture)

539./439. Management Challenges in Long Term Care (3)

Prerequisite/Corequisite: HCA 300 or 502.

Functions and essential skills to manage LTC organizations and facilities: institutional arrangements; patient/family/community relations; workforce management; marketing; reimbursement.

Letter grade only (A-F). (Lecture)

550. Continuous Quality Improvement in Health Services (3)

Prerequisites: HCA 502

Administrative and professional issues to assure quality in health care. Historical beginnings: metrics and indicators; state-of-the-art practices; voluntary and governmental monitoring.

Letter grade only (A-F). (Lecture)

552./452. Medical Group Practice Management (3) F

Prerequisites/Corequisites: For undergraduates, HCA 341 and 300. For graduates HCA 502 and HCA 515.

Fundamental operational responsibilities of medical group administration today, with emphasis on finance operations and management skills.

Letter grade only (A-F). (Lecture)

580./480. Internship in Health Care Administration (3)

Prerequisites: A grade of "C" or better in HCA 502, 505, 510, 515, 524, 530, 535, and 550.

Minimum 120 hours of structured work experience in a health care organization, under direct supervision of a preceptor-employee. Graduate students study and report on institution's organizational structure, philosophy, problems and personnel.

May be repeated to a maximum of six units in different semesters. Letter grade only (A-F).

590. Selected Topics in Health Care Administration (1-3)

Topics of current interest in the various fields of health administration and health services management selected for special presentation.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

599. Directed Studies (1-3) F,S

Prerequisite: Consent of instructor.

Directed study of a special topic to be taken under supervised independent study.

May be repeated for a maximum 6 units with different topics in different semesters. Letter grade only (A-F).

695. Integrative Seminar: Critical Analysis of the Health Care System (3) S

Prerequisites/Corequisites: HCA 580, 698.

Systemic, ecological approach to an advanced, critical analysis of U.S. health care system. Emphasis on public policy determinations that have influenced system development, relevant problems, issues.

Letter grade only (A-F).

698A. Project Part I (3)

Prerequisites: Completion of all 500-level courses and advancement to candidacy, or consent of instructor.

To provide students with the skills and techniques of research to design and carry out their own investigation of a health care

or health services project. Project is a two-semester course sequence.

Letter grade only (A-F).

698B. Project Part II (3)

Prerequisites: Completion of all HCA 500-level courses, HCA 698A, and consent of the instructor.

Project is a two-semester course sequence; the purpose of HCA 698B is for students to execute and complete the research project proposed and designed in 698A.

Letter grade only (A-F).

HEALTH SCIENCE

College of Health and Human Services

Department Chair: Tony Sinay

Department Office: Health and Human Services (HHS) 2, Room 115
Telephone: (562) 985-4057

Faculty: Veronica Acosta-Deprez, Stephanie L. Eatmon (Emerita), Dale W. Evans (Emeritus), Gail Farmer, Mohammed R. Forouzes, Robert H. Friis, Sarah Gunatilake, Javier Lopez-Zetina, Kevin Malotte, Britt K. Rios-Ellis

Liaison, CSULB/VA Joint Studies Institute: Robert H. Friis
Co-Directors, Graduate Studies: Javier Lopez-Zetina and Britt Rios-Ellis

Director, Undergraduate Studies: Veronica Acosta-Deprez

Director, Radiation Therapy: Stephanie Eatmon

Clinical Coordinator, Radiation Therapy: Cheryl Brady

Coordinator, Single Subject Credential: Victoria Bisorca

Administrative Support Coordinators: Mark Vela, Karen Miyahara

Career Possibilities

Health Science: Health Educator • Government Inspector • California Middle/High School Health Teacher • Researcher/Evaluator • Health Education Specialist • Public Health Educator • Patient Educator

Radiation Therapy: Staff Therapists • Simulator Therapists • Dosimetrists • Educators • Senior Therapists • Department Managers • Temporary Staffing Therapists • Consultants • Equipment Sales and Marketing (For more information, see www.careers.csulb.edu.)

Introduction

The Department offers undergraduate and graduate study in Health Education, and an undergraduate option in Radiation Therapy. For program information, students should review the information found on our website <http://www.csulb.edu/colleges/chhs/departments/healthscience/> and contact the department office for referral to one of the faculty advisors: Director of Undergraduate Studies, Director of Radiation Therapy, Director of Graduate Studies and/or Single Subject Credential Advisor.

Undergraduate Programs

Bachelor of Science in Health Science

The basic University requirements for graduation with a B.S. Degree in Health Science consist of:

1. completion of general education requirements,
2. completion of all courses identified on the Program Planner for the Option selected, with no grade lower than a "C" for each listed course or approved substitute,
3. completion of a minimum of 120 units, at least 40 units of which must be upper division. Upper division courses are numbered 300 to 499.

Major Core Requirements

All Health Science majors must complete the required core. The core of the Health Science program contains five areas of competence: Statistics, Program Development, Professionalism, Health Services Organization and Health

Promotion. All majors must complete at least one course from each competency area. Courses must be selected in consultation with an advisor.

Option in Community Health Education (120 units)

The Community Health Education option is designed for persons whose occupational objective is to serve as a community health educator with an official, voluntary, or corporate health agency.

Lower Division:

Take all of the following courses:

H SC 210 Contemporary Health Problems (3)
Prerequisites: GE Foundation requirements.

BIOL 205 Human Biology (4)
Prerequisites: GE Foundation requirements.

MICR 101 Introduction to Human Disease (3)
Prerequisites/Corequisites: Course that fulfills the A1 GE requirement.

NUTR 132 Introduction to Nutrition (3)
Prerequisites/Corequisites: One Foundation course.

Take one of the following courses:

PSY 210 Introductory Statistics (4)
Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.

SOC 250 Elementary Statistics (4)
Prerequisite: Knowledge of mathematical procedures usually covered in elementary high school algebra as demonstrated on a screening examination.

Take a 3-unit foreign language course.

Upper Division:

Take all of the following courses:

H SC 301 Orientation to Health Science (3)
Prerequisite: Open to Health Science majors and minors only.

H SC 400 Principles of Epidemiology (3)
Prerequisites: Open to Health Care Administration and Health Science majors and minors only. Health Care Administration majors: SOC 250. Health Science majors: H SC 403.

H SC 401 Community Health Education (3)
Prerequisites: HSC 301.

H SC 402 Applied Concepts of Community Health Education (3)
Prerequisites: H SC 301, 401.

H SC 403 Community Health Statistics (3)
Prerequisites: GE Math and SOC 250 or PSY 210 or equivalent.

H SC 405 Health Education Program Evaluation and Measurement (3)
Prerequisites: HSC 403 or equivalent.

H SC 421 Health Behavior (3)
Prerequisites: None.

H SC 430 School Health Program (3)
Prerequisites: HSC 301.

H SC 435 Health Promotion Risk Reduction (3)
Prerequisites: HSC 421 or consent of instructor.

H SC 440 Applied Concepts of Health Science (3)
Prerequisites: HSC 430.

H SC 485 Internship in Community Health Education (3)
Prerequisites: Open to Health Science majors only. H SC 401 and consent of instructor.

Take three courses selected from the following:

H SC 407, 420I, 422, 423, 425I, 427

Take one course selected from the following:

PSY 351 or SOC 335I

Take one course selected from the following:

SOC 320, 462, 464

Take one course selected from the following:

COMM 334, 335

Option in School Health Education (120 units)

The School Health Option is designed for persons who wish to become health science teachers in California middle and high schools. The program is approved by the California Commission on Teacher Credentialing and meets subject matter competence requirements for the Single Subject Teaching Credential in Health Science. Prospective students should consult the department's Health Science Single Subject Advisor early to plan their program.

Requirements

Lower Division:

Take all of the following courses:

BIOL 205 Human Biology (4)

Prerequisites: GE Foundation requirements.

MICR 101 Introduction to Human Disease (3)

Prerequisites/Corequisites: Course that fulfills the A1 GE requirement.

NUTR 132 Introduction to Nutrition (3)

Prerequisites/Corequisites: One Foundation course.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

Take one of the following courses:

PSY 210 Introductory Statistics (4)

Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.

SOC 250 Elementary Statistics (4)

Prerequisite: Knowledge of mathematical procedures usually covered in elementary high school algebra as demonstrated on a screening examination.

Take a 3-unit foreign language course.

Upper Division:

Take one of the following:

COMM 335 Persuasive Speaking (3)

Prerequisites: GE Foundation requirements.

Approved upper-division COMM course

Take one of the following courses:

EDP 301 Child Development and Learning (3)

Prerequisites: None.

EDP 302 Early and Late Adolescent Development (3)

Prerequisites: None.

EDP 305 Educational Psychology (3)

Prerequisites: None.

Take one of the following courses:

ANTH 329; CDFS 319I; HSC 420I; PSY 378;

SOC 320, 423

Subject Matter Courses

Take all of the following courses:

EETC 444 Computer Technology in Education, Level I (3)

Prerequisites: Course design assumes familiarity with topics introduced in EETC 110.

H SC 210 Contemporary Health Problems (3)

Prerequisites: GE Foundation requirements.

H SC 301 Orientation to Health Science (3)

Prerequisite: Open to Health Science majors and minors only.

H SC 401 Community Health Education (3)

Prerequisites: HSC 301.

H SC 403 Community Health Statistics (3)

Prerequisites: GE Math and SOC 250 or PSY 210 or equivalent.

H SC 421 Health Behavior (3)

Prerequisites: None.

H SC 422 Environmental Health (3)

Prerequisites: None.

H SC 423 Consumer Health (3)

Prerequisites: None.

H SC 425I Human Sexuality and Sex Education (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing. Recommended: PSY 100.

H SC 427 Drugs and Health (3)

Prerequisites: Upper-division standing.

H SC 430 School Health Program (3)

Prerequisites: HSC 301.

H SC 435 Health Promotion/Risk Reduction (3)

Prerequisites: HSC 421 or consent of instructor.

H SC 440 Applied Concepts of Health Science (3)

Prerequisites: HSC 430.

Single Subject Teaching Credential in Health Science

In addition to meeting the subject matter competence requirement for the Single Subject Teaching Credential in Health Science, prospective health teachers are also required to complete an additional 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

The Health Science Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

Option in Health Care (120 units)

The Option in Health Care is designed for those individuals who have received certification and/or license from an approved allied health/health care program and desire a Bachelor of Science degree. The focus of this option is the development of professional skills for people whose goal is: (a) providing service, or (b) instructing in the health care setting.

Admission Requirements

Once admitted to the University, students are required to complete the following prior to acceptance into the Health Care Option.

1. Obtain certification and/or license from an allied health/health care program from an institution that has been

accredited by either a Committee on Post-secondary Accreditation (COPA) approved accreditation agency or the Committee on Allied Health Education and Accreditation (CAHEA). Those individuals who do not have appropriate certification will be counseled by the Department of Health Science regarding where to obtain an appropriate accredited program, and, when possible, concurrent enrollment may be utilized;

2. Earn a minimum GPA of 2.0.

Lower Division:

Completion of general education requirements to include:

ENGL 100 Composition (3)

Prerequisites: A recorded total score of 151 or above on the English Placement test, credit in ENGL 1 (or its equivalent), or consent of the instructor.

Take one course from the following:

ANTH 120, SOC 100, PSY 100

Take a minimum of 12 units in Natural Sciences, approved by department advisor equivalent to:

BIOL 200, 207, 208; MICR 101

Take one course from the following:

CHEM 100, 111A

Upper Division

Core: Three units from each area with advisor consultation:

A. Statistics: H SC 403, ED P 419

B. Program Development: H SC 430 and HCA 320 or H SC 455 and H SC 316

C. Professionalism: H SC 451, HCA 340

D. Health Organization: H SC 401, 420I

E. Health Promotion: H SC 435, HCA 300

Requirements

Take the following course:

H SC 400 Principles of Epidemiology (3)

Prerequisites: Open to Health Care Administration and Health Science majors and minors only. Health Care Administration majors: SOC 250. Health Science majors: H SC 403.

Take one of the following courses:

HDEV 320 Research Methods in Human Development (4)

Prerequisites: ANTH 120 or PSY 100 or SOC 100 or HDEV 180 and HDEV 250.

H SC 405 Health Education Program Evaluation and Measurement (3)

Prerequisites: HSC 403 or equivalent.

Take one of the following courses:

ANTH 353 Health and Healing (3)

Prerequisites: GE Foundation requirements.

SOC 462 Medical Sociology (3)

Prerequisites: GE Foundation requirements.

Take one of the following courses:

POSC 329 Cases in Public Policy Making (3)

Prerequisites: GE Foundation requirement, POSC 100, and POSC 328.

ECON 300 Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

Take one of the following emphases:

A. Providing Service (12 units)

Take the following courses:

HCA 410 Health Management and Organization (3)

Prerequisites: Open to Health Care Administration majors only. Prerequisite/Corequisite: HCA 300.

HCA 465 Analysis and Evaluation of Health Care Services (3)

Prerequisite/Corequisite: HCA 300.

Prerequisites: Open to Health Care Administration majors only and a grade of "C" or better in PSY 210 or SOC 250 or equivalent.

Take one of the following courses:

H SC 421 Health Behavior (3)

Prerequisites: None.

H SC 492A,B Internship in Health Care (1-3)

Prerequisites: Consent of instructor.

Take one of the following courses:

ANTH 319 Human Growth and Development (3)

Prerequisites: None.

GERN 400I Perspectives on Gerontology (2)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

GERN 482 Health Assessment of the Aging Client (3)

Prerequisites: GERN 400I, HDEV 357I or PSY 365, ANTH 454, and BIOL 401, or consent of instructor.

NRSRG 482 Physical Assessment and Aging (3)

Prerequisites: GERN 400I or equivalent and upper standing or consent of instructor.

B. Instructing in the Health Care Setting (12 units)

Take the following courses:

HCA 410 Health Management and Organization (3)

Prerequisites: Open to Health Care Administration majors only. Prerequisite/Corequisite: HCA 300.

HCA 465 Analysis and Evaluation of Health Care Services (3)

Prerequisites/Corequisites: HCA 402. Prerequisites: A grade of "C" or better in PSY 210 or SOC 250 or equivalent.

Take one of the following courses:

H SC 492A,B Internship in Health Care (3)

Prerequisites: Consent of instructor.

ED P 432 Social and Cultural Diversity in Educational Settings (3)

Prerequisites: None.

Take one of the following courses:

ED P 305 Educational Psychology (3)

Prerequisites: None.

H SC 421 Health Behavior (3)

Prerequisites: None.

Minor in Health Science

Twenty-four units required.

Take all the following courses:

H SC 301 Orientation to Health Science (3)

Prerequisite: Open to Health Science majors and minors only.

H SC 401 Community Health Education (3)

Prerequisites: HSC 301.

H SC 430 School Health Program (3)

Prerequisites: HSC 301.

H SC 435 Health Promotion Risk Reduction (3)

Prerequisites: HSC 421 or consent of instructor.

H SC 440 Applied Concepts of Health Science (3)

Prerequisites: HSC 430.

Take three courses from the following courses:

H SC 400, 420I, 421, 422, 423, 425I, 427.

Graduate Programs

Graduate Program in Health Education

Accredited by the Council on Education for Public Health (Council on Education for Public Health, 1015 Fifteenth Street, NW, Washington, DC 20005, phone: 202-789-1050).

In order to be admitted to the graduate program for study toward a degree, a prospective candidate must apply both to this department and the University. Contact the Director of Graduate Studies for current requirements.

The graduate student will be prepared for a leadership role in a school or community setting and for admission to doctoral programs. Admitted graduate students must contact the Director of Graduate Studies for advisement early in their first semester of enrollment in order to develop an approved program of study.

Master of Science in Health Science

The Master of Science program is designed to provide students with:

1. an intensive study of health education concepts, theories, and processes;
2. an introduction to public health concepts and issues; and
3. research methodology and skills appropriate to an in-depth examination of a public health topic.

Admission Requirements

Applicants must apply both to the Department and the University. Applications are available from the Department office or on-line at www.csulb.edu/health-science.

1. Each applicant must request that a copy of official transcript(s) of all work to be sent to the university's Office of Enrollment Services.
2. A bachelor's degree with a major in health education, which articulates with the course requirements for the same degree at California State University, Long Beach; or a bachelor's degree in a related discipline with a minimum of 21 units of upper division course work comparable to that required of the Health Science major at the University; or a bachelor's degree in a related discipline and willingness to make up any deficiencies in prerequisite Health Science courses. Prerequisites for all courses carrying graduate credit must have been completed within seven years of acceptance to the program. If any prerequisite is outdated, it may be repeated or credit may be obtained by (1) written examination on the subject matter or (2) providing documented evidence of currency in the subject area.
3. An overall undergraduate GPA of at least 3.0. Students with less than a 3.0 GPA on the last 60 units of undergraduate units attempted, but who show promise in all other aspects, may be given special consideration after petitioning for conditional admission into the program through the Director of Graduate Studies.
4. Acceptance by the University as a student with graduate standing.
5. A maximum of 9 units of approved graduate work at the post-baccalaureate level may be credited to a student's program requirements upon departmental acceptance to the graduate program.

6. Submission of the analytic, quantitative and verbal scores from the Graduate Record Examination (GRE).
7. Copy of the CSU graduate application to the department.
8. Three letters of recommendation from persons with whom the candidate has worked and/or who have direct knowledge of the applicant's professional or academic potential as a community health educator.
9. A separate personal statement of reasons for pursuing this field of study and comments about interests and experience that are germane to career objectives. Submit a personal resume reflecting the applicant's education and relevant work experience.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy:
 - A. fulfill the Graduation Writing Assessment Requirement (GWAR);
 - B. maintain at least a 3.0 average for all course work attempted as a graduate student; and
 - C. complete H SC 500, 503, and 570;
2. Approval by the Director of Graduate Studies and the Associate Dean of Academic Programs of the College of Health and Human Services.

Requirements

1. A minimum of 43 units of approved upper division and graduate courses including:
 - A. 21 units of H SC courses, which include the following:
 - HCA 502 The Health Care System (3)
Prerequisites: None.
 - H SC 440 Applied Concepts of Health Science (3)
Prerequisites: HSC 430.
 - H SC 500 Principles of Epidemiology (3)
Prerequisites: HSC 301 and HSC 403.
 - H SC 503 Advanced Community Health Statistics (3)
Prerequisites: HSC 403 or equivalent.
 - H SC 570 Theoretical Concepts and Issues in Health Science (3)
Prerequisites: None.
 - H SC 581 Curriculum Development in Health Education (3)
Prerequisites: HSC 430, 440.
 - H SC 696 Research Methods (3)
Prerequisites: Undergraduate major in Health Science or related field; undergraduate course in statistics.
 - B. 18 units of electives in a specialty field;
 - C. 4 units of the following:
 - H SC 698 Thesis (1-3)
Prerequisites: HSC 696, advancement to candidacy.
2. A thesis with an oral exam.

Master of Public Health

Option in Community Health Education

The Master of Public Health in Community Health provides an opportunity for students: to specialize in community health education and health promotion within the general context of Public Health; to increase competence in designing, implementing, and evaluating social behavior changes programs in preparation for serving in various health agencies; prepare for teaching at college and

university levels; and for administrative positions in public and private health agencies.

Admission Requirements

Applicants must apply both to the Department and the University. Applications are available online at www.csulb.edu/health-science.

1. Each applicant must request that a copy of official transcript(s) of all work be sent to the university's Office of Enrollment Services.
2. A bachelor's degree with a major in health education, which articulates with the course requirements for the same degree at California State University, Long Beach; or a bachelor's degree in a related discipline with a minimum of 21 units of upper division course work comparable to those required of the Health Science major at the University; or a bachelor's degree in a related discipline and willingness to make up any deficiencies in prerequisite Health Science courses. Prerequisites for all courses carrying graduate credit must have been completed within seven years of acceptance to the graduate program. If any prerequisite is outdated, it must be repeated. Credit may be obtained by (1) written examination on the subject matter or (2) providing documented evidence of currency in the subject area.
3. An overall undergraduate GPA of at least 3.0. Students with less than a 3.0 GPA on the last 60 units of undergraduate units attempted, but who show promise in all other aspects, may be given special consideration after petitioning for conditional admission into the program through the Director of Graduate Studies.
4. Acceptance by the University as a student with graduate standing.
5. A maximum of 9 units of graduate work at the post-baccalaureate level may be credited to a student's program requirements upon departmental acceptance to the graduate program.
6. Submission of analytic, quantitative and verbal scores from the Graduate Record Examination (GRE) to the Department.
7. Submission of a copy of the CSU graduate application.
8. Three letters of recommendation from persons with whom the applicant has worked and/or who have direct knowledge of the applicant's professional and academic potential as a health educator.
9. A separate personal statement of reasons for pursuing this field of study and comments about interests and experience that are germane to career objectives. Submit a personal resume reflecting the applicant's education and relevant experience.
10. At least one year's full-time (or equivalent) paid or volunteer experience in Health Education or a closely related health field. Preference will be given to those with greater experience and ability.

Advancement to Candidacy

1. Satisfy the general university requirements for advancement to candidacy:
 - A. Fulfill the Graduation Writing Assessment Requirement (GWAR);

- B. Maintain at least a 3.0 average for all course work attempted as a graduate student;
 - C. Complete the following: H SC 500, 503, 570
2. Approval by the Director of Graduate Studies and Associate Dean for Academic Programs of the College of Health and Human Services.

Requirements

1. A minimum of 42 units of approved upper-division and graduate-level courses including:
 - A. 30-31 units of core classes including:
 - HCA 502 The Health Care System (3)
Prerequisites: HSC 301 and HSC 403.
 - HSC 508 Administrative Relationships in Health Education Programs (3)
Prerequisites: Undergraduate major in Health Science or related field.
 - HSC 528 Advanced Environmental Health (3)
Prerequisites: HSC 422 or consent of instructor.
 - H SC 570 Theoretical Concepts and Issues in Health Science (3)
Prerequisites: None.
 - H SC 581 Curriculum Dev in Health Education (3)
Prerequisites: HSC 430, 440.
 - HSC 624 Seminar in Community Analysis and Program Planning (3)
Prerequisites: HSC 625 or consent of instructor.
 - HSC 625 Advanced Community Health Education (3)
Prerequisites: HSC 401 and 485; consent of instructor.
 - HSC 626 Integrative Seminar in Public Health (3)
Prerequisites: HSC 570, advancement to candidacy.
- Take one of the following courses:
- H SC 500 Principles of Epidemiology (3)
Prerequisites: HSC 301 and HSC 403.
 - MICR 429 Epidemiology of Infectious Diseases (3)
Prerequisites: BIOL 260; MICR 320, 322; all of a grade of "C" or better.
- Take one of the following courses:
- H SC 503 Advanced Community Health Statistics (3)
Prerequisites: HSC 403 or equivalent.
 - BIOL 565 Experimental Design and Regression Analysis (4)
Prerequisites: BIOL 260; MATH 119B or 123; 6 units of upper division biological science all with a grade of "C" or better.
- B. 3 units of electives at the 500/600 level;
 - C. 6 units of supervised internship:
 - H SC 585 Health Education Internship (1-6)
Prerequisites: Consent of instructor.
2. A comprehensive written examination (see department for guidelines).

Master of Science in Nursing/Master of Public Health

For requirements, see description in the Nursing section of this catalog.

Single Subject Teaching Credential in Health Science

For information, refer to the undergraduate section in this department.

Courses (H SC)

LOWER DIVISION

150. Medical Terminology (1)

Development of medical vocabulary emphasizing the building of terms utilizing prefixes, combining forms and suffixes. Includes medical terms for application in the interpretation of medical records.

(Lecture-discussion 1 hour.) Letter grade only (A-F).

200. Orientation to Radiation Therapy (3)

Introduction to the profession of Radiation therapy and an overview of the Option requirements. The role of Radiation therapy in cancer treatment and the role Radiation Therapist in patient care, treatment, simulation, dosimetry and follow-up.

40 hours of clinical fieldwork required. Letter grade only (A-F).

210. Contemporary Health Problems (3)

Prerequisite: GE Foundation requirements.

Development of modern health knowledge, attitudes and behavior: includes family life-sex education, drug use and abuse, mental health, medical quackery and health frauds, common diseases such as sexually transmitted diseases, heart disease and cancer.

UPPER DIVISION

301. Orientation to Health Science (3)

Prerequisite: Open to Health Science majors and minors only.

Overview of philosophy of Health Science Department Orientation to degree requirements, career opportunities, and theoretical and practical issues of health education as a profession.

305. Basic Research Methods and Data Analyses in Health and Human Services (3)

Introduction to research methods and data analyses concerning health and human services. An understanding and application of public data sources, research designs, primary and secondary data analyses, and report writing. Critical assessment of information presented in media and journals.

Letter grade only (A-F).

310. Radiation Therapy Patient Care I (2)

Prerequisite: Admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Topics covered include the role of the radiation therapist, communication, self-care, basic patient care, patient assessment, infection control, medical emergencies, basic pharmacology and medication administration.

Letter grade only (A-F).

311. Radiation Therapy Patient Care II (2)

Prerequisites: Admission to the Radiation Therapy Option Professional Preparation of consent of instructor, HSC 310.

Topics covered include psychosocial aspects of cancer diagnosis, death and dying, patient education and intervention for treatment related sequelae. Additionally local, state and national cancer resources are covered.

Letter grade only (A-F).

315. Seminar in Radiation Therapy I (2)

Prerequisites: Concurrent enrollment in HSC 492A, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Introduction to the clinical arena requiring application of previous didactic material. Focus is on the patient, consult, simulation, treatment, dosimetry and case study review.

Letter grade only (A-F). (Lecture-Discussion, 2 hrs)

316. Seminar in Radiation Therapy II (2)

Prerequisites: Concurrent enrollment in HSC 492B, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Application of previous didactic material. Comprehensive analysis of case studies in the clinical setting with emphasis on treatment rationale and options.

Letter grade only (A-F). (Lecture-discussion 2 hours)

320. Radiologic Techniques and Imaging Modalities (3)

Prerequisites: Admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Concepts and processes involved in producing a radiograph will be covered. Additionally, other diagnostic imaging modalities such as CT, MRI, Ultrasound will be covered.

(Lecture-discussion 2 hr) Letter grade only (A-F).

330. Topographic Anatomy (2)

Prerequisites: BIOL 207, 208 admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Examination of external anatomic landmarks to internal anatomy. Additionally, cross sectional anatomy is covered with interpretation of port films and other diagnostic films.

(Lecture-discussion 2 hr) Letter grade only (A-F).

333. Latino Nutrition, Health and Chronic Disease Prevention (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses and upper division standing.

Explores nutrition-related and contextual factors associated with the high rates of chronic disease among diverse Latino-specific subpopulations and provide culturally-relevant strategies for prevention.

Letter grade only (A-F). Same course as NUTR 333. Not open for credit to students with credit in NUTR 333.

340. Clinical Radiation Therapy (3)

Prerequisites: HSC 200, 320, admission to the Radiation Therapy Option Professional Preparation or consent of instructor.

Rationale of radiation therapy treatments; construction of immobilization devices, contours, beam modifiers and positioning aids. Examination of simulation procedures, contrast media, treatment positioning and monitoring.

(Lec-discussion 2 hrs, Lab 2 hrs) Letter grade only (A-F).

341. Clinical Radiation Therapy II (1)

Prerequisites: HSC 340, admission to the Radiation Therapy Option Professional Preparation or consent of instructor. Corequisite: HSC 445A.

Examination of site specific techniques to treat cancers of the skin, head and neck, lung, esophagus, breast, gastrointestinal, kidney and bladder.

Letter grade only (A-F). (Lecture-discussion, 1 hour)

342. Clinical Radiation Therapy III (1)

Prerequisites: HSC 341, concurrent enrollment in HSC 445B, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Examination of site specific techniques to treat cancers of the reproductive systems, CNS, eye, endocrine, bone, soft tissues, blood and lymphatics. Pediatric cancer treatments will be included.

Letter grade only (A-F). (Lecture discussion 1 hour)

400. Principles of Epidemiology (3)

Prerequisites: Open to Health Care Administration and Health Science majors and minors only. Health Care Administration majors: SOC 250. Health Science majors: H SC 403.

Application of epidemiologic procedures to the understanding of the occurrence and control of infectious and chronic diseases,

mental illness, environmental health hazards, accidents, and geriatric problems.

(Lecture 3 hours)

401. Community Health Education (3)

Prerequisite: H SC 301.

Concepts of community health education with emphasis on community organization; application of these concepts to health education activities of official, voluntary and professional health agencies.

402. Applied Concepts of Community Health Education (3)

Prerequisites: H SC 301, 401.

Identification and application of concepts unique to community health education; includes examination of theoretical foundations, marketing and promotion techniques, and application of health education strategies.

403. Community Health Statistics (3)

Prerequisites: G.E. math and SOC 250 or PSY 210 or equivalent.

Representative topics are descriptive statistics, sample designs, central tendency, and variability. Statistical tools for inferential analyses include hypothesis testing and parameter estimation.

(Lecture 2 hours, Activity 2 hours)

405. Health Education Program Evaluation and Measurement (3)

Prerequisite: HSC 403 or equivalent.

Research designs, standardized measurements, data collection, analysis, and reporting are used to develop evaluation skills to assess program outcomes. Program activities promoting behavior change in communities, organizations, groups and individuals are evaluated.

(Discussion 3 hours)

407. Health Equity and Health Disparities Research in the US (3)

Prerequisites: GE Foundation, one or more Exploration courses and upper-division standing.

Explores socioeconomic, biologic, environmental, and institutional factors associated with health issues and disease. Students will learn about research and interventions to affect positive health outcomes and access for underserved, underrepresented diverse populations.

Letter grade only (A-F).

411A. Health Science for Elementary Teachers (3)

Prerequisite: Upper-division standing. Corequisite: Current CPR Certification required.

Contemporary teaching of health education in elementary schools; emphasizes coordinated school health, drugs, sexuality, nutrition, child abuse, violence, community and human ecology. Based upon California Health Framework, meets state credential requirements.

Not open for credit to health Science majors or minors.

411B. Health Science for Secondary Teachers (3)

Prerequisite: Upper-division standing. Corequisite: Current CPR Certification required.

Contemporary teaching of health education in secondary schools; emphasizes coordinated school health, integrating health content and instruction into other subjects, drugs, sexuality, nutrition, child abuse, violence, community and human ecology. Based upon California Health Framework, meets state credential requirements.

Not open for credit to health Science majors or minors

415. Radiation Biology (2)

Prerequisites: BIOL 207, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Biological effects of radiation at the cellular, organ and whole body levels. Radiobiological effectiveness, linear energy transfer,

oxygen enhancement ratio, sensitizers and protectors will be covered.

(Lecture-discussion 2 hours). Letter grade only (A-F).

420I. International Health (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

Analysis of current health problems in the world; examination of contributing social, psychological, physical, legal and cultural factors; international programs for the improvement of world health; structure and functions of world health agencies and organizations.

Course fee may be required.

421. Health Behavior (3)

Survey of contemporary research on the health effects of human behavior. Special emphasis is given to current issues of health behavior; decision-making in contemporary society, values clarification and contemporary theories of behavior change (e.g., health belief model).

422. Environmental Health (3)

Examination of reciprocal relationship existing between man and his environment, with the emphasis directed toward the health related consequences of man's actions in the environment.

423. Consumer Health (3)

Effective selection of health information, products and services; medical quackery and fraudulent health practices; laws and agencies protecting the consumer; health care delivery systems; and influences of corporate control on the consumer movement in contemporary society.

425I. Human Sexuality and Sex Education (3)

Prerequisites: G.E. Foundation, one or more Exploration courses, and upper-division standing. Recommended: PSY 100.

Biomedical, sociological, and psychological aspects of human sexuality, the communication of sexual information, the implementation, content and evaluation of family life and sex education in the schools.

427. Drugs and Health (3)

Prerequisite: Upper division standing.

Study of psychoactive drugs with primary attention to alcohol, nicotine, caffeine, cannabis, hallucinogens, narcotics and other drugs; examination of trends, philosophical issues and behavioral practices associated with drug use and dependence. Includes physiological psycho-social, legal, historical, philosophical and political aspects; treatment-rehabilitation activities and programs; and drug abuse prevention education.

Not open for credit to students with credit in H SC 327.

430. School Health Program (3)

Prerequisite: H SC 301.

Intensive analysis of the philosophy, organization and legal aspects of the school health program. Includes school and community coordination for a team approach to health education for the school age individual.

435./535. Health Promotion and Risk Reduction (3)

Prerequisites: H SC 421 or consent of instructor.

Health promotion/risk reduction program content, development and implementation for use in corporate, hospital and public settings. Intended primarily for Health Science majors.

(Discussion 3 hours)

440. Applied Concepts of Health Science (3)

Prerequisite: H SC 430.

Identification and application of the concepts and modes of inquiry unique to the discipline of health science; development of appropriate curriculum based upon an analysis of individual, school and community needs and interests.

445A. Oncologic Pathology I (3)

Prerequisites: BIOL 207, 208; HSC 150, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Examination of Oncologic pathology with emphasis on malignant neoplasia; specific attention given to cancers of the skin, head and neck, lung, esophagus, breast, gastrointestinal tract, kidney and bladder.

(Lecture-discussion 3 hours) Letter grade only (A-F).

445B. Oncologic Pathology II (3)

Prerequisites: HSC 445A, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Continuing study of Oncologic pathology with specific attention given to cancers of the reproductive system, central nervous system, eye, endocrine, major digestive glands, bone, soft tissue, blood, lymphatic system and pediatric solid tumors.

(Lecture-discussion 3 hours) Letter grade only (A-F).

451. Ethics Professionalism in Health Care (3)

Examination of professionalism and bioethics, and the process of making moral decisions; ethical issues; professional oaths and codes of ethics; health care ethics and the law.

455. Quality Management in Radiation Therapy (1)

Prerequisites: HSC 470B, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Study of the principles of quality management with an emphasis on specific quality assurance tests in radiation therapy. Students will be given the opportunity to either perform or observe a demonstration of each quality assurance test.

(Letter grade only (A-F).

465. Radiation Therapy in the Health Care Industry (3)

Prerequisites: Admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Examination of radiation therapy in the current health care market. Focus in on various operational and budgetary issues, hospital and governmental accreditation, types of insurance and reimbursements.

Letter grade only (A-F). Lecture-discussion 3 hours)

470A. Clinical Radiation Physics I (3)

Prerequisites: PHYS 100A, B, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Nature and description of the structure of matter and energy; interactions of photons and gamma radiation; instrumentation and measurement of ionizing radiation; beam quality and dose; percentage depth dose, tissue air ratios, treatment dose calculations.

(Lecture-discussion 2 hours, Laboratory 2 hours). Letter grade only (A-F).

470B. Clinical Radiation Physics II (3)

Prerequisites: HSC 470A, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

A continuation of the study of radiation physics with emphasis on electron beams, brachytherapy, intensity modulated radiotherapy, conformal radiotherapy and other emerging technologies. Radiation safety and protection also included.

(Lecture-discussion 2 hours, Laboratory 2 hours). Letter grade only (A-F).

475. Treatment Planning – Dosimetry (2)

Prerequisites: HSC 470A, B, concurrent enrollment in HSC 475L, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Examines the effects of treatment distance, field weighting, beam modifiers, irregular fields, tissue inhomogeneities and tissue compensation on dose. Dose calculations for external photon and electron beams.

(Lecture-discussion 2 hours). Letter grade only (A-F).

475L. Treatment Planning – Dosimetry Laboratory (1)

Prerequisites: Concurrent enrollment in HSC 475, admission to the Radiation Therapy Option Professional Preparation of consent of instructor.

Practical experience with calculation of treatment dose given a variety of clinical situations. Calculations to determine dose to critical structures or methods used to lower or avoid dose. Use of a treatment planning computer for complex field arrangements.

(Laboratory 3 hours) Letter grade only (A-F).

480. Advanced Radiation Therapy (2)

Prerequisites: Must be in final semester of Radiation Therapy Option Professional Preparation.

Synthesis of previous didactic and clinical information; examination of current and future professional issues, technological advances, ethics, professional organizations and continuing education.

(Lecture-discussion 2 hours) Letter grade only (A-F).

485. Internship in Community Health Education (3)

Prerequisites: Open to Health Science majors only. H SC 401 and consent of instructor.

Preparation for and introduction to work experience in a community health organization. A minimum of 80 hours work experience in a community health organization under direct supervision of a preceptor.

Letter grade only (A-F). (6 hours activity)

486. Internship and Careers in Community Health Education

Prerequisites: Open to Health Science majors only. H SC 485 and consent of instructor.

Culminating experience in a community health setting. Assess needs, plan and implement health education programs and strategies. Evaluation of work experience in a community health organization where a minimum of 120 hours work experience required under the direct supervision of a preceptor.

Letter grade only (A-F). (6 hours activity)

490. Independent Studies in Health Science (1-3)

Prerequisite: Consent of instructor.

Students conduct independent library or laboratory research under the supervision of a faculty member and write a report of the

investigation. May be repeated to a maximum of 6 units.

492A. Internship in Health Care (1-7)

Prerequisite: Consent of instructor.

Supervised observation and field experience in community health and medical facilities. Student responsible for successful completion of clinical objectives applicable to area of observation.

Letter grade only (A-F).

492B. Internship in Health Care (1-9)

Prerequisites: Consent of instructor.

Supervised observation and field experience in community health and medical facilities. Student responsible for successful completion of clinical objectives applicable to area of observation.

Letter grade only (A-F).

497. Selected Topics in Health Science

Group investigation of selected topics. Topics are announced in the Schedule of Classes.

Letter grade only (A-F). May be repeated for a maximum of 6 units with different topics in different semesters.

GRADUATE LEVEL**500. Principles of Epidemiology (3)**

Prerequisites: H SC 301 and H SC 403.

Application of epidemiologic procedures to the understanding of the occurrence and control of infectious and chronic diseases, mental

illness, environmental health hazards, accidents, and geriatric problems.

Letter grade only (A-F). (Lecture 3 hours.)

503. Advanced Community Health Statistics (3)

Prerequisite: HSC 403 or equivalent.

Analysis of quantitative health related data. Topics include mean and percentage comparisons, multiple regression, logistic regression and survival analysis. Use of computers is required.

Letter grade only (A-F). (Discussion, 3 hours)

507. Health Equity and Health Disparities Research in the US (3)

Prerequisites: Undergraduate major in Health Science or related field.

Explores socioeconomic, biologic, environmental, and institutional factors associated with health issues and disease. Students will learn about research and interventions to affect positive health outcomes and access for underserved, underrepresented diverse populations.

Letter grade only(A-F).

508. Administrative Relationships in Health Education Programs (3)

Prerequisite: Undergraduate major in Health Science or related field.

Introduction to administrative theory; investigation of administrative responsibilities and functions implicit in school health or other health education programs.

Letter grade only (A-F).

528. Advanced Environmental Health (3)

Prerequisite: H SC 422 or consent of instructor.

Organization and methods for promoting human health by controlling environmental factors.

Letter grade only (A-F).

534. Advanced Latino Nutrition, Health and Chronic Disease Prevention (3)

Prerequisite: Open to students enrolled in graduate programs in Family and Consumer Sciences, Health Science, or related fields.

Explores nutrition-related and contextual factors associated with the high rates of chronic disease among diverse Latino-specific subpopulations and provides culturally relevant strategies for prevention.

Letter grade only (A-F). Same course as FCS 534. Not open for credit to students with credit in FCS 534.

535./435. Health Promotion and Risk Reduction (3)

Prerequisites: H SC 421 or consent of instructor.

Health promotion/risk reduction program content, development and implementation for use in corporate, hospital and public settings. Intended primarily for Health Science majors.

Letter grade only (A-F). (Discussion 3 hours)

537. Culturally Responsive Nutrition Promotion for Latinos (3)

Prerequisites: Open to students enrolled in graduate programs in Family and Consumer Sciences, Health Science, or related fields.

Explores the need and methods to develop culturally and linguistically relevant nutrition education with a focus on the Latino population. Students will analyze, evaluate, and create culturally competent nutrition interventions for the Latino community.

Letter grade only (A-F). Same course as FCS 537. Not open for credit to students with credit in FCS 537.

570. Theoretical Concepts and Issues in Health Science (3)

Identification and analysis of current trends, philosophies and issues in health science.

Letter grade only (A-F).

581. Curriculum Development in Health Education (3)

Prerequisites: H SC 430, 440.

Principles of curriculum development; selection and evaluation of resource materials; theory and practice in measurement in health education.

Letter grade only (A-F).

585. Health Education Internship (1-6)

Prerequisite: Consent of the instructor.

Extended applied experience under guidance of faculty and preceptors in an approved health education practice setting.

Letter grade only (A-F). (480 hours of field placement or the equivalent experience.)

590. Independent Study (1-3)

Independent research conducted under the supervision of a full-time faculty member resulting in a written report of the investigation.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics.

597. Selected Topics in Health Science (3)

Group investigation of selected topics. Topics are announced in the Schedule of Classes.

Letter grade only (A-F). May be repeated for a maximum of 6 units with different topics in different semesters.

624. Seminar in Community Analysis and Program Planning (3)

Prerequisites: H SC 625 or consent of instructor.

Process and techniques of community analysis and program planning.

Letter grade only (A-F).

625. Advanced Community Health Education (3)

Prerequisites: H SC 401 and 485; or consent of instructor.

Advanced study of educational and related theory applicable to the conduct of health education programs in community and other settings. Methods of promoting change; role as program and staff director and evaluation techniques.

Letter grade only (A-F).

626. Integrative Seminar in Public Health (3)

Prerequisites: H SC 570, advancement to candidacy.

Summative critical analysis of current methodologies, research, and practices in public health and health education in particular. Synthesis of coursework, internship, and other relevant experiences in the graduate program.

Letter grade only (A-F).

696. Research Methods (3)

Prerequisites: Undergraduate major in Health Science or related field; undergraduate course in statistics.

Introduction to research methodology in the area of Health Science.

Letter grade only (A-F).

697. Directed Studies (1-3)

Prerequisite: Advancement to candidacy.

Independent investigation of research problems in health education.

Letter grade only (A-F).

698. Thesis (1-3)

Prerequisites: H SC 696, advancement to candidacy.

Planning, preparation and completion of an approved thesis.

May be repeated to a maximum of 6 units in different semesters.

HISTORY

College of Liberal Arts

Department Chair: Nancy L. Quam-Wickham

Department Office: Faculty Offices 2 (FO2), Room 106
Telephone: (562) 985-4431

Faculty: Houri Berberian, Emily Berquist, Jeff Blutinger, Patricia A. Cleary, Keith E. Collins (Emeritus), Jane Dabel, David C. Hood, Ali Igmen, Andrew Jenks, Troy R. Johnson, Arnold P. Kaminsky, Marie Kelleher, Margaret Kuo, Arlene Lazarowitz, Guotong Li, Eileen Luhr, Brett Mizelle, Caitlin Murdock, Charles Ponce De Leon, Sarah Schrank, David Shafer, Michiko Takeuchi, Nancy L. Quam-Wickham, Hugh Wilford

Advisors:

Undergraduate: Linda Alkana, Caitlin Murdock
Sharlene Sayegh-Canada, Portfolio Advisor

Credential: Eileen Luhr

Graduate: Houri Berberian

Office Manager: Cris Hernandez

Career Possibilities

Historian • Writer • Editor • Administrators in Historic and Cultural Preservation • Teacher • Museum Curator • Multimedia Specialist • Preservation and Environmental Lawyer • College Instructor • Film Maker • Environmental Review Specialist • Human Resources Manager • Advertising Analyst • Systems Analyst • Insurance Broker • Executive (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Department advising is available to all students interested in a major, minor, or a teaching credential. Students are strongly encouraged to see an advisor early in the development of their programs. Undergraduate majors should see History department staff to fill out a work sheet before meeting with the Undergraduate Advisor. Students interested in the M.A. program should contact History department staff for application information. Graduate students should see the Graduate Advisor. Applicants for the Social Science Credential Single Subject Program must see Credential Advisors. All advisors maintain extended hours during the semester and are available at other times by appointment. The department has open advising days in the week prior to each new semester; call the department for information.

History

Students in the B.A. in History will demonstrate basic research skills, writing skills, and presentation skills.

The History Department awards many scholarships and prizes to outstanding undergraduate and graduate students. For further information about these awards, given annually, inquire at the Department office no later than the beginning of the spring semester. Undergraduate and graduate students are eligible for the Department's facilitator program for which they may earn units in the major; see Department staff for applications. Graduate assistantships and readerships are also frequently available to qualified

graduate and undergraduate students. The Department recruits outstanding students for Phi Alpha Theta, the national honor society for History students.

The Department of History offers graduate study leading to the Master of Arts degree. The candidate is responsible for observation of the general requirements stated in this catalog as well as specific departmental requirements listed in the M.A. brochure, available on request from the Department office.

General Education Requirement in United States History

To fulfill State of California requirements, students must take three (3) units of U.S. history. This requirement can be met by HIST 172 or 173. Students who have taken U.S. history at another institution should check with the History Department before enrolling.

Undergraduate Programs

Bachelor of Arts in History (120 units)

Requirements

Majors must take 48 units of history: 9 lower-division and 39 upper-division.

1. Core (15 units):

Take the following courses with a grade of "C" or better:

HIST 301 Methodology of History (4)

Prerequisite: History majors only.

HIST 302 Theory and History (4)

Prerequisite: HIST 301. Required of all History majors. Must be taken in the semester immediately following successful completion of HIST 301.

Take the following course:

HIST 499 Senior Seminar (4)

Prerequisites: HIST 301, 302; 18 units of upper-division course work in History; at least two courses (6 units) of which must be in the 499 seminar's area of concentration.

HIST 301 MUST be taken in the first semester of upper-division course work in the major. HIST 301 is a prerequisite for 302, and both courses are prerequisites for 499.

Take one history course that fulfills the gender, race, and ethnicity requirement (from a list of approved courses available from the Undergraduate Advisor).

2. Fields of emphasis (18 units)

Option One: two fields of nine units each.

Option Two: three fields of six units each.

Select the fields from the following:

- A. Africa and the Middle East
- B. Ancient and Medieval Europe
- C. Asia
- D. Latin America
- E. Modern Europe (Including Britain)
- F. United States
- G. World

History B.A. students with a field of concentration in Modern European history must take either HIST 330 or 331; may elect to take both HIST 330 and 331.
History B.A. students with a field of concentration in United States history must have, at the minimum, one course in U.S. history at the 300 level and one course in U.S. history at the 400 level.

3. Breadth (6 units):

Take six units in a field (or fields) of history outside of their fields of emphasis.

4. Develop a portfolio (beginning with HIST 301) reflecting work in the History major. The portfolio will be evaluated as one of the requirements in the senior seminar (HIST 499). Complete 18 units of upper-division work in the major.

NOTE: History majors are strongly encouraged to include the study of foreign language and literature in their programs. Students working for a single-subject credential in secondary education must consult with the College's secondary education advisor as to the applicable credential major requirements.

History/Social Science Teaching Specialization

The History/Social Science teaching specialization is designed for prospective secondary History/Social Science teachers. Students receive a B.A. in History, but they complete a sequence of classes that satisfies the state-mandated requirement in subject matter competence for the Single Subject Teaching Credential. As part of the major, students in the History/Social Science Teaching Emphasis must take the following courses:

HIST 172 Early United States (3)

Prerequisite/Corequisite: One GE Foundation course and ENGL 100 or equivalent.

HIST 173 Recent United State History (3)

Prerequisite/Corequisite: One GE Foundation course and ENGL 100 or equivalent.

HIST 211 World History: Origins to 1500 (3)

Prerequisite: GE Foundation requirements.

HIST 212 World History: Since 1500 (3)

Prerequisite: GE Foundation requirements.

HIST 396 Contemporary World History (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor.

HIST 473 California History (3)

Prerequisite: None

HIST 401 History for Secondary Social Science Teachers (4)

Prerequisites: completed a majority of all coursework in the Social Science Subject Matter Program. Capstone course for students in Social Science Subject Matter Program.

In addition, students should select US History as one of their fields of emphasis in the History major.

The state-mandated subject matter competence requirement also includes several Social Science courses outside the History major. Students in the History/Social Science Teaching Emphasis must, in meeting their General Education requirements, take the following courses:

POSC 100 Introduction to American Government (fulfills GE Category D1b: Constitution & American Ideals)
Prerequisite/Corequisite: GE A1 requirement.

ECON 300 Fundamentals of Economics (fulfills GE Category D2: Social and Behavioral Sciences and History)
Prerequisites: GE Foundation requirements.

GEOG 100 World Regional Geography (3)
(fulfills GE Category D2: Social and Behavioral Sciences and History)

Prerequisite/Corequisite: One G.E. Foundation course.

GEOG 306 United States and Canada (3)
(fulfills GE Category D2: Social and Behavioral Sciences and History)

Prerequisites: GE Foundation requirement.

POSC 215 Issues of Comparative Politics (3)
(fulfills GE Category D2: Social and Behavioral Sciences and History)

Prerequisite: GE Foundation requirement; POSC 100.

EDSS 300S Intro to Teaching - Social Science
Prerequisite: Advanced sophomore or junior standing

In addition to meeting the subject matter competence requirement for the Single Subject Teaching Credential in Social Science, prospective History/Social Science teachers are also required to compete 45 units of professional preparation in the Single Subject Teaching Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all the credential program courses, except student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures. Prospective students should consult with the History/Social Science Education Credential Program Advisor in the History Department to plan their program.

Single Subject Teaching Credential in Social Science for Non-History Majors

The core discipline in the California State History/Social Science curriculum is History, but courses in the subject matter program also align with social science majors such as Political Science, Economics, and Geography. In order for non-History majors to demonstrate subject matter competence by course work for the History/Social Science teaching credential, candidates must complete 39 units from the core requirements listed below, which may be taken as part of the BA major or as electives. Students must also complete 15 additional units in the breadth area. Prospective students should consult with the History/Social Science Credential Advisor in the History department early to plan their program.

Requirements

Core (39 units)

Take each of the following courses:

History:

HIST 172 Early United States History (3)

Prerequisite/Corequisite: One GE Foundation course and ENGL 100 or equivalent.

HIST 173 Recent United State History (3)

Prerequisite/Corequisite: One GE Foundation course and ENGL 100 or equivalent.

HIST 211 World History: Origins to 1500 (3)

Prerequisite: GE Foundation requirements.

HIST 212 World Since 1500 (3)

Prerequisite: GE Foundation requirements.

HIST 396 Contemporary World History (3)
Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor.

HIST 473 California History (3)
Prerequisite: None

Economics:

ECON 300 Fundamentals of Economics (3)
Prerequisites: GE Foundation requirements.

Geography:

GEOG 100 World Regional Geography (3)
Prerequisite/Corequisite: One G.E. Foundation course.

GEOG 306 United States and Canada (3)
Prerequisites: GE Foundation requirement.

Political Science:

POSC 100 Introduction to American Government (3)
Prerequisite/Corequisite: GE A1 requirement.

POSC 215 Issues of Comparative Politics (3)
Prerequisite: GE Foundation requirement; POSC 100.

History/Social Science Teaching:

EDSS 300S Intro to Teaching - Social Science
Prerequisite: Advanced sophomore or junior standing

Capstone:

HIST 401 History for Secondary Social Science Teachers (4)
Prerequisites: completed a majority of all coursework in the Social Science Subject Matter Program. Capstone course for students in Social Science Subject Matter Program.

Breadth Requirements (15 units)

Courses must be selected from each of the following fields.

1. Diversity in History

Candidates must select three units from the following:
HIST 309I, 319, 338, 370 (same as CHLS 300), 394, 406A, 406B, 469, 470, 483, 485A, 485B, 486, 490.

2. United States Studies

Candidates must select six units from the following:
AFRS 332, 400; AIS 335, 485; ASAM 335I, 345, 346;
ANTH 321, 322, 329; AMST 310, 350I; CHLS 300 (same as HIST 370)*, 350; ECON 355; GEOG 304; HIST 370 (same as CHLS 300)*, 371, 372, 373, 375, 376, 378, 379, 380A, 380B, 407I, 451, 469*, 471, 474I, 475, 477A, 477B, 478, 479, 480, 482I, 485A*, 485B*, 486*; PHIL 451I; POSC 308, 311, 312, 321, 323, 326, 412, 423, 424; RST 302I, 482I; SOC 420, 427; WGSS 308, 315, 318, 320.

3. Global Studies

Candidates must select six units from the following:
AFRS 304; ANTH 307I, 323, 324, 332, 333, 335, 345;
ASAM 301I; CHLS 450I; ECON 366, 372; GEOG 308I, 309I, 313I, 314I, 315I, 316, 318, 321, 322; HIST 304, 332, 334, 335, 336, 337, 338*, 339, 340, 341A, 341B, 353, 356, 357, 362, 364, 365, 382A, 382B, 383A, 383B, 384, 385I, 386, 388, 391, 392, 394*, 400I, 406A*, 406B*, 407I, 409, 416, 418, 431, 432, 440, 441, 443, 461, 462, 463, 488, 491; POSC 358, 362, 367, 371; RST 308, 344, 352, 353I, 383I.

*Cannot be used as part of this breadth requirement if this course is chosen as part of the Diversity in History requirement

In addition to meeting the subject matter competence requirement for the Single Subject Teaching Credential in

Social Science, prospective History/Social Science teachers are also required to complete 45 units of professional preparation in the Single Subject Teaching Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all the credential program courses, except student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

Prospective students should consult with the History/Social Science Education Credential Program Advisor in the History Department to plan their program.

Honors in History

Students with a major in history may be admitted to the History Department honors program (option of the University Honor's Program) provided they have:

1. Completed at least 30 semester units of college- or university-level courses, including at least two history courses;
2. A minimum cumulative GPA of 3.3, and a 3.5 in history courses;
3. Submitted to the department honors committee chairperson two letters of recommendation from faculty members;
4. Received admission approval from the departmental honors committee.

Students who have the minimum GPA requirements established by the University Honors Program (3.0 overall and 3.3 in the major, but who do not meet History departmental GPA requirements above may petition the department honors committee for conditional admission to the Department Honors Program).

In order to graduate with Honors in history a student must:

1. Complete all regular requirements for the history major;
2. Complete HIST 501 Theories and Methodologies of History (3)
3. Complete HIST 498H Honors Research (3)
4. Complete HIST 499H Honors Thesis (3)
5. Complete 6 units of additional course work chosen in consultation with the Department Honors Advisor; such courses normally will require two analytical papers or a research paper on a honors level of performance;
6. Have at the time of graduation a cumulative GPA of at least 3.3 and a GPA of at least 3.5 in history.

Students admitted to the program must maintain a file in the University Honors Program which will include copies of proposals for 498H and 499H.

Oral History Program

This program, housed in the Department of History, is designed to teach and train history students in the use of materials that focus on largely unwritten sources. History majors, and social science credential students with a history concentration, are urged to take HIST 402.

Minor in History

A minimum of 21 units which must include:

Lower Division:

Take a six-unit sequence from the following:

HIST 211 World History: Origins to 1500 (3)

Prerequisite: GE Foundation requirements.

HIST 212 World Since 1500 (3)

Prerequisite: GE Foundation requirements.

or

HIST 131 Early Western Civilization (3)

Corequisite: ENGL 100.

HIST 132 Modern Western Civilization (3)

Corequisite: ENGL 100.

Upper Division:

Take a minimum of 12 units, which must include at least six units in each of two areas as defined for the major.

Minor in Jewish Studies

For requirements, see description in the Jewish Studies section of this catalog.

Minor in Latin American Studies

For requirements, see description in the Latin American Studies section of this catalog.

Minor in Middle Eastern Studies

Requirements

A minimum of 18 units.

Core

Minimum twelve (12) units: At least three units must be in History of the Middle East and four units must be in Arabic.*

ARAB 101A, 101B, 201A, 201B, 250; HIST 416/516,

418/518, 431/531, 432/532; R/ST 331I; POSC 367.

Electives

Must take a minimum of six additional units, selected with an advisor, from the following courses without repeating courses from the core:

ARAB 101A, 101B, 201A, 201B, 250; AH 116; ART 465/565; CWL 104, 402/502; GEOG 309I; HIST 393, 394, 416/516, 418/518, 428, 431/531, 432/532; POSC 367; R/ST 331I, 490**.

Three of these units may be taken from the following courses, which have a global and comparative perspective, without repeating courses from core:

CBA 300; HIST 440/540; WGSS 401I; CDFS 410; R/ST 102, 448/548; HIST 495**.

*Other languages of the Middle East may be substituted with the approval of the Director of the program.

**Only topics courses relevant to the minor will be accepted.

Graduate Programs

Master of Arts in History

Prerequisites

1. A bachelor's degree in history with an overall 3.0 GPA or higher or
2. A bachelor's degree with 24 units of upper-division courses in history. These courses must be comparable

to those required of a major in history at this University. Deficiencies are determined by the graduate advisor after consultation with the student and after study of transcript records.

Requirements

The Master of Arts in History is a program of 30 minimum units as defined below.

Core Courses required of all students:

HIST 501 Theories and Methodologies of History (3)

Prerequisite: Graduate standing in History.

HIST 590 Selected Topics in Comparative History (3)

Prerequisite: Graduate standing in History.

Options for Field of Study

The fields are Africa and the Middle East, Ancient/Medieval Europe, Asia, Latin America, Modern Europe, United States, World.

Option One

For Students pursuing one field of concentration.

Take 18 units of graduate-level coursework in field:

Take HIST 510 Literature of History (3) (in the field)

Take HIST 510 Literature of History (3) (outside the field)

Take Research Seminar if offered. For example:

HIST 611 (Ancient/Medieval), HIST 631 (Europe),

HIST 663 (Latin America), HIST 673 (US), and

HIST 682 (East Asia)

Option Two

For students pursuing two fields of concentration.

Take 9 units of graduate-level coursework in each field:

Take two HIST 510s, one in each field

Take Research Seminar in the field of concentration. For

example:

HIST 611 (Ancient/Medieval), HIST 631 (Europe),

HIST 663 (Latin America), HIST 673 (US), and

HIST 682 (East Asia)

Electives applicable to all students:

Six units of electives of graduate (500/600) coursework in History or supporting disciplines relating to the student's Field(s) of Concentration. Upon written approval of the Graduate Advisor, students may substitute three to six units of upper-division (300/400) coursework in History or supporting disciplines relating to the student's Field(s) of Concentration. Graduate students who wish to enroll in double-numbered (400/500) courses must take the 500-level course.

All Students

The courses for Special Preparation (595), Directed Study (695), Directed Research (697), and Thesis (698) may be applied to the 18 unit total only with the permission of the graduate advisor. A student may propose a field other than those cited above with the consent of the Graduate advisor and her/his graduate committee.

A reading knowledge of one or more foreign languages may be required, depending upon the candidate's program of study as recommended by her/his graduate committee.

Advancement to Candidacy

Students should see Graduate Advisor to file Advancement to Candidacy after at least 6 units but no more than 15 units of graduate coursework are completed.

Must have taken 501 as well as have passed the Graduation Writing Assessment Requirement (GWAR) or appropriate designated course. The Writing Proficiency Exam (WPE) is administered several times every academic year by the University Testing Office. Must be attempted in the first semester of graduate work and passed by the time of advancement. Exam may be waived if earned a 4.0 or higher on Writing portion of GRE.

Advancement must take place at least two semesters prior to taking Comprehensive Exams or completing the Thesis. Comprehensive Examination Approval Form or Thesis Committee Agreement Form must be filed with department at time of Advancement. At this point, a student must commit to taking exams or writing a thesis. Advancement to Candidacy is a formal contract listing courses student has taken, is taking, and will take. Changes to contract may be made in consultation with Graduate Advisor.

Culminating Project

Students must take either Comprehensive Exams in one field (two periods) or in two fields, or write a Thesis on one field or incorporating two fields to culminate their Master's Degree in History.

Comprehensive exams require filing a Comprehensive Examination Approval Form with the department.

Completion of a thesis: a thesis requires filing a Thesis Committee Agreement Form and enrolling in HIST 698 with the thesis advisor for four (4) units.

All candidates for the M.A. degree in history who have selected to write a thesis must demonstrate competency in at least one foreign language. Exceptions are granted only with the approval of the chair of a graduate student's committee and the Graduate Advisor.

The language competency requirement may be met in two ways:

1. Through an examination by a faculty member with expertise in the student's language. The exam will be a translation of about a 500-word text to be completed in two hours; a dictionary is allowed.
2. By taking the equivalent of two full years of university level foreign language courses, with an average GPA of 3.0 in those courses. If the primary concentration is in Ancient/Medieval, a student may also fulfill this requirement by taking one year of Greek and one year of Latin. All course work completed must be within five years of admission to the graduate program.

Single Subject Teaching Credential in Social Science

For information, refer to the undergraduate section in this department.

Courses (HIST)

LOWER DIVISION

101. Facts, Evidence and Explanation (3)

Corequisite: ENGL 100.

Explanation of facts, evidence and explanation to explore and develop habits of critical thought using a historical and global

perspective. Topics include argument, inductive and deductive reasoning, the relationship of language to logic and theoretical perspectives.

Not open for credit to students with credit in HIST 201.

131. Early Western Civilization (3)

Corequisite: ENGL 100.

History of western civilization from its origins through the 16th century. Stresses society, culture, and political institutions of ancient Near East, classical world, the medieval West, and renaissance and reformation Europe.

132. Modern Western Civilization (3)

Corequisite: ENGL 100.

European society from 16th century to present. Stresses events and phenomena which reshaped political, economic and social structures of the West and their impact throughout the world. Emphasis on intellectual, social and psychological transformation of modern life.

141. Jewish Civilization (3)

Prerequisites/Corequisites: One GE Foundation course and ENGL 100 or equivalent.

Survey traces diversity and complexity of Jewish traditions from ancient to modern times across different regions, exploring inter-cultural and assimilationist contacts in Diaspora. Students critically engage with Jewish source texts from various eras and regions.

161. Introduction to Latin American Studies (3)

Prerequisite/Corequisite: ENGL 100.

Interdisciplinary overview of history, society, and culture in Latin America – Mexico, Central American, the Caribbean, and South America. Examines political, economic, social, and cultural conditions for conflict, change, and continuity over last five hundred years.

Letter grade only (A-F). Same course as SOC 161 and LAS 161. Not open for credit to students with credit in SOC 161 and LAS 161.

172. Early United States History (3)

Prerequisite/Corequisite: One GE Foundation course and ENGL 100 or equivalent.

Survey of political, social, economic, and cultural development of the United States from discovery through reconstruction. Focus on the colonial era, establishment of the new nation, sectional problems, national growth, disunion, and reconstruction. Material may be covered chronologically or topically.

Not open for credit to students with credit in HIST 162A.

173. Recent United States History (3)

Prerequisite/Corequisite: One GE Foundation course and ENGL 100 or equivalent.

Survey of political social, economic, intellectual, and cultural development of United States from Reconstruction to present. Focuses on different social groups; movements of people; labor; women's and minority issues; politics, protest, and war; society and culture.

211. World History: Origins to 1500 (3)

Prerequisite: GE Foundation requirements.

Survey of pre-modern World History emphasizes interactions between civilizations. Topics include role of universal religions; political, social, and gender structures; economic and demographic development; diffusion of culture and technology via migration, commerce, and imperial expansion.

Not open for credit to students with credit in HIST 111.

212. World Since 1500 (3)

Prerequisite: GE Foundation requirements.

Survey of modern World History emphasizing global interactions such as economic globalization; demographic, environmental and gender transitions; intellectual, religious and cultural

transformations; imperialism and resistance to empire, birth of nations; and historical origins of contemporary world.

Not open for credit to students with credit in HIST 112.

250. Early World Historical Geography (4)

Prerequisites: Open only to Integrated Teacher Education Program (ITEP) students.

Examines emergence and changing nature of urban life, cultural and technological diffusions, and cross-cultural contact and exchange between cultures and civilizations over time

Same course as GEOG 250. Not open for credit to students with credit in GEOG 250.

290. Selected Topics in History (3)

Prerequisite: GE Foundation requirements.

Topics of current interest in History. Applicability to major requirements will be specified in description of individual topics.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

GENERAL

- 300. United States, Past and Present
- 301. Methodology of History
- 302. Theory and History
- 401. History for Secondary Social Science Teachers
- 490. Selected Topics in History
- 494. Practicum in History
- 495. Colloquium
- 498. Directed Studies
- 498H. Honors Research
- 499. Senior Seminar
- 499H. Honors Thesis

INTERDISCIPLINARY COURSES

- 303I. Rebels and Renegades
- 308I. Law and Civilization
- 309I. Men and Masculinity
- 310I. The Greek World
- 312I. Roman World
- 346I. European Cinema of Communism, Fascism, and Resistance
- 385I. India and South Asia
- 400I. History of Western Scientific Thought
- 407I. Japan and the United States in the 20th Century
- 464I. Latin American Environmental History
- 474I. The History and Culture of American Cities
- 482I. Recent American Environmental History

AFRICA AND THE MIDDLE EAST

- 391. The Making of Modern Africa, 1800-1939
- 392. Contemporary Africa, 1940-Present
- 393. Jews of the Modern Middle East
- 394. Middle Eastern Women
- 416./516. Central Asia and Afghanistan from Mongol Era to WWI
- 417. Minorities of the Middle East, Caucasus and Central Asia
- 418./518. Central Asia and Afghanistan, Twentieth Century
- 428. History of the Palestinian-Israeli Conflict
- 431./531. The Middle East (Southwest Asia), 600-1700
- 432./532. The Middle East (Southwest Asia), 1700-Present
- 491. Modern and Contemporary Africa

ANCIENT AND MEDIEVAL

- 310I. The Greek World
- 312I. Roman World
- 313. Ancient Greece
- 314. Roman History
- 316. Early Middle Ages
- 317. High Middle Ages
- 318. Byzantine Empire
- 319. Women in the Ancient and Medieval West
- 341A. Foundations of Russia
- 351. Medieval England

ASIAN

- 382A. Imperial China
- 382B. Modern China
- 383A. Japan to 1850
- 383B. Modern Japan
- 384. Contemporary Japan
- 385I. India and South Asia
- 386. History of Modern SE Asia: Colonial Era to the Vietnam War
- 388. Contemporary China
- 405./505. Classical Japan
- 406A. Asian Women: East and Northeast Asia
- 406B. Asian Women: South and Southeast Asia
- 407I. Japan and the United States in the 20th Century
- 409. Early Modern Japan
- 412. Chinese Emigration/Migration in Modern Period
- 416./516. Central Asia and Afghanistan from Mongol Era to WWI
- 417. Minorities of the Middle East, Caucasus and Central Asia
- 418./518. Central Asia and Afghanistan, Twentieth Century

LATIN AMERICAN

- 362. Colonial Latin America
- 364. Latin American Nations
- 365. Brazil
- 366. Latin American History and Literature
- 459. Religion in Colonial Latin America
- 460./560. Slavery in Latin America
- 461. History of Precolumbian Mexico
- 462. Mexico
- 463. The Caribbean and Central America
- 464I. Latin American Environmental History
- 465. Painting as Power
- 466. Selected Topics in Latin American History

MODERN EUROPEAN

- 304. The Holocaust
- 330. Early Modern Europe
- 331. History of Modern Europe, 1789 – Present
- 332. The Age of the Renaissance
- 333. Reformation Europe
- 334. Early Modern France, 1589-1789
- 335. The Shaping of Modern Europe
- 336. The French Revolution and Napoleon
- 337. Europe in the Nineteenth Century
- 338. Modern European Women's History
- 339. Europe, 1890-1945
- 340. Europe Since 1945
- 341B. Modern Russia
- 343. Modern Eastern Europe

- 346I. European Cinema of Communism, Fascism, and Resistance
- 347. Tradition and Crisis: Jews in Eastern Europe
- 348. Emancipation & Assimilation: Modern Jewish Hist of W. Europe
- 353. Tudor and Stuart England
- 356. Georgian and Victorian Britain
- 357. Recent Britain
- 400I. History of Western Scientific Thought
- 437. History of Germany 1871 to Present
- 450./550. Foucault and His Critics: Making A Social Body
- 483. Women in Eighteenth-Century England and America

ORAL HISTORY PROGRAM

- 402. Oral History Methods
- 498O. Directed Studies in Oral History

UNITED STATES

- 370. Chicano History
- 372. United States: Colonial Period
- 373. United States: Age of Revolution
- 375. The United States Emerges as a Nation
- 376. United States: Civil War and Reconstruction
- 378. United States History: 1877-1920
- 379. United States: Twenties, Depression, and World War II
- 380A. The United States in the Liberal Era 1945-1968
- 380B. The United States Since 1968
- 387. The Vietnam War in U.S. History
- 451. The United States in the World
- 452. The United States at War
- 468./568. Public Art, Monuments and Memory
- 469. Ethnic Groups in Urban America: An Historical Examination
- 470. American Jewish History
- 471. History of the Westward Movement
- 472. History of the South
- 473. California History
- 474I. The History and Culture of American Cities
- 475. American Immigration and Ethnicity
- 476. The History of Social Activism
- 477A./577A. American Cultural History
- 477B./577B. American Cultural History
- 478. Foreign Relations of the U.S.
- 479. U.S. Constitution: Origins and Early Development
- 480. Law and Fundamental Rights in American History
- 482I. Recent American Environmental History
- 484. Religion in American History
- 485A. History of Women in the U.S. Early Period
- 485B. History of Women in the U.S. Since 1850
- 486. History of Afro-Americans in the United States
- 489. Selected Topics in Legal History of the United States
- 496. Selected Topics in U.S. History

WORLD HISTORY

- 345. Comparative Genocide
- 349. The History of Food
- 395. Gender, Sexuality and Desire in World History
- 396. Contemporary World History
- 435. History of the Francophone World
- 440./540. The Silk Roads
- 441./541. Mediterranean World
- 442./542. The Indian Ocean in World History
- 443./543. The Early Modern Atlantic World
- 444./544. Pacific Ocean in World History
- 451. The United States in the World
- 492./592. Proseminar in World History

History Courses (HIST)

NOTE: General Education Category A must be completed prior to taking any upper-division course except upper-division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

UPPER DIVISION

300. The United States Past and Present (3)

Prerequisite: GE Foundation requirements.

Upper-division survey, may not be taken for credit in the United States field. For upper-division transfer students in lieu of HIST 172 and 173.

301. Methodology of History (4)

Prerequisite: History majors only.

Introduction to historiography and methodological issues, skills and competencies exercises, research methods, research presentations, and peer review. Creation of student portfolio used in remaining upper-division courses in major and assessed in HIST 499.

Letter grade only (A-F). May be used to satisfy the GEAR.

302. Theory and History (4)

Prerequisite: HIST 301. Required of all History majors. Must be taken in the semester immediately following successful completion of HIST 301.

Introduction to history of historical profession, conceptual categories of historical inquiry, the ways theory shapes historical research and writing. Focuses on case studies, significant historical works, major schools of historical interpretation and recent historiographic trends.

Letter grade only (A-F).

303I. Rebels and Renegades (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Exploration of music, literature and art used by 20th century social and political activists in an effort to understand the goals, tactics and accomplishments such activists use to make the world more just, inclusive and peaceful.

304. The Holocaust (3)

Examines the destruction of European Jews by Nazi Germany during the Second World War. Students will trace the roots of antisemitism in European history, the origins of Hitler's anti-Jewish assault, and the process from ghettoization to extermination.

308I. Law and Civilization (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Exploration of law as an intellectual effort to define, direct, and administer human experience. Examination of theories of knowledge, language, meaning, mental processes, social organization, personal responsibility and freedom underlying legal analysis and decision-making in courts as well as in administrative/bureaucratic settings.

309I. Men and Masculinity (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Exploration of male roles from an interdisciplinary perspective focusing on men as workers, friends, lovers, and fathers. Consideration of the choices available to men under the impact of tradition, feminism, and a changing job market. Gender-oriented social and political movements.

Letter grade only (A-F).

310I. The Greek World (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Examines major events and ideas in society and culture of ancient Greece. Emphasis on literature, the arts, and history. Topics include

Minoan civilization, Homer and the Trojan War, mythology and religion, lyric poetry, the Persian Wars, the "Golden Age" of Athens, the Peloponnesian War, and Hellenistic culture.

Same course as CLSC 3111. Not open for credit to students with credit in CLSC 3111.

312I. Roman World (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Examines major events and ideas in the society and culture of ancient Rome. Emphasis on literature, the arts, and history. Topics include genesis and growth of the Roman world, transition from Republic to Empire, imperial maturity, decay and decline, and the contributions of the Romans to the modern world.

Same course as CLSC 312I. Not open for credit to students with credit in CLSC 312I. Course fee may be required.

313. Ancient Greece (3)

Prerequisite: GE Foundation requirements.

History of the Greeks and the Greek world from the earliest times to the Roman conquest.

314. Roman History (3)

Prerequisite: GE Foundation requirements.

History of Rome and the Roman world from the Eighth Century B.C. to the Fifth Century A.D.

316. Early Middle Ages (3)

History of Western Civilization from the fall of the Roman Empire in the West to the Crusades. Germanization of the West, evolution of Christian institutions, Slavic expansion, Byzantinization of the Eastern Empire, Islamic civilization, Carolingian age, feudal and manorial institutions.

317. High Middle Ages (3)

History of Western Civilization from the Crusades to the end of the Middle Ages. Revival of trade, growth of towns and of capitalism, origins of modern political institutions, and medieval learning and art.

318. Byzantine Empire (3)

History of the Byzantine Empire from the 4th century AD to Constantinople's fall in 1453; the cultural heritage of the Roman Empire in the eastern Mediterranean; religious controversies and development of eastern Christianity; relations with Islam and medieval Europe.

319. Women in the Ancient and Medieval West (3)

Prerequisite: ENGL 100.

Examines roles and experiences of women in Western Europe from prehistory to the sixteenth century. Themes may include: construction of gender roles, relation between symbols and reality, interaction of private/public life, access to power/opportunity; the possibility of a "women's culture."

Same course as WGSS 312. Not open for credit to students with credit in W/ST 312 or WGSS 312.

330. Early Modern Europe (3)

Examines the multiple political and cultural reinventions of Europe between the Italian Renaissance and French Revolution. Studies the transformation of Europe as a society based around the Mediterranean to one defined by its relationship to the Atlantic world and overseas empires.

331. History of Modern Europe, 1789 – Present (3)

Prerequisite: GE Foundation requirements.

Introduces the social, political, cultural, and economic changes that have transformed European societies from the French Revolution to the present.

Letter grade only (A-F).

332. The Age of the Renaissance (3)

Examines remarkable transformation of Europe during the Renaissance period (1350-1550), including themes of humanism

and artistic and literary developments; humanism and politics; religion in the "Age of Reason." Particular emphasis on relationship between power and culture in Italian civilization.

Course fee may be required.

333. Reformation Europe (3)

Examination and analysis of the "long 16th century," from the beginning of the Italian Wars (1494) to the Peace of Westphalia (1648). Emphasis on economic, institutional, intellectual and religious crises, and on their resolutions in the post-Reformation period.

334. Early Modern France, 1589-1789 (3)

Spanning French history from the advent of the Bourbon monarchy until its demise with the French Revolution. Exposes students to the political, social, economic, and cultural developments that attended domestic and international expansion of the French state.

335. The Shaping of Modern Europe (3)

European political, social, economic and intellectual life from 1500 to 1789. Reviews Renaissance and Reformation, then traces the crisis of absolutism, the consolidation of state authority, rise of scientific and enlightened ideas, and the origins of the French Revolution.

336. The French Revolution and Napoleon (3)

End of the Old Regime and the French Revolution. Decline of the feudal monarchy, failure of enlightened despotism, the rise of revolutionary thought, French Revolution, and Napoleonic imperialism.

337. Europe in the Nineteenth Century (3)

Prerequisite: GE Foundation requirements.

Commencing with Napoléon's empire and concluding with the fin-de-siècle, examines industrialization and its repercussions; popular protest and revolution; nationalism; class consciousness; feminism; imperialism; and emergent ideologies (conservatism, liberalism, socialism; communism).

338. Modern European Women's History (3)

Investigates how European history has impacted on women, and how women and women's issues have shaped historical events. Issues covered are: industrialization, the family, wars and revolutions, health and sexuality, and the "woman question" in politics, culture and society.

Not open for credit to students with credit in W/ST 384 or WGSS 384.

339. Europe, 1890-1945 (3)

Prerequisite: GE Foundation requirements.

Explores the political, social, economic, international, and cultural crises prior to the First World War; the rise of totalitarianism in the Soviet Union and Nazi Germany, the Spanish Civil War, the Second World War, and the Holocaust.

340. Europe Since 1945 (3)

Examines the political, social, economic, and cultural history of Europe since the end of World War II. Themes include post-war recovery, the Cold War, decolonization, the fall of communism, the transformation of Central Europe, and the European Union.

341A. Foundations of Russia (3)

Prerequisite: GE Foundation requirements.

Evolution of the state structure, diverse cultural patterns, and social structures associated with ancient Kiev Russia: rise of Moscow, origins of autocracy and serfdom; westernization and modernization as problems during the imperial period to 1801. Particular emphasis on social history.

341B. Modern Russia (3)

Prerequisite: GE Foundation requirements.

Interaction with the West from 1801; era of great reforms and revolutionary movements; downfall of imperial Russia; establishment of the Soviet regime; chief political, social, economic and cultural developments in the Soviet era; role of the Soviet Union in world affairs.

343. Modern Eastern Europe (3)

Prerequisite: GE Foundation or consent of instructor.

Examines modern Eastern Europe from the emergence of nation states, to nationalism, world wars, fascism, Communism, conformity, dissent, and revolution. We will explore the role of Eastern Europe as a place and as an idea in modern Europe.

345. Comparative Genocide (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Explores the modern phenomenon of mass killings of targeted populations in order to achieve a particular demographic, political, or cultural goal. Examines a series of case studies - including the Armenian Genocide, the Holocaust, Cambodia, and Rwanda - to understand not only how and why genocides occur, but also to look at the possibilities of preventative action.

346. The European Cinema of Communism, Fascism, and Resistance (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Focuses on European cinema of the twentieth century as a manifestation of totalitarian and ideological movements preceding, in-between, and following the two world wars. The ensuing and ongoing resistance movements will also be examined.

Same course as RGR 346I and FEA 346I. Not open for credit to students with credit in RGR 346I and FEA 346I. (2 hrs seminar, 2 hrs activity)

347. Tradition and Crisis: Jews in Eastern Europe (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Explores the history of Eastern European Jewry, from its medieval origins to its destruction in the twentieth century. In particular, the course examines the impact of absolutist rule and the attempts to create new frameworks for Jewish identity.

348. Emancipation and Assimilation: Modern Jewish History of Western Europe (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Examines modern Jewish history in Western Europe. Topics include the ideas behind emancipation, the attempts to achieve it, and efforts to reconcile Jewishness with modern citizenship.

349. The History of Food (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor.

Religious and secular role of food, its connection to issues of identity, and significance of securing reliable sources of sustenance as central to political, economic, and military agendas all underline the usefulness of studying food and our complicated relationships with it throughout history.

Course fee may be required.

351. Medieval England (3)

Analysis of English political institutions, society, religion and economy in the Anglo-Saxon, Norman, Plantagenet, and late medieval eras.

353. Tudor and Stuart England (3)

Social, cultural, religious, political, and dynastic history of England from 1485 to 1714. Renaissance and Reformation; Crown and Parliament; civil war and revolution; the pre-industrial economy; relations with Scotland, Ireland, Europe, and America.

356. Georgian and Victorian Britain (3)

Social, cultural, religious, political, and constitutional history of Britain from 1714 to 1901. Changes in agriculture, commerce, industry, and population; Parliamentary democracy; Irish problems; relations with America, India, Europe, and the world.

357. Recent Britain (3)

Social, cultural, economic, and political history of 20th century Britain. Governments and people; labor, party politics, and the welfare state; two world wars; problems with Ireland and Europe; the end of Empire; race relations; mass media and popular culture; contemporary developments.

362. Colonial Latin America (3)

Prerequisite: GE Foundation requirements.

Iberian preparation for overseas expansion, discovery and conquest in America, evolution of colonial institutions, dynamic 18th century developments, wars of independence.

364. Latin American Nations (3)

Prerequisite: GE Foundation requirements.

Political, economic, social and intellectual evolution of Latin America in the 19th and 20th Centuries.

365. Brazil (3)

Surveys the history of Brazil from 1500 to the present. It covers the colonial, imperial and republican periods, analyzing the impact of slavery on society, the myth of "racial democracy," and contemporary economic and urbanization patterns. It also studies the 1964-1985 dictatorship and the return to democracy, as well as the challenges of twentieth-first century Brazil.

366. Latin American History and Literature (3)

Latin American history through the novel and film; will integrate literature and the cinema with traditional historical materials in order to provide the student with a deeper understanding of the development of Hispanic America.

370. Chicano History (3)

Prerequisite: GE Foundation requirements.

Chicanos in the settlement and development of the Southwest and in contemporary U.S. society; Chicano experience as a U.S. minority group; emerging civil rights movement of La Raza.

Letter grade only (A-F). Same course as CHLS 300. Not open for credit to students with credit in CHLS 300.

372. United States: Colonial Period (3)

Discovery and settlement of the new world; European institutions in a new environment; development of colonial government, economy and social institutions; European dynastic rivalry and colonial America.

373. United States: Age of Revolution (3)

Clash between British attempts to control and tax the colonies and colonial distaste for both; growth of an independent spirit; the American Revolution; problems of the new nation; the constitution.

375. The United States Emerges as a Nation (3)

An analysis of the political, economic, social, and intellectual forces from the adoption of the constitution through the 1840s.

376. United States: Civil War and Reconstruction (3)

Sectional rivalry, manifest destiny, mid-century divisive forces, Civil War and reconstruction.

378. United States History: 1877-1920 (3)

Development of the U.S. as an urban, industrial, multicultural society; progressive reform movements at the city, state, and national level; rise of U.S. as a world power; WWI.

379. United States: Twenties, Depression, and World War II (3)

The conflict-ridden 1920s; the Depression years, and the beginnings of welfare democracy; the United States in World War II.

380A. The United States in the Liberal Era 1945-1968 (3)

The political, social, cultural, and economic history of the United States between World War II and the late 1960s, an era when American involvement in the Cold War helped both sustain and eventually undermine the liberal anti-communist order.

Not open to students with credit in HIST 380.

380B. The United States Since 1968 (3)

Explores the Vietnam War, deindustrialization, suburbanization, consumerism, conservatism, the "new" Cold War, globalization, and the "war on terror." Uses music, film, fiction, and contemporary historical scholarship to address political, economic, and social issues; examines the connections between politics and culture.

382A. Imperial China (3)

Prerequisites: GE Foundation requirements; upper-division standing.

Introduction to Chinese civilization from prehistory to modern times stressing foundations of Chinese philosophy and material culture, and the causation of Chinese problems: production, reproduction, and population.

382B. Modern China (3)

Prerequisite: GE Foundation requirements.

Chinese society from 17th century to 1949. Impact of imperialism, reform and revolutionary movements, background of Chinese communism.

Not open for credit to students with credit in HIST 482B.

383A. Japan to 1850 (3)

Prerequisite: GE Foundation requirements.

Japan from prehistory to the nineteenth century; emphasis on social and cultural developments, the evolution of political institutions, and the development of early modern society.

383B. Modern Japan (3)

Prerequisite: GE Foundation requirements.

Japan from 1850 to 1945; collapse of the Tokugawa bakufu and rise of the Meiji state; industrialization, social change, and protest; "Taisho democracy" and the Pacific War.

384. Contemporary Japan (3)

Japan since 1945; impact of Hiroshima and Nagasaki; American occupation of Japan; Japan's "economic miracle," social change and social criticism in literature and film; Japan's role in the contemporary world; conflict with the U.S.

385I. India and South Asia (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

An interdisciplinary examination of the Indian subcontinent and the South Asian region from its historic roots through the founding and consolidation of the Great Mughal empire, to the beginnings of Western imperialism and the establishment of the British Raj, ending with nationalism and the course of events in post-Independence India, Pakistan and Bangladesh.

386. History of Modern Southeast Asia: Colonial Era to the Vietnam War (3)

Survey of political and cultural history of modern Southeast Asia from 1800: Expansion of European influence, growth of nationalism and process of decolonization, and the post-WWII configuration of the area. Both mainland and insular Southeast Asia will be surveyed.

387. The Vietnam War in U.S. History (3)

Prerequisite: GE Foundation requirements.

Examines the history of American involvement in Vietnam, the experience of Americans (and to some extent, Vietnamese) who fought the Second Indochina War (1954-1975), and the impact of the war on American Society.

388. Contemporary China (3)

China from 1949 to the present. The political, economic and cultural factors that shaped its continuity and change and the impact of its transformation on Greater China, including Hong Kong and Taiwan.

391. The Making of Modern Africa, 1800-1939 (3)

Survey of sub-Saharan Africa from the early 19th through the mid-20th centuries. Examines the European conquest and the entrenchment of colonialism. Emphasis will be on how Africans

perceived these processes, how they adjusted to them, and the continuing relevance of these experiences today.

392. Contemporary Africa, 1940-Present (3)

Surveys history of African continent during transition from colonialism to national independence and post-colonialism. The current political, economic, social and intellectual trends of Africa will be considered in historical context. African actions and perspectives will be prioritized.

393. Jews of the Modern Middle East (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Explores history, culture, and transformations of important Jewish communities in Middle East. Examines effects of modernization and colonialism on these disparate communities, including phenomenon of Jewish colonization of other Jews and impact of exclusivist nationalisms on Jewish identities.

394. Middle Eastern Women (3)

Prerequisites: Upper division standing.

Explores a wide range of roles played by Middle Eastern women throughout history, seek to understand their multi-faceted thoughts and activities, and discuss the most important issues related to women and gender in Middle Eastern history.

Not open for credit to students with credit in W/ST 394 or WGSS 394.

395. Gender, Sexuality and Desire in World History (3)

Prerequisite: Upper-division status

An introductory survey of the colonial and post-colonial world history regarding human gender, sexuality and desire. It examines the European colonial era and the twentieth century constructions of sexual identities in conjunction with class, race, ethnicity, colonialism, and nationalism.

Letter grade only (A-F).

396. Contemporary World History (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor.

World historical approach to the study of the twentieth century. Themes include: the changing global economy and environment; the advance and retreat of empires; colonialism and post-colonialism; contending ideologies; the intensification of globalization at the end of the century.

400I. History of Western Scientific Thought (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Introduction to history of science for scientists and non-scientists. Evolution of scientists' views of means and ends of their activities; ways science is affected by and affects contemporary cultures.

401. History for Secondary Social Science Teachers (4)

Prerequisites: completed a majority of all coursework in the Social Science Subject Matter Program. Capstone course for students in Social Science Subject Matter Program.

Examination of World and American history to promote global perspective and deeper knowledge of historical content within California History-Social Science Framework and Standards, historiography and historical thinking, methodology related to teaching and learning history. Emphasis on imbedding interdisciplinary approaches from social sciences in teaching and learning of history.

A grade of "B" or better is required for advancement to student teaching. Letter grade only (A-F).

402. Oral History Methods (1-3)

Through a series of workshops and through field experiences, skills in oral history will be developed which will enable students to use oral history either for their own personal use in family history or for class projects.

Not open for credit to students with credit in C/LA 485.

405./505. Classical Japan (3)

Japan from prehistory to the fifteenth century. Connections to other Asian cultures, the influence of Buddhism, and development of Japanese esthetics exemplified in literature and art; dynamics of centralized vs. regional power; civil vs. military authority.

406A. Asian Women: East and Northeast Asia (3)

Prerequisite: Upper division standing.

Exploration of the histories of women in China, Japan and Korea from prehistory to the present. Major themes include women's contributions to social, cultural and political change, and the complex relationship between feminism and nationalism in the modern period.

Same course as A/ST 406A and WGSS 406A. Not open for credit to students with credit in A/ST 406A, W/ST 406A or WGSS 406A.

406B. Asian Women: South and Southeast Asia (3)

Emphasis on modern period; exploration of complexities of women's roles in multicultural, multilingual societies in South and Southeast Asia, including gender as a continuing site of contention in nationalist discourse.

Same course as A/ST 406B and WGSS 406B. Not open for credit to students with credit in A/ST 406B, W/ST 406B or WGSS 406B. Letter grade only (A-F).

407I. Japan and the United States in the 20th Century (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Examination of relationships between Japan and the United States, emphasizing cultural, economic, and political conflict and cooperation.

409.Early Modern Japan (3)

Japan from the mid-16th century to the end of the Tokugawa period in 1868; reunification, the growth of urban centers and transportation, economic growth; blossoming of political theory, and of popular culture.

412. Chinese Emigration/Migration in Modern Period (3)

Emphasis on Chinese in SE Asia, the Americas, and Western Europe; exploration of the implications of human migration for the developing world, and the fluidity and contested nature of "nation states."

Not open for credit to students with credit in HIST 410.

416. Central Asia and Afghanistan from the Mongol Era to WWI (3)

Prerequisite: Upper-Division standing.

Introductory survey of the history of change and continuity in Afghanistan and Turkistan (currently Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) during the Mongol Era of the Thirteenth Century and the World War I.

417. Minorities of the Middle East, Caucasus, and Central Asia (3)

Prerequisites: GE Foundation requirements; Upper-division standing

Historical examination of minorities in Middle East, Caucasus, and Central Asia. Explores complexities of relationships among ethnic and confessional communities and interactions of the state and the minority communities from the seventeenth century to the post-imperial, post-colonial era of modern independent states of region.

418. Central Asia and Afghanistan, Twentieth Century (3)

Prerequisite: Upper-division standing.

Introductory survey of history of change and continuity in Afghanistan and Turkistan (currently Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) during the Twentieth Century.

428. History of the Palestinian-Israeli Conflict (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Examines evolution of Palestinian-Israeli conflict from late nineteenth century to present. Explores how social, economic, and political realities gave birth to competing Zionist and Palestinian national identities evolved over time, highlighting diverse perspectives within each national community.

431./531. The Middle East (Southwest Asia), 600-1700 (3)

Explores political, cultural, social, and economic developments in the region: emergence of Islam; creation and development of Islamic Empire; rise of dynastic successor states and "gunpowder" empires; European encroachment; and, integration into emerging world system.

432./532. The Middle East (Southwest Asia), 1700-Present (3)

Explores political, cultural, social, and economic developments in the region: Modernization and reform; problems and impact of modernity and imperialism; state building; nationalism; and, Islamic revivalism.

435. History of the Francophone World (3)

Prerequisites: HIST 132, 212, or approval of advisor.

Commencing with a study of the history of French language, explores methods by which France expanded its global presence. Themes to be covered include French colonialism, resistance to French overseas expansion and issues relative to race and identity.

437. History of Germany 1871 to Present (3)

History of Germany from unification: the First World War, the Weimar Republic, the National Socialist Reich, and the post-war recovery.

440./540. The Silk Roads (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor.

Examines the Silk Roads from the first century BCE to the end of the fifteenth century CE from a world historical perspective. Emphasis is on economic integration, cultural diffusion, exchange and syncretism, and comparative demographic and political development.

441./541. Mediterranean World (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor

Focuses on pre-modern Mediterranean world up to geographical shift of political power and wealth to the Atlantic world with an emphasis on the exchange and interaction of peoples and ideas.

Letter grade only (A-F).

442./542. The Indian Ocean in World History (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor.

Examines the Indian Ocean from 600 CE to the nineteenth century from a world historical perspective. Emphasis is on how the Indian Ocean connected diverse regions, societies and polities, and facilitated the circulation and modification of commodities, cultural practices and ideas.

443./543. The Early Modern Atlantic World (3)

Prerequisite: HIST 211 or 132 or consent of undergraduate/graduate advisor

Examines early modern Atlantic from a world historical perspective emphasis on cultural encounter/exchange, environmental interaction, and comparative colonial development from early Iberian maritime expansion through Atlantic revolutions and wars of independence.

Letter grade only (A-F).

444./544. The Pacific Ocean in World History (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor

Examines the Pacific World from the pre-modern period to the twentieth century from a world historical perspective. Emphasis is on how the Pacific Ocean connected diverse regions, societies and polities, and facilitated the circulation and modification of commodities, cultural practices and ideas.

Letter grade only (A-F).

450. Foucault and His Critics: Making a Social Body (3)

Examines Foucaultian texts and works of other theorists in historical context. Also explores the ways in which historians apply Foucault's theories to investigations of social and political reforms of Modern Europe, specifically the history of mass culture and citizenship.

451. The United States in the World (3)

Prerequisites: Upper-division standing.

A survey of American history from the colonial period to the present day framed within a world history context, focusing on comparisons and connections between national and international developments.

452. United States at War (3)

Prerequisites: GE Foundation requirements. Explores the United States experience of modern warfare. Examines discourse about the morality of war, the objectives of conflict, and the consequences of global warfare. Incorporates the study of the home front and domestic images of war.

Not open to students with credit in HIST 377.

459. Religion in Colonial Latin America (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Explores history of religion in Latin America from the pre-Hispanic period through Independence, with a focus on the social, cultural, and political implications of European, Indigenous and African religious traditions.

460./560. Slavery in Latin America (3)

GE Foundation requirements, one or more Exploration courses and upper division standing.

Systems of forced labor in Latin America since European arrival; the slave trade; slavery in economic context; resistance and negotiation; plantations and urban slavery; slaves in the independence wars; manumission and slavery abolition; Afro-latino Americans post slavery.

461. History of Precolumbian Mexico (3)

History of Meso-America from prehistoric times to the Spanish conquest, emphasizing the study of the societies and the religious and intellectual life of people of ancient middle America.

462. Mexico (3)

Spanish conquest of Indian Mexico; settlement and exploration; colonial life and institutions; the achievement of independence from Spain; reform, foreign intervention, dictatorship in the 19th century; the Revolution of 1910 and after; contemporary Mexico.

463. The Caribbean and Central America (3)

History of Caribbean Islands and Central America from European colonization to the present, with emphasis on Cuba and Central America. Economic, political/cultural development, relations with the United States.

464I. Latin American Environmental History (3)

Prerequisite: Upper-division standing, GE Foundation requirements, 3 units Latin American survey (HIST 161 or 364 or equivalent) or consent of instructor.

Explores the environmental history of Latin America from an interdisciplinary perspective, with a focus on the production of nature and society and the transformation of the relationship between human societies and the natural world from pre-European contact to the 21st century.

465./565. Painting as Power: The Politics of Visual Culture in the Early Modern Spanish Empire (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Explores the history of the Spanish Empire ca. 1500-1800 through the politics of visual culture (paintings, maps, clothing, festivals, architecture.) Historical focus on the social, cultural, and political

implications of visual culture. Emphasis on the connections between metropolitan and colonial culture and politics and reading visual culture as historical documentation.

Letter grade only (A-F).

466. Selected Topics in Latin American History (3)

Topics will vary from semester to semester.

May be repeated to a maximum of 9 units with different topics. Topics announced in Schedule of Classes.

468./568. Public Art, Monuments, and Memory (3)

Prerequisite: G.E. Foundation requirements, Upper-division standing

Historical examination of the role of public art and monuments in shaping civic identity and public memory in the United States. Traces the creative ways that artists and citizens alike have challenged official representations of American history and culture.

469. Ethnic Groups in Urban America: An Historical Examination (3)

Examination of the origin, migration, settlement and the assimilation of various ethnic groups in American cities since the late 19th century. Emphasis will be on the economic, social, and political struggles encountered by different groups adjusting to urban life.

470. American Jewish History (3)

Chronological and thematic approach to American Jewish history. Covers Sephardic, German, Eastern European, and recent Jewish immigration. Emphasis on experiences immigrants brought with them. Critical examination of assimilation, transformation of traditions, women, anti-Semitism, development of denominations, mobility, leadership of Diaspora.

Letter grade only (A-F).

471. History of the Westward Movement (3)

Examination of the impact of American expansion on the West: Euro-American exploration and migration, ethnic conflict and conquest, gender and family roles on the frontier, environmental changes in the West, development of economic institutions, and urbanization of the region.

472. History of the South (3)

Explores development of the South, including examination of regional culture, traditions, and social crisis in the Antebellum period; conflict and social change; economic transformations; role of women in the region; and the interaction of racial groups in the Modern South.

473. California History (3)

Survey of California from the 1500s to the present. Emphasis on migration, cultural diversity, and significant social, political, and economic developments.

474I. The History and Culture of American Cities (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary exploration of the history and cultural life of American cities from the nineteenth century to the present.

475. American Immigration and Ethnicity (3)

Explores the history of immigration to the United States and the experiences of immigrants in American society. Major themes include political, social, and economic implication of immigration; push and pull factors; nativism; assimilation; and social constructions of ethnicity.

476. The History of Social Activism (3)

Prerequisites: GE Category A must be completed prior to taking any upper-division course.

Social movements are collective efforts to change society. At many times in history they have had dramatic consequences and they continue to be a focus of controversy, conflict, and change today.

477A./577A. American Cultural History (3)

Development of American way of life treated in terms of values, behavior and institution, themes of individualism, community, ethnic diversity and social reform.

477B./577B. American Cultural History (3)

Development of American way of life treated in terms of values, behavior and institutions, themes of individualism, community, ethnic diversity and social reform.

478. Foreign Relations of the U.S. (3)

Incorporates a global perspective and considers the influence of such issues as domestic politics, bureaucratic rivalry and decision-making, economics, ideology, race, and the role of special interest groups in the making of foreign policy.

Same course as I/ST 478. Not open for credit to students with credit in I/ST 478.

479. U.S. Constitution: Origins and Early Development (3)

European sources of constitutional thought, colonial background, impact of the American Revolution, the framing period and the rise of a judicial approach to constitutional interpretation. Emphasis throughout: the evolution of constitutionalism as a basic principle in American thought and institutions.

480. Law and Fundamental Rights in American History (3)

Selected variable topics on civil liberties issues addressing the historical development of constitutional guarantees in the areas of freedom of expression, privacy, church and state, due process, and equal protection.

482I. Recent American Environmental History (3)

An examination of the impact of industrialization and urban growth on the American environment, the emergence of ecological consciousness and green politics, and the creation of the idea of Nature in American culture in the U.S. since the 1860s.

483. Women in Eighteenth-Century England and America (3)

Prerequisites: ENGL 100 and upper division standing.

Representations and realities of women's lives, 1688-1800, using critical methodology of history and literature; analysis of literary and historical texts to explore law and economics; religion; education and culture; marriage, sex, and health; politics and revolution.

484. Religion in American History (3)

Prerequisite: GE Foundation requirements.

Explores American religion from European settlement to present. Focuses on interconnections between American religion, politics, and culture—including literature, film, music, moral crusades, and built environment. Examines how beliefs structured interactions between social groups.

Not open to students with credit in HIST 371.

485A. History of Women in the U.S. Early Period (3)

Prerequisite: GE Foundation requirements.

Survey of roles and activities of American women from colonial period to 1850, with focus on slavery, immigration, family, economy, law, and politics.

Only 3 units of 485A,B may be applied to a field of concentration in U.S. history for the major. Same course as WGSS 485A. Not open for credit to students with credit in W/ST 485A or WGSS 485A.

485B. History of Women in the U.S. Since 1850 (3)

Prerequisite: GE Foundation requirements.

Examines the changing roles and status of women's economic, political, and social roles. Explores the suffrage movement, the role played by women in WW II and the changes brought forth during the "second wave" of feminism.

Only 3 units of 485A,B may be applied to a field of concentration in U.S. history for the major. Same course as WGSS 485B. Not open for credit to students with credit in W/ST 485B or WGSS 485B.

486. History of Afro-Americans in the United States (3)

Examines the roots and culture of Afro-Americans from African origins to the present. We will explore the transformation from slavery to freedom; segregation and racial conflict; emigration patterns, societal interactions, and the experiences of women.

489. Selected Topics in Legal History of the United States (3)

Case studies in American law from colonial times to the present: English common law heritage, puritan and frontier influences, the legal profession, judicial traditions, formative stages in criminal law, torts and contracts, and modern trends in legal thought.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

490. Selected Topics in History (1-3)

Topics of current interest in history selected for intensive development.

May be repeated to a maximum of 6 units with different topics in different semesters, but no more than 3 units may be used to satisfy the requirements for the major. Topics announced in the *Schedule of Classes*.

491. Modern and Contemporary Africa (3)

Conquest of Africa by European states, contrasting colonial systems as they evolved, anti-colonial movements and progress towards self-government or independence, problems of economic and political development, and race tensions in areas of white settlement.

492./592. Proseminar in World History (3)

Prerequisite: Consent of the instructor.

Discussion and analysis of recently published historical works and materials from a world history perspective.

May be repeated to a maximum of 6 units.

494. Practicum in History (1-3)

Prerequisites: Consent of instructor and department chair.

Field work in History, supplemented by reading and tutorials under direction of a faculty member. Internships, small group discussion/teaching, and other assignments directed by supervising faculty member.

May be repeated to a maximum of 6 units, but no more than 3 units may be applied to the major in History.

495. Selected Topics (3)

Prerequisites: HIST 301 and nine additional units of upper division History.

Seminar level course exploring a specific historical field or issue chosen by instructor; students expected to analyze and interpret primary and secondary sources in a paper presented to the class.

Part of core requirements for students declaring a major before summer 2001; students declaring a major after spring 2001 will be required to take HIST 499 as a core requirement, not 495.

496. Selected Topics in the United States History (3)

Variable topics in U.S. history from the 17th century to the present. Fits within the 400-level thematic courses of the U.S. field. Some background in U.S. history is strongly encouraged.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

497. Selected Topics in Asian History (3)

Prerequisite: Consent of instructor.

Selected topics in Asian History.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

498. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study under the supervision of a faculty member.

May be repeated to a maximum 6 units.

498H. Honors Research (3)

Research for and writing of a senior thesis under the direction of a departmental advisor.

498O. Directed Studies in Oral History (1-6)

Prerequisite: Consent of instructor.

Directed study on a research topic using the methodology of oral history.

May be repeated to a maximum of 6 units. Not open for credit to students with credit in C/LA 498

499. Senior Seminar (4)

Prerequisites: HIST 301, 302; 18 units of upper-division course work in History; at least two courses (6 units) of which must be in the 499 seminar's area of concentration.

Students must demonstrate mastery of historical processes and literature through: 1) portfolio submission; 2) research paper, and 3) oral presentations.

Not open for credit to students who have not met the prerequisites listed above. Letter grade only (A-F).

499H. Honors Thesis (3)

Prerequisites: HIST 498H

Research, writing, and presentation of a senior honors thesis under the direction of departmental faculty advisor.

GRADUATE LEVEL

501. Theories and Methodologies of History (3)

Prerequisite: Graduate standing in History.

Development of history as a discipline, major schools of historical interpretation, and recent developments in analysis and theory. Emphasis will be placed on the interrelationships of history with other disciplines in the social sciences and humanities. A minimum B grade is required to continue in the graduate program.

Letter grade only (A-F).

505./405. Classical Japan (3)

Japan from prehistory to the fifteenth century. Connections to other Asian cultures, the influence of Buddhism, and development of Japanese esthetics exemplified in literature and art; dynamics of centralized vs. regional power; civil vs. military authority.

510. Selected Topics in the Literature of History (3)

Reading and discussion of major works and intensive study of bibliography and bibliographical aids. Includes a comparative history component.

Letter grade only (A-F). May be repeated to a maximum of 6 units in the same semester. Topics announced in the *Schedule of Classes*.

- A. Ancient and Medieval
- B. Modern Europe
- C. Modern Middle East (SW Asia)
- D. Latin America
- E. World
- F. United States
- G. Asia

512. Chinese Emigration and Migration in the Modern Period (3)

Prerequisite: Graduate standing

Examines Chinese emigration and internal migration since the seventeenth century, in Southeast Asia, the Americas and Oceania, and Europe. Explores factors that have shaped Chinese emigration and migration in the modern period, as well as impact on world history.

Letter grade only (A-F).

516. Central Asia and Afghanistan from the Mongol Era to WWI (3)

Prerequisite: Upper division standing.

An introductory survey of the history of change and continuity in

Afghanistan and Turkistan (currently Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) during the Mongol Era of the Thirteenth Century and the World War I.

Letter grade only (A-F).

518. Central Asia and Afghanistan, Twentieth Century (3)

Prerequisite: Upper Division Standing.

Introductory survey of the history of change and continuity in Afghanistan and Turkistan (currently Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) during the Twentieth Century.

Letter grade only (A-F).

531./431. The Middle East (Southwest Asia), 600-1700 (3)

Explores political, cultural, social, and economic developments in the region: emergence of Islam; creation and development of Islamic Empire; rise of dynastic successor states and "gunpowder" empires; European encroachment; and, integration into the emerging world system.

532./432. The Middle East (Southwest Asia), 1700-Present (3)

Explores political, cultural, social, and economic developments in the region: Modernization and reform; problems and impact of modernity and imperialism; state building; nationalism; and, Islamic revivalism.

540./440. The Silk Roads (3)

Prerequisite: HIST 211 or 131 or consent of undergraduate/graduate advisor.

Examines the Silk Roads from the first century BCE to the end of the fifteenth century CE from a world historical perspective. Emphasis is on economic integration, cultural diffusion, exchange and syncretism, and comparative demographic and political development.

541. Mediterranean World (3)

Prerequisite: Graduate standing in History.

Focus on pre-modern Mediterranean world up to geographical shift of political power and wealth to the Atlantic world with an emphasis on the exchange and interaction of peoples and ideas.

Letter grade only (A-F).

542./442. The Indian Ocean in World History (3)

Prerequisite: Graduate Standing

Examines the Indian Ocean from 600 CE to the nineteenth century from a world historical perspective. Emphasis is on how the Indian Ocean connected diverse regions, societies and polities, and facilitated the circulation and modification of commodities, cultural practices and ideas.

Letter grade only (A-F).

543. The Early Modern Atlantic World (3)

Prerequisite: Graduate standing in History.

Examines early modern Atlantic from a world historical perspective with an emphasis on cultural encounter and exchange, environmental interaction, and comparative colonial development from early Iberian maritime expansion through the Atlantic revolutions and wars of independence.

Letter grade only (A-F).

544./444. The Pacific Ocean in World History (3)

Prerequisite: History 211 or 131 or consent of undergraduate/graduate advisor

Examines the Pacific World from the pre-modern period to the twentieth century from a world historical perspective. Emphasis is on how the Pacific Ocean connected diverse regions, societies and polities, and facilitated the circulation and modification of commodities, cultural practices and ideas.

Letter grade only (A-F).

550. Foucault and His Critics: Making A Social Body (3)

Examines Foucaultian texts and works of other theorists in historical context. Also explores the ways in which historians apply Foucault's theories to investigations of social and political reforms of Modern Europe, specifically the history of mass culture and citizenship.

Letter grade only (A-F).

560./460. Slavery in Latin America (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses and upper division standing.

Systems of forced labor in Latin America since European arrival; the slave trade; slavery in economic context; resistance and negotiation; plantations and urban slavery; slaves in the independence wars; manumission and slavery abolition; Afro-latinos Americans post slavery.

565./465. Painting as Power: The Politics of Visual Culture in the Early Modern Spanish Empire (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Explores the history of the Spanish Empire (Spain and Spanish America) ca. 1500-1800 through the politics of visual culture (paintings, maps, clothing, festivals, architecture.) Historical focus on the social, cultural, and political implications of visual culture. Emphasis on the connections between metropolitan and colonial culture and politics and reading visual culture as historical documentation.

Letter grade only (A-F).

568./468. Public Art, Monuments, and Memory (3)

Prerequisite: GE Foundation requirements, Upper-division standing

Historical examination of the role of public art and monuments in shaping civic identity and public memory in the United States. Traces the creative ways that artists and citizens alike have challenged official representations of American history and culture.

577A./477A. American Cultural History (3)

Development of American way of life treated in terms of values, behavior and institutions, themes of individualism, community, ethnic diversity and social reform.

Letter grade only (A-F).

577B./477B. American Cultural History (3)

Development of American way of life treated in terms of values, behavior and institution, themes of individualism, community, ethnic diversity and social reform.

Letter grade only (A-F).

590. Selected Topics in Comparative History (3)

Prerequisite: Graduate standing in History.

Selected themes in history involving cross-cultural and comparative approaches.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*

592./492. Proseminar in World History (3)

Prerequisite: Graduate standing in History.

Discussion and analysis of recently published historical works and materials from a world history perspective.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

595. Special Preparation (3)

Prerequisite: Graduate standing; consent of Graduate Advisor.

Special preparation for the M.A. examinations under faculty direction.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

611. Seminars in Ancient and Medieval History (3)

Prerequisite: Graduate standing in History.

Selected topics in ancient or medieval history.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

631. Seminars in European History (including Britain and Russia) (3)

Prerequisite: Graduate standing in History.

Directed reading and research in the political, economic, social and cultural history of Europe.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

663. Seminar in Latin American History (3)

Directed reading and research in history, focusing on selected topics in Latin American history.

May be repeated for a maximum of six units in different semesters. Letter grade only (A-F).

673. Seminars in United States History (3)

Prerequisite: Graduate standing in History.

Topics in domestic or international affairs from colonial times to present.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

682. Seminars in Asian History (3)

Prerequisites: Six units of upper division Asian history or consent of instructor.

Selected topics in Asian history.

May be repeated to a maximum of 6 units in different semesters. Letter grade only (A-F).

695. Directed Readings (1-3)

Prerequisites: Consent of instructor.

Readings on an individual basis.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Consent of instructor.

Research on an individual basis.

Letter grade only (A-F).

698. Thesis (1-4)

Planning, preparation and completion of non-curricular work in history for the master's degree.

HOSPITALITY MANAGEMENT

College of Health and Human Services
Department of Family and Consumer Sciences

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001

Telephone / Fax: (562) 985-4484 / 985-4414

Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

HFHM Program Director: Lee Blecher

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Career Possibilities

Restaurant Manager • Hotel Manager • Catering Director • Foodservice Manager in College, University or Corporate Setting • Manager in a Bed and Breakfast Facility • Healthcare Hospitality Director • School Foodservice Director • Club Manager • Manager in Senior Nutrition Programs, Stadiums or Amusement Parks • Food Purchaser or Broker. (For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Science in Hospitality Management (120 units)

The program is accredited by the Accreditation Commission for Programs in Hospitality Administration.

This program provides a broad-based foundation and includes hands-on practical experience. It prepares students for entry into a multi-ethnic and multi-cultural domestic and international job market.

In addition to general education requirements (48 units), complete a minimum of 40 units from the major department, 24 of which must be upper division. Students transferring from another college or university will receive transfer credit in required courses if the course is equivalent to the course at this university and it is accepted by this university.

Requirements

Take all of the following required courses:

ACCT 201 Elementary Financial Accounting (3)
Prerequisites: None.

CAFF 321I Family and Consumer Resource Management (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

COMM 110 Interpersonal Communication (3)
(or equivalent)

Corequisites: Concurrent enrollment in COMM 110 Workshop.

ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)

Prerequisites/Corequisites: MATH 103 or higher.

FCSE 299 Introduction to FCS (1)

Prerequisites: None.

FCSE 499 Professionalism and Leadership in FCS (2)

Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course work in Family and Consumer Sciences.

HFHM 170 Intro to Hospitality Foodservice and Hotel Management (3)

Prerequisites: None.

HFHM 173 Applied Foodservice Sanitation (1)

Prerequisites: None.

HFHM 176 Fundamentals of Food Preparation (2)

Recommended corequisite: CHEM 100 or equivalent.

HFHM 274 Intentional Hospitality Development (3)

Prerequisites: ENGL 100 or equivalent.

HFHM 276 Food Production and Service in Hospitality Foodservice and Hotel Management (3)

Prerequisites: HFHM 173, HFHM 176 or 235.

HFHM 371 Human Resources in Foodservice and Lodging Management (3)

Prerequisites: Consent of instructor.

HFHM 372 Hotel and Lodging Management (3)

Prerequisites: HFHM 270.

HFHM 373 Hotel and Restaurant Information Technology (3)

Prerequisites: HFHM 270 or consent of instructor.

HFHM 376 Customer Service Management in the Hospitality Foodservice and Hotel Industry (3)

Prerequisites: HFHM 270.

HFHM 378 Legal Issues in Hospitality Foodservice and Hotel Management (3)

Prerequisites: Upper division standing or consent of instructor.

HFHM 379 Field Studies in Hospitality Foodservice and Hotel Management (3)

Prerequisites: Upper division standing or consent of instructor.

HFHM 471 Hotel & Lodging Property Management (3)

Prerequisites: HFHM 372 or consent of instructor.

HFHM 474 Cost Control in Hospitality Foodservice and Hotel Management (3)

Prerequisites: HFHM 275 or 276 or consent of instructor.

HFHM 476 Hotel and Restaurant Financial Management (3)

Prerequisites: ACCT 201 and HFHM 270.

HFHM 492J Internship in Hospitality Foodservice and Hotel Management (3)

Prerequisites: Student must be a major or minor in Hospitality Foodservice and Hotel Management; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Hospitality Foodservice and Hotel Management; and HFHM 275 or 276 or 372, and 800 hours of approved work experience. Each prerequisite course must be completed with a grade of "C" or better.

MKTG 300 Marketing (3)

Prerequisites: ECON 100, 101.

NUTR 132 Introductory Nutrition (3)

Prerequisites/Corequisites: One Foundation course.

PHIL 160 Introductory Ethics (3)

Prerequisites/Corequisites: Any course from GE Foundation categories A.1 (Written English), A.2 (Oral Communication), or A.3 (Critical Thinking).

REC 340I Leisure in Contemporary Society (3)

Prerequisites: GE Foundations requirements; one or more Exploration courses; upper division standing.

STAT 108 Statistics for Everyday Life or equivalent (3)

Prerequisites: None.

Take one of the following courses:

PSY 100 Intro to Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

SOC 100 Intro to Sociology (3)

Prerequisites/Corequisites: A GE Foundation course.

Take 9 units from the following for enhanced professional knowledge and specialization:

HFHM 374 Meeting Planning in Hotels & Restaurants (3)

Prerequisites: HFHM 2703

HFHM 375 Food Production Systems II (3)

Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 173 and 275.

HFHM 472 Advanced Hotel Administration (3)

Prerequisites: HFHM 372.

HFHM 473 Beverage Management (3)

For Hospitality Foodservice and Hotel Management majors: HFHM 276, senior standing; Nutrition and Dietetics majors: HFHM 275, senior standing.

HFHM 477 Foodservice Management (3)

Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 275.

A minimum of 6 units of pre-approved coursework taken as major electives to develop individual interests are selected in consultation with a faculty advisor from the following:

Any HFHM major course not selected; CAFF 429; FCSE 486, 497; GEOG 352; GERN 400I; additional units of HFHM 492J; IS 301; NUTR 336, 439; REC 141, 325, 462, 465, 468; or others as approved by advisor.

Each course on the student's program planner must be completed with a grade of a "C" or better. In addition, a course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with the approval of the student's faculty advisor.

HFHM 492J requires 800 hours of approved work experience as a prerequisite for this degree. Field study hours in HFHM 379 can be used toward meeting the 800 hours.

Minor in Hospitality Management

The 22-unit Minor in Hospitality Management is available to any non-Hospitality Management major.

Take all of the following:

HFHM 170 Intro to Hospitality Foodservice and Hotel Management (3)

Prerequisites: None.

HFHM 173 Applied Foodservice Sanitation (1)

Prerequisites: None.

Take one of the following:

HFHM 379 Field Studies in Hospitality Foodservice and Hotel Management (3)

Prerequisites: Upper division standing or consent of instructor.

HFHM 492J Internship in Hospitality Foodservice and Hotel Management (3)

Prerequisites: Student must be a major or minor in Hospitality Foodservice and Hotel Management; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Hospitality Foodservice and Hotel Management; and HFHM 275 or 276 or 372, and 800 hours of approved work experience. Each prerequisite course must be completed with a grade of "C" or better.

Take 15 units selected from the following:

HFHM 176 or 235, 274, 275 or 276, 372, 373, 374, 375, 376, 378, 471, 472, 473, 474, 476 and 477.

Students are responsible to adhere to all prerequisites of courses as designated in the catalog. Certain combinations of classes could require additional units. Please see an advisor for help in making these decisions.

Minor In Event Planning Management

For requirements, see description in the Recreation and Leisure Studies section of this catalog.

Hospitality Foodservice and Hotel Management Courses (HFHM)

LOWER DIVISION

170. Introduction to Hospitality Foodservice and Hotel Management (3)

Introduction to hospitality foodservice and hotel industry and historical overview of field. Careers in hospitality foodservice and hotel management defined. Explore relationship of careers to community and foodservice and hotel/lodging industry. Overview of organization and current forces shaping foodservice and hotel operations.

Not open for credit to students with credit in HFHM 270. (Lecture-discussion 3 hours)

173. Applied Foodservice Sanitation (1)

Principles of sanitation and safety; the causes and controls of food borne illnesses, sanitary practices with purchasing, receiving, storing and preparing food, principles HACCP, sanitary maintenance of kitchen, dining room and equipment, personal hygiene, and safety of the food handler.

Letter grade only (A-F). (Lecture-discussion 1 hour)

176. Fundamentals of Food Preparation in Hospitality Foodservice and Hotel Management (3)

Recommended corequisite: CHEM 100 or equivalent.

Covers basic scientific principles related to various foods and food preparation methods from the perspective of the restaurant and

foodservice industry. Fundamental skills and techniques used for handling and preparing foods to maintain quality and safety are covered.

Letter grade only (A-F). Course fee may be required. (Lecture-discussion 2 hours, laboratory 3 hours).

235. Principles of Food Preparation (3)

Application of scientific principles in the preparation of selected food products emphasis on physical and chemical properties of food; methods and techniques of food preparation; factors that contribute to quality of prepared foods.

Letter grade only (A-F). (Lecture-discussion 2 hours, Laboratory 3 hours) Course fee may be required.

274. International Hospitality Development (3)

Prerequisites: ENGL 100 or equivalent.

International hospitality foodservice and hotel management. Issues and problems in the hotel and restaurant industry from a global perspective. Dynamics of human interaction in a multi-ethnic and multi-cultural global job market.

(Discussion 3 hours)

275. Food Production Systems I (3)

Prerequisites: NUTR 132 and HFHM 235.

Factors which influence individual, family and quantity foodservice. Menu planning and food selection, preparation and service in relation to management of time, energy and money. Foodservice practices for regular meals and special occasions.

Course fee may be required. (Lecture-discussion 2 hours, lab 3 hours)

276. Food Production and Service in Hospitality Foodservice and Hotel Management (3)

Prerequisites: HFHM 173, HFHM 176 or 235.

Fundamentals of planning, organizing, preparing, and serving of meals as applicable to hospitality foodservice and hotel industry. Operations relative to provision of quality food and beverage services included.

Letter grade only (A-F). Course fee may be required. (Lecture-discussion 2 hours, laboratory 3 hours)

UPPER DIVISION

301. College Dining Services & Bookstore Administration (3)

Prerequisite: Consent of instructor.

Academic and experiential learning in management of college dining services and bookstore. Internship for student employees of Forty-Niner Shops, Inc.; 150 hrs of work experience, 18 hrs of classroom instruction.

371. Human Resources in Foodservice and Lodging Management (3)

Prerequisites: HFHM 176 or 235 and upper division standing; or consent of instructor.

Application of human resources management in the foodservice and lodging industries. Includes recruitment, selection, training and development, organizing a workforce, supervision, performance leadership, workplace safety, labor relations, and related legal issues.

Letter grade only (A-F).

372. Hotel and Lodging Management (3)

Prerequisite: HFHM 170.

Organization and management of hotel and lodging facilities. Covers functions of various operational departments and how they interrelate. Importance of assuring quality guest service emphasized.

Fieldtrips may be required. (Lecture - discussion 3 hours)

373. Hotel and Restaurant Information Technology (3)

Prerequisites: HFHM 170 or consent of instructor.

Management of information systems found in hotel & restaurant industry. Includes applications of technology and computer systems facilitating front office, sales and marketing management, restaurant management, customer service, and communications in hotel and restaurant operations.

Letter grade only (A-F). (Lecture activity 3 hours)

374. Meeting Planning in Hotels and Restaurants (3)

Prerequisites: HFHM 170.

Planning, organizing, and implementing meetings in the hotel and restaurant industry. Factors necessary to provide food, lodging, and facility services for meetings and special functions are included.

Letter grade only (A-F). (Lecture/Discussion 3 hours)

375. Food Production Systems II (3)

Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 173 and 275.

Quantity food operations utilized providing production and operational experiences: menu planning, costing, standardizing recipes, serving, merchandising, sanitation and safety. Commercial and non-commercial settings are used.

Letter grade only (A-F). (Lecture - discussion 2 hours, Laboratory 3 hours)

376. Customer Service Management in the Hospitality Foodservice and Hotel Industry (3)

Prerequisites: HFHM 170.

Examine components of customer service management and guest relations in foodservice and lodging industries. Importance of quality customer service's relationship to success of operations in the industry.

Letter grade only (A-F). Fieldtrips and off-campus activities required. (Lecture-activity 3 hours)

378. Legal Issues in Hospitality Foodservice and Hotel Management (3)

Prerequisite: Upper division standing or consent of instructor.

Examine evolving laws of foodservice and lodging both historically and as they exist today.

(Lecture discussion 3 hours)

379. Field Studies in Hospitality Foodservice and Hotel Management (1-3)

Prerequisites: Upper division standing or consent of instructor.

Structured experiential learning designed to expand professional experiences and enhance development of competencies required for performance in hospitality foodservice and hotel management.

May be repeated to a maximum of 6 units. (Seminar 1-3 hours)

471. Hotel and Lodging Property Management (3)

Prerequisites: HFHM 372 or consent of instructor.

Management principles and practices applied to maintenance of hotel and lodging facilities. Strategies for maintaining hotels to ensure customer safety and satisfaction are included.

Letter grade only (A-F). (Lecture activity 3 hour) Field trips required.

472. Advanced Hotel Administration (3)

Prerequisites: HFHM 372.

Principles of organization, administration, and leadership in hotel and lodging operations. Topics include organizational management, human resource management, productivity, marketing, financial management, and quality service management.

Letter grade only (A-F). (Lecture activity 3 hour) Field trips required.

473. Beverage Management (3)

Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276, senior standing; Nutrition and Dietetics majors: HFHM 275, senior standing.

Overview of the beverage industry. Identification, use, and service of wines and other alcoholic and non-alcoholic beverages, with an in-depth analysis of the various elements of beverage operations including purchasing, control, merchandising, and bar management.

Field trips required. (Discussion 3 hours)

474. Cost Control in Hospitality Foodservice and Hotel Management (3)

Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 275.

Financial management of food, labor, supplies, and other operational costs; procedures for controlling purchasing, receiving, storing, and issuing of food, beverage, and supplies; inventory and security management; computer applications; and analysis of financial reports.

(Lecture - discussion 3 hours)

476. Hotel and Restaurant Financial Management (3)

Prerequisites: ACCT 201 and HFHM 170.

Managerial and financial analysis of numerical data and reports used for planning, controlling, and decision making in the hotel and restaurant industry. Topics include ratio analysis, internal control, sales, revenue and cost management, cash control, budgeting, and feasibility studies as applied to the hotel and restaurant operations.

Letter grade only (A-F). (Lecture Activity 3 hours).

477. Foodservice Administration (3)

Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 375.

Explore organization and administration in commercial and non-commercial foodservice operations. Includes food purchasing, receiving, storage, inventory control, marketing, organizational management, human resource management, productivity, financial management, and quality management.

Fieldtrips required. (Discussion 3 hours)

492J. Internship in Hospitality Foodservice and Hotel Management (3)

Prerequisites: Student must be a major or minor in Hospitality Foodservice and Hotel Management; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Hospitality Foodservice and Hotel Management; and HFHM 275 or 276 or 372, and 800 hours of approved work experience. Each prerequisite course must be completed with a grade of "C" or better.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)

HUMAN DEVELOPMENT

College of Liberal Arts

Chair: Carl Fisher

Department Office: Psychology (PSY) 205

Telephone: (562) 985-4344

FAX: (562) 985-4237

Website: <http://www.csulb.edu/colleges/cla/human-dev/>

Faculty: Jeffrey P. Davis, Shelley J. Eriksen, Beth Manke, Pamela Roberts, Heather Rae-Espinoza, Lauren Rauscher, Judith Stevenson, Katherine Van Giffen

Administrative Support Coordinator: Wendy Lopez

Undergraduate Advisor: Lauren Rauscher

Career Possibilities

Elementary or Secondary School Teacher • Occupational Therapist • Physical Therapist • Parent Educator • Health Educator • Student Services • School Administration • Social Worker • Program Evaluator • Human Resources • Consumer Research • Health Administrator • Educational Counseling • Admissions or Academic Advising • Youth Program Specialist • Recreation Specialist • Community Organization Worker • Child Life Specialist • Training and Development Specialist • Senior Citizen Center Director • Gerontologist • Victim Witness Case Worker • Peace Corps Worker • Personnel Specialist • Teacher • Adoption Counselor • Marriage and Family Counselor • School Psychologist (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The field of Human Development studies lifespan development within societal and cultural contexts. Accordingly, Human Development is interdisciplinary, examining development primarily from the perspectives of its component disciplines: Anthropology, Biology, Psychology and Sociology.

The department offers a B.A. in Human Development and supervises the Human/Child Development concentrations in the Liberal Studies Program. The B.A. allows students to choose from a wide variety of Foundation Area courses. Careful selection of Foundation courses allows students to make significant progress in a minor or certificate while completing the major. In addition to academic training, students are taught to apply their knowledge through a semester Practicum.

The faculty of Human Development are active researchers, who regularly include interested students in their research programs. Students who are considering graduate school have the opportunity to work as research assistants on a variety of projects and can help present the findings of those projects at professional conferences. Research experience of this type enhances the likelihood that students will be accepted into a graduate program.

The Human Development Student Association (HDSA) is an active student club open to all students enrolled in Human Development courses and has regularly scheduled meetings. HDSA activities are posted outside the department office.

For more information, visit the office (PSY 205) or visit the department website. Students who wish to major in Human Development should seek early advising from the Undergraduate Advisor.

Bachelor of Arts in Human Development (120 units)

Requirements

Lower Division:

Take 9 units from the following:

HDEV 180 Lifespan Human Development (3)
Prerequisite/Corequisite: ENGL 100 or equivalent.

ANTH 120 Introduction to Cultural Anthropology (3)
Prerequisite/Corequisite: Any GE Foundation course.

PSY 100 General Psychology (3)
Prerequisite/Corequisite: GE A1 requirement.

SOC 100 Principles of Sociology (3)
Prerequisite/Corequisite: A GE Foundation course.

Core Courses (24 units):

Take all of the following courses:

HDEV 250 Elementary Statistics in Social and Behavioral Sciences (4)
Prerequisites: Knowledge of mathematical procedure usually covered in elementary high school algebra, eligibility for GE math.

HDEV 307I Approaches to Childhood Through Adolescence (3)
Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

HDEV 320 Research Methods in Human Development (4)
Prerequisites: ANTH 120 or PSY 100 or SOC 100 or HDEV 180 and HDEV 250.

HDEV 357I Approaches to Adulthood Through Aging (3)
Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

HDEV 360 Cultural Foundations for Human Development (3)
Prerequisites: HDEV 307I and HDEV 357I.
Prerequisites/Corequisite: HDEV 320.

HDEV 470 Seminar/Practicum (4)
Prerequisites: HDEV 250, 307I, 320, 357I, 360; and consent of the instructor.

Take one of the following courses:

HDEV 402 Development of Thought: Structure, Process and Cultural Influences Across the Life Span (3)
Prerequisites: HDEV 320 and 360.

HDEV 403 The Acquisition of Culture: Socialization in Cross-cultural Perspective (3)
Prerequisites: HDEV 320, 360 or an equivalent upper-level cultural anthropology course (e.g. ANTH 414, 415, 419, 420, 421) and consent of instructor.

Take 12 units from the following, including at least one course from each foundation area:

Biological:

ANTH 318, 319; BIOL 301; H SC 420I, 421, 425I; WGSS 440;

Psychological:

ED P 302, 305; CDFS 311, 312I, 314, 411, 412;
GERN 400I, 485; HDEV 300I; PSY 331, 332, 333,
336, 351, 356, 368, 370, 378, 438, 463;

Sociocultural:

ANTH 351, 413, 419, 421, 454, 475; ASAM 340, 381;
AFRS 410; CHLS 340, 350, 415; CDFS 413; CWL
315I; GERN 400I; HDEV 300I, 340; LING 329, 379;
SOC 320, 325, 335I, 345, 346, 423, 464; WGSS 401I,
420.

Students must earn a grade of at least "C" in all upper division major courses.

Minor in Human Development

The minor in Human Development may be combined with any major at CSULB except Human Development and Liberal Studies, Track II - Human Development Concentration. The minor in Human Development offers students an opportunity to supplement their education with an interdisciplinary study of lifespan development within societal and cultural contexts.

Requirements

A minimum of 7 courses, chosen in consultation with the Human Development Department Advisor.

Take one of the following courses:

HDEV 180 Lifespan Human Development (3)

Prerequisite/Corequisite: ENGL 100 or equivalent.

ANTH 120 Introduction to Cultural Anthropology (3)

Prerequisite/Corequisite: Any GE Foundation course.

PSY 100 General Psychology (3)

Prerequisite/Corequisite: GE A1 requirement.

SOC 100 Principles of Sociology (3)

Prerequisite/Corequisite: A GE Foundation course.

Take all of the following courses:

HDEV 250 Elementary Statistics in Social and Behavioral Sciences (4)

Prerequisites: Knowledge of mathematical procedure usually covered in elementary high school algebra, eligibility for GE math.

HDEV 307I Approaches to Childhood Through Adolescence (3)

Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

HDEV 320 Research Methods in Human Development (4)

Prerequisites: ANTH 120 or PSY 100 or SOC 100 or HDEV 180 and HDEV 250.

HDEV 357I Approaches to Adulthood Through Aging (3)

Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

HDEV 360 Cultural Foundations for Human Development (3)

Prerequisites: HDEV 307I and HDEV 357I.
Prerequisites/Corequisite: HDEV 320.

Take one additional course chosen from the following:

HDEV 300I, 340, 402, 403, 470.

All students in this minor must take at least 6 courses in Human Development. All students who complete another course as part of their major that is equivalent to a Human Development course (such as a statistics course equivalent to HDEV 250) must substitute another HDEV course for that one.

Courses (HDEV)

LOWER DIVISION

180. Lifespan Human Development (3)

Prerequisite/Corequisite: ENGL 100 or equivalent.

Introduction to the cognitive, social emotional and physical development of humans within their ecological niches. Differing worldviews (anthropology, sociology, psychology, and biology) will be used to compare and contrast developmental milestones and issues from conception to death.

250. Elementary Statistics in Social and Behavioral Sciences (4)

Prerequisites: Knowledge of mathematical procedure usually covered in elementary high school algebra, eligibility for GE math.

Introduction to descriptive and inferential statistics and their applications in social and behavioral science research; performance of statistical exercises by interactive computer. Emphasis upon knowledge of which statistical tests to use and how to interpret their results.

Same course as C/LA 250. Not open for credit to students with credit in ANTH 202, PSY 110, 210, SOC 250 or C/LA 250. (Lec 3 hrs, lab 2 hrs.)

UPPER DIVISION

300I. Death and Dying (3)

Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100. Not open for credit to students with credit in HDEV 400I.

Exploration of social, cultural and individual aspects of death experience examined from historical, biological, legal, religious and ethical perspectives. Deathwork, the dying experience, survivorship, ritual and grief examined in light of life-span, cultural and gender diversity.

307I. Approaches to Childhood (3)

Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

Biological, psychological, and sociocultural aspects in the growth of the individual from conception through early adolescence will be considered. Relevant topics and theoretical issues will be treated in an interdisciplinary manner.

Not open for credit to students with credit in NRS 307.

320. Research Methods in Human Development (4)

Prerequisites: ANTH 120 or PSY 100 or SOC 100 or HDEV 180 and HDEV 250.

Research methods in human development including methods and models from anthropology, biology, psychology and sociology.

Letter grade only (A-F). Lec 3 hrs; lab 2 hrs.

327. Approaches to Adolescence and Emerging Adulthood (3)

Prerequisites: Completion of G.E. Foundation, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

Biological, psychological, and sociocultural aspects in the development of the individual from pubescence through emerging adulthood will be examined. Relevant topics and theoretical issues will be treated in an interdisciplinary manner.

340. Families and Work: Life Course Processes (3)

Prerequisites: ANTH 120 or PSY 100 or SOC 100 or HDEV 180.

Examination of the historical transformations over time in Western societies, but especially in the U.S., in the nature of work and how these changes have helped to reshape family forms, relationships and processes.

357I. Approaches to Adulthood Through Aging (3)

Prerequisites: GE Foundation requirements, upper-division standing, ANTH 120 or HDEV 180 or PSY 100 or SOC 100.

Biological, psychological and sociocultural aspects in the development of the individual from late adolescence or youth until death. Relevant topics and theoretical issues are treated in an interdisciplinary manner.

Not open for credit to students with credit in NRS 357.

360. Cultural Foundations for Human Development (3)

Prerequisites: HDEV 307I and HDEV 357I.

Prerequisites/Corequisite: HDEV 320.

Examination of the human life cycle from a global and cross-cultural comparative perspective. Consideration of how the phases of human development (and the transitions between them) are conceptualized and dealt with in a variety of sociocultural settings worldwide.

Not open for credit to students with credit in HDEV 401.

402. Development of Thought: Structure, Process and Cultural Influences Across the Life Span (3)

Prerequisites: HDEV 320 and 360.

Examination of theories and current research on the development of thought and problem solving across the lifespan and cross-culturally using a multidisciplinary approach. Specific topics include cognition, problem solving, intelligence, language and thought, understanding numbers, literacy and educational implications.

403. The Acquisition of Culture: Socialization in Cross-cultural Perspective (3)

Prerequisites: HDEV 320, 360 or an equivalent upper-level cultural anthropology course (e.g. ANTH 414, 415, 419, 420, 421) and consent of instructor.

Examination of socialization as both a universal and culturally specific phenomenon. Topics include cross-cultural variations in teaching and learning; socialization of children and adult novices; socialization as key aspect of social and cultural reproduction and source of innovation and change.

470. Seminar/Practicum (4)

Prerequisites: HDEV 250, 307I, 320, 357I, 360; and consent of the instructor.

Provides for a sequence of observations and supervised participation with individuals in a variety of community agencies and/or educational settings. Practicum is supplemented by topical seminar discussions for two hours each week.

(Seminar 2 hrs, practicum 6 hrs.)

490. Selected Topics in Human Development (3)

Prerequisites: HDEV 307I, consent of instructor.

Topics of current interest in human development selected for intensive study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

499. Independent Study (1-3)

Prerequisite: Consent of instructor and chair.

Student conduct independent laboratory, field, or library research and write a report of the research.

May be repeated to a maximum of 6 units.

INFORMATION SYSTEMS

College of Business Administration

Department Chair: C. Sophie Lee

Department Office: College of Business Administration (CBA) 426
Telephone: (562) 985-4993 (O) 985-5543 (F)

Website: www.csulb.edu/colleges/cba/is/

Faculty: Omer S. Benli, Lori Brown, Robert T. Chi, H. Michael Chung, Mohammed B. Khan (emeritus), Melody Y. Kiang, C. Sophie Lee, Ying Liu, Khosrow Moshirvaziri, Thang Nguyen, Dee C.J. Walter, Yu-Ming Wang

Administrative Support Coordinator: Gordon Thompson

For MBA with Specialization in Information Systems, see Business Administration, Graduate Programs.

Career Possibilities

MIS Specialist • Computer Analyst • Software Developer
• Systems Analyst • Telecommunications Specialist •
Management Consultant • Other careers requiring computer skills

Applications Development – Business Systems Analysts • Applications Programmers • Support Specialists • Software Trainers • Database Designers • IT Administrators
Business Telecommunications – Telecommunications and Computer Network Specialists • Network Administrators
Electronic Commerce – Web Developers and Administrators • Webmasters

Decision Technologies – Business Analysts • System Support Managers and Consultants

(Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Science in Business Administration

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

In order to graduate with a business degree from CSULB, a student must complete a minimum of 120 units. A majority of the upper division business courses, including economics and statistics, must be completed at this university. For details, refer to the CBA Policy on Course Transfers/Substitutions.

1. Lower Division:

ACCT 201 Elementary Financial Accounting (3)
Prerequisite: None

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher; one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

MATH 115 Calculus for Business (3)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

STAT 108 Statistics for Everyday Life (3)

Prerequisite: None

Choose one of the following:

PHIL 170 Critical Reasoning (3)

Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

I S 100 Information Technology Literacy (3)

Prerequisite: None

2. All business and pre-business majors shall demonstrate computer literacy and competency prior to taking junior and senior level courses. Requires one of the following:

A. Passing score (70%) on the Computer Proficiency Examination (CPE).

B. With Credit (Cr) or "C" or better grade in a transfer equivalent course, complete:

IS 233 Introduction to Computer Systems and Applications (3)

Prerequisite: None

3. Upper Division:

A. Take all of the following:

CBA 300 International Business (3)

Prerequisite: None

ACCT 310 Cost Accounting for Managers (3)

Prerequisites: ACCT 201 or equivalent.

ECON 333 Managerial Economics (3)

Prerequisites: ECON 100, 101; MATH 115 or 122.

FIN 300 Business Finance (3)

Prerequisite: None

BLAW 320 Legal and Regulatory Environment of Business (3)

Prerequisite: None

IS 300 Management Information Systems (3)

Prerequisite: IS 233 or equivalent.

IS 301 Business Communications (3)

Prerequisite: None

IS 310 Business Statistics (3)

Prerequisite: MATH 114.

HRM 360 Organizational Behavior (3)

Prerequisite: None

MGMT 300 Principles of Management (3)

Prerequisite: None

MKTG 300 Marketing (3)

Prerequisite: None

B. MGMT 425, Business Strategy and Policy (3 units), (Capstone) must be taken at CSULB as a senior and after the upper division prerequisite core courses have been completed (ACCT 310, FIN 300, MGMT 300, MKTG 300, IS 301).

C. Completion of option requirements.

4. Elective courses to total 120 units. Students are encouraged to select electives for expansion of knowledge and intellectual interests as well as for preparation for business employment.

Option in Management Information Systems (120 units)

This option has an emphasis on systems management, information process and analysis, and new uses of information technologies and management information systems for business applications and decision-making. Also included are application development, e-commerce, business telecommunications, and decision technologies.

Requirements

1. Take the following courses:
 - I S 340 Business Application Programming (3)
Prerequisites: I S 300.
 - I S 380 Database Management (3)
Prerequisite: I S 300.
 - I S 385 Systems Analysis and Design (3)
Prerequisite: I S 300.
2. Take 9 units selected from the following:
IS 320, 355, 445, 455, 456, 457, 464, 470, 480, 483, 484, 485.

Minor in Management Information Systems

Requirements

1. Take the following course:
 - IS 300 Management Information Systems (3)
Prerequisite: IS 233 or equivalent.
2. Take 15 units selected from the following:
IS 320, 340, 355, 380, 385, 445, 455, 456, 464, 470, 480, 483, 484, and 485

Information Systems Courses (I S)

LOWER DIVISION

100. Information Technology Literacy (3)

Critical thinking and information literacy skills through information needs assessment, information gathering, diagnosis, synthesis, deductive and inductive reasoning, and reporting and presentation using information technologies.

Letter grade only (A-F).

233. Introduction to Computer Systems and Applications (3)

Introduction to using Internet and e-mail, Windows, word processing, spreadsheet, and database applications; basic computer literacy.

Credit/No Credit grading only.

UPPER DIVISION

300. Management Information Systems (3)

Prerequisite: IS 233 or equivalent.

Information systems concepts and components, contemporary organizational applications, development and management of information systems, and future trends. Computer-based team projects requiring integration and application of conceptual and skills-oriented information systems knowledge in business environment.

Letter grade only (A-F).

301. Business Communications (3)

Analysis of principles of collecting, organizing, analyzing, and presenting business information. Written and oral communications involving problem solving in the business management process.

Letter grade only (A-F).

301L. Business Communication Writing (3)

Prerequisite: Consent of instructor

A writing intensive course format emphasizing concepts and practice for development of writing skills necessary for successful professional practice. This course may be used to satisfy the GVAR requirement.

May be repeated to a maximum of 4 units in different semesters. May be used to satisfy the GVAR.

310. Business Statistics I (3)

Prerequisite: STAT 108.

Application of statistics to business problems. Data collection and organization, probability theory, measures of central tendency and dispersion, hypothesis testing and estimation, simple regression, and correlation. Use of statistical software.

Letter grade only (A-F)

320. Quantitative Analysis for Business Decisions (3)

Prerequisite: MATH 114.

Application of quantitative analysis and computer software for solving business problems. Linear programming, integer programming, PERT and CPM, inventory control, queuing models, quality control, number basis, transportation and assignment models, and simulation. Use of computer software.

Letter grade only (A-F).

340. Business Application Programming (3)

Prerequisites: I S 300.

Object-oriented programming (OOP). Labels, buttons and text boxes, menus, dialog boxes and multiple forms, arrays, and drag-and-drop functions. Accessing database files. Concepts ranging from simple to advanced. Visual programming systems.

Letter grade only (A-F).

355. Introduction to Business Telecommunications (3)

Prerequisite: I S 300.

Introduction to concepts and technology of telecommunications and networking in business and organizations. Basics of voice, data, image, and video transmission. Fundamentals of networking, use of Internet technology and telecommunication regulation and standards.

Letter grade only (A-F).

380. Database Management (3)

Prerequisite: I S 300.

Introduction to database requirements, analysis and specification. SQL query formulation. Database implementation using relational database management system software, such as Oracle. Design of computerized business forms and reports.

Letter grade only (A-F).

385. Systems Analysis and Design (3)

Prerequisite: I S 300.

Introduction to current and emerging practices, concepts and methods of systems analysis and design. Development process models, requirements analysis and system modeling, conceptual and physical design, systems implementation and maintenance, project management and teamwork, roles and responsibilities of systems analysts.

Letter grade only (A-F).

410. Business Statistics II (3)

Prerequisites: IS 310 and 301.

A second course in business statistics. Sampling distributions, estimation, hypothesis testing, analysis of variance, linear regression and correlation analyses, multiple regression, non-parametric techniques, one-way and two-way analysis of variance, and time series forecasting. Use of appropriate software and spreadsheet modeling.

Letter grade only (A-F)

445./545. Internet Applications Development (3)

Prerequisites: IS 301 or 340.

Design, management, and applications of Internet-based electronic business transaction systems. Special emphasis on Web home page design and database-driven Web application development.

Letter grade only (A-F). Lecture, hands-on software project and case studies.

455. Local Area Networks (3)

Prerequisites: IS 301, 355.

Technology and system development of local area networks. Network requirement analysis, design, implementation, and operation from user and network administrator perspectives. Network server management, wide area network and Internet connectivity, and network security and control.

Letter grade only (A-F).

456. Systems Integration and Security (3)

Prerequisites: IS 301, 355.

Technology, application, operating system, infrastructure, and systems integration in internetworking and enterprise networking. Interoperability, mobile system, multimedia, distributed and collaborative systems, network management, fault tolerance, security and middleware. Case studies and hands-on activities.

Letter grade only (A-F).

457. Wireless Systems and Mobile Applications (3)

Prerequisites: IS 301, 355.

Application of information technologies, management in wireless and mobile environment. Technical aspects of wireless internetworking and mobile applications in business. Pervasive and ubiquitous computing environment and applications. Current technical issues, application development, and human interface design.

Letter grade only (A-F).

464./564. Network Modeling and Simulation (3)

Prerequisites: IS 301, 310.

Fundamentals of simulation methodology for performance and feasibility study of business models. Basic probability distributions, random number generation, model formulation, evaluating results, validations, waiting-line simulation, and computer network performance measurement via simulation and use of computer software simulation packages.

Letter grade only (A-F).

470. Decision Support Systems (3)

Prerequisites: IS 301, 310, 380.

Use of information systems technologies to support decision making by managers. Emphasis is given to individual and group decision support systems, expert systems, and executive information systems.

Letter grade only (A-F).

480. Advanced Database Management (3)

Prerequisites: IS 301, 380.

Advanced approaches such as object-oriented, data warehousing, and client/server methods to database applications and development. Use of entity-relationship analysis to identify objects. Development of relational database systems for a business. Application software development project using cutting-edge database technology.

Letter grade only (A-F).

483. Business Applications Using Java (3)

Prerequisites: IS 300, 301.

Development of business application using Java language. Tools and technologies including data types, program control, objects, classes and relationship, class inheritance, interfaces,

polymorphism, inner classes, the relationship between super-classes and sub-classes, event-driven programming and socket-bases communication in Java.

Letter grade only (A-F).

484./584. Electronic Commerce (3)

Prerequisites: IS 300, 301.

Theory and applications of electronic commerce including issues such as E-cash, E-banking, E-tailing, SCM, E-marketing, B2C, B2B, C2C, E-government, Internet business opportunities, Internet security homepage maintenance, Internet database interface and cooperative computing.

Letter grade only (A-F).

485. Information Systems Project (3)

Prerequisites: IS 301, 380.

A comprehensive systems project of moderate complexity for a client-server environment using a team approach for requirements analysis, system design, and prototype creation. Project planning and management techniques.

Letter grade only (A-F).

495. Selected Topics in Information Systems (1-3)

Prerequisites: Consent of instructor and GPA of 3.0 or higher in major, IS 301.

Topics of current interest in the field.

May be repeated to a maximum of 6 units with different topics.

Topics announced in the *Schedule of Classes*.

497. Directed Studies (1-3)

Prerequisites: Consent of instructor and department chair; student must be on Dean's List with a GPA of 3.0 or higher in Management Information Systems.

Individual projects, research, or study in the option.

INTERNATIONAL BUSINESS

College of Business Administration

Director: Terrence H. Witkowski

Phone: (562) 985-4766

Website: www.csulb.edu/colleges/cba/ib/

For MBA degree requirements, see Business Administration, Graduate Programs.

Career Possibilities

Import/Export Agent • Foreign Sales Representative • Trade Broker • Buyer • Bank Manager • Financial Manager • Foreign Currency Investment Advisor • International Management Consultant • Relocation Consultant • Customs Broker

Undergraduate Programs

Bachelor of Science in Business Administration

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

In order to graduate with an undergraduate business degree from CSULB, a student must complete a minimum of 120 units. A majority of the upper division business courses, including economics and statistics, must be completed at this university. For details, refer to the CBA Policy on Course Transfers/Substitutions.

1. Lower Division:

Take all of the following:

ACCT 201 Elementary Financial Accounting (3)
Prerequisite: None

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher; one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

MATH 115 Calculus for Business (3)
Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

STAT 108 Statistics for Everyday Life (3)
Prerequisite: None

Choose one of the following:

PHIL 170 Critical Reasoning (3)
Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

IS 100 Information Technology Literacy (3)
Prerequisite: None

2. All business and pre-business majors shall demonstrate computer literacy and competency prior to taking junior and senior level courses. Requires one of the following:

A. Passing score (70%) on the Computer Proficiency Examination (CPE).

B. With Credit (Cr) or "C" or better grade in a transfer equivalent course, complete:

IS 233 Introduction to Computer Systems and Applications (3)
Prerequisite: None

3. Upper Division:

A. Take all of the following:

CBA 300 International Business (3)
Prerequisite: None

ACCT 310 Cost Accounting for Managers (3)
Prerequisites: ACCT 201 or equivalent.

ECON 333 Managerial Economics (3)
Prerequisites: ECON 100, 101; MATH 115 or 122.

FIN 300 Business Finance (3)
Prerequisite: None

BLAW 320 Legal and Regulatory Environment of Business (3)
Prerequisite: None

IS 300 Management Information Systems (3)
Prerequisite: IS 233 or equivalent.

IS 301 Business Communications (3)
Prerequisite: None

IS 310 Business Statistics (3)
Prerequisite: MATH 114.

HRM 360 Organizational Behavior (3)
Prerequisite: None

MGMT 300 Principles of Management (3)
Prerequisite: None

MKTG 300 Marketing (3)
Prerequisite: None

B. The following Capstone course must be taken at CSULB as a senior and after the upper-division prerequisite core courses have been completed (ACCT 310, FIN 300, MGMT 300, MKTG 300, IS 301):
MGMT 425 Business Strategy and Policy (3)
Prerequisites: ACCT 310 or 320; MGMT 300, MKTG 300, FIN 300, IS 301.

C. Completion of option requirements.

4. Elective courses to total 120 units. Student are encouraged to select electives for expansion of knowledge and intellectual interests as well as for preparation for business employment.

Option in International Business (120 units)

This option prepares students for an increasingly competitive and interdependent international business world and offers information about how international business practices and customs differ from those in the U. S. Students need some familiarity with a language other than English as well as knowledge of culture and world geography.

Requirements

1. Take all of the following:

ACCT 465 International Accounting (4)
Prerequisites: Any 300-level accounting course with grade of "C" or better, IS 301.

FIN 490 International Finance (3)

Prerequisites: FIN 300, IS 301

MKTG 480 International Marketing (3)

Prerequisite: MKTG 300, IS 301.

Take one of the following:

MGMT 405 International and Comparative Management (3)

Prerequisites: MGMT 300, IS 301.

MGMT 406 International Business Policy (3)

Prerequisite: MGMT 300, IS 301.

2. Take one of the following courses:
BLAW 424, CBA 494, HRM 458, MKTG 481, and MGMT 405 or 406 (whichever was not taken in satisfaction of requirement #1)
3. Two years (4 semesters or 6 quarters finishing at the level of 201B or its equivalent) at the baccalaureate level of one of the following languages: Arabic, Chinese, French, German, Italian, Japanese, Portuguese, Russian, or Spanish. Under individual, special circumstances, the Director of the International Business Option may approve a language other than those listed above to satisfy the language requirement for a degree in the option.
4. Choice of the language will determine the country or geographic area of the world about which the student must study a minimum of 2 courses (6 units).

These will be in lieu of 6 other elective units, and can be double counted as part of the student's general education requirement, if approved to meet GE requirements.

General Education or Elective Courses

Select two courses (6 units), appropriate for your choice of language:

All Languages:

ANTH 412I; COMM 330, 452; I/ST 317I, 318I, 319I, 355I; LING 413, 425, 470; POSC 371, 485; WGSS 401I.

Arabic:

ARAB 250; CWL 402; GEOG 309L; HIST 394, 428, 432; POSC 367; R/ST 331I.

Chinese:

ANTH 332; A/ST 301I, 310, 495I; CHIN 301, 350, 370; CWL 403; HIST 382B, 406A; POSC 362; R/ST 341I.

French:

CWL 330A,B; GEOG 316; HIST 335, 337, 339; POSC 353; FREN 335, 336 or courses taken at a specified French university with which CSULB has an exchange agreement and taught by instructors from CSULB may be approved by the Director of the International Business Program in partial or full satisfaction of this requirement.

German:

CWL 330A, 330B; GEOG 316; HIST 335, 337, 339, 437; POSC 353; GERM 380I, 415, 416.

Italian:

CWL 330A, 330B; GEOG 316; HIST 335, 337, 339; POSC 353.

Japanese:

ANTH 335; A/ST 301I, 310; CWL 403; HIST 383B, 384, 406A, 407I; JAPN 350, 451, 471; R/ST 341I, 344.

Portuguese or Spanish:

ANTH 323, 324; CWL 440; HIST 364, 462, 463; POSC 358, 481; SPAN 330, 335A, 335B, 341, 430, 445.

Russian:

GEOG 318; HIST 341B; RUSS 310, 410I.

Certificate in International Business

This certificate combines an undergraduate degree in business with additional training in the area of international business. The objective of the program is to enhance the scope and perception of the business student to include the international business environment. Courses used to meet the certificate requirements may also apply toward College of Business Administration degree requirements.

Requirements

1. A bachelor of Science degree in Business Administration. This requirement may be completed concurrently with certificate requirements,
2. Eighteen units or more of study at this University in International Business, including six of the following:
ACCT 465; BLAW 424; CBA 300; CBA 494; FIN 490; HRM 458; MGMT 405, 406; MKTG 480 or 481.
3. Grade of "C" or higher required in each course completed;
4. The Certificate does not permit use of the Credit/No Credit option. Students with specific geographic areas of interest should consider development of language competence and cultural understanding relative to their area of interest concurrent with their Certificate. For additional information or for application to the program, interested persons may contact the Director of International Business.

INTERNATIONAL STUDIES

College of Liberal Arts

Director: Richard R. Marcus

Program Office: Social Sciences and Public Affairs (SPA) 257
Telephone: (562) 985-4705

Program Secretary: Vacant

Telephone: (562) 985-4705

FAX: (562) 985-4979

Website: <http://www.csulb.edu/depts/intlst/>

Faculty: Linda Alkana (History), Bipasha Baruah (International Studies), Norma Chinchilla (Sociology), Thomas Frazier (International Studies), Nathan Gonzales (International Studies), Richard Haesly (Political Science), Paul Laris (Geography), Arlene Lazarowitz (History) Richard Marcus (International Studies), Elizabeth Philipose (International Studies), Teresa Wright (Political Science), Julie Weise (International Studies)

Career Possibilities

International Development Officer • Program Officer • Foreign Service Officer • Researcher • Teacher • Intelligence Analyst • Social Service Worker • Lawyer • Community Organizer • Journalist • Administrator (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu or an International Studies advisor.)

Bachelor of Arts in International Studies (120 units)

The Bachelor of Arts in International Studies is an interdisciplinary degree program that combines the study of Development, Culture and Identity, Citizenship and Migration, Politics and Social Movements, and International Environmental and Natural Resource Issues with a geographic area concentration. Students receive direct exposure to an international environment by participating in a foreign study program or an internationally related internship in this country.

International Studies students are curious global citizens who want to make their mark on the world. The major program provides them the tools and guidance to focus their interests and accomplish their goals. It prepares CSULB graduates for good jobs in fields like non-profit work, international development, international affairs, international trade and business, education, and law.

International Studies uses an outcomes-oriented approach to higher education leading students to develop strong analytical and writing skills while teaching students how to integrate a wide variety of disciplinary methods, language competencies, and cross-cultural understandings into the study of global issues.

All International Studies majors are required to develop a program of study in consultation with the program advisor. Majors should choose their foreign language, foreign study or internship experience, and senior seminar research project to reflect this emphasis.

Requirements

A minimum of 51 units in a program approved by the International Studies advisor.

Requirements not included in major

Foreign Language: Three years of college level study or equivalent proficiency in a language appropriate to the program of study and geographic area concentration selected.

Major Requirements

Lower Division (18 units):

Take all the following:

I/ST 200 Introduction to International Studies (3)
Prerequisite: GE Foundation requirements.

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

Take an additional 9 units chosen from the following:
ANTH 120; HIST 212; GEOG 100 or 160; POSC 215, 218 or 220

Upper Division - Minimum of 33 units including:

Core Courses - 9 units, chosen from:

I/ST 317I Problems in International Social Conflict (3)
Prerequisites: GE Foundation requirements, one Exploration course, and upper division standing.

I/ST 319I International Development (3)
Prerequisites: GE Foundation requirements, one Exploration course, upper-division standing.

I/ST 320I Migration and Modernity (3)
Prerequisite: GE Foundation requirements.

I/ST 355I International Environmental Issues (3)
Prerequisites: GE Foundation requirements, one Exploration course, and upper division standing.

I/ST 463 Nationalism and National Identities (3)
Prerequisites: POSC 100 and GE Foundation requirements.

Professional Development Area - 9 units, chosen from one of the following five areas:

Development

ANTH 307I; ECON 372, 310, 311, 366, 464, 465, 470, 471; GEOG 360, 452, 468; HDEV 360, 403; I/ST 419, 350; I/ST/GEOG 319I; POSC 461I; WGSS 424

Culture and Identity

AFRS 337, 353I, 460; AIS 315; ANTH 420, 314, 413, 419, 427; ASAM 354, 407; A/ST 320, 334, 336, 393, 406A, 406B, 495I, 551; CHIN 451, 471; CHLS 341, 342; COMM 330, 430, 437; CWL 346, 350, 404, 334, 403, 406, 440, 402, 330A/B, 438, 344; ENGL 459, 466, 359; FREN 456; GEOG 352; GERM 370, 380I; HDEV 360, 403; HIST 487, 460, 465, 451, 435, 346I; I/ST 320, 350; JAPN 451, 452, 453, 471; RGR 450, 314I, 315I, 346I; RUSS 310, 428; R/ST 308, 314, 315I, 317, 331I, 341I, 344, 351, 352, 353I, 383I, 458, 460, 467I; WGSS 406, 406A, 406B, 410, 490

Citizenship and Migration

ANTH 444; CHLS 341, 342, 300, 335I, 352; GEOG 360; HIST 410, 350; I/ST 320; SOC 358I

Politics, International Relations, and Social Movements
AFRS 430; ANTH 315I, 420; GEOG 470; HIST 451,
345; I/ST 350; I/ST/HIST 478; I/ST/SOC 317I, 318I;
JOUR 312I; PHIL 351I; POSC 376, 371, 362, 353,
367, 450, 455, 481, 378; SOC 430, 449; WGSS 424,
401I, 402, 425, 449

International Environmental and Natural Resource
Issues
ECON 464; ENGR 302I; GEOG 340, 440; HIST 464;
I/ST/GEOG 355I;

Geographic Area Concentration

Take 9 units from one of the following areas:

Latin America and the Caribbean

AIS 315; ANTH 323, 324; CHLS 300, 352, 450I, 430,
450A, 450B; CWL 350, 440; GEOG 306, 321, 322;
HIST 451, 462, 435, 460, 465, 464, 362, 364, 365,
366, 462, 463, 466; I/ST 478; SPAN 450I, 460, 445,
455

Europe

CHLS 450I; CWL 406, 344, 330A/B, 438; ENGL359,
459, 466; FREN 440, 456; GEOG 316; GERM 370
380I; HIST 343, 347, 304, 435, 346I, 332, 333, 334,
335, 337, 338, 339, 340, 348, 357, 437; PHIL 414;
POSC 357, 358, 481; RGR 314I, 315I, 346; RUSS
310, 428; SPAN 428, 446, 449, 430

Russia and Central Asia

GEOG 318; HIST 418, 416, 440, 341A, 341B; RUSS
310, 428

Middle East and North Africa

CWL 402; ENGL 359; GEOG 309; HIST 393, 394,
428, 431, 432, 435; POSC 367

Sub-Saharan Africa

AFRS 343A, 363, 304, 337, 353I, 380, 430, 460;
GEOG 308I; HIST 391, 392, 491

South Asia

A/ST 306I, 307I; GEOG 314I; HIST 385, 406B; PHIL
307

East Asia

ANTH 332, 333, 335; A/ST 300I, 301I, 393, 495I;
CHIN 382B, 451; CWL 334, 403; ENGL 359; GEOG
313I, 315I; HIST 410, 487, 407I; 382A, 382B, 383A,
383B, 384, 386, 388, 406A, 406B, 409, 488; JAPN
451, 452; PHIL 306; POSC 362

North America

ANTH 323; CHLS 300, 352; CWL 350; GEOG 321,
306; HIST 451, 462, 435; I/ST 478

Oceania - GEOG 326

NB: Due to lack of available courses, this
concentration can only be chosen if the student is
completing a relevant study abroad.

Internship or Foreign Study:

I/ST 492 International Studies Internship/Foreign Study (3)
(internship with significant international content or
foreign study program related to course of study
selected, as approved by major advisor)

Prerequisites: Consent of I/ST advisor; completion of a
minimum of 15 upper division units required for the major in
International Studies.

Senior Research Seminar:

I/ST 490 Senior Research Sem in International Studies (3)
Prerequisites: Senior standing or consent of the International
Studies advisor and instructor.

Minor in International Studies

This minor consists of a minimum of 24 units at least
15 which must be upper division courses, together with at
least three years of college level of study (or equivalent
proficiency) in a language (other than English) relevant to the
student's program of study in International Studies.

Requirements

Lower Division (9 units):

Take the following course:

I/ST 200 Introduction to International Studies (3)
Prerequisite: GE Foundation requirements.

Take one of the following:

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher and one GE Foundation
course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

Take three units selected from the following:

ANTH 120, HIST 212, GEOG 100 or 160; POSC 215,
218, or 220.

Upper Division (15 units):

9 units selected from the courses grouped in the
International Studies Core as this group is defined for
the Bachelor of Arts degree in International Studies.

6 units selected from one of the Geographic Area
Concentration as defined for the Bachelor of Arts
degree in International Studies.

International Studies Courses (I/ST)

General Education Foundation must be completed prior to taking
any upper division course except upper division language courses
where students meet formal prerequisites and/or competency
equivalent for advanced study.

LOWER DIVISION

100. Global Citizenship (3)

Prerequisite/Corequisite: one GE A1 course

International Studies 100: Global Citizenship is an introduction to
International Studies for majors and non-majors. Course develops
the ability to distinguish fact from judgment; to analyze, criticize and
advocate ideas; to reach well-supported conclusions about global/
local trends and impacts.

Letter grade only (A-F).

200. Introduction to International Studies (3)

Prerequisite: GE Foundation requirements.

Analyses of "the international." Theoretical, political, social and
cultural perspectives on contemporary globalization, modern
European colonialism, and the historical and contemporary
relationship of the United States to global relations and processes.

UPPER DIVISION

317I. Problems in International Social Conflict (3)

Prerequisites: GE Foundation requirements, one Exploration
course, and upper division standing.

Interdisciplinary analysis of social conflict in the world. Topics

may include ethnocentrism; nationalism; globalization; trade; aid; economic development; poverty; inequality; the environment; war; ideological, ethnic, gender, and religious conflict; democratization; social movements; new forms of civil society and social solidarity. Letter grade only (A-F). Same course as SOC 317I. Not open for credit to students with credit in SOC 317I.

318I. Cases in International Social Conflict (3)

Prerequisites: GE Foundation requirements, one Exploration course, and upper division standing.

Interdisciplinary analysis of social conflict in the world. Case studies will focus on globalization; technology; economic development; trade and aid; population growth; immigration; ideological, religious, ethnic and gender conflicts; war and civil unrest; human rights; democratization; global citizenship; environmental sustainability.

Letter grade only (A-F). Same course as SOC 318I. Not open for credit to students with credit in SOC 318I.

319I. International Development (3)

Prerequisites: GE Foundation requirements, one Exploration course, upper-division standing.

Theoretical and practical analysis of social, political, and economic development and alternative developmental models. Contemporary and historical comparisons of how "developed" and "developing" areas of the world have confronted various economic, social, and political challenges.

Same course as GEOG 319I. Not open for credit to students with credit in GEOG 319I.

320I. Migration and Modernity (3)

Prerequisite: GE Foundation requirements.

Examines global migration from 1700s-present, putting U.S. immigration history in context and emphasizing recent and contemporary trends. Uses history, politics, and culture (literature, photography and film) to consider migration's intersections with race, ethnicity, and nationalism.

Letter grade only (A-F).

333: Ethics of Globalization (3)

Prerequisite: Completion of foundation courses

Senior level requirement for IST majors. Open to non-majors. Reviews ethical debates in globalization: inequality; poverty, wealth; war, peace, torture; social justice movements; persecution, displacement; privatization, food, water; land rights.

Letter grade only (A-F)

350. Water: People, Politics, and Processes (3)

Prerequisites: GE Foundation requirements.

Explores the impact of water resources management on society, economy, and governance through socio-political and hydrological overviews as well as both domestic and international case studies.

Letter grade only (A-F).

355I. International Environmental Issues (3)

Prerequisites: GE Foundation requirements, one Exploration course, and upper division standing.

Examines the deterioration, destruction, maintenance and restoration of environmental systems and resources. Identifies and analyzes major environmental problems that have international dimensions. Investigates ongoing and potential efforts to resolve them.

Same course as GEOG 355I. Not open for credit to students with credit in GEOG 355I.

419 Applied International Development (3)

Prerequisite: I/ST 319 recommended.

Provides applied skills for practice of international development at local, national, regional and global levels. Development policy, applied tools and methodologies to pursue careers with United Nations system, development-oriented state agencies, non-profit

organizations, bilateral and multi-lateral agencies, and private foundations.

Letter grade only (A-F).

449. Feminism and International Human Rights (3)

Prerequisite: Upper division status or consent of the instructor

Analyzes contemporary women's international human rights issues and social movements as influences on contemporary international human rights system. Covers international law, human rights treaty system, World Conferences, current issues, landmark cases, local/global activism, feminist intellectual debates.

Letter grade (A-F).

463. Nationalism and National Identities (3)

Prerequisites: POSC 100 and GE Foundation requirements.

Consideration of the impact of nationalism on contemporary world politics with special attention to the role of national identities in the rise of political violence, national liberation movements, and the struggle for democracy. Close investigation of multiple historical and contemporary cases.

Same course as POSC 463. Not open for credit to students with credit in POSC 463.

478. Foreign Relations of the U.S. (3)

Incorporates a global perspective and considers the influence of such issues as domestic politics, bureaucratic rivalry and decision-making, economics, ideology, race, and the role of special interest groups on the making of foreign policy.

Same course as HIST 478. Not open for credit to students with credit in HIST 478.

490. Senior Research Seminar in International Studies (3)

Prerequisites: Senior standing or consent of the International Studies advisor and instructor.

Capstone research seminar for I/ST majors. Classroom preparation for directed research on a topic of choice integrating international economics and politics, cross-cultural communication, development studies, contemporary belief systems, language skills, and a geographic area.

Letter grade only (A-F).

492. International Studies Internship/Foreign Study (3)

Prerequisites: Consent of I/ST advisor; completion of a minimum of 15 upper division units required for the major in International Studies.

A study abroad program or an internship with internationally-oriented, governmental, non-governmental, and for-profit organizations required of I/ST majors. Internship conducted under joint supervision of program sponsor and CSULB faculty. Final report required for internships.

Credit/No Credit grading only.

493. Selected Topics in International Studies (1-6)

Prerequisite: Consent of instructor.

Analysis of contemporary issues and problems in International Studies.

Topics announced in the *Schedule of Classes*.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Individually directed studies of special problems in International Studies.

May be repeated to a maximum of 6 units with consent of program director. May not be credited toward the major in I/ST without written department consent in advance of enrollment. (Supervised) Letter grade only (A-F).

ITALIAN

College of Liberal Arts

Department of Romance, German, Russian Languages and Literatures

Department Chair: Lisa Vollendorf

Program Director and George L. Graziadio Chair for Italian Studies: Clorinda Donato

RGRLL Language Coordinator: Markus Muller

Single Subject Coordinator for L.O.T.E.: Jean-Jacques Jura

Department Office: Academic Services, Room 309
Telephone: (562) 985-4318

Faculty: Clorinda Donato, Enrico Vettore

Major/Minor/Credential Advisor: Clorinda Donato

Administrative Support Coordinator: Cerise Dragicevich

Students desiring information should contact the department office for referral to one of the faculty advisors. Credential advisors, Undergraduate Advisor, Graduate Advisor.

Career Possibilities

Customs Inspector • Immigration Officer • Importer/Exporter • Foreign Service Officer • International Marketing Representative • Travel Guide • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Translator • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Italian Program exists thanks to an agreement between the Italian American community in the area and CSULB. This collaboration led to the establishment of the program itself as well as the Center for Italian Studies, named in honor of Mr. George L. Graziadio. The Center offers scholarships to study in Italy and regularly organizes workshops on Italian teaching. Its program of events is often shaped in collaboration with Italian and Italian American institutions and organizations in the area.

Bachelor of Arts in Italian Studies (120 units)

This program offers two concentrations: Italian Language and Culture and Interdisciplinary Italian Studies. Regular consultation with advisor is highly recommended.

Students are strongly encouraged to study abroad through the CSU International Programs or semester-long options in Rome and Venice. In addition, there are program internship opportunities at Italian and Italian-American institutions in the area.

Once students have met the first- and second-year general language requirements, in the third year they take a common set of core courses in the target language. In the fourth year they choose between the two concentrations: students intending to earn the teaching credential select Italian Language and Culture; students interested in a more interdisciplinary approach select Interdisciplinary Italian Studies. Both tracks share a common core.

Requirements

Lower Division:

Competency in the Italian Language (16 units lower division Italian). Take all of the following:

ITAL 101A Fundamentals of Italian (4)

Prerequisite/Corequisite: Any Foundation course.

ITAL 101B Fundamentals of Italian (4)

Prerequisite/Corequisite: ITAL 101A or two years of high school Italian or equivalent. Any Foundation course.

ITAL 201A Intermediate of Italian (4)

Prerequisite: ITAL 101B or three years of high school Italian or equivalent. Prerequisite/Corequisite: Any Foundation course.

ITAL 201B Intermediate of Italian (4)

Prerequisite: ITAL 201A or four years of high school Italian or equivalent. Prerequisite/Corequisite: Any Foundation course

Some of these courses may be waived for students who have completed sufficient high-school Italian or have proved intermediate-level proficiency. Native speakers of Italian may not enroll in ITAL 101A,B or 201 A,B.

Upper Division (minimum 33 units):

Basic Core (24 units):

ITAL 310 Introduction to Analysis of Italian Literature (3)

Prerequisite: Upper division standing in Italian or equivalent.

ITAL 312A Advanced Italian I (3)

Prerequisite: Upper division standing in Italian or equivalent.

ITAL 312B Advanced Italian II (3)

Prerequisite: Upper division standing in Italian or equivalent.

ITAL 314 Advanced Conversation (3)

Prerequisite: ITAL 214 or consent of the instructor.

ITAL 335 Survey of Italian Literature I: Middle Ages-Eighteenth Century (3)

Prerequisites: Upper division standing in Italian or consent of instructor.

ITAL 336 Survey of Italian Literature I: Nineteenth and Twentieth Centuries (3)

Prerequisites: Upper division standing in Italian or consent of instructor.

ITAL 340 Italian Civilization (3)

Prerequisite: Upper division standing in Italian or consent of instructor.

ITAL 482 The Building of the Italian Nation (3)

Prerequisites: ITAL 310, 335, 336 or consent of instructor.

Concentration I - Italian Language and Culture

Electives (9 units): ITAL 411, 414*, 433, 454, 462, 473, 476, 478, 482, 490, 494, 499.

Two years of a second foreign language.

* Candidates who intend to teach Italian language are required to take ITAL 414.

Concentration II - Interdisciplinary Italian Studies

Electives (9 units): AH 423, 424; C/LT 330A**, 330B**, 422I, 430, 432, 449**; HIST 332; ITAL 411, 414, 454, 462, 473, 476, 478, 482, 490, 494, 499; MUS 436**;
RGR 314I, 315I, 346I, 400I.

**Accepted only when syllabi include a good amount of Italian content.

Electives and Other Courses

Close work with the advisor will enable majors to design a comprehensive study plan for their entire CSULB experience and for life-long learning. General Education courses and electives should be chosen to coordinate with the major.

Single Subject Teaching Credential in Italian

Completion of Concentration I (Language and Culture) of the Italian major meets the subject matter competence requirement for the Single Subject Teaching Credential in Italian. Prospective students should consult the undergraduate Italian Advisor and the Languages Other Than English (LOTE) Credential Program Advisor early to plan their program.

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective teachers of Italian are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the website (www.ced.csulb.edu/single-subject) for a description of professional preparation requirements, courses, and application procedures.

Requirements

Same as the BA in Italian, Concentration I (Italian Language and Culture).

Minor in Italian

This minor can be taken in conjunction with any other major. The minor in Italian is open to any non-Italian major.

Requirements

Minimum of 18 upper division units.

Take all of the following courses:

ITAL 312A Advanced Italian I (3)

Prerequisite: Upper division standing in Italian or equivalent.

ITAL 312B Advanced Italian II (3)

Prerequisite: Upper division standing in Italian or equivalent.

ITAL 314 Advanced Conversation (3)

Prerequisite: ITAL 214 or consent of the instructor.

Take 9 units chosen from the following courses:

ITAL 310, 335, 336, 340, 345, 411, 414, 454, 462, 476, 478, 482, 490, 494, 499.

Italian Courses (ITAL)

LOWER DIVISION

100A. Fundamentals of Italian for Spanish Speakers (4)

Prerequisites: Two semesters of college Spanish or 3 years of high school Spanish; or be native or heritage speaker of Spanish.

Introductory course on the fundamental skills of speaking, reading, writing and comprehending Italian with an emphasis on the structural similarities between Italian and Spanish.

Not open to heritage speakers or native speakers of Italian. Not open for credit to students with credit in ITAL 101A or 102A.

100B. Fundamentals of Italian for Spanish Speakers (4)

Prerequisites: ITAL 100A; or ITAL 101A with 2 semesters of college Spanish or 3 years of high school Spanish; or be a heritage or native speaker of Spanish.

Introductory course on the fundamental skills of speaking, reading, writing and comprehending Italian with an emphasis on the structural similarities between Italian and Spanish.

Not open to heritage or native speakers of Italian. Not open for credit to students with credit in ITAL 101B or ITAL 102B.

101A. Fundamentals of Italian (4)

Prerequisite/Corequisite: Any Foundation course.

Introduction to fundamental skills of speaking, oral comprehension, reading, and writing. For those who are beginning the study of Italian or who have had one year of high school Italian.

For non-native speakers only. Not open to heritage speakers or native speakers of Italian. Course fee may be required.

101B. Fundamentals of Italian (4)

Prerequisite/Corequisite: ITAL 101A or two years of high school Italian or equivalent. Any Foundation course.

Fundamental skills of speaking, oral comprehension, reading and writing.

For non-native speakers only. Not open to heritage speakers or native speakers of Italian. Course fee may be required.

200. Intermediate Italian for Spanish Speakers (6)

Prerequisites: ITAL 100B or ITAL 101B, or ITAL 100B or 3 years of high school Italian and 2 years of college Spanish or be a native or heritage Spanish speaker.

Two semesters of intermediate Italian are covered in one semester in this intensive hybrid (blended) course designed for students who are either native or heritage speakers of Spanish or have at least intermediate- to advanced-level proficiency in Spanish (see prerequisites).

Not open to heritage speakers or native speakers of Italian. Not open to students with credit in ITAL 201A or ITAL 201B.

201A. Intermediate Italian (4)

Prerequisite: ITAL 101B or three years of high school Italian or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development of speaking, oral comprehension, reading, and writing skills.

For non-native speakers only. Not open to heritage speakers or native speakers of Italian. Course fee may be required.

201B. Intermediate Italian (4)

Prerequisite: ITAL 201A or four years of high school Italian or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills.

For non-native speakers only. Not open to heritage speakers or native speakers of Italian. Course fee may be required.

214. Intermediate Conversation (3)

Prerequisite: ITAL 101B. Prerequisite/Corequisite: ITAL 201A or 201B.

Designed to develop basic conversational skills and to prepare for more advanced work in ITAL 314.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

310. Introduction to Analysis of Italian Literature (3)

Prerequisite: Upper division standing in Italian or equivalent.

Imparts literary terminology and the study of the primary genres in Italian literature through an analysis of exemplary texts. A brief overview of methodologies will also be introduced, i.e., structuralism, sociological, gender studies, formalism and deconstruction.

312A. Advanced Italian I (3)

Prerequisite: Upper division standing in Italian or equivalent.

Review of grammatical principles with regular exercises and composition work for the development of increased mastery of the written language.

312B. Advanced Italian II (3)

Prerequisite: Upper division standing in Italian or equivalent.

Review of grammatical principles with regular exercises and composition work for development of increased mastery of written language.

314. Advanced Conversation (3)

Prerequisite: ITAL 214 or consent of the instructor.

Continuation of ITAL 214. More advanced use of spoken Italian to establish strong basis for correct and fluent proficiency in oral idiom.

335. Survey of Italian Literature I: Middle Ages– Eighteenth Century (3)

Prerequisites: Upper division standing in Italian or consent of instructor.

Introductory study of the most important Italian literary works, authors, and movements of Italian literature from the Middle Ages to the Eighteenth Century.

336. Survey of Italian Literature II: Nineteenth Century to Present (3)

Prerequisites: Upper division standing in Italian or consent of instructor.

Introductory study of the most important Italian literary works, authors, and movements of Italian literature of the Nineteenth and Twentieth Centuries.

340. Italian Civilization (3)

Prerequisite: Upper division standing in Italian or consent of instructor.

Multidisciplinary study of Italian culture from unification (1861) to present, special emphasis on last thirty years. Crucial historical moments analyzed for social and cultural impact on Italian customs, and ways of thinking. Taught in Italian.

345. Italian American Culture (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Addresses issues of migration, cultural conflict, and ethnic identity formation in the context of the Italian American experience. Interdisciplinary in nature, the syllabus embraces such topics as labor exploitation, discrimination, women's roles, interethnic relations, religion, food, family, etc.

Not open for credit to students with credit in ITAL 440.

411. Advanced Syntax, Grammar, and Stylistics (3)

Prerequisite: ITAL 312B.

Provides an in depth study of Italian syntax in order to improve skills for written Italian. Vocabulary development and analysis and imitation of writing styles and forms will be emphasized.

414. History of the Italian Language (3)

Prerequisite: ITAL 312B.

Examines the main developments in the transformation from Latin to Italian, and the debates on what constitutes the Italian language (*questione della lingua*) 1200 – present, including the contributions of Dante Alighieri, Machiavelli, Alessandro Manzoni, the Italian diaspora and recent immigration.

433. Italian Literature as Historical Memory (3)

Prerequisites: Upper division standing in Italian or consent of instructor.

Select texts of Italian literature are analyzed as sources for the understanding of Italian history and culture 1300-1800.

Letter grade only A-F).

454. Italian Cinema (3)

Prerequisite: Senior standing or consent of instructor.

Overview of main movements and directors in the history of Italian cinema. Socio-political and aesthetic analysis will be adopted in reading films from the post-war period to the present.

Letter grade only (A-F). Same course as FEA 454. Not open for credit to students with credit in FEA 454. (2 hrs sem, 2 hrs activity)

462. Italian Women Writers (3)

Prerequisites: Upper division standing in Italian or consent of instructor.

Studies roles of women writers within history of Italian literature from Middle Ages through Renaissance to contemporary literature.

Letter grade only (A-F). Not open for credit to students with credit in ITAL 424.

473. Masterpieces of Italian Renaissance Literature (3)

Prerequisites: ITAL 310, 335, 336 or consent of instructor.

Readings in Italian Quattrocento and Cinquecento thought to explore the revolution toward the "new learning" and the valorization of human ability, worldly matters, and secular culture.

Letter grade only (A-F).

476. The Modern Italian Short Story (3)

Prerequisites: Upper division standing in Italian or consent of instructor.

Selected Italian short stories of the 19th and 20th Centuries are analyzed as sources for the understanding of Italian history, culture, anthropology and politics.

Letter grade only (A-F).

478. The Italian Novelistic Tradition (3)

Prerequisites: ITAL 335 and 336 or consent of instructor.

Historical overview of the Italian novelistic tradition with in-depth study of representative Italian novels.

Letter grade only (A-F).

482. The Building of the Italian Nation (3)

Prerequisites: ITAL 310, 335, 336 or consent of instructor.

Explores the literature, the ideas and the cultural artifacts that promoted the creation and building of Italian nation from the Middle Ages to the present.

Letter grade only (A-F).

490. Selected Topics in Italian (3)

Prerequisite: Upper division standing in Italian or consent of instructor.

Study of a particular topic or aspect of Italian literature, language or culture.

May be repeated to a maximum of 12 units with different topics.

Topics announced in the *Schedule of Classes*. Course fee required if topic is offered abroad.

494. Internship in Italian (1-3)

Prerequisites: Consent of instructor and department chair.

Field work in Italian, supplemented by readings and tutorials under the direction of a faculty member. Internships, small group discussion/teaching, and other assignments directed by a supervising faculty member.

May be repeated to a maximum of 6 units. No more than 3 units may be applied to the major in Italian.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor and department chair.

Independent study under the supervision of a faculty member.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL

533./433. Italian Literature as Historical Memory (3)

Prerequisites: Graduate standing in Italian or consent of instructor.

Select texts of Italian literature are analyzed as sources for the understanding of Italian history and culture 1300-1800.

Letter grade only (A-F).

578./478. The Italian Novelistic Tradition (3)

Prerequisites: ITAL 335 and 336 or consent of instructor.

Historical overview of the Italian novelistic tradition with in-depth study of representative Italian novels.

Letter grade only (A-F).

JAPANESE

College of Liberal Arts

Department of Asian and Asian American Studies

Department Chair: John N. Tsuchida

Vice Chair: Teri Yamada

Department Office: Faculty Offices FO3-340

Telephone: (562) 985-4645

FAX: (562) 985-1535

Center: Center for Asian Pacific American Studies

Website: <http://www.csulb.edu/dept/as>

Faculty: Ruixi Ai, Kiyomi Chinen, Masako O. Douglas, Linda N. España-Maram, Hiroko Kataoka, Hsin-sheng C. Kao (Emerita), Barbara W. Kim, Yoko Pusavant (Emerita), San-Pao Li (Emeritus), Dean S. Toji, John N. Tsuchida, Tianwei Xie, Teri Yamada

Advisors:

Graduate: Tim Xie

Undergraduate: Teri Yamada

Undergraduate: Dean Toji (Asian American Studies)

Undergraduate: Teri Yamada (Asian Studies)

Undergraduate: Ruixi Ai (Chinese Studies)

Undergraduate: Masako O. Douglas (Japanese)

Associate Faculty: Bipasha Baruah (International Studies), Christine Bhat (Educational Psychology, Administration and Counseling), Jeffrey Broughton (Religious Studies), Kendall Brown (Art History), Chi-Ah Chun (Psychology), Frank Gossette (Geography), Lisa Grobar (Economics), Jack W. Hou (Economics), Margaret Kuo (History), Tomotaka Ishimine (Economics), Guotong Li (History), Jyotsna Pattnaik (Teacher Education), Xiaoping Liang (Linguistics), William Mulligan (Journalism), Kim Oanh Nguyen-Lam (CLMER), Karen Quintiliani (Anthropology), George Scott (Anthropology), Michiko Takeuchi (History), Teresa Wright (Political Science), Oliver Wang (Sociology), R. Scott Wilson (Anthropology)

Administrative Support Coordinator: Michelle Seales-Kaestner

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Customs Inspector • Immigration Officer • Importer/Exporter • Foreign Service Officer • International Marketing Representative • Travel Guide • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Translator • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Bachelor of Arts in Japanese (120 units)

The Bachelor of Arts program in Japanese at CSULB is designed to provide students with linguistic and cultural preparation supported by international perspectives and understanding of humanities for personal, social, intellectual and cognitive development as well as development of skills for economic self-sufficiency in the ever-intertwining world of global economy. It emphasizes pragmatic language studies aiming for acquisition of communication skills through communication based instruction, and providing knowledge of language and culture to develop appropriate understanding and attitudes for intercultural communication.

Planning a Program of Study

The student and undergraduate advisor should plan a coherent program that both fulfills the requirements of the major and covers the student's areas of interest in allied fields outside the Japanese language.

Students with background in Japanese language competency gained through home use or through primary or secondary school work in the U.S. or Japan must take a placement test administered by the department.

Students are encouraged to study in Japan, either through the CSU Study Abroad Program or independently, after completing at least two years of study (or its equivalent) of Japanese at CSULB.

Residence Requirement for the Majors

At least five upper division courses required for the major must be completed successfully at CSULB. Students are encouraged, however, to complete up to a year of their language study in approved programs of study abroad.

Requirements

A minimum of 44 units is required, including at least 15 units earned in residence at CSULB. JAPN 101 and 102 are prerequisite to the major and may be satisfied by appropriate high school preparation or by examination.

Lower Division (8 units):

Take both the following courses:

JAPN 201 Intermediate Japanese (4)

Prerequisites: JAPN 102; GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Japanese.

JAPN 202 Intermediate Japanese (4)

Prerequisites: JAPN 201; GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Japanese.

Upper Division (36 units):

Take all the following courses:

JAPN 301 Advanced Japanese (3)

Prerequisites: JAPN 202 or equivalent as determined by instructor.

JAPN 302 Advanced Japanese (3)

Prerequisites: JAPN 301 or equivalent as determined by instructor.

JAPN 311 Advanced Spoken Japanese (3)

Prerequisites: JAPN 202 or equivalent as determined by instructor.

JAPN 312 Advanced Spoken Japanese (3)

Prerequisites: JAPN 311 or equivalent as determined by instructor.

JAPN 451 Japanese Civilization (in Japanese) (3)

Prerequisites: JAPN 302 or equivalent as determined by instructor.

Take electives from the following:

A. Language and Language Related Courses (12 units) selected from:

JAPN 350, 370, 371, 385, 421, 422, 452, 453, 461, 462, 463, 471, 481, 490, 492, 497;

B. Japanese Civilization (taught in English) (6 units) selected from:

ANTH 335, A/ST 393, AH 470A/B, HIST 383A, 383B, 384, 405, 406A, 407I, 409, POSC 363, RST 344;

C. Japan-Related or Intercultural Communication Courses (3 units) selected from:

ANTH 307I, 412I, 413, 490*, ASAM 330, 345, AST 300I, 301I, 310, 320, 406A, 490*, 492, 495I, CWL 403, COMM 309, 330, ECON 372, EDSS 450F, HSC 420I, HIST 382B, 406B, 478, 495*, IST 317I, 318I, 319I, 478, JOUR 312, PHIL 306, POSC 362, 371, 378, 469*, 489, 497*, RST 341I, SOC 350, WGSS 401I, 406A.

*Special topics courses in departments which regularly offer topical courses pertinent to the program.

Single Subject Teaching Credential in Japanese

The Japanese Subject Matter Credential Program at CSU, Long Beach is designed to provide students with linguistic and cultural preparation and understanding of humanities for personal, social, intellectual and cognitive development as well as development of skills for economic self-sufficiency in the ever-intertwining world of global economy. It is intended to produce educators prepared in teaching Japanese with the communication proficiency, critical thinking skills, and sociocultural understanding essential for effective intercultural communication as well as pedagogical knowledge and training in teaching Japanese to diverse populations in our society.

The program requires a minimum of 30 semester units of upper-division courses in Japanese as listed below under the four subject categories: Language, Linguistics, Culture, and Literature. Students should take 21 units of core courses and 9 units of electives. All upper division courses are conducted in the target language and require completion or equivalent of the four semesters of lower division Japanese language courses.

All upper-division language courses are designed to develop competency in four skills and content. However, JAPN 311 and 312 emphasize spoken Japanese at advanced level, while JAPN 301 and 302 emphasize reading and writing at advanced level. The content courses represent three areas of study - Japanese culture, linguistics, and literature. The culture courses provide an overview of Japanese history from the prehistoric times to contemporary Japan, and an insight into Japanese culture and society. The linguistics courses introduce the sound, meaning, syntactic and discourse structure of language, and offer a comparison of Japanese and English as well as other languages. The literature course introduces selected major literary works, which will provide sources to cultivate literary appreciation and to develop cultural understanding of Japan.

A grade of "C" or better is required in all courses accepted for the Japanese program. The exit requirement is "Advanced" level Japanese language proficiency.

In addition to meeting the subject matter competence requirement for the teaching credential, prospective teachers of Japanese are also required to complete 45 units of professional preparation in the Single Subject Credential

Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the website (www.ced.csulb.edu/single-subject) for a description of professional preparation requirements, courses, and application procedures. Prospective students should consult the Japanese Education Advisor and the Languages Other Than English (LOTE) Program Advisor early to plan their program.

The Japanese Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

Core Requirements

24 upper division units selected from the following areas:

1. *Language:*

JAPN 301 Advanced Japanese (3)

Prerequisites: JAPN 202 or equivalent as determined by instructor.

JAPN 302 Advanced Japanese (3)

Prerequisites: JAPN 301 or equivalent as determined by instructor.

JAPN 311 Advanced Spoken Japanese (3)

Prerequisites: JAPN 202 or equivalent as determined by instructor.

JAPN 312 Advanced Spoken Japanese (3)

Prerequisites: JAPN 311 or equivalent as determined by instructor.

2. *Linguistics:*

JAPN 461 Structure of the Japanese Language (3)

Prerequisites: JAPN 302 or equivalent as determined by instructor.

3. *Literature:*

JAPN 471 Readings in Modern and Contemporary Japanese Literature (3)

Prerequisite: JAPN 371 or equivalent as determined by instructor.

and one of the following:

JAPN 421 Selected Readings/Writing in Japanese (3)

Prerequisites: JAPN 302 or consent of instructor.

JAPN 370 Japanese Literature in English Translation (3)

Prerequisite: GE Foundation requirements.

4. *Culture:*

JAPN 451 Japanese Civilization (3)

Prerequisites: JAPN 302 or equivalent as determined by instructor.

Electives:

Take a total of 6 units selected from at least two different areas in consultation with a program advisor based on the student's background, interest, and teaching plans.

Language: JAPN 421, 422

Linguistics: JAPN 462, 463, 481

Literature: JAPN 370, 371

Culture: JAPN 350; 492

Variable Subjects: JAPN 490; 497

Certificate in Japanese

This certification is being considered for discontinuance.

Requirements

1. A bachelor's degree (may be earned concurrently with the certificate);
2. 15 units of upper division level Japanese language courses to be selected from: JAPN 301, 302, 311, 312, 371, 385, 421, 422, 451, 452, 453, 461, 462, 463, 471, 481, 490, 497
3. 12 units of Japan-related upper division work from at least two disciplines. These units must be selected with the approval of a member of the advisory committee from the following approved courses:
ANTH 307I, 335, 412I, 413, 490, ASAM 330, 345, AST 300I, 301I, 310, 320, 393, 406A, 490, 492, 495I, AH 470A/B, CWL 403, COMM 309, 330, ECON 372, EDSS 450F, H SC 420I, HIST 382B, 383A, 383B, 384, 405, 406A, 406B, 407I, 409, 478, 495, I/ST 317I, 318I, 319I, 478, JAPN 350, 370, JOUR 312, PHIL 306, POSC 362, 363, 371, 378, 469, 489, 497, R/ST 341I, 344, SOC 350, WGSS 401I, 406A.

Japanese Courses (JAPN)

LOWER DIVISION

101. Fundamentals of Japanese (4)

Prerequisite: One GE Foundation (may be taken concurrently) or formal prerequisites and/or competency equivalent for JAPN 101.

Introduction to pronunciation, reading, writing, conversation, and structure of the Japanese language.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

102. Fundamentals of Japanese (4)

Prerequisites: JAPN 101; one GE Foundation course (may be taken concurrently) or formal prerequisites and/or competency equivalent for advanced study in Japanese.

Introduction to pronunciation, reading, writing, conversation, and structure of the Japanese language.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

201. Intermediate Japanese (4)

Prerequisites: JAPN 102; GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Japanese.

Continuation of first year Japanese. Further development of listening, speaking, reading, writing, and communication.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

202. Intermediate Japanese (4)

Prerequisites: JAPN 201; GE Foundation requirements, or formal prerequisites and/or competency equivalent for advanced study in Japanese.

Continuation of first year Japanese. Further development of listening, speaking, reading, writing, and communication.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

250. Japanese Anime and Manga (3)

Students examine, analyze, and discuss selected topics in Japanese culture and modern society by analyzing Japanese animation (anime) and printed cartoons (manga). Familiarity with Japanese language is desirable but not required.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

301. Advanced Japanese (3)

Prerequisites: JAPN 202 or equivalent as determined by instructor.

Study of modern spoken and written Japanese involving advanced patterns and expressions. Emphasis on reading comprehension, vocabulary building and idiomatic usage.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

302. Advanced Japanese (3)

Prerequisites: JAPN 301 or equivalent as determined by instructor.

Study of modern spoken and written Japanese involving advanced patterns and expressions. Emphasis on reading comprehension, vocabulary building and idiomatic usage.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

311. Advanced Spoken Japanese (3)

Prerequisites: JAPN 202 or equivalent as determined by instructor.

Advanced study in modern spoken Japanese and Japanese communication.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

312. Advanced Spoken Japanese (3)

Prerequisites: JAPN 311 or equivalent as determined by instructor.

Advanced study in modern spoken Japanese and Japanese communication.

Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

350. Japanese Language, Culture, and Communication (3)

Study of Japanese language and culture through sociolinguistic perspectives. Exploration of the interrelationship between the language and culture by focusing on verbal and nonverbal communicative behaviors. Taught in English and Japanese.

Letter grade only for Japanese majors.

370. Japanese Literature in English Translation (3)

Prerequisite: GE Foundation requirements.

Readings in translation of representative works of major literary genres in Japan covering both the classical and modern periods. Previous knowledge of the language is highly desirable, but not necessary.

371. Survey of Japanese Literature (3)

Prerequisite: JAPN 302 or consent of instructor.

Presents a survey of the major literary works from Kojiki to contemporary Japanese authors. Students reflect on the predominant movements, genres, rhetorical devices, literary techniques, and writers of the works.

Conducted in Japanese and English. Letter grade only (A-F).

385. Japanese Language & Culture for Heritage Learners (3)

Prerequisite: Consent of instructor or a placement test.

Designed to address the particular needs of students of Japanese as a heritage language, the course emphasizes individual learning to improve formal use of the language in listening, speaking, reading and writing, and cultural knowledge.

May be repeated to a maximum of 6 units in different semesters. Letter grade only (A-F)

421./521. Selected Readings/Writing in Japanese (3)

Prerequisites: JAPN 302 or consent of instructor.

Readings from a selection of contemporary materials including literary works, magazines, newspapers, instructional and technical materials.

Letter grade only for Japanese majors.

422./522. Technical Japanese (3)

Prerequisites: JAPN 421 or equivalent.

Development of receptive and productive skills using authentic materials drawn from business, humanities, sciences, and others that will be selected according to students' interest.

Letter grade only (A-F).

451./551. Japanese Civilization (3)

Prerequisites: JAPN 302 or equivalent as determined by instructor.

Introduction and exploration of characteristic features of Japanese civilization and culture through studying selected topics and themes in fields such as arts, humanities, sciences, and social sciences. Conducted in Japanese.

Letter grade only (A-F) for Japanese majors.

452. Japan: Its Land, People and Culture (3)

Prerequisites: JAPN 302 and 312, or consent of instructor.

Students will study the land of Japan and learn how the land's physical features have influenced its people and culture, including history, way of life, and language. Taught in Japanese.

Letter grade only (A-F).

453. Japanese Culture as Social Process (3)

Prerequisites: JAPN 302 and 350, or consent of instructor.

Major features of Japanese culture and society are analyzed. Key characteristics of contemporary Japanese society are compared with Western society, emphasizing processes in common. Taught in Japanese and English.

Letter grade only (A-F).

461./561. The Structure of the Japanese Language (3)

Prerequisites: JAPN 302 or equivalent as determined by instructor.

Introduction to phonology, morphology, syntax, semantics and discourse of modern Japanese. Conducted in Japanese with some readings in English.

Letter grade only for Japanese majors.

462./562. Contrastive Analysis of English and Japanese (3)

Prerequisites: JAPN 302 and 312 or equivalent as determined by instructor.

Contrastive analysis of phonological, morphological, syntactic and discourse aspects of English and Japanese. Conducted in Japanese with some readings in English.

Letter grade only for Japanese majors.

463./563. Acquisition of Japanese as a Second/Foreign Language: Theory and Practice (3)

Prerequisites: LING 101 or LING 170 or JAPN 461; and JAPN 302 or Placement Test.

Theoretical and practical background of language acquisition of Japanese as a second/foreign language. Aims at building knowledge of current research and its pedagogical implications. Conducted in Japanese with some readings in English.

Letter grade only for Japanese majors.

471. Readings in Modern and Contemporary Japanese Literature (3)

Prerequisite: JAPN 371 or equivalent as determined by instructor.

Readings of representative works of modern and contemporary Japanese literature including short stories, novellas, diaries, memoirs, poetry, and excerpts from novels and plays. Taught in Japanese.

Letter grade only for Japanese majors.

481./581. Principles and Practice of Teaching Japanese (3)

Prerequisites: JAPN 302, 312, 350, and at least one 400-level course or equivalent as determined by instructor.

Introduces Japanese language pedagogy in the U.S. with principles of second language acquisition, and explore linguistic/pedagogical/sociocultural issues. Conducted in Japanese with some readings in English.

Letter grade only for Japanese majors.

490. Selected Topics in Japanese (3)

Prerequisite: Consent of instructor.

Select topics related to advanced Japanese study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

492./592. Japanese Internship (3-6)

Prerequisites: Consent of instructor; completion of a minimum of 15 upper division units required for the major in Japanese.

Field work in Japanese under joint direction of activity sponsor and faculty.

Credit/No Credit grading only.

497. Directed Studies (1-6)

Prerequisite: Consent of instructor.

Independent study under supervision of a faculty member.

GRADUATE LEVEL**521./421. Selected Readings/Writing in Japanese (3)**

Prerequisites: JAPN 302 or consent of instructor.

Readings from a selection of contemporary materials including literary works, magazines, newspapers, instructional and technical materials.

Letter grade only (A-F).

522./422. Technical Japanese (3)

Prerequisites: JAPN 421 or equivalent.

Development of receptive and productive skills using authentic materials drawn from business, humanities, sciences, and others that will be selected according to students' interest.

(Lecture) Letter grade only (A-F).

551./451. Japanese Civilization (3)

Prerequisites: JAPN 302 or equivalent as determined by instructor.

Introduction and exploration of characteristic features of Japanese civilization and culture through studying selected topics and themes in fields such as arts, humanities, sciences, and social sciences.

Conducted in Japanese.

Letter grade only (A-F).

561./461. The Structure of the Japanese Language (3)

Prerequisites: JAPN 302 or equivalent as determined by instructor.

Introduction to phonology, morphology, syntax, semantics and discourse of modern Japanese. Conducted in Japanese with some readings in English.

Letter grade only (A-F).

562./462. Contrastive Analysis of English and Japanese (3)

Prerequisites: JAPN 302 and 312 or equivalent as determined by instructor.

Contrastive analysis of phonological, morphological, syntactic and discourse aspects of English and Japanese. Conducted in Japanese with some readings in English.

Letter grade only (A-F).

563./463. Acquisition of Japanese as a Second/Foreign Language: Theory and Practice (3)

Prerequisites: LING 101 or LING 170 or JAPN 461; and JAPN 302 or Placement Test.

Theoretical and practical background of language acquisition of Japanese as a second/foreign language. Aims at building knowledge of current research and its pedagogical implications. Conducted in Japanese with some readings in English.

Letter grade only (A-F).

581./481. Principles and Practice of Teaching Japanese (3)

Prerequisites: JAPN 302, 312, 350, and at least one 400-level course or equivalent as determined by instructor.

Introduces Japanese language pedagogy in the U.S. with principles of second language acquisition, and explore linguistic/pedagogical/sociocultural issues. Conducted in Japanese with some readings in English.

Letter grade only (A-F).

592./492. Japanese Internship (3-6)

Prerequisites: Consent of instructor; completion of a minimum of 15 upper division units required for the major in Japanese.

Field work in Japanese under joint direction of activity sponsor and faculty.

Credit/No Credit grading only.

695. Directed Readings (1-3)

Prerequisites: Consent of graduate advisor.

Readings in Japanese on an individual basis.

Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisites: Consent of graduate advisor.

Research in Japanese on an individual basis.

Letter grade only (A-F).

JEWISH STUDIES

College of Liberal Arts

Director: Jeffrey Blutinger

Telephone: (562) 985-2196

FAX: (562) 985-5431

Email: jblutinger@csulb.edu

Faculty: Houri Berberian (History), Jeffrey Blutinger (History), Carl Fisher (Comparative Literature and Classics), Cheryl Goldstein (Comparative Literature and Classics), Ali Igmen (History), Arlene Lazarowitz (History), David Stewart (Religious Studies)

Bachelor of Arts in Modern Jewish Studies

The Bachelor of Arts in Modern Jewish Studies is an interdisciplinary major that consists of courses in a variety of disciplines. Students will gain an understanding of Jewish civilizations, as the result of interactions of Jewish culture, history, and religion. Students will explore the constants and diversity of the Jewish experience in different eras and geographical settings, and will study and grapple with Jewish beliefs and texts. Students must demonstrate a Novice-midlevel proficiency in Hebrew (as defined by the American Council for the Teaching of Foreign Languages guidelines), either by successfully completing a semester of beginning Hebrew (HEBW 101A or HEBW 101B), a semester of Biblical Hebrew (RST 318 or RST 319), or by passing a language test arranged by the Director of the program.

Requirements (40 units minimum)

Core (30 units)

Take the following course:

*HIST 141 Jewish Civilization (3)

*Culture and Society (6 units):
CWL 342 and 344

*History area (9 units) chosen from the following:
HIST 304, 345, 347, 348, 393, 428, 431, 432, 470

*Religion and Thought (9 units) chosen from the following:
R/ST 210, 230, 311, 312I, 314, 315, 317, 318, 319,
320A, 320B, 338I, 460

*Capstone Course (3 units):
To be determined by Program Advisor.

*Electives (10 units):
GEOG 309I, POSC 367, HEBW 101A or 101B,
or courses listed above in excess of core requirements
or other courses as determined by advisor.

Minor in Jewish Studies

The Minor in Jewish Studies consists of a minimum of 19 units. Jewish Studies encourages undergraduate students to acquire the academic breadth and depth to comprehend the major issues, themes, and concepts of a culture and heritage that has had a distinct impact on world civilization. The interdisciplinary minor consists of courses in a variety of disciplines, including literature, history, religion, geography, Hebrew language, and politics. Students will expand their understanding of the broader dynamics of the Jewish experience through different eras and geographic settings, both in Israel and the Diaspora.

Requirements

1. Required core course:
HIST 141 Jewish Civilization (3)
2. Culture and Society (3 units):
CWL 342, 344,
3. History area (3 units):
HIST 304, 345, 347, 348, 393, 428, 431, 432, 470.
4. Religion and Thought (3 units):
R/ST 210, 230, 311, 312I, 314, 315, 317, 318, 319, 320A,
320B, 338I, 460.
5. The remaining seven units to complete the minor may be satisfied through any of the courses listed above, or:
GEOG 309I, POSC 367, HEBW 101A, HEBW 101B or other courses as determined by the advisor.
6. In the event that no course is available to satisfy a requirement of the minor, the missing course or courses may be substituted through a directed study, as determined by the advisor.
7. Students must demonstrate a Novice-midlevel reading proficiency in Hebrew (as defined by the American Council for the Teaching of Foreign Language guidelines), either by successfully completing a semester of either Beginning or Biblical Hebrew, or by passing a language test arranged by the Director of the program. Students who have a similar competency in another Jewish language (e.g., Yiddish, Ladino), should contact the Director of the program.

Hebrew Courses (HEBW)

101A. Fundamentals of Hebrew (4)

Prerequisite/Corequisite: Any Foundation course.

Designed for non-native speakers, introduces students to Hebrew and enables them to comprehend and communicate in Hebrew at increasingly complex levels.

For non-native speakers only. Not open to heritage speakers or native speakers of Hebrew.

101B. Fundamentals of Hebrew (4)

Prerequisite/Corequisite: HEBW 101A.

Continuation of HEBW 101A. Introduces students to Hebrew and enables them to comprehend and communicate in Hebrew at increasingly complex levels. For non-native speakers only. Not open to heritage speakers or native speakers of Hebrew.

JOURNALISM AND MASS COMMUNICATION

College of Liberal Arts

Department Chair: Christopher Burnett

Office: Social Sciences and Public Affairs (SS/PA) Room 024
Telephone: (562) 985-4981

Faculty: Lee Brown (Emeritus), Christopher Burnett, Jennifer Fleming, Heloiza Herscovitz, Christopher Karadjov, Gary Metzker, Daniel Paskin, Emma Daugherty, Raul Reis, Gwen Shaffer, John Shrader, Barbara Kingsley-Wilson

Career Possibilities

Journalist • Copy Writer • Editor • Online Journalist • Multimedia Journalist • Public Relations Practitioner • Proofreader • Technical Writer • Freelance Writer • Reporter • Newscaster • Critic • Sports Writer • Photojournalist • Radio/TV Scriptwriter • Sales Representative • Marketing Researcher • Educator • Fund Raiser (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.) Various entry-level trainee positions in business and industry are available for graduates regardless of academic discipline.

Introduction

The Department of Journalism and Mass Communication offers undergraduate curricula in journalism and public relations. Students should contact the department office for referral to an appropriate faculty adviser for developing a study plan.

The department houses the campus newspaper, the Daily Forty-Niner, which serves the campus community and other constituencies as well as Dig magazine, the Online Forty-Niner, the Dig Online, the Summer Forty-Niner and Beach News, an online newscast.

Broadcast journalism students also work at radio outlets when opportunities present themselves. They also work with Advanced Media Productions to produce a weekly cable television program. Advanced students are strongly encouraged to participate in the department's internship program. Within the limits of its resources, the department helps graduating seniors and alumni find professional positions.

Bachelor of Arts in Journalism (120 units)

General Requirements

Computer Prerequisites to Entering Journalism Classes:

All students entering journalism skills courses must be familiar with at least one established word-processing program at the level of at least 40 words per minute.

Professional Skills:

JOUR 101, 120 and 311 are the basic writing and reporting courses for journalism and are prerequisites for most upper division skills courses in the department.

Residency Requirements:

Transfer students must complete at least 50 percent of their upper-division journalism units at CSULB. Journalism courses taken on another campus may not be substituted for CSULB journalism courses without the approval of the CSULB Department of Journalism and

Mass Communication.

Distribution of Units:

Journalism majors may apply no more than 40 units of journalism courses toward the 120 units required for the degree of Bachelor of Arts. Students should meet with a journalism adviser before declaring the major and the minor.

Journalism majors may apply no more than 40 units of journalism courses toward the 120 units required for the degree of Bachelor of Arts. Students should meet with a journalism adviser before declaring the major and the minor.

Journalism majors are required to have a minor or a double-major. Each CSULB department defines its own minor, and these vary between 18 and 24 units. Students interested in pursuing the Single-Subject Credential in English/Journalism should consult the teaching credential adviser in the Department of English.

By default, students are placed in the Journalism program but may also choose to pursue a Specialization in Public Relations.

Bachelor of Arts in Journalism

Specific Requirements for the Journalism Degree

This degree program requires 40 units in the major, of which seven are lower division and 33 are upper division.

Lower Division:

Take all the following courses:

JOUR 101 English for Media Writers (1)
Prerequisite: None

JOUR 110 Introduction to Mass Communications (3)
Prerequisite/Corequisite: One GE Foundation.

JOUR 120 Writing Across the Media (3)
Prerequisite: None

Upper Division:

Take all of the following:

JOUR 311 Reporting and Information Gathering (3)
Prerequisites: JOUR 120 with a grade of "C" or better.

JOUR 340 Introduction to Online Media (3)
Prerequisite: JOUR 311 with a grade of "C" or better.

JOUR 430 Law of Mass Communications (3)
Prerequisite: Junior or senior standing.

JOUR 431 Mass Media Ethics (3)
Prerequisite: Junior or senior standing.

JOUR 495 Senior Seminar (3)
Prerequisite: JOUR 311 with a grade of "C" or better, senior standing.

Take two courses chosen from the following:

JOUR 312I, 315, 370, 412, 415, 418, 494

Take three units total from the following:

JOUR 497, 498

Take three courses from the following:

JOUR 300, 305, 310, 316, 318, 320, 321, 331, 374, 380, 382, 405, 420, 422, 440, 471, 478, 480, 482, 490, 499.

In addition to the "C" average in the overall major and the "C" average in the upper division major at CSULB, both of which are required by the University, journalism majors must earn a "C" or better in each of these core courses:

JOUR 110, 120, 311, 340, 430, 431 and 495.

Specialization in Public Relations

Requirements

This specialization requires 40 units in the major, of which seven are lower division and 33 are upper division.

Lower Division:

Take all the following courses:

JOUR 101 English for Media Writers (1)
Prerequisite: None

JOUR 110 Introduction to Mass Communications (3)
Prerequisite/Corequisite: One GE Foundation.

JOUR 120 Writing Across the Media (3)
Prerequisite: None

Upper Division:

Take all the following courses:

JOUR 311 Reporting and Information Gathering (3)
Prerequisites: JOUR 120 with a grade of "C" or better.

JOUR 370 Principles of Public Relations (3)
Prerequisite: None

JOUR 374 Written Communication Public Relations (3)
Prerequisites: JOUR 120, 370.

JOUR 430 Law of Mass Communications (3)
Prerequisite: Junior or senior standing.

JOUR 431 Mass Media Ethics (3)
Prerequisite: Junior or senior standing.

JOUR 471 Public Relations Mgmt and Campaigns (3)
Prerequisites: JOUR 311, 374.

JOUR 478 Public Relations Case Studies (3)
Prerequisites: JOUR 311, 374.

Take three units total from the following:

JOUR 497, 498

Take three courses from the following:

JOUR 300, 305 (recommended for public relations), 310, 312I, 315, 316, 318, 320, 321, 331, 340 (recommended for public relations), 380, 382, 405, 412, 415, 418, 420, 422, 440, 480, 482, 490, 494 (highly recommended for public relations), 495 and 499.

In addition to the "C" average in the overall major and the "C" average in the upper division major at CSULB, both of which are required by the University, journalism majors specializing in Public Relations must earn a "C" or better in each of these core courses:

JOUR 110, 120, 311, 430, 431, 370, 374, 471, 478.

Minor in Journalism

A minimum of 21 units including the following:

JOUR 110 Introduction to Mass Communications (3)
Prerequisite/Corequisite: One GE Foundation.

JOUR 120 Writing Across the Media (3)
Prerequisite: None

JOUR 311 Reporting and Information Gathering (3)
Prerequisites: JOUR 120 with a grade of "C" or better.

JOUR 430 Law of Mass Communications (3)
Prerequisite: Junior or senior standing.

JOUR 431 Mass Media Ethics (3)
Prerequisite: Junior or senior standing.

Journalism Courses (JOUR)

LOWER DIVISION

101. English for Media Writers (1)

Intensive review of grammar, word usage, spelling, and the principles of clear and concise writing for student writers who seek careers in the mass media.

Letter grade only (A-F). (1 hour skills.)

110. Introduction to Mass Communications (3)

Prerequisite/Corequisite: One GE Foundation.

Origins, development and contemporary role of newspapers, magazines, radio, television, books, new media and films, and such related fields as advertising and public relations.

Letter grade only (A-F). (Lecture/Discussion 3 hours)

120. Writing Across the Media (3)

Course provides introductory overview on writing techniques used in the print media, in broadcast media, in online media and in preparation of materials for media professionals by public relations practitioners. Focus is on writing news stories and meeting deadlines.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

126. Narrative Writing for Journalism (3)

A gateway course to journalistic screen writing dedicated to helping students express themselves through story while introducing them to a variety of delivery media and narrative formats.

Letter grade only (A-F).

160. Understanding News Media (3)

Prerequisite: GE Foundation requirements.

Develop critical thinking through the examination of news media in the United States including print, television and online news sources, news narratives, journalistic methodologies, ownership patterns, value systems, thought processes, effects and trends.

Not open for credit to students with credit in JOUR 220.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300. Beginning Photojournalism (3)

Prerequisites: JOUR 311 with a grade of "C" or better.

Techniques of photojournalism for newspapers, magazines, corporate communications, new media and public relations. Course covers types of photos needed for all aspects of editorial photography, including lighting, use of filters, working with subjects and the photo picture page.

Letter grade only (A-F).

305. Media Design (3)

Prerequisites: JOUR 120.

Gives students experience in design of printed and online materials. Examines theories, principles and techniques of contemporary media design. Covers historical roots of media design and acquaints students with use of photographs, illustrations, graphs, type and color in visual communication.

Letter grade only (A-F).

310. Writing for the Daily Forty-Niner (3)

Prerequisites: "C" or better in JOUR 120, or consent of instructor.

Students cover a beat and/or write general assignment stories as well as produce online story packages for the Daily Forty-Niner newspaper and website.

Letter grade only (A-F).

311. Reporting and Information Gathering (3)

Prerequisites: JOUR 120 with a grade of "C" or better.

Students will learn to gather, process and analyze information from a variety of sources, reporting through multiple platforms while emphasizing ethical standards and credibility. Students will learn to observe; conduct effective interviews; practice writing for the media; and multimedia storytelling.

Letter grade only (A-F).

312I. Global News Media (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses and upper-division standing.

Analysis of world's news media with an emphasis on structure, ownership, social and political roles and the degree of government pressure and control. Particular attention paid to economic, political and mass media globalization and its effects on developing countries.

Letter grade only (A-F). Course fee may be required.

315. Literary Journalism (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Study and practice of literary reportage by analyzing styles and methods employed by British pioneers, contemporary American, European and Latin American journalists. Discussion and application of ethical guidelines that keep literary journalists from crossing the line between fact and fiction.

316. Feature Writing (3)

Prerequisites: JOUR 311 with a grade of "C" or better.

Covers the feature article for newspapers, magazines and online media. Discusses style, organization, human interest, use of quotes, leads and article ideas. Emphasis is on clear readable prose.

Letter grade only (A-F).

318. Introduction to Sports Journalism (3)

Prerequisites: JOUR 311

Offers students the opportunity to explore the state and practice of sports journalism. Students learn the history of sports writing as well as the fundamentals of the sports writing process, from information gathering and interviewing to writing and editing.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

320. Advanced Reporting (3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Students will research, report and write stories on issues affecting the campus and local community. Computer-assisted research, multimedia, investigative, and interviewing skills are stressed.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

321. Introduction to Broadcast Writing (3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Techniques for information gathering, scripting, selecting video and choosing sound bites for news and feature stories.

Letter grade only (A-F). (Lecture two hours, Laboratory 2 hours)

331. Introduction to News Editing (3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Basics of copy editing, line editing, and proofreading for print and online news publications, including grammar, AP style, and usage. Role of editor, from assigning stories to creating budgets and working with writers, artists and photographers to put together news stories, features, and opinion pieces.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

340. Introduction to Online Media (3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Introduction to the Internet and World Wide Web from the perspective of online journalism. Provides introduction to the basics of online publishing and writing. Students work with the tools and technologies to create their own websites and write content for the online

environment.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

370. Principles of Public Relations (3)

Public relations fundamentals: research, planning, communication and evaluation. Study of targeting special publics, the use of public relations tools, developing public relations programs and the importance of social responsibility.

Letter grade only (A-F).

374. Written Communication for Public Relations (3)

Prerequisites: JOUR 120, 370.

Students learn to write a wide variety of internal public relations materials, including backgrounders, position papers, proposals, letters, memos, speeches and crisis communication plans. Students develop a crisis communication plan for a nonprofit organization as a service-learning project.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

380. Advanced Photojournalism (3)

Prerequisite: JOUR 311 with a grade of "C" or better, JOUR 300.

Photographic reporting with a camera. In-depth study of photojournalism with emphasis on creation of photo story ideas, photo essays and feature photos; photo editing and layout as applied to newspapers, magazines and online media.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

382. Radio News Production (3)

Prerequisite: JOUR 311 with a grade of "C" or better, JOUR 321.

Reporting, writing and editing news and feature stories for radio news program. Special emphasis is on radio production techniques.

Letter-grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

405. Advanced Media Design (3)

Prerequisites: JOUR 305

Students learn more advanced skills in media design, including typography, color, art and white space. This class builds on basic theories learned in other media design classes, and further develops skills related to niches of particular interest to students.

Letter grade only (A-F). Lecture 2 hours, Laboratory 2 hours.

412. Theories of Mass Communication (3)

Contemporary theories of mass communication. An overview of development of communication theory as it relates to mass media. Evaluation of theories of communication process through analysis of original research upon which theories were founded. Source, message and audience effects of communication process.

Letter grade only (A-F).

415. Minorities and the Media (3)

Analysis of the issues pertaining to minorities (ethnic, racial, national origin, gender, sexuality, physical, age and mental ability) and how they intersect with the mass media.

Letter grade only (A-F).

418. Media History (3)

Overview of development of mass media in United States and around the world. Major media figures, trends and industries are examined. Examines how individuals' interpretations of past historical events affect their sense of the present and what should occur in the future.

Letter grade only (A-F).

420. Investigative Reporting (3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Students work in an editor-reporter relationship with instructor in researching and writing in-depth pieces on such complex issues as mass transit, air pollution, city government, poverty, crime, housing and drug abuse. Computer-assisted research and investigative and interviewing techniques stressed.

Letter-grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

422. Senior Media Production (1)

Advanced work on Forty-Niner Publications as editors.

Credit/No Credit grading only. May be repeated for a maximum of 3 units in different semesters with consent of instructor.

430. Law of Mass Communications (3)

Prerequisite: Junior or senior standing.

Principles and case studies of law of the press, radio, television, advertising, public relations and new media with emphasis on constitutional guarantees, prior restraints, libel, contempt, privacy, taxation, licensing, shield laws, free press vs. fair trial, copyright and other laws affecting the mass media.

Letter grade only (A-F).

431. Mass Media Ethics (3)

Prerequisite: Junior or senior standing.

Study of ethical codes and value systems used in writing, producing and presenting news in the United States. Philosophical foundations of moral theory and various approaches to ethical decisionmaking for journalists and other media practitioners.

Letter grade only (A-F).

440. Advanced Online Media (3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Understanding online journalism and tools and technologies necessary for online publication. Students develop skills in computer-assisted reporting methods to conduct online journalistic research. Students publish work on class website and other professional venues.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

471. Public Relations Management and Campaigns (3)

Prerequisites: JOUR 311, 374.

Students work in agency situation to develop a business proposal for client involving a formal written plan and oral presentation. Students serve as consultants and develop programs for a nonprofit organization as a service-learning project.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

478. Public Relations Case Studies (3)

Prerequisites: JOUR 311, 374.

Case studies used to acquaint students with problems encountered when working in profit and nonprofit sectors. Emphasis placed on analytic planning, critical thinking and programmatic skills. Students develop research study examining a public relations issue in-depth.

Letter grade only (A-F).

480. Magazine Production (3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Analysis of theory and practice behind magazine production, writing and editing; students produce print and online stories for various department publications

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

482. Television News Production (3)

Prerequisite: JOUR 311 with a grade of "C" or better, JOUR 321.

Scripting, voicing, shooting and editing news and feature stories for cablecast student program. Special emphasis on videography and editing.

Letter grade only (A-F). (Lecture 2 hours, Laboratory 2 hours)

490. Selected Topics in Mass Communications (1-3)

Prerequisite: JOUR 311 with a grade of "C" or better.

Topics of special interest in mass communications selected for intensive study.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

494. Research Methods in Mass Communications (3)

Basic techniques of research in mass communications and mass media. Overview of theory building and hypothesis testing procedures as applicable to current problems in the mass communication field. Scientific methods, survey and experimental design, field studies, analysis of data.

Letter grade only (A-F).

495. Senior Seminar (3)

Prerequisite: JOUR 311 with a grade of "C" or better, senior standing.

Analysis of issues and problems in journalism and mass communications. Examines theoretical and applied issues related to the media. Discussion topics may include international communication, copyright, social responsibility, ethics, free speech and journalism history, among others.

Letter grade only (A-F).

497. Practicum in Journalism and Mass Communication (1-3)

Prerequisites: JOUR 311 with a grade of "C" or better, junior or senior standing.

Practice of journalism and mass communication in various on-campus media settings.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in at least two different semesters.

498. Internship (3)

Prerequisite: JOUR 311 with a grade of "C" or better, junior or senior standing.

Work of an editorial or writing nature at least 10 hours a week with journalism or PR organization in the Los Angeles-Orange County area. Work edited and evaluated by on-site supervisors. Regular reports to faculty supervisor and meetings with supervisor.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters.

499. Special Projects (1-3)

Prerequisite: JOUR 311, with a grade of "C" or better. Journalism Major only.

Advance approval of instructor; (permit required to enroll). Research in the field of journalism in broadcast, newspaper, magazine, public relations, advertising, new media or other related fields. Students must meet once a week with instructor.

May be repeated to a maximum of 6 units with different topics. Letter grade only (A-F).

KINESIOLOGY

College of Health and Human Services

Department Chair: Sharon R. Guthrie

Department Office: Health and Human Services (HHS) 2, Rm. 105
Telephone: (562) 985-4051
Website: <http://www.csulb.edu/colleges/chhs/departments/kin/>

Faculty: D. Margaret Costa, Jill A. Crussemeyer, James A. Davis, Keith W. Freeseemann, Christine Galvan, Sharon R. Guthrie, Grant M. Hill, Kerrie Kauer, Jeff L. Kress, Barry W. Lavay, Mikiko Nakajima, Clayre K. Petray, Ralph Rozenek, Jan M. Schroeder, Emyr W. Williams, Alison M. Wrynn, Will Wu, Douglas E. Young

Department Coordinator: Stacia Ticer

Career Possibilities

Allied Health Professions Programs: Certified Athletic Trainer • Educator/Professor • Researcher • Certified Kinesiotherapist

Exercise Science and Fitness: Strength and Conditioning Coach • Educator/Professor • Researcher • Exercise Technician • Fitness Specialist • Exercise Physiologist • Exercise Specialist

Physical Education Teacher Education (PETE): Physical Educator • Adapted Physical Education Specialist • Sport Coach • High School Athletic Administrator • Educator/Professor • Researcher

Sport Studies: Sport Coach • Educator/Professor • Researcher • Mental Training Consultant/Sport Psychologist • Sport Manager • College Athletic Administrator
(For more information, see www.careers.csulb.edu.) Various entry-level trainee positions are available for graduates, regardless of academic discipline.

Introduction

The mission of the Department of Kinesiology is to facilitate wellness among individuals through the study and application of human movement principles across the lifespan and through the management of and participation in physical activity, exercise, and sport. The Department serves the needs of students completing majors in other fields who find that certain aspects of kinesiology are important to professional objectives and personal interests.

Programs at a Glance

- Bachelor of Arts in Kinesiology in two options
- Bachelor of Science in Kinesiology in four options
- Bachelor of Science in Athletic Training
- Master of Arts in Kinesiology in five options
- Master of Science in Kinesiology in four options
- Single Subject Teaching Credential in Physical Education (K-12)
- Single Subject Teaching Authorization in Adapted Physical Education (K-12)

- Wilderness Studies Certificate
- Kinesiotherapy Certificate

In addition to the degree requirements for the Bachelor of Arts in Kinesiology and the Bachelor of Science in Kinesiology, the Major must meet the following Department

policies and requirements for University graduation:

1. Each major course and prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than a "C" is received must be retaken and successfully completed prior to enrolling in any other course for which it is a prerequisite;
2. Upper-division courses may not be waived by substitution or examination without Department petition and approval;
3. Department approval.

Undergraduate Programs

Bachelor of Arts in Kinesiology

Students pursuing a B.A. degree in Kinesiology must complete requirements plus one of the two Options.

Option in Adapted Physical Education – Teacher Education (120 units)

This option places emphasis on teaching public school PE to students with disabilities in preschool through grade 12.

Completion of this option meets Commission on Teacher Credentialing requirements for subject matter competence for the Single Subject Teaching Authorization in Adapted Physical Education (K-12).

This option is being revised to meet new state standards for subject matter competence for physical education teachers. When the revised program has been approved by the Commission on Teacher Credentialing, the new requirements will be in effect superseding current requirements.

Requirements

Lower Division:

Take all of the following courses:

BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.

BIOL 208 Human Anatomy (4)
Prerequisites: GE Foundation requirements.

PSY 100 General Psychology (3)
Prerequisites/Corequisites: GE A1 requirement.

KIN 149A Self Defense (1)
Prerequisites: None.

KIN 237 Techniques and Analysis of Aquatic Skills (2)
Prerequisites: KIN 125A or 125B or consent of instructor, American Red Cross Community First Aid and CPR certifications or equivalent. To maintain enrollment, students must pass the swimming proficiency examination that will be administered the first week of instruction.

KIN 250 Techniques of Basketball (1)
Prerequisites: None.

KIN 251 Techniques of Flag Football (1)
Prerequisites: None.

KIN 253 Techniques of Soccer (1)
Prerequisites: None.

KIN 255 Techniques of Softball (1)
Prerequisites: None.

KIN 257 Techniques of Volleyball (1)
Prerequisites: None.

- KIN 261 Techniques and Analysis of Fundamental Rhythms (2)
Prerequisites: None.
- KIN 264 Techniques of Golf (1)
Prerequisites: None.
- KIN 265 Techniques of Gymnastics (1)
Prerequisites: None.
- KIN 266 Techniques of Badminton (1)
Prerequisites: None.
- KIN 267 Techniques of Tennis (1)
Prerequisites: None.
- KIN 268 Techniques of Track and Field (1)
Prerequisites: None.
- KIN 270 Professional Practices in Public School Physical Education (3)
Prerequisites: None.

Upper Division:

Take all of the following courses:

- KIN 300 Biomechanics of Human Movement (3)
Prerequisites: BIOL 208 or equivalent.
- KIN 301 Exercise Physiology (3)
Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with a grade of "C" or better or consent of instructor.
- KIN 312 Motor Control and Learning (3)
Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.
- KIN 315 Motor Development (3)
Prerequisites: BIOL 207, 208; PSY 100 or equivalent.
- KIN 320 Adapted Physical Education (3)
Prerequisites: BIOL 208.
- KIN 332I Sociocultural Dimensions of Sport and Human Movement (3)
Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.
- KIN 335 Historical and Cultural Foundations of Sport and Kinesiology in America (3)
Prerequisites: Upper Division Standing.
- KIN 343 Techniques and Analysis of Fitness (2)
Prerequisites: KIN 270.
- KIN 370 Movement Theory and Practice of Elementary Physical Education (3)
Prerequisites: KIN 270.
- KIN 380 Principles, Organization and Management of Secondary School Physical Education (3)
Prerequisites: KIN 149, 237, 250, 253, 255, 257, 261, 264, 265, 266, 267, 268, 343, 370 or consent of instructor.
Corequisites: EDSS 300P.
- KIN 387 Physical Activities for the Disabled (3)
Prerequisites: KIN 320, 427. Corequisites: KIN 489A.
- KIN 388 Program Planning and Instruction in Adapted Physical Education (3)
Prerequisites: KIN 387. Corequisites: KIN 489A.
- KIN 427 Physical and Motor Assessment (3)
Prerequisites: KIN 315 or equivalent and KIN 320 or equivalent; upper-division undergraduate or graduate standing.
- KIN 460 Applied Theory and Analysis of Non-Traditional Physical Education Games & Activities (2)
Prerequisites: KIN 370, senior standing.

A fieldwork, field experience or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and

Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Single Subject Teaching Authorization in Adapted Physical Education (K-12)

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective Adapted Physical Education teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

Option in K-12 Physical Education – Teacher Education (120 units)

Completion of this option meets the subject matter competence requirement for the Single Subject Teaching Credential in Physical Education. Prospective students should consult the department's Physical Education Advisor early to plan their program.

Requirements

Lower Division:

Take all of the following courses:

- BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.
- BIOL 208 Human Anatomy (4)
Prerequisites: GE Foundation requirements.
- PSY 100 General Psychology (3)
Prerequisites/Corequisites: GE A1 requirement.
- KIN 149A Self Defense (1)
Prerequisites: None.
- KIN 237 Techniques and Analysis of Aquatic Skills (2)
Prerequisites: KIN 125A or 125B or consent of instructor, American Red Cross Community First Aid and CPR certifications or equivalent. To maintain enrollment, students must pass the swimming proficiency examination that will be administered the first week of instruction.
- KIN 250 Techniques of Basketball (1)
Prerequisites: None.
- KIN 251 Techniques of Flag Football (1)
Prerequisites: None.
- KIN 253 Techniques of Soccer (1)
Prerequisites: None.
- KIN 255 Techniques of Softball (1)
Prerequisites: None.
- KIN 257 Techniques of Volleyball (1)
Prerequisites: None.
- KIN 261 Techniques & Analysis of Fundamental Rhythms (2)
Prerequisites: None.
- KIN 264 Techniques of Golf (1)
Prerequisites: None.
- KIN 265 Techniques of Gymnastics (1)
Prerequisites: None.

- KIN 266 Techniques of Badminton (1)
Prerequisites: None.
- KIN 267 Techniques of Tennis (1)
Prerequisites: None.
- KIN 268 Techniques of Track and Field (1)
Prerequisites: None.
- KIN 270 Professional Practices in Public School Physical Education (3)
Prerequisites: None.

Upper Division:

Take all of the following courses:

- KIN 300 Biomechanics of Human Movement (3)
Prerequisites: BIOL 208 or equivalent.
- KIN 301 Exercise Physiology (3)
Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with a grade of "C" or better or consent of instructor.
- KIN 312 Motor Control and Learning (3)
Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.
- KIN 315 Motor Development (3)
Prerequisites: BIOL 207, 208; PSY 100 or equivalent.
- KIN 320 Adapted Physical Education (3)
Prerequisites: BIOL 208.
- KIN 332I Sociocultural Dimensions of Sport and Human Movement (3)
Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.
- KIN 335 Historical and Cultural Foundations of Sport and Kinesiology in America (3)
Prerequisites: Upper Division Standing.
- KIN 343 Techniques and Analysis of Fitness (2)
Prerequisites: KIN 270.
- KIN 370 Movement Theory and Practice of Elementary Physical Education (3)
Prerequisites: KIN 270.
- KIN 380 Principles, Organization and Management of Secondary School Physical Education (3)
Prerequisites: KIN 149, 237, 250, 253, 255, 257, 261, 264, 265, 266, 267, 268, 343, 370 or consent of instructor. Corequisites: EDSS 300P.
- KIN 457 Applied Theory of Teaching Team Sports (3)
Prerequisites: KIN 250, 251, 253, 255, 257, 270 or consent of instructor; senior standing.
- KIN 460 Applied Theory and Analysis of Non-Traditional Physical Education Games & Activities (2)
Prerequisites: KIN 370, senior standing.
- KIN 461 Applied Theory of Teaching Individual & Dual Sports (3)
Prerequisites: KIN 237, 264, 265, 266, 267, 268, 270, or consent of instructor.
- KIN 477 Measurement and Curriculum in Physical Education (3)
Prerequisites: KIN 343 and KIN 370 or consent of instructor.

A fieldwork, field experience or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Single Subject Teaching Credential in Physical Education (K-12)

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective Physical Education teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

Adapted Physical Education Specialist Teaching Authorization

This program is designed for students interested in the administration and implementation of physical activity programs for persons with disabilities in K-12 schools. Completion of this program results in the Adapted Physical Education added authorization for holders of a current Single Subject, Multiple Subject, or Education Specialist basic teaching credential.

Requirements

1. Bachelor's degree;
2. Concurrent enrollment in or completion of the Single Subject Physical Education teaching credential program or the Multiple Subject or Education Specialist teaching credential program;
3. Take the following courses:
 - KIN 320 Adapted Physical Education (3)
Prerequisites: BIOL 208.
 - KIN 387 Physical Activities for the Disabled (3)
Prerequisites: KIN 320, 427. Corequisites: KIN 489A.
 - KIN 388 Program Planning and Instruction in Adapted Physical Education (3)
Prerequisites: KIN 387. Corequisites: KIN 489A.
 - KIN 427 Physical and Motor Assessment (3)
Prerequisites: KIN 315 or equivalent and KIN 320 or equivalent; upper-division undergraduate or graduate standing; consent of instructor required for graduate students prior to registration.
 - KIN 489A Field Work in Physical Activity Settings (6)
Prerequisites: Completion of Kinesiology course requirements for the major option in which field work is taken.
 - EDSP 350 Education of Exceptional Individuals (3)
Prerequisites: None.

Select two courses from the following:

ED P 405; EDSP 577, 578; KIN 526; LING 151.

Bachelor of Science in Kinesiology

Students pursuing the Bachelor of Science degree in Kinesiology must complete the course requirements and the physical fitness proficiency of each Option. Students may select their area of specialization from the Options described below.

Option in Exercise Science (120 units)

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

Core:

Take all of the following courses:

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

BIOL 208 Human Anatomy (4)

Prerequisites: GE Foundation requirements.

KIN 300 Biomechanics of Human Movement (3)

Prerequisites: BIOL 208 or equivalent.

KIN 301 Exercise Physiology (3)

Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with a grade of "C" or better or consent of instructor.

KIN 312 Motor Control and Learning (3)

Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.

Lower Division:

Take all of the following courses:

MATH 113 (or higher) Precalculus Algebra (3)

Prerequisites: Appropriate ELM score, ELM exemption or MAPB11.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination (credit in CHEM 191 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended.

CHEM 111B General Chemistry (5)

Prerequisites: CHEM 111A with a grade of "C" or better.

KIN 263 Techniques of Physical Fitness (2)

Prerequisites: None.

PHYS 100A General Physics (4)

Prerequisites: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

Upper Division:

Take all of the following courses:

KIN 405 Cardiopulmonary Aspects of Health Related Exercise Programs (4)

Prerequisites: KIN 210 or current First Aid and CPR certificates, KIN 301.

KIN 441 Applied Biomechanics: Lifting and Work Capacity (3)

Prerequisites: KIN 300 or equivalent (Trigonometry and PHYS 100A recommended).

Take one of the following courses:

KIN 430 Motor Control Principles and Theory (3)

Prerequisites: KIN 312 or equivalent.

KIN 431 Scientific Foundations of Locomotion (3)

Prerequisites: KIN 300, 312.

Take one of the following courses:

KIN 483 Statistics in Human Movement Science (3)

Prerequisites: KIN 300, 301, 312.

BIOL 260 Biostatistics (3)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

Take three of the following courses:

KIN 339I, 462, 465, 466, 432.

Take 18 units (minimum 6 units from KIN) of elective courses from the following:

BIOL 200, 211, 212, 213 (BIOL 111 and 111L, 212 and 212L, 213 and 213L if courses taken prior to this catalog year), 301, 340, 341, 342 and 342L, 345, 441, 443, 445; CHEM 327, 448; NUTR 132, 331A, 331B, 439; H SC 150; KIN 315, 320, 339I*, 364, 367, 430*, 431*, 432*, 462*, 465*, 466*, 471, 494, 495, 497; MICR 200, 211; PSY 327I, 370.

*If not taken as one of the major required upper-division courses.

A fieldwork, field experience or internship course requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Option in Fitness (120 units)

Requirements

Core Courses:

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

BIOL 208 Human Anatomy (4)

Prerequisites: GE Foundation requirements.

KIN 300 Biomechanics of Human Movement (3)

Prerequisites: BIOL 208 or equivalent.

KIN 301 Exercise Physiology (3)

Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with a grade of "C" or better or consent of instructor.

KIN 312 Motor Control and Learning (3)

Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.

Lower Division:

NUTR 132 Introductory Nutrition (3)

Prerequisites/Corequisites: One Foundation course.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

STAT 108 Statistics for Everyday Life (3)

Prerequisites: None

KIN 218 Introduction to the Fitness Industry (2)

Prerequisites: None.

KIN 263 Techniques of Physical Fitness (2)

Prerequisites: None.

Physical Activity Courses:

Take a minimum of 7 units selected from different classes chosen from the following:

KIN 100A, 102A, 104A, 106A, 107A, 108A, 109A, 110A, 112A, 114A, 114B, 114C, 121A, 124A, 125A, 125B, 126A, 127A, 142, 145A, 146A, 148A, 149A, 151A, 152A, 161A, 162A, 165A, 166, 167A, 168A, 169A, 172A, 172B, 172C, 183A, 185, 189, 198F, 198G, 198H, 198J, 242, 243A, 243C, 244, 245, 246A, 247A, 250, 251, 253, 255, 257, 264, 265, 266, 267, 268.

Upper Division:

KIN 339I Psychology of Sport Behavior and Athletic Performance (3)

Prerequisites: GE Foundation requirements, PSY 100, and upper-division standing.

KIN 363 Theory and Analysis of Group Fitness Instruction (2)

Prerequisites: KIN 263.

KIN 364 Fitness for Adult Populations with Unique Health Considerations (3)

Prerequisites: KIN 301.

KIN 367 Fitness and the Aging Process (3)

Prerequisites: KIN 301.

KIN 368 Resistance Training for Fitness (3)

Prerequisites: KIN 300 and 301.

KIN 467 Fundamentals of Personal Training (3)

Prerequisites: KIN 368. Open to Fitness Option students in Kinesiology only, or consent of instructor.

KIN 468 Nutrition for Exercise and Performance (3)

Prerequisites: NUTR 132, KIN 301.

KIN 469 Fitness Management (3)

Prerequisites: KIN 363, 368.

KIN 478 Psychological Aspects of Exercise and Fitness (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

KIN 489D Fieldwork in Fitness (3)

Prerequisites: Completion of Kinesiology course requirement for the major option in which the field work is taken. KIN 467, completion of 200 hours in a corporate fitness setting, 200 hours in a traditional fitness setting and 100 hours of approved fitness experience.

Take one of the following:

KIN 332I Sociocultural Dimensions of Sport and Human Movement (3)

Prerequisites: GE Foundation requirement, one or more Exploration course and upper-division standing.

KIN 335 Historical and Cultural Foundations of Sport and Kinesiology in America (3)

Prerequisites: Upper division standing.

Take nine units of elective courses from the following:

ATEP 207, 309; NUTR 433, 439; H SC 421, 423, 427, 429; KIN 315, 332I*, 335*, 462, 487; REC 421, 423, 425, 427.

* If not taken as one of the major required upper-division courses.

A fieldwork, field experience, or internship requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

Option in Kinesiotherapy (120 units)

This Option is designed for those students who would like to train to become a Kinesiotherapist. Kinesiotherapy is defined as the application of scientifically based exercise principles adapted to enhance the strength, endurance, and mobility of individuals with functional limitations or those requiring extended physical conditioning.

The Kinesiotherapist is a health care professional competent in the administration of musculoskeletal, neurological, ergonomic, biomechanical, and task specific

functional tests and measures. Kinesiotherapists provide a bridge between acute illness and physical wellness. They work primarily with medically stable patients to assist them in reaching their optimal level of functional capacity. They are skilled in adapting scientifically based exercises to accommodate in the medical/surgical limitations of their clients.

Current employment settings of program graduates for registered Kinesiotherapists are: Department of Veteran Affairs, Department of Defense (e.g., Civilian Wellness Programs), Medical centers, Medical fitness facilities, Rehabilitation facilities, Learning disability centers, Colleges and universities, Workman's compensation programs conducting functional capacity evaluations

While the coursework in this Option is designed for students preparing for careers in Kinesiotherapy, it can also accommodate students interested in other allied health disciplines. If the student plans on using the Option coursework for that purpose, he/she may be required to enroll in additional courses outside the Option.

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

Core Courses:

Take the following:

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

BIOL 208 Human Anatomy (4)

Prerequisites: GE Foundation requirements.

KIN 300 Biomechanics of Human Movement (3)

Prerequisites: BIOL 208 or equivalent.

KIN 301 Exercise Physiology (3)

Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with a grade of "C" or better or consent of instructor.

KIN 312 Motor Control and Learning (3)

Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.

Lower Division:

Take the following:

KIN 217 Introduction to Kinesiotherapy (2)

Prerequisites: None.

KIN 263 Techniques in Physical Fitness (2)

Prerequisites: None.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

PSY 210 Introduction to Statistics (4)

Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.

PSY 220 Research Methods (4)

Prerequisites: PSY 100, 210, GE A1 requirement.

PSY 241 Psychobiology (3)

Prerequisites: PSY 100, GE A1 requirement.

Upper Division:

Take the following:

ATEP 309 Developmental & Therapeutic Exercise (3)

Prerequisites: KIN 300, 301 or consent of instructor.

GERN 400I Perspectives on Gerontology (3)

Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

KIN 315 Motor Development (3)

Prerequisites: BIOL 207, 208; PSY 100 or equivalent.

KIN 320 Adapted Physical Education (3)

Prerequisites: BIOL 208.

KIN 367 Fitness and the Aging Process (3)

Prerequisites: KIN 301.

KIN 427 Physical and Motor Assessment (3)

Prerequisites: KIN 315 or equivalent and KIN 320 or equivalent; upper-division undergraduate or graduate standing.

KIN 485 Neurological and Pathological Foundations for Kinesiotherapy (3)

Prerequisites: BIOL 207, 208; KIN 300, 301, 320, 489F or consent of instructor.

KIN 489F Fieldwork in Kinesiotherapy (3)

Prerequisites: Completion of Kinesiology course requirements for the major option in which field work is taken.

PSY 341 Neuropsychology (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing.

PSY 370 Abnormal Psychology (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

Take one of the following:

KIN 430 Motor Control Principles (3)

Prerequisites: KIN 312 or equivalent.

KIN 432 Applied Motor Learning (3)

Prerequisites: KIN 300 and 312.

Take one of the following:

PSY 361 Psychology of Childhood Adolescent Development (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

PSY 365 Psychology of Adult Development & Aging (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

Take one of the following:

KIN 332I Sociocultural Dimensions of Sport/Human Movement (3)

Prerequisites: BIOL 207, 208; PSY 100.

KIN 335 Historical and Cultural Foundations of Sport and Kinesiology in America (3)

Prerequisites: Upper division standing.

Students planning to enroll in Kinesiotherapy fieldwork and internship courses are required to attain current certification in First Aid and Cardiopulmonary Resuscitation (CPR) prior to enrollment by completing the American Red Cross Course: CPR/AED Certification for the Healthcare Provider and the Professional Rescuer or the American Heart Association Course: BLS for Healthcare Providers.

Option in Sport Psychology and Leadership (120 units)

This option has two concentrations – one in Sport Psychology and one in Leadership. The course work for both concentrations is the same except for the activity courses and the elective courses. The option is designed for students interested in careers in: 1) sport psychology; and 2) coaching outside the public school system (K-12), e.g., sport management/leadership; coaching professional athletes, coaching youth-sport athletes, and coaching in sport academies.

Requirements

Core Courses

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

BIOL 208 Human Anatomy (4)

Prerequisites: GE Foundation requirements.

KIN 300 Biomechanics of Human Movement (3)

Prerequisites: BIOL 208 or equivalent.

KIN 301 Exercise Physiology (3)

Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with a grade of "C" or better or consent of instructor.

KIN 312 Motor Control and Learning (3)

Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.

Lower Division:

NUTR 132 Introductory Nutrition (3)

Prerequisites/Corequisites: One Foundation course.

KIN 263 Techniques of Physical Fitness (2)

Prerequisites: None.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

STAT 108 Statistics for Everyday Life (3)

Prerequisites: None

Take three activity units selected from the following:

KIN 100A, 102A, 104A, 106A, 107A, 108A, 110A, 112A, 114A, 114B, 114C, 121A, 124A, 125A, 125B, 126A, 127A, 142, 145A, 146A, 148A, 149A, 151A, 152A, 161A, 162A, 165A, 166, 167A, 169A, 172A, 172B, 172C, 183A, 185, 189, 242, 243A, 243C, 244, 245, 246A, 247A, 250, 253, 255, 257, 264, 265, 266, 267, 268.

Upper Division:

KIN 332I Sociocultural Dimensions of Sport/Human Movement (3)

Prerequisites: BIOL 207, 208; PSY 100.

KIN 335 Historical and Cultural Foundations of Sport and Kinesiology in America (3)

Prerequisites: Upper division standing.

KIN 338I Women in Sport (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

KIN 339I Psychology of Sport Behavior and Athletic Performance (3)

Prerequisites: GE Foundation requirements, PSY 100, and upper-division standing.

KIN 472 Applied Sport and Exercise Psychology (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

KIN 475 Psychology of Coaching (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

KIN 478 Psychological Aspects of Exercise & Fitness (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

PSY 356 Personality (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

Concentration in Sport Psychology

Elective Courses:

Select 15 units (minimum 3 units from KIN and 9 units from PSY). At least 7 units must be upper division) from the following courses:

ANTH 353, 412I, H SC 427; KIN 156, 210, 315, 489B, 497; PSY 220, 241, 301, 332, 333, 336, 351, 370, 373, 378, 453, 475.

Concentration in Leadership

Elective Courses:

Select 15 units (Minimum 3 units from KIN. At least 7 units must be upper division) from the following courses:
ANTH 353, 412I; CBA 400I; COMM 306, 335, 411; H SC 427; KIN 156, 200, 210, 489B, 497; REC 321, 322, 324, 340I, 427; PSY 351, 453.

A fieldwork, field experience, or internship requires current certification in First Aid (American Red Cross: Community First Aid & Safety or Emergency Response or Workplace Training: Standard First Aid or equivalent) and Cardiopulmonary Resuscitation (American Red Cross: Adult CPR or Adult, Infant & Child CPR or CPR for the Professional Rescuer; American Heart Association: Adult CPR or Adult, Infant & Child CPR or ACLS Provider or equivalent) prior to enrollment.

This degree option has been deemed "similar" to the Transfer Model Curriculum for Kinesiology under the Student Transfer Agreement Reform Act (SB 1440-Padilla). Students who complete an approved A.A.-T or A.S.-T degree in Kinesiology at a California Community College can meet B.S. in Kinesiology: Option in Sport Psychology and Leadership (KPE_BS04) requirements with no more than 60 additional units. Contact a Kinesiology faculty advisor for assistance in program planning.

Bachelor of Science in Athletic Training (120 units)

The Department of Kinesiology offers the Bachelor of Science in Athletic Training degree through the Athletic Training Education Program (ATEP). ATEP is nationally accredited by the Commission on the Accreditation of Athletic Training Education (CAATE).

Athletic training is practiced by athletic trainers, health care professionals who collaborate with physicians to optimize activity and participation of patients and clients. Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities. Students who want to become certified athletic trainers must earn a degree from an accredited athletic training curriculum. For additional information please refer to the following website: <http://www.nata.org/athletic-training>

The ATEP is designed for formal instruction in areas such as injury/illness prevention, first aid and emergency care, assessment of injury/illness, human anatomy and physiology, therapeutic intervention, and nutrition. Classroom learning is enhanced through clinical education experiences. Upon successful completion of all the ATEP requirements and Program Director approval, students are eligible to take the Board of Certification (BOC) examination to become a certified athletic trainer (ATC). Entry level careers in athletic training include professional sports, colleges & universities, secondary schools, and emerging settings such as hospital & clinical, industrial/occupational, military, performing arts, physician extender, and public safety.

Admission Under Impaction

The Bachelor of Science in Athletic Training is an impacted major and requires a supplemental program application in addition to the CSULB admission application.

Admission to CSULB does not guarantee admission into the Athletic Training major.

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Athletic Training Education Program Website

Refer to the following website for the most current ATEP information, supplemental application packet, and resources: <http://www.csulb.edu/colleges/chhs/departments/kin/athletic-training/index.html>

Requirements

Core:

- BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.
- BIOL 208 Human Anatomy (4)
Prerequisites: GE Foundation requirements.
- KIN 300 Biomechanics of Human Movement (3)
Prerequisites: BIOL 208 or equivalent.
- KIN 301 Exercise Physiology (3)
Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with a grade of "C" or better or consent of instructor.
- KIN 312 Motor Control and Learning (3)
Prerequisites: For KIN majors: BIOL 207, 208; PSY 100.
For PSY Neuroscience majors: BIOL 208, 342; PSY 100.

Lower Division:

Take all of the following courses:

- ATEP 207 Prevention and Care of Athletic Injuries (3)
Prerequisites: KIN 210 or equivalent.
- KIN 263 Techniques in Physical Fitness (2)
Prerequisites: None.
- NUTR 132 Introductory Nutrition (3)
Prerequisites/Corequisites: One Foundation course.
- PHYS 100A General Physics (4)
Prerequisites: MATH 109 or 113 or 117 or 119A or 120 or 122.
- PSY 100 General Psychology (3)
Prerequisites/Corequisites: GE A1 requirement.

Take one of the following courses:

- CHEM 100 Chemistry and Today's World (4)
Prerequisites: One GE Foundation course (GE categories A1, A2, A3 or B2).
- CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination (credit in CHEM 191 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended.
- CHEM 140 General, Organic, and Biochemistry (5)
Prerequisites: A GE math course (may be taken concurrently); high school chemistry or equivalent.

Take one of the following courses:

- BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.
- KIN 483 Statistics in Human Movement Science (3)
Prerequisites: KIN 300, 301, 312.
- PSY 210 Introductory Statistics (4)
Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.
- STAT 108 Statistics for Everyday Life (3)
Prerequisites: None.

Upper Division:

Take all of the following courses:

- ATEP 304 Clinical Aspects of Athletic Training (3)
Prerequisites: BIOL 207, 208; ATEP 207.
- ATEP 306 Medical Aspects of Athletic Training (3)
Prerequisites: BIOL 207, 208; ATEP 207.
- ATEP 308A Athletic Training Evaluation I (3)
Prerequisites: ATEP 207, BIOL 208.
- ATEP 308B Athletic Training Evaluation II (3)
Prerequisites: ATEP 308A.
- ATEP 309 Developmental and Therapeutic Exercise (3)
Prerequisites: KIN 300, 301 or consent of instructor.
- ATEP 310 Therapeutic Approaches in Athletic Training (3)
Prerequisites: ATEP 308A or 309 or consent of instructor.
- ATEP 407 Management Strategies in Athletic Training (3)
Prerequisites: Senior standing or consent of instructor.
- ATEP 490A Clinical Practicum in Athletic Training (2)
Prerequisites: Consent of instructor and Grade of "B" or better in ATEP 207; satisfactory completion of CSULB ATEP Physical Exam Form and satisfactory completion of CSULB ATEP Technical Standards Form.
- ATEP 490B Clinical Practicum in Athletic Training (2)
Prerequisites: Consent of instructor and successful completion of ATEP 490A; satisfactory completion of CSULB ATEP Physical Exam Form and satisfactory completion of CSULB ATEP Technical Standards Form.
- ATEP 490C Clinical Practicum in Athletic Training (2)
Prerequisites: Consent of instructor and successful completion of ATEP 490B.
- ATEP 490D Clinical Practicum in Athletic Training (2)
Prerequisites: Consent of instructor and successful completion of ATEP 490C.
- H SC 427 Drugs and Health (3)
Prerequisites: Upper division standing.
- KIN 315 Motor Development (3)
Prerequisites: BIOL 207, 208; PSY 100 or equivalent.
- KIN 339I Psychology of Sport Behavior and Athletic Performance (3)
Prerequisites: GE Foundation requirements, PSY 100 and upper division standing.
- KIN 368 Resistance Training for Fitness (3)
Prerequisites: KIN 300 and 301.

Take one of the following courses:

- KIN 332I Sociocultural Dimensions of Sport/Human Movement (3)
Prerequisites: BIOL 207, 208; PSY 100.
- KIN 335 Historical and Cultural Foundations of Sport and Kinesiology in America (3)
Prerequisites: Upper division standing.

Certificate Programs

The Department of Kinesiology offers two different certificate programs each of which is related to a special emphasis provided in the curriculum. All certificate programs are open to students enrolled in the University who meet general admission requirements as follows:

1. Completion of 30 hours of course work;
2. A minimum 2.75 GPA in all completed course work;
3. Admission application and approval by a faculty committee in the certificate program selected.

Certificate in Wilderness Studies

Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

1. Wilderness First Responder (WFR) Certification (80 hours)
2. Resume of Outdoor Experiences
3. Coursework (27-29 units):

Take all of the following:

- BIOL 100 Biology of the Human Environment (3)
Prerequisites/Corequisites: One GE Foundation course.
- KIN 242 Backpacking (2)
Prerequisites: None.
- KIN 244 Kayaking (2)
Prerequisites: None.
- KIN 246A Mountaineering (2)
Prerequisites: None.
- KIN 247A Techniques of Rockclimbing (2)
Prerequisites: None.
- KIN 448 Wilderness Studies: Leadership Practicum (3)
Prerequisites: None.
- KIN 489K Field Work in Physical Activity Settings - Fieldwork in Wilderness Studies (1-3)
Prerequisites: Completion of Kinesiology course requirements for the major option in which field work is taken. KIN 242, 244, 246 or 247, 243C or 245. Completion or corequisite of KIN 448, certification in CPR and First Aid, and consent of instructor.
- REC 427 Legal Aspects of Leisure Services (3)
Prerequisites: Upper division standing.

Select three of the following:

- KIN 243A, 243C, 245; REC 430

Graduate Programs

Two degree programs are available to the student: Master of Arts degree in Kinesiology with five Options and Master of Science degree in Kinesiology with four Options. The student may select the thesis/project track or the comprehensive examination track. The student who chooses the thesis/project track is required to complete a thesis or a project. The minimum unit requirement for the MA degree major program is 30 units for thesis/project students and 36 units for comprehensive examination students. The minimum unit requirement for the MS degree major program is 34 units for thesis/project students and 39 units for comprehensive examination students.

Admission Criteria

1. A bachelor's degree from an accredited institution with a major in Kinesiology/Physical Education or the equivalent;
2. If a prospective graduate student has a baccalaureate degree in a field other than Kinesiology or Physical Education, he/she may be required to take prerequisite or foundational upper-division undergraduate coursework in Kinesiology. Students must consult with the Associate Chair for Graduate Studies and/or major advisor before enrolling in foundational courses. The courses, which vary depending on the student's academic background and Option, may be taken at CSULB or another college/university. All foundational coursework must be completed prior to Advancement to Candidacy.

3. An overall undergraduate GPA of 2.5 or better and an upper division Kinesiology/Physical Education major GPA of 2.75 or better;
4. A minimum cumulative score of 150 on the verbal, 141 on the quantitative and 3.5 on the analytical writing sections of the Graduate Record Examination.

Advancement to Candidacy

1. Completion of the general University requirements for advancement to candidacy;
2. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
3. A graduate program must have approval of the student's advisor, Department Associate Chair for Graduate Studies, and Associate Dean of Graduate Students, Research, and Faculty Affairs for the College of Health and Human Services.

Master of Arts in Kinesiology

Five options are under the Master of Arts degree in Kinesiology and are described below. The core courses for thesis students are KIN 696 and 698. The core course for comprehensive examination students is KIN 696.

Option in Adapted Physical Education

This option is designed to provide advanced preparation in adapted physical activity and the study of individuals with disabilities across the lifespan (preschool to adult).

Requirements

1. Take the following course:
 - KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.
2. Minimum of 12 units, take the following:
 - EDSP 577, 578; KIN 537, 638, 697
3. KIN 698 (4 units) for thesis/project students plus a minimum of 17 elective units;
4. Comprehensive exam students complete a minimum of 21 elective units.

Option in Coaching and Student-Athlete Development

Requirements

1. Take the following courses:
 - KIN 512 Legal and Ethical Issues in Sport (3)
Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program; or consent of instructor.
 - KIN 577 Sport in U.S. Culture (3)
Prerequisites: KIN 332I or equivalent.
 - KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.
2. For Student-Athlete Development students:
 - KIN 523 Theory and Practice of College Teaching in Kinesiology (3)
Prerequisites: Graduate standing.
3. For Coaching students:
 - KIN 575 Psychology of Coaching (3)
Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

4. Student-Athlete Development Students select five from the following list of elective courses:

KIN 572, 573, 575, 578, 593A, 597 or 697, 633; KIN/COUN 539; COUN 515.

5. Coaching students select five from the following list of elective courses:

KIN 523, 540, 551, 560, 562, 571, 572, 573, 593A, 593B, 597 or 697, 630, 633, KIN/COUN 539.

6. Thesis/Project students complete the following course:

KIN 698 Thesis/Project (4)

Prerequisites: KIN 590, 696, advancement to candidacy.

7. Comprehensive exam students complete a minimum of 9 additional elective units from #4 or 5 above that do not duplicate a previous selection.

Option in Pedagogical Studies

This option is offered only through College of Continuing and Professional Education at a higher tuition rate.

Instruction is presented in an accelerated cohort program format over 24 months.

Requirements

1. Comprehensive exam students

Required courses:

KIN 524 Analysis of Teaching in Physical Education (3)
Prerequisites: None.

KIN 525 Instructional Design in Physical Education (3)
Prerequisites: Undergraduate major in physical education, EDST 300.

KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.

Take five of the following courses:

KIN 522, 526, 528, 537, 575, 580, 596

Take 12 elective units (36 units total)

2. Thesis/Project students

Required courses:

KIN 524 Analysis of Teaching in Physical Education (3)
Prerequisites: None.

KIN 525 Instructional Design in Physical Education (3)
Prerequisites: Undergraduate major in physical education, EDST 300.

KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.

KIN 698 Thesis/Project (4)

Prerequisites: KIN 590, 696, advancement to candidacy.

Take three of the following courses:

KIN 522, 526, 528, 537, 575, 580, 596

Take 8 elective units (30 units total)

Option in Sport Management

This option is offered only through College of Continuing and Professional Studies at a higher tuition rate. Instruction is presented in an accelerated cohort program format over 18 months.

Requirements

Take all the following courses:

KIN 511 Sports Marketing, Development and Fund Raising (3)

Prerequisites: Graduate standing and a Baccalaureate Degree in Kinesiology/Physical Education or related field and admission to the Kinesiology Graduate Sports Management Program.

KIN 512 Legal and Ethical Issues in Sport (3)
Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program; or consent of instructor.

KIN 513 Personnel and Facility Management in Athletics (3)
Prerequisites: Graduate standing admission in to the Kinesiology Graduate Sport Management Program.

KIN 514 Sport Finance (3)
Prerequisites: Graduate standing; admission in to the Kinesiology Graduate Sport Management Program.

KIN 521 Foundations of Sport Management (3)
Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program.

KIN 577 Sport in U.S. Culture (3)
Prerequisites: KIN 332I or equivalent.

KIN 591 Field Studies in Sport Event Management (3)
Prerequisites: Graduate standing; admission to the Kinesiology Graduate Sports Management Program.

KIN 592A Sports Management Internship (6)
Prerequisites: Graduate standing; admission to the Kinesiology Graduate Sports Management Program.

KIN 694 Capstone in Kinesiology (3)
Prerequisite: KIN 696 and admission into a Kinesiology graduate program.

KIN 695 Seminar in Professional Literature (3)
Prerequisites: KIN 590, 696.

KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.

Option in Individualized Studies

This option is designed to provide the student with curriculum activities that combine one or more option areas into a program of study. This option is developed by the student with the advisement of a graduate faculty member and/or the Associate Chair for Graduate Studies. A statement of rationale for the proposal must accompany the program of study.

Requirements

1. Take the following course:
KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.
2. Minimum of 15 units from 500 and/or 600 level coursework in KIN;
3. Thesis/Project students complete a minimum of 8 elective units (individualized) and the following course:
KIN 698 Thesis/Project (4)
Prerequisites: KIN 590, 696, advancement to candidacy.
4. Comprehensive exam students complete a minimum of 15 elective units.

Master of Science in Kinesiology

Four options are under the Master of Science degree in Kinesiology and are described below. The core courses for thesis/project students are KIN 696 and 698. The core course for comprehensive examination students is KIN 696.

Option in Exercise Science

Requirements

1. Take the following courses:
KIN 540 Biomechanical Factors in Human Movement (3)
Prerequisites: KIN 300 or equivalent.

KIN 551 Advanced Exercise Physiology (3)
Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent.

KIN 530 Neuromotor Control (3)
Prerequisites: Graduate standing, KIN 312 or equivalent.

KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.

2. Elective Courses: Select six of the following courses:
KIN 541, 552, 553, 562, 565, 566, 568, 594 or 595, 630, or 697 (18 units);
3. Thesis/Project students complete the following course:
KIN 698 Thesis/Project (4)
Prerequisites: KIN 590, 696, advancement to candidacy.
4. 9 units of electives from within or outside of the department offerings selected from appropriate areas of interest in consultation with advisor for comprehensive examination students.

Option in Sport and Exercise Psychology

Requirements

1. Take the following courses:
KIN 512 Legal and Ethical Issues in Sport (3)
Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program; or consent of instructor.
KIN 572 Applied Sport Psychology (3)
Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.
KIN 577 Sport in U.S. Culture (3)
Prerequisites: KIN 332I or equivalent.
KIN 578 Psychological Aspects of Exercise and Fitness (3)
Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.
KIN 633 Seminar in Sport Psychology (3)
Prerequisites: KIN 339I or consent of instructor.
KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.
2. Two of the following courses:
KIN 523, 541, 551, 571, 573, 575, 597 or 697, 630; PSY 536, 553, 575, 633, 634, 637, 678;
3. Thesis/Project students complete a minimum of 5 units from #2 above that do not duplicate a previous selection and the following course:
KIN 698 Thesis/Project (4)
Prerequisites: KIN 590, 696, advancement to candidacy.
4. Comprehensive exam students complete a minimum of 15 elective units from #2 above that do not duplicate a previous selection.

Option in Sports Medicine and Injury Studies

Requirements

1. Take the following courses:
KIN 540 Biomechanical Factors in Human Movement (3)
Prerequisites: KIN 300 or equivalent.
KIN 551 Advanced Exercise Physiology (3)
Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent.

- KIN 560 Health Related Problems in Sport (3)
Prerequisites: KIN 207 and 301 or their equivalents and BIOL 207 and 208 or their equivalents.
- KIN 561 Musculoskeletal Injuries in Sport (3)
Prerequisites: KIN 207 and 300 or their equivalents and BIOL 208 or its equivalents.
- KIN 562 Advanced Strength and Conditioning (3)
Prerequisites: KIN 300, 301.
- KIN 633 Seminar in Sport Psychology (3)
Prerequisites: KIN 339I or consent of instructor.
- KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.
- KIN 697 Directed Studies (1-3)
Prerequisites: KIN 590, 696, advancement to candidacy.

2. Thesis/Project students complete a minimum of 6 elective units and the following course:
KIN 698 Thesis/Project (4)
Prerequisites: KIN 590, 696, advancement to candidacy.
3. Comprehensive examination students complete a minimum of 15 elective units.

Option in Exercise Physiology and Nutrition

Requirements

1. Take the following courses:
 - KIN 551 Advanced Exercise Physiology (3)
Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent.
 - KIN 552 Exercise Testing and Training in Health and Disease (3)
Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent.
 - KIN 566 Biochemical and Hormonal Adaptations to Physical Activity (3)
Prerequisites: Upper-division undergraduate or Graduate standing; KIN 301 or equivalent; CHEM 111A or its equivalent. Consent of instructor required for upper-division undergraduate students prior to registration.
- Take one of the following:
- KIN 696 Research Methods and Statistical Analysis (3)
Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.
 - FCS 696 Research Methods (3)
Prerequisites: Upper-division course in statistics.
2. Select three from the following list of courses:
KIN 553, 562, 565, 568 and 594, or 595;
 3. Select three from the following list of courses:
KIN 568; FCS 530A, 530B, 531, 536, 539, 655A;
 4. KIN 698 or FCS 698 (4 units) for thesis/project;
 5. A minimum of 9 elective units approved by the advisor for comprehensive exam students.

Single Subject Teaching Credential in Physical Education

For information, refer to the undergraduate section in this department.

Certificate in Kinesiotherapy

This program is designed to prepare the student to pass the American Kinesiotherapy Association (AKTA) Certification Test. AKTA certification will qualify the therapist

to provide therapeutic physical activities in rehabilitation settings including clinics, hospital, schools, universities, convalescent home and other private and public institutions or private practice. The student will complete the Option in Kinesiotherapy in the undergraduate curriculum plus 19 additional units. Information concerning the certificate can be obtained from the Director of the Kinesiotherapy Program in the Department of Kinesiology.

Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

1. Admissions application and approval by Director
2. Completion of the degree requirements of the Bachelor of Science: Option in Kinesiotherapy with a cumulative GPA of 2.75 or better.
3. Students must maintain a 3.0 GPA to continue and to receive the certificate
4. Course work

KIN 405 Cardiopulmonary Aspects of Health-Related Exercise Programs (4)
Prerequisites: KIN 210 or current First Aid and CPR certificates, KIN 301.

KIN 488 Clinical Basis of Kinesiotherapy (3)
Prerequisites: Completion of Bachelor's degree in Kinesiology, Physical Therapy, Exercise Physiology, or Kinesiotherapy and admission into the Kinesiotherapy Certificate Program and successful completion of a course(s) in pathological and neurological foundations of rehabilitation or approval of the Director of the Kinesiotherapy Certificate Program.

KIN 489F Fieldwork in Kinesiotherapy
Prerequisite: Completion of Kinesiology course requirements for the major Option in which field work is taken.

KIN 588L Kinesiotherapy Clinical Training I Lab (6)
Corequisites: KIN 588.

KIN 589L Kinesiotherapy Clinical Training II (3)
Corequisites: KIN 589.

*Students planning to enroll in Kinesiotherapy Option, fieldwork and internship courses are required to attain current certification in First Aid and Cardiopulmonary Resuscitation (CPR) prior to enrollment by completing the American Red Cross Course: CPR/AED Certification for the Healthcare Provider & the Professional Rescuer or the American Heart Association Course: BLS for Healthcare Providers

Kinesiology Courses (KIN)

ACTIVITY COURSES

100-198. Physical Education Activity (1)

Broad range of physical education activities designed to provide opportunities to meet health, physical and recreational needs and interests.

Maximum of 8 units may be applied toward University graduation requirement. Students assume responsibility for satisfactory health status appropriate for class activity. May be offered at beginning (I), intermediate (II), and advanced (III) levels. All classes are co-educational, students may enroll in activity courses offered by Department of Kinesiology. Classes offered within areas are:

Individual/Dual Activities (1)

100A. Archery. Course fee may be required.

100B. Intermediate Archery

Prerequisites: KIN 100A or consent of instructor.

- 102A. Badminton
- 104A. Bowling. Course fee may be required.
- 104B. Advanced Bowling
Prerequisite: KIN 104A or consent of instructor.
- 108A. Golf
- 112A. Racquetball
- 114A,B,C. Tennis
- 145A. Gymnastics
- 152A. Yoga

Combative Activities (1)

- 106A. Fencing-Foil
- 107A. Fencing-Sabre
- 109A. Fitness Walking (1)
- 110A. Triathlon Fitness (1)
- 148A. Karate
- 149A. Self Defense

Aquatics (1)

- 121A. Sailing. Course fee may be required.
- 124A. Surfing
- 125A,B. Swimming
- 126A. Swimming Conditioning
- 127A. Aqua Aerobics (1)

Fitness Activities (1)

- 142. Group Exercise: Cardio
- 146A. Jogging
- 151A. Weight Training and Conditioning
- 152B. Intermediate Yoga
Prerequisite: KIN 152A or consent of instructor.

Team Activities

- 161A. Basketball
- 162A. Beach Volleyball
- 165A. Flag Football
- 166. Rugby
- 167A. Soccer
- 168A. Ultimate Frisbee (1)
- 169A. Softball
- 172A,B,C. Volleyball

Recreational Dance

- 183A. Recreational Dance Workshop
- 183B. Recreational Dance Workshop II
Prerequisites: KIN 183A, 185, or consent of instructor.
- 184. Formation Dancing
Prerequisite: KIN 183B or consent of instructor.
- 188. Salsa
- 185. Social Dance

198. Special Activities

- F. Group Exercise: Dance Conditioning (1-3)
- G. Tai Chi Chuan (1)
- H. Chinese Sword Combat for Sport (1)
- J. Mat Pilates Level I (1)
- K. Kung Fu (1)
- L. Group Exercise: Stretch and Relaxation (1)

* See Physical Education professional courses for additional activities open to non-majors.

PROFESSIONAL COURSES

Kinesiology majors and minors will be given priority enrollment in classes required for the major. Selected courses are available to the general student body to receive credit toward general education requirements.

LOWER DIVISION

143. Individual Conditioning (1)

Designed to introduce the student to the activities, equipment, and techniques used in the development of conditioning programs tailored to one's individual needs.

May be repeated to a maximum of 8 units.

156. Sports Appreciation (3)

Prerequisite/Corequisite: GE Foundation requirement.

Introduction to the study of sport as a social institution in American society.

157. Fitness for Living (3)

Prerequisite/Corequisite: GE Foundation requirement.

Analysis and implementation of the concepts related to exercise for health and fitness.

(Lecture 2 hours, Activity 2 hours.)

189. Country Dancing (1)

Instruction and practice in various country dance forms including line dancing, two-step, waltz, contra dancing, round dancing, and mixers. Useful for lifelong fitness, socialization, and recreation.

May be repeated to a maximum of 8 units.

200. Psychological Skills for Peak Performance in Sport (3)

Introduction of psychological strategies and skills designed to help individuals achieve optimal performance. Skills such as imagery, goal setting, self-talk, attentional focusing, arousal regulation, and coping are presented.

(Lecture, 3 hours)

210. Advanced Emergency Care (3)

Theory and practice of first aid for the injured. Successful completion of course requirements leads to the American National Red Cross advanced first aid and personal safety and community CPR certificate. Course fee may be required.

217. Introduction to Kinesiotherapy (2)

Introduction to profession of Kinesiotherapy intended to provide student with information regarding history of the profession, its educational expectations, standards and scope of practice and a survey of basic skills needed to enter this field of study.

Letter grade only (A-F).

218. Introduction to the Fitness Industry (2)

Prerequisites: Open to Fitness Option students in Kinesiology only or by consent of instructor.

An introduction to the Fitness profession which will provide the student with information regarding the history of the fitness industry, its educational expectations, standards and scope of practice basic skills needed to enter the field, and career options.

Letter grade only (A-F).

237. Techniques and Analysis of Aquatic Skills (2)

Prerequisites: KIN 125A or 125B or consent of instructor, American Red Cross Community First Aid and CPR certifications or equivalent. Open to Kinesiology majors in the Adapted, Elementary, and Secondary Physical Education options. To maintain enrollment, students must pass the swimming proficiency examination that will be administered the first week of instruction.

Instruction and techniques in individual aquatic skills, hydrodynamic and movement principles, and an exposure to a variety of learning procedures applicable to the development of aquatic skills.

Letter grade only (A-F). (Lecture 1 hour, Laboratory 3 hours.)

Kinesiology Courses (KIN)

242. Backpacking (2)

An experiential examination and analysis in the judgment, knowledge, equipment and skills necessary to safe wilderness travel and living.

2-3 day field experience required. Course fee may be required.

243A. Winter Mountain Expedition (3)

Introduction to winter mountaineering skills; study of the mountain environment.

(Activity 6 hours). (Field experience required). Course fee may be required.

243C. Desert Expedition (3)

Introduction to the skills, attitudes and knowledge required for safe use and enjoyment of desert areas. An interdisciplinary introduction to the meaning and significance of the desert. Trip planning, map use, methods of safe travel.

Course includes field trip. Course fee may be required. (Activity 6 hours.)

244. Kayaking (2)

An experiential examination and analysis of the judgment, knowledge, equipment and skill development necessary to safe flat and whitewater kayaking.

2-3 day field experience required. Course fee may be required. (Activity 4 hours.)

245. Wilderness Water Expedition (3)

Introduction to the skills, attitudes and knowledge required for safe use of varied types of wilderness waters. The skills and techniques of boat handling and trip planning. An interdisciplinary introduction to the study of waterways.

(Activity 6 hours.) 2-3 day field experience required. Course fee may be required.

246A. Mountaineering (2)

An experiential examination and analysis in the judgement, knowledge, equipment and skills necessary to safe mountaineering.

Course includes field trip. Letter grade only (A-F). (Activity 4 hours.) Course fee may be required.

247A. Techniques of Rockclimbing (2)

Introduction to the basic skills, judgment and safety for technical rockclimbing. The skills and techniques of top roping, belaying rappels and self rescue.

Includes a field trip. Course fee may be required. (Activity 4 hours.)

250. Techniques of Basketball (1)

Instruction in individual and team skills and techniques utilized in the sport of basketball for successful performance.

Open to Kinesiology majors and minors only. (Activity 2 hours.)

251. Techniques of Flag Football (1)

Open to Kinesiology majors and minors only.

Instruction and practice in catching, throwing, tackling, running. Comprehensive teaching of skills and techniques in Flag Football.

Letter grade only (A-F).

253. Techniques of Soccer (1)

Instruction in individual and team skills and techniques utilized in the sport of soccer for successful performance.

Open to Kinesiology majors and minors only. (Activity 2 hours.)

255. Techniques of Softball (1)

Instruction and practice in catching, throwing, hitting, sliding, base running, and bunting. Comprehensive teaching of skills and techniques in softball.

Open to Kinesiology majors and minors only. (Activity 2 hours.)

257. Techniques of Volleyball (1)

Instruction in individual and team techniques utilized in the sport of volleyball.

Open to Kinesiology majors and minors only. (Activity 2 hours.)

261. Techniques and Analysis of Fundamental Rhythms (2)

Instruction, practice, teaching, and analysis of floor patterns and rhythm variations of basic social and folk dances and their appropriateness for successful teaching of various age groups and skill levels in the public schools.

Open to Kinesiology Pedagogy Majors only. Letter grade only (A-F). (Activity 4 hours.)

263. Techniques of Physical Fitness (2)

Consists of instruction, practice, and evaluation in physical fitness. Cardiorespiratory, muscular strength and endurance, and flexibility activities will be emphasized within the course.

Open to Kinesiology majors only or consent of instructor. Not open for credit to Kinesiology majors in the pedagogy options. Letter grade only (A-F). (Discussion 1 hour, Laboratory 3 hours.)

264. Techniques of Golf (1)

Instruction and techniques in individual skills and strategies for successful performance in golf.

Open to Kinesiology majors and minors only. (Activity 2 hours.)

265. Techniques of Gymnastics (1)

Open to Kinesiology majors and minors only.

Techniques and instruction of the principles of movement in gymnastics as well as organizational strategies utilized in presenting gymnastics in Physical Education classes.

Letter grade only (A-F).

266. Techniques of Badminton (1)

Instruction and techniques in the skills and strategies for successful performance in badminton.

Open to Kinesiology majors and minors only. (Activity 2 hours.)

267. Techniques of Tennis (1)

Instruction, techniques and analysis in the concepts of teaching, coaching, and playing tennis.

Open to Kinesiology majors and minors only. (Activity 2 hours.)

268. Techniques of Track and Field (1)

Instruction, techniques and analysis in the concepts of teaching, coaching, and performance in track and field.

Open to Kinesiology majors and minors only. Letter grade only (A-F) (Activity 2 hours.)

270. Professional Practices in Public School Physical Education (3)

Prerequisite: Students must meet the University GE writing course requirement. Corequisite: Community CPR/First Aid/Safety or current certification.

Provides an overview of current professional practices in public school physical education. Students plan, teach, and self-evaluate lessons. Required introductory course for Adapted, Elementary and Secondary Pedagogy options after 30 units of college course work.

Open to Kinesiology majors in the Adapted PE Option and K-12 PE Option. Letter grade only (A-F). (Lecture 2 hours, Lab 2 hours.)

UPPER DIVISION

300. Biomechanics of Human Movement (3)

Prerequisites: BIOL 208 or equivalent.

Anatomical structure and function, and mechanical principles relating to human motion, including analytical application.

(Lecture 2 hours, laboratory 3 hours.)

301. Exercise Physiology (3)

Prerequisites: BIOL 207 or equivalent 4-unit Human Physiology course with 3-hour lecture and 3-hour laboratory with grade of "C" or better or consent of instructor.

Basic concepts of the physiology of muscular exercise with emphasis on the responses and adaptations of the circulatory system, the respiratory system, and skeletal muscles to the physical stress of acute and chronic exercise.

(Lecture 2 hours, Laboratory 3 hours). Course fee may be required.

312. Motor Control and Learning (3)

Prerequisites: For KIN majors: BIOL 207, 208; PSY 100. For PSY Neuroscience majors: BIOL 208, 342; PSY 100.

Basic concepts of the neuro-motor and psychological contributions in the control and acquisition of skilled performance.

Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours)

315. Motor Development (3)

Prerequisites: BIOL 207, 208; PSY 100 or equivalent.

Developmental perspective of factors contributing to acquisition of motor control from infancy through adolescence.

(Lecture 2 hours, Activity 2 hours)

320. Adapted Physical Education (3)

Prerequisites: BIOL 208.

Kinesiology majors learn to teach physical activity to persons with disabilities. Discussed are the etiology characteristics and best teaching practices (i.e., inclusion) for persons with mental, learning physical, emotional, sensory, health, and/or multiple disabilities.

(Lecture 2 hours, Activity 2 hours).

332I. Sociocultural Dimensions of Sport and Human Movement (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Socio-cultural and psychological correlations to human movement.

335. Historical and Cultural Foundations of Sport and Kinesiology in America (3)

Prerequisites: Upper division standing.

Survey of the history of sport and kinesiology. Historical identification of the cultural trends and functions of sport and kinesiology in America.

Open to Kinesiology Majors only.

338I. Women in Sport (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Survey of women's historical and contemporary involvement with sport. The social, cultural and developmental implications of sports participation for women.

339I. Psychology of Sport Behavior and Athletic Performance (3)

Prerequisites: GE Foundation requirements, PSY 100, and upper-division standing.

Psychological dimensions of attitudes, behaviors, and performance in sport and exercise environments.

Same course as PSY 339I. Not open for credit to students with credit in PSY 339I.

343. Techniques and Analysis of Physical Fitness and Activity (2)

Prerequisite: KIN 270.

Knowledge needed to plan and implement physical activity programs in public school. Analysis of development, maintenance, implementation, and self-assessment of physical fitness. Designed to prepare for FITNESSGRAM assessments and Department's Physical Fitness Proficiency Examination.

Open to Kinesiology/Physical Education Pedagogy Majors and Minors only. Letter grade only (A-F). (Lecture 1 hour, Activity 3 hours).

354. Technology in Physical Education (3)

Overview of education technology applications, specifically wordprocessing, spreadsheet, video technology, web-based information, internet related software and technologies, pdf documents, personal digital assistants (PDAs) and use of commercially produced education software.

Meets computer technology requirement for California Single Subject Teaching Credential. Letter grade only (A-F). (Lecture 2 hours, laboratory 2 hours).

363. Theory and Analysis of Group Fitness Instruction (2)

Prerequisite: KIN 263. Open to Fitness Option students in Kinesiology only, or consent of instructor.

Learn to become effective group exercise leaders by understanding responsibilities of fitness leaders, principles of fitness, and leadership skill. Techniques for various group exercise activities will be taught.

Letter grade only (A-F). (Discussion 1 hour, Activity 2 hours.)

364. Fitness for Adult Populations with Unique Health Considerations (3)

Prerequisites: KIN 301. Open to Fitness Option students in Kinesiology only, or consent of instructor.

Scientific information regarding exercise testing and exercise prescription for adult special populations. Topics include pregnancy, diabetes, arthritis, stroke, respiratory disorder, coronary artery disease, hypertension, and obesity.

Letter grade only (A-F).

367. Fitness and the Aging Process (3)

Prerequisites: KIN 301. Open to Fitness, Kinesiotherapy and Exercise Science Option students in Kinesiology only, or consent of instructor.

Provides knowledge in the area of fitness and the older adult. Topics include theories of aging, age-related changes that affect physical capacity, exercise and its impact on the aging process, and physical activity programming for the older adult.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 2 hours.)

368. Resistance Training for Fitness (3)

Prerequisites: KIN 300 and 301. Open to Fitness, Athletic Training and Exercise Science Option students in Kinesiology only, or consent of instructor.

Designed to provide the student with theoretical knowledge and practical skills needed to become a personal trainer. The course covers such topics as the business of personal training, client-trainer relationships, fitness and health assessments and exercise prescription.

Letter grade only (A-F). (Discussion 2 hours, Activity 2 hours.)

370. Movement Theory and Practice of Elementary Physical Education (3)

Prerequisite: KIN 270.

Provides Kinesiology Physical Education Teacher Education (PETE) Option candidates with movement theory and practice in elementary school physical education based upon California Physical Education Framework and Content Standards. Practice includes fieldwork experiences in elementary school physical education.

Designed for Kinesiology majors. (Lecture 2 hours, Activity 2 hours)

380. Principles, Organization and Management of Secondary School Physical Education (3)

Prerequisites: KIN 149, 237, 250, 253, 255, 257, 261, 264, 265, 266, 267, 268, 343, 370 or consent of instructor. Corequisite: EDSS 300P.

Principles, organization and management of activities taught in secondary schools, includes basic organization and management strategies and fieldwork experience in public secondary school physical education.

Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours.)

Kinesiology Courses (KIN)

387. Physical Activities for the Disabled (3)

Prerequisites: KIN 320, 427. Corequisite: KIN 489A.

Adaptation of physical activities, equipment, and facilities for individuals with permanent disabilities affecting motor performance.

(Lecture 2 hours, Activity 2 hours)

388. Program Planning and Instruction in Adapted Physical Education (3)

Prerequisite: KIN 387. Corequisite: KIN 489A.

Emphasis on program planning and the development of teaching skills in Adapted Physical Education.

(Lecture 2 hours, Activity 2 hours)

405. Cardiopulmonary Aspects of Health-Related Exercise Programs (4)

Prerequisites: KIN 210 or current First Aid and CPR certificates, KIN 301. Open to Exercise Science Option students in Kinesiology only, or consent of instructor.

Theory and practical application of physical fitness assessment. Emphasis will be placed on the use of assessments to design and implement basic fitness programs for apparently healthy individuals.

Letter grade only (A-F). (Lecture 3 hours, Laboratory 3 hours)

427./527. Physical and Motor Assessment (3)

Prerequisites: KIN 315 or equivalent and KIN 320 or equivalent; upper-division undergraduate or graduate standing; consent of instructor required for graduate students prior to registration.

The selection, administration, and interpretation of standardized and informal tests used in the physical and motor assessment practices of individuals with disabilities.

Upper-division students register in KIN 427; Graduate students register in KIN 527. Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours)

430. Motor Control Principles and Theory (3)

Prerequisite: KIN 312 or equivalent. Open to Exercise Science Option students in Kinesiology only, or consent of instructor.

Study of the principles, models, and theories of human movement control. Instruction is directed toward understanding the fundamental principles, theoretical propositions, and neuro-kinesiological models, with applications to sport, physical education, human factors, and human performance.

Letter grade only (A-F).

431. Scientific Foundations of Locomotion (3)

Prerequisites: KIN 300, 312. Open to Exercise Science Option students in Kinesiology only, or consent of instructor.

Instruction is directed towards understanding the influence of motor control theories, biomechanical principles, and constraints to human movement on locomotion.

Letter grade only (A-F).

432. Applied Motor Learning (3)

Prerequisites: KIN 300 and 312.

Provides students with an applied perspective of Motor Learning. Motor learning topics addressed include: theory, research, and application. Focuses on requiring students to apply various motor learning concepts into real world environments.

Letter grade only (A-F).

438. Motor Dysfunction and the Exceptional Person (3)

Prerequisites: A basic undergraduate course in Adapted Physical Education or its equivalent.

Recognition, analysis, assessment and remediation of movement problems in a child with minor nervous system dysfunctions.

441./541. Applied Biomechanics: Lifting and Work Capacity (3)

Prerequisites: KIN 300 or equivalent (Trigonometry and PHYS 100A recommended). Open to Exercise Science Option students in Kinesiology only, or consent of instructor.

Study of the mechanical properties of bone, ligament, tendon and skeletal muscle. Development, description, and application of selected biomechanical models to the evaluation of weight-lifting, rehabilitation exercises, and occupational lifting tasks. Critical analysis of methods used to assess strength.

Letter grade only (A-F).

448. Wilderness Studies: Leadership Practicum (3)

Analysis and practice of the leadership and teaching techniques appropriate to the conduct of wilderness adventure programs.

Course fee may be required.

457. Applied Theory of Teaching Team Sports (3)

Prerequisites: KIN 250, 251, 253, 255, 257, 270 or consent of instructor; senior standing.

Comprehensive analysis of the principles of movement, corrections of performance, and organizational strategies utilized in presenting team sports: basketball, flag football, soccer, softball, volleyball, floor hockey, speedball, and team handball.

Letter grade only (A-F). (Lecture 2 hours, activity 2 hours.)

460. Applied Theory and Analysis of Non-Traditional Physical Education Games and Activities (2)

Prerequisites: KIN 370, senior standing.

Organization and management to effectively plan and implement a variety of non-traditional physical education games and activities such as cooperative games, problem solving activities, collaborative learning groups, and outdoor educational experiences.

Letter grade only (A-F). Open to Kinesiology majors and minors only. (Lecture 1 hour, Laboratory 3 hours.)

461. Applied Theory of Teaching Individual and Dual Sports (3)

Prerequisites: KIN 237, 264, 265, 266, 267, 268, 270, or consent of instructor; senior standing.

Comprehensive analysis of the principles of movement and organizational strategies utilized in archery, badminton, golf, paddle tennis, pickleball, racquetball, tennis, swimming, orienteering, and track and field.

Open to Kinesiology majors in the Adapted PE Option and K-12 PE Option. Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours.)

462./562. Advanced Strength and Conditioning (3)

Prerequisites: KIN 300, 301. Open to Exercise Science and Fitness Option students in Kinesiology only, or consent of instructor.

Study of biomechanical and kinesiological factors which are important in understanding the function and proper techniques for execution of a wide variety of standard and advanced weight training exercises. Physiological bases for strength training and adaptations caused by different training regimes are emphasized.

Letter grade only (A-F).

465./565. Clinical Exercise Electrocardiography (3)

Prerequisites: BIOL 207 and KIN 301. Open to Exercise Science and Fitness Option students in Kinesiology only, or consent of instructor.

Study of the physiology and patho-physiology of the electrical activity of the heart. Instruction is directed toward pattern recognition of normal and abnormal resting and exercise electrocardiograms.

466./566. Biochemical and Hormonal Adaptations to Physical Activity (3)

Prerequisites: KIN 301 or equivalent; CHEM 111A or its equivalent. Open to Exercise Science Option students in Kinesiology only, or consent of instructor.

Study of the biochemical and hormonal changes that occur as a result of acute and chronic physical activity. Emphasis will be placed on the application of concepts to the development of exercise

training programs.

Consent of instructor required for upper-division undergraduate students prior to registration. Upper-division undergraduate students register in KIN 466; graduate students register in KIN 566. Letter grade only (A-F). Same course as NUTR 466. Not open for credit to students with credit in NUTR 466.

467. Fundamentals of Personal Training (3)

Prerequisites: KIN 368. Open to Fitness Option students in Kinesiology only, or consent of instructor.

Designed to provide the student with theoretical knowledge and practical skills needed to become a personal trainer. Covers such topics as the business of personal training, client-trainer relationships, fitness and health assessments and exercise prescription.

Letter grade only (A-F). (Discussion 2 hours, Laboratory 3 hours.)

468./568. Nutrition for Exercise and Performance (3)

Prerequisites: NUTR 132, KIN 301 for the KIN Fitness option and the KIN Exercise Science option or BIOL 207 for the Nutrition and Dietetics option.

Explores role nutrients play in exercise and performance enhancement. Topics include evaluation of energy needs during physical activity, examination of weight management practices, assessment of nutritional status, and investigation of contemporary dietary issues related to exercise.

Letter grade only (A-F). Same course as NUTR 468. Not open for credit to students with credit in NUTR 468. Open to Kinesiology undergraduate students in the Fitness and Exercise Science options and to the Nutrition and Dietetics option in Family and Consumer Sciences.

469. Fitness Management (3)

Prerequisite: KIN 363, 368. Open to Fitness Option students in Kinesiology only, or by consent of instructor.

Provides knowledge in the area of management of fitness programs. Topics will include program development, personnel issues, financial and legal considerations, equipment purchasing, and marketing strategies for fitness programs.

Open to Fitness Option students in Kinesiology only, or by consent of instructor. Letter grade only (A-F).

471./571. Technological Applications in Sport and Exercise Science (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Learning and application of advanced computer and technology skills such as biofeedback, video analysis software, advanced audio and video recording, software for presentations and interactive workshops, worldwide communications, and distance learning/consultations.

Letter grade only (A-F). Undergraduates register in KIN 471; graduates register in KIN 571. A written report is required for KIN 571 students.

472./572. Applied Sport Psychology (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Application of psychological skills and interventions to enhance athletic performance.

Letter grade only (A-F). Undergraduates register in KIN 472; graduates register in KIN 572. A written report is required for KIN 572 students.

475./575. Psychology of Coaching (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Current topics of psychological concern and application as related to athletic performance.

Letter grade only (A-F). Undergraduates register in KIN 475; graduates register in KIN 575. A written report is required for KIN 575.

476. Physical Education for the Elementary School Teacher (3)

Prerequisite: Junior standing.

Provides Multiple Subject Credential candidates with knowledge and experiences necessary to teach quality physical education lessons based upon the California Physical Education Framework and Content Standards. Content Includes the FITNESSGRAM Program (state fitness test) and subject integration activities.

(Lecture 2 hours, Activity 2 hours)

477. Measurement and Curriculum in Physical Education (3)

Prerequisite: KIN 343 and KIN 370 or consent of instructor

Course provides students with experiences in content development, program implementation, and evaluation of a physical education program. This service-learning component allows students to teach and critically reflect on subject matter while assisting a population in need.

Letter grade only (A-F). (2 hours lecture discussion, 2 hours lab)

478./578. Psychological Aspects of Exercise and Fitness (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Philosophical, psychological and behavioral concepts of physical activities and health states will be discussed. Professional standards and invention strategies will be covered.

Letter grade only (A-F).

Undergraduates register in KIN 478; graduates register in KIN 578; A written report is required for KIN 578.

483. Statistics in Human Movement Science (3)

Prerequisites: KIN 300, 301, 312.

Evaluation and analysis of measuring devices and resulting data used in Kinesiology. Interpretation of data using appropriate statistical analyses.

(Lecture 2 hours, Activity 2 hours)

485. Neurological and Pathological Foundations for Kinesiotherapy (3)

Prerequisites: BIOL 207, 208; KIN 300, 301, 320, 489F, or consent of instructor.

Survey of neurological control of normal movement and the implications of various medical pathologies for rehabilitation. Emphasis on inflammatory processes, metabolic and vascular disturbances, traumatic injuries, nutritional deficiencies, neoplasms, degenerative conditions and congenital disorders as related to the practice of Kinesiotherapy.

Letter grade only (A-F).

487./587. Supervised Activity Instruction Experience (1-3)

Prerequisite: Upper division or graduate standing and consent of instructor.

Experience in the organization of and methods for the activity component of a course in kinesiology. A written report is required for KIN 587 students.

Undergraduates register in KIN 487; graduates register in KIN 587. May be repeated to a maximum of 4 units. Letter grade only (A-F). Restricted to major students only. Not open for credit to graduate students with credit in KIN 487. (Conference 1 hour, Laboratory 2 hours per unit.)

488./588. Clinical Basis of Kinesiotherapy (3)

Prerequisites: Completion of Bachelor's degree in Kinesiology, Physical Therapy, Exercise Physiology, or Kinesiotherapy and admission into the Kinesiotherapy Certificate Program and successful completion of a course(s) in pathological and neurological foundations of rehabilitation or approval of the Director of the Kinesiotherapy Certificate Program.

The theoretical foundations of clinical practice in Kinesiotherapy.

Letter grade only (A-F).

Kinesiology Courses (KIN)

489. Field Work in Physical Activity Settings (1-3)

Prerequisite: Completion of Kinesiology course requirements for the major Option in which field work is taken.

Supervised practice in working with individuals or small to large groups in public or private agencies and schools.

Credit/No Credit grading only. May be repeated to a maximum of 9 units.

- A. Fieldwork in Adapted Physical Education
- B. Fieldwork in Athletic Coaching
- D. Fieldwork in Fitness

Additional Prerequisites: KIN 467, completion of 200 hours in a corporate fitness setting, 200 hours in a traditional fitness setting, and 100 hours of approved fitness experience. Open to Fitness Option students in Kinesiology only.

- F. Fieldwork in Kinesiotherapy
- G. Fieldwork in Motor Development
- K. Fieldwork in Wilderness Studies

Additional Prerequisites: KIN 242, 244, 246 or 247, 243C or 245. Completion or corequisite of KIN 448, certification in CPR and First Aid, and consent of instructor. Supervised experience and practice working with individuals and groups in public/private agencies and schools involved in wilderness activities. May enroll in 1-3 units of fieldwork. Each unit is equivalent to 40 hours of fieldwork assignment. 120 hours minimum required for 3 units, of which at least 40 hours with CSULB Wilderness Studies Program. Balance of hours with public/private agencies.

494./594. Exercise Science Internship (3)

Prerequisites: Upper-division or graduate standing with a grade of "B" or better in KIN 300 for a biomechanics internship or KIN 301 for an exercise physiology internship or KIN 312 for a motor control and learning internship; consent of instructor required prior to registration.

Provides practical experience in applying exercise science concepts in a fieldwork setting such as cardiac rehabilitation in a medical setting.

Upper-division undergraduate students register in KIN 494; Graduate students register in KIN 594. Letter grade only (A-F). May be repeated to a maximum of 6 units.

495./595. Supervised Laboratory Methods (1-3)

Prerequisites: Upper division or graduate standing and consent of instructor.

Provides experience in the methods of the laboratory component for a Kinesiology course, for example, assisting students with their experiments and laboratory reports.

Undergraduates register in KIN 495; graduates register in KIN 595. A written report is required for KIN 595 students. Letter grade only (A-F). Restricted to Kinesiology major students only. Not open for credit to graduate students with credit in KIN 495. (Conference 1 hour, Laboratory 2 hours per unit.) May be repeated to a maximum of 4 units.

497. Independent Study (1-3)

Prerequisites: Major or minor in physical education, senior standing and consent of Kinesiology Department.

Student will conduct independent library or laboratory research under the supervision of a faculty member and write a report of the investigation.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

499. Selected Topics in Kinesiology (1-3)

Group investigation of topics of current interest in kinesiology or athletics.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

GRADUATE LEVEL

511. Sports Marketing, Development, and Fund Raising (3)

Prerequisites: Graduate standing and a Baccalaureate Degree in Kinesiology/Physical Education or related field and admission to the Kinesiology Graduate Sports Management Program.

Provides students with an overview of sport marketing. It presents basic marketing terminology and discusses the application of marketing concepts to the development and promotion of the business of sport.

Letter grade only (A-F).

512. Legal and Ethical Issues in Sport (3)

Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program; or consent of instructor.

Examines legal and ethical issues associated with sport settings.

Letter grade only (A-F).

513. Personnel and Facility Management in Athletics (3)

Prerequisites: Graduate standing admission into the Kinesiology Graduate Sport Management Program.

Examines the principles and practices associated with managing personnel and facilities in interscholastic, intercollegiate, amateur, international, and professional sport.

Letter grade only (A-F).

514. Sport Finance (3)

Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program.

Discusses financial management principles for use in interscholastic, intercollegiate, amateur, international, and professional sports. Special emphasis is placed on understanding various means by which sport organizations control costs and increase revenue.

Letter grade only (A-F).

521. Foundations of Sport Management (3)

Prerequisites: Graduate standing; admission into the Kinesiology Graduate Sport Management Program.

Introduces students to the business of sport and the functional areas of Sport Management. Discusses the leadership/supervisory philosophies, principles, and practices of managing interscholastic, intercollegiate, amateur, international, and professional sport.

522. Non-Traditional Activities in K-12 Physical Education (3)

Prerequisite: Graduate standing; admission to the Master of Arts Program in Pedagogical Studies.

Plan, implement, and evaluate nontraditional games and activities. Emphasis is on meeting needs of diverse populations, including students with disabilities, problem-solving, assessment, safety and injury prevention, ethical issues, group discussion, analysis of school outdoor educational experiences.

Letter grade only (A-F).

523. Theory and Practice of College Teaching in Kinesiology (3)

Prerequisite: Graduate standing.

Designed to enhance the teaching knowledge and skills of persons who aspire to become or are currently college and university instructors of kinesiology through an examination of the principles and techniques of adult education associated with the discipline.

Letter grade only (A-F).

524. Analysis of Teaching in Physical Education (3)

Analysis of teachers and teaching in physical activity environment; focus on developing observational competencies, analysis of research completed and future research designs.

525. Instructional Design in Physical Education (3)

Prerequisites: Undergraduate major in physical education, EDST 300.

A systems approach to designing instruction for the physical education program.

526. Applied Behavior Analysis in Physical Education (3)

Application of applied behavior analysis principles to physical education (sport) with particular emphasis on single subject research designs and behavior analysis in the physical education setting.

527./427. Physical and Motor Assessment (3)

Prerequisites: KIN 315 or equivalent and KIN 320 or equivalent. Upper-division undergraduate or Graduate standing.

Includes the selection, evaluation, administration and interpretation of various tests used in the physical and motor assessment practices of individuals with disabilities.

Consent of instructor required for graduate students prior to registration. Requirement toward the Adapted Physical Education Specialist Credential. Upper-division students register in KIN 427; Graduate students register in KIN 527. Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours)

528. Promoting Physical Activity and Fitness in K-12 Physical Education (3)

Prerequisite: Graduate standing; admission to the Master of Arts Program in Pedagogical Studies.

Develop physical education program plans that are in compliance with California State Content Standards for promoting physically active lifestyles and healthy physical fitness levels for all children, including those with special needs.

Letter grade only (A-F).

530. Neuromotor Control (3)

Prerequisites: Graduate standing, KIN 312 or equivalent.

Study of the neurological and muscular contributions to the control of human movement with emphasis on application of concepts to sports, physical activity, and human factors. Instruction is directed toward understanding the fundamental principles of motor control.

Letter grade only (A-F).

537. Physical Education for Special Populations (3)

Foundations in the organization and conduct of Adapted Physical Education.

539. Seminar in Student Athlete Development (3)

Prerequisite: Graduate standing.

Examination of student-athlete administration and advising in higher education: history, principles, techniques, and professional standards for student-athlete programs and services.

Letter grade only (A-F). Same course as COUN 539. Not open for credit to students with credit in COUN 539.

540. Biomechanical Factors in Human Movement (3)

Prerequisite: KIN 300 or equivalent.

Study of film, video and force plate data collection for human movement evaluation, including data smoothing techniques. Quantitative kinematic and kinetic analysis examples including gait, jumping and lifting activities. Comparison of 2D versus 3D analyses of movement activities.

Letter grade only (A-F).

541./441. Applied Biomechanics: Lifting and Work Capacity (3)

Prerequisite: KIN 300 or equivalent (Trigonometry and PHYS 100A recommended).

Study of the mechanical properties of bone, ligament, tendon and skeletal muscle. Development, description, and application of selected biomechanical models to the evaluation of weight-lifting,

rehabilitation exercises, and occupational lifting tasks. Critical analysis of methods used to assess strength.

Letter grade only (A-F).

551. Advanced Exercise Physiology (3)

Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent. Advanced concepts in exercise physiology. Letter grade only (A-F).

552. Exercise Testing and Training in Health and Disease (3)

Prerequisites: KIN 301 or equivalent and BIOL 207 or equivalent
Physiological principles of exercise testing and exercise training in healthy individuals and patients with diseases such as coronary artery disease.

Letter grade only (A-F).

553. Environmental Aspects of Human Performance (3)

Prerequisites: Graduate standing; KIN 301 or equivalent with a grade of "C" or better or consent from the instructor.

Study of the physiological responses and adaptations associated with exposure to environmental stressors including heat, cold, microgravity, air pollution, and elevated and reduced atmospheric pressures. Emphasis will be placed upon physical performance and its limitations under various environmental conditions.

Letter grade only (A-F).

560. Health Related Problems in Sport (3)

Prerequisites: KIN 207 and 301 or their equivalents and BIOL 207 and 208 or their equivalents.

Examination of health problems related to engaging in vigorous physical activity.

Letter grade only (A-F).

561. Musculoskeletal Injuries in Sport (3)

Prerequisites: KIN 207 and 300 or their equivalents and BIOL 208 or its equivalent.

An in-depth study of the most prevalent musculoskeletal injuries occurring in sports activities, including mechanisms, tissue responses, and management procedures.

Letter grade only (A-F).

562./462. Advanced Strength and Conditioning (3)

Prerequisites: KIN 300, 301.

Study of biomechanical and kinesiological factors which are important in understanding the function and proper techniques for execution of a wide variety of standard and advanced weight training exercises. Physiological bases for strength training and adaptations caused by different training regimes are emphasized.

Letter grade only (A-F).

565./465. Clinical Exercise Electrocardiography (3)

Prerequisites: BIOL 207, KIN 301, and/or consent of instructor.

Study physiology and patho-physiology of electrical activity of the heart. Instruction directed toward pattern recognition of normal and abnormal resting and exercise electrocardiograms.

566./466. Biochemical and Hormonal Adaptations to Physical Activity (3)

Prerequisites: Upper-division undergraduate or Graduate standing; KIN 301 or equivalent; CHEM 111A or its equivalent. Consent of instructor required for upper-division undergraduate students prior to registration.

Study of biochemical and hormonal changes that occur as a result of acute and chronic physical activity. Emphasis on application of concepts to development of exercise training programs.

Upper-division undergraduate students register in KIN 466; graduate students register in KIN 566. Letter grade only (A-F). Same course as FCS 566. Not open for credit to students with credit in FCS 566.

Kinesiology Courses (KIN)

568./468. Nutrition for Exercise and Performance (3)

Prerequisites: NUTR 132, KIN 301 for the KIN Fitness option and the KIN Exercise Science option or BIOL 207 for the Nutrition and Dietetics option.

Explores the role nutrients play in exercise and performance enhancement. Topics include evaluation of energy needs during physical activity, examination of weight management practices, assessment of nutritional status, and investigation of contemporary dietary issues related to exercise.

Letter grade only (A-F). Same course as FCS 568. Not open for credit to students with credit in FCS 568. Open to all graduate Kinesiology students in the Adapted Physical Education, Coaching and Student Athlete Development, Pedagogical Studies (for K-12 teachers), Sport Management, Individualized Studies, Exercise Science, Exercise Physiology and Nutrition, Sport and Exercise Psychology, and Sports Medicine and Injury Studies options and M.S. students in the Nutritional Science without Dietetic Internship, Nutritional Science with Dietetic Internship, and Food Science emphases and/or consent of instructor.

571./471. Technological Applications in Sport and Exercise Science (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Learning and application of advanced computer and technology skills such as biofeedback, video analysis software, advanced audio and video recording, software for presentations and interactive workshops, worldwide communications, and distance learning/consultations.

Letter grade only (A-F). Graduates register in KIN 571; undergraduates register in KIN 471. A written report is required for KIN 571 students.

572./472. Applied Sport Psychology (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Application of psychological skills and interventions to enhance athletic performance.

Letter grade only (A-F). Graduates register in KIN 572; undergraduates register in KIN 472. A written report is required for KIN 572 students.

573. History of Sport in the U.S.A. (3)

Prerequisite: KIN 335 or equivalent.

An analysis of the history of American sport as it reflects the dominant themes in American society.

575./475. Psychology of Coaching (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Current topics of psychological concern and application as related to athletic performance.

Letter grade only (A-F). Graduates register in KIN 575; undergraduates register in KIN 475. A written report is required for KIN 575.

577. Sport in U.S. Culture (3)

Prerequisite: KIN 332I or equivalent.

Analysis of physical activities in U.S. culture. Consideration of the relationships between sports and games and the factors of status, values, environment and cultural change.

578./478. Psychological Aspects of Exercise and Fitness (3)

Prerequisites: KIN 339I; upper division standing or consent of instructor or graduate standing.

Philosophical, psychological and behavioral concepts of physical activities and health states will be discussed. Professional standards

and invention strategies will be covered.

Letter grade only (A-F).

Graduates register in KIN 578; undergraduates register in KIN 478; A written report is required for KIN 578.

580. Computer Applications in Physical Education (3)

Prerequisites: Graduate standing, consent from instructor. Introduction to computer hardware and software used in Kinesiology including DOS/Windows and Apple Macintosh operating systems.

Topics include: hardware, operating systems, word-processing, spreadsheets, data exchange, presentation graphics/authoring tools, and video capture. Emphasis will be placed on integrating the use of hardware and software into a variety of Physical Education environments.

587./487. Supervised Activity Instruction Experience (1-3)

Prerequisite: Upper division or graduate standing and consent of instructor.

Experience in the organization of and methods for the activity component of a course in kinesiology and physical education.

Undergraduates register in KIN 487; graduates register in KIN 587. A written report is required for KIN 587 students. May be repeated to a maximum of 4 units. Letter grade only (A-F). Restricted to major students only. Not open for credit to graduate students with credit in KIN 487. (Conference 1 hour, Laboratory 2 hours per unit.)

588./488. Clinical Basis of Kinesiotherapy (3)

Prerequisites: Completion of Bachelor's degree in Kinesiology, Physical Therapy, Exercise Physiology, or Kinesiotherapy and admission into the Kinesiotherapy Certificate Program and successful completion of a course(s) in pathological and neurological foundations of rehabilitation or approval of the Director of the Kinesiotherapy Certificate Program.

The theoretical foundations of clinical practice in Kinesiotherapy.

Letter grade only (A-F).

588L. Kinesiotherapy Clinical Training I Laboratory (6)

Corequisite: KIN 588.

Instruction and observation at the Long Beach Veterans Administration Medical Center.

589. Kinesiotherapy Clinical Training II (3)

Prerequisite: Satisfactory completion of KIN 588.

Theory and practice of Kinesiotherapy techniques in a medical center setting. 500 hours of instruction and observation at Long Beach Veterans Administration Medical Center.

589L. Kinesiotherapy Clinical Training II (3)

Corequisite: KIN 589.

Laboratory instruction and observation at the Long Beach Veterans Administration Medical Center.

590. Statistical Analysis and Measurement in Kinesiology and Physical Education (3)

Prerequisites: EDSE 421, EDSS 450P or 450W, KIN 483 or equivalent.

Introduces students to the logic and application of basic descriptive and inferential statistics (i.e., correlation, regression, and analysis of variance) and includes a critical analysis of selected research publications.

Required of all master's degree candidates. To be completed within first 12 units of 500-600 series courses.

591. Field Studies in Sport Event Management (3)

Prerequisites: Graduate standing; admission to the Kinesiology Graduate Sports Management Program.

Practical field-based course requires students to complete 15 hours of classroom seminar instruction and 120 hours of supervised practical experience in a managed sport setting.

Letter grade only (A-F).

592A. Sports Management Internship (3)

Prerequisites: Graduate standing; admission to the Kinesiology Graduate Sports Management Program.

A minimum of 20 hours per week for 16 weeks of supervised work experience in an approved sport management/administrative setting, jointly supervised by a University Faculty member and a supervisor from the assigned organization. May be in a paid or volunteer capacity.

Note: 6 units in one semester may not be taken if student is full-time employed. May be repeated to a maximum of 6 units. Letter grade only (A-F).

593A. Coaching Internship (3)

Prerequisites: Bachelor degree with a major or minor in Kinesiology or Physical Education or an approved related major; advancement to candidacy and approval of Intern Coordinator.

A minimum of 20 hours per week for 16 weeks of supervised work experience in an approved coaching setting, jointly supervised by a University Faculty member and a supervisor from the assigned organization. May be in a paid or volunteer capacity.

Note: 6 units in one semester may not be taken if student is full-time employed. May be repeated to a maximum of 6 units. Letter grade only (A-F).

593B. Coaching Internship (6)

Prerequisites: Bachelor degree with a major or minor in Kinesiology or Physical Education or an approved related major; advancement to candidacy and approval of Intern Coordinator.

A minimum of 40 hours per week for 16 weeks of supervised work experience in an approved coaching setting, jointly supervised by a University Faculty member and a supervisor from the assigned organization. May be in a paid or volunteer capacity.

Note: May not be taken if student is full-time employed. Letter grade only (A-F).

594./494. Exercise Science Internship (3)

Prerequisites: Upper division or graduate standing with a grade of "B" or better in KIN 300 for a biomechanics internship or KIN 301 for an exercise physiology internship or KIN 312 for a motor control and learning internship.

Provides a minimum of 120 hours of practical experience in applying exercise science concepts in a fieldwork setting. The internship will provide such experiences as conducting the biomechanical/physiological exercise testing and/or leading the exercise training of selected subject populations such as patients undergoing cardiac rehabilitation, asymptomatic adults, and athletes.

Consent of instructor required prior to registration.

Upper-division undergraduate students register in KIN 494; Graduate students register in KIN 594. Letter grade only (A-F). May be repeated to a maximum of 6 units.

595./495. Supervised Laboratory Methods (1-3)

Prerequisites: Upper division or graduate standing and consent of instructor.

Experience in the organization of and methods for a laboratory in kinesiology and physical education. Includes assisting students with their experiments and laboratory reports.

Undergraduates register in KIN 495; graduates register in KIN 595.) A written report is required for KIN 595 students. May be repeated to a maximum of 4 units. Letter grade only (A-F). Restricted to Kinesiology major students only. Not open for credit to graduate students with credit in KIN 495. (Conference 1 hour, laboratory 2 hours per unit) May be repeated to a maximum of 4 units.

596. Practicum in Physical Education Pedagogy (3)

Prerequisites: Graduate standing; admission to the Master of Arts Program in Pedagogical Studies.

Students are required to evaluate their teaching and provide documentation that they are addressing all of the physical education standards for individuals ages 3-18 that have been established by the National Board for Teacher Certification (NBPTS).

Letter grade only (A-F).

597. Independent Research (1-3)

Prerequisites: Consent of Kinesiology faculty member and graduate advisor.

Independent research under the guidance of a faculty member. Varied learning activities utilized to achieve competency related to Physical Education not offered in regular classes.

Written report required. Letter grade only (A-F). (Independent Study)

630. Seminar in Motor Learning (3)

Prerequisites: KIN 312, 590 and 696 (may be taken concurrently).

Identification and analysis of motor learning principles and theories applicable to training, learning, and rehabilitation in sport, physical education, recreation, and therapeutic settings.

633. Seminar in Sport Psychology (3)

Prerequisite: KIN 339I or consent of instructor.

Study of psychological theories and their relationship to human behavior in sport and other physical activity settings.

638. Seminar in Trends in Adapted Physical Education (3)

Prerequisites: KIN 537 or equivalent.

An examination and analysis of the current trends in Adapted Physical Education.

671. Seminar in Current Trends and Issues in Kinesiology (3)

Prerequisite: Graduate standing.

Examines current trends and issues in Kinesiology, develop and defend personal perspective on significant issues, and identify problems and develop plans for problem-solution in organizational/professional contexts.

Letter grade only (A-F).

694. Capstone in Kinesiology (3)

Prerequisite: KIN 696 and admission into a Kinesiology graduate program.

Focuses on the process, production, and presentation of research projects in Kinesiology.

Letter grade only (A-F).

695. Seminar in Professional Literature (3)

Prerequisites: KIN 590, 696.

Critical analysis and synthesis of professional literature in Kinesiology. Professional portfolio required to be submitted during the class.

Required of all candidates not electing thesis option.

696. Research Methods and Statistical Analysis (3)

Prerequisites: Undergraduate major in Kinesiology or related field, undergraduate Statistic course or equivalent.

Methodological approaches to contemporary problems in Kinesiology, including research design, data collection and analysis, and application of descriptive and inferential statistics.

697. Directed Studies (1-3)

Prerequisites: KIN 590, 696, advancement to candidacy.

Research in an area of specialization under the direction of a faculty member.

698. Thesis/Project (1-4)

Prerequisites: KIN 590, 696, advancement to candidacy.

Planning, preparation and completion of an approved thesis/project. Professional portfolio required to be submitted during the class.

699. Selected Topics in Kinesiology (3)

Intensive study of salient problems of current professional importance to experienced physical educators.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

Athletic Training Courses (ATEP)

LOWER DIVISION

207. Prevention and Care of Athletic Injuries (3)

Prerequisites: KIN 210 or equivalent.

Principles and techniques of the prevention and care of common athletic injuries.

Not open for credit to students with credit in KIN 207. (Lecture 2 hours, Activity 2 hours).

UPPER DIVISION

304. Clinical Aspects of Athletic Training (3)

Prerequisites: BIOL 207, 208; ATEP 207.

Principles and techniques of related clinical concepts applicable to the athletic training setting.

Open to Kinesiology majors in athletic training or consent of instructor. Letter grade only (A-F). Not open for credit to students with credit in KIN 304. (Lecture 2 hours, Activity 2 hours).

306. Medical Aspects of Athletic Training (3)

Prerequisites: BIOL 207, 208; ATEP 207.

Principles and techniques of related medical concepts applicable to the athletic training setting.

Open to Kinesiology majors in athletic training or consent of instructor. Letter grade only (A-F). Not open for credit to students with credit in KIN 306.

308A. Athletic Training Evaluation I (3)

Prerequisites: ATEP 207, BIOL 208.

Study of athletic training clinical skills required for assessment of pathologies to the lower extremity and lumbar spine. Integrate anatomical knowledge and evaluation techniques to provide a basis for critical decision-making in injury management.

Open to Kinesiology majors in Athletic Training or consent of instructor. Letter grade only (A-F). Not open for credit to students with credit in KIN 308A. (Lecture 2 hours, Activity 2 hours)

308B. Athletic Training Evaluation II (3)

Prerequisite: ATEP 308A.

Study of athletic training clinical skills required for assessment of pathologies to the head, face, upper extremity, and cervical spine. Integrate anatomical knowledge and evaluation techniques to provide a basis for critical decision-making in injury management.

Open to Kinesiology majors in Athletic Training or consent of instructor. Letter grade only (A-F). Not open for credit to students with credit in KIN 308B. (Lecture 2 hours, Activity 2 hours)

309. Developmental and Therapeutic Exercise (3)

Prerequisites: KIN 300, 301 or consent of instructor.

Principles, techniques, and prescription of exercises for development or rehabilitation of the body.

Not open for credit to students with credit in KIN 309. (Lecture 2 hours, Activity 2 hours.)

310. Therapeutic Approaches in Athletic Training (3)

Prerequisites: ATEP 308A or 309 or consent of instructor.

Theory and application therapeutic modalities and exercise rehabilitation commonly used in athletic training programs.

Open to Kinesiology majors in the athletic training option only. Not open for credit to students with credit in KIN 310. (Lecture 2 hours, Activity 2 hours).

407. Management Strategies in Athletic Training (3)

Prerequisites: Senior standing or consent of instructor.

Professional issues, administration, and management strategies of athletic training programs.

Open to Kinesiology majors in the athletic training option only. Not open for credit to students with credit in KIN 407.

490A. Clinical Practicum in Athletic Training (2)

Prerequisites: Consent of instructor and Grade of "B" or better in ATEP 207; satisfactory completion of CSULB ATEP Physical Exam Form and satisfactory completion of CSULB ATEP Technical Standards Form.

First of four semesters. Clinical experiences with formal instruction and evaluation of the Athletic Training Educational Competencies. Weekly campus clinical practicum meeting. Minimum of 250 hours supervised by an Approved Clinical Instructor or a Clinical Instructor.

Credit/No Credit grading only. Not open for credit to students with credit in KIN 490A.

490B. Clinical Practicum in Athletic Training (2)

Prerequisites: Consent of instructor and successful completion of ATEP 490A; satisfactory completion of CSULB ATEP Physical Exam Form and satisfactory completion of CSULB ATEP Technical Standards Form.

Second of four semesters. Continuation of clinical experiences with formal instruction and evaluation of the Athletic Training Educational Competencies. Weekly campus clinical practicum meeting. Minimum of 250 hours supervised by an Approved Clinical Instructor or a Clinical Instructor.

Credit/No Credit grading only. Not open for credit to students with credit in KIN 490B.

490C. Clinical Practicum in Athletic Training (2)

Prerequisites: Consent of instructor and successful completion of ATEP 490B.

Third of four semesters. Continuation of clinical experiences with formal instruction and evaluation of the Athletic Training Educational Competencies. Weekly campus clinical practicum meeting. Minimum of 250 hours supervised by an Approved Clinical Instructor or a Clinical Instructor.

Credit/No Credit grading only. Not open for credit to students with credit in KIN 490C.

490D. Clinical Practicum in Athletic Training (2)

Prerequisites: Consent of instructor and successful completion of ATEP 490C.

Fourth of four semesters. Continuation of clinical experiences with formal instruction and evaluation of the Athletic Training Educational Competencies. Weekly campus clinical practicum meeting. Minimum of 250 hours supervised by an Approved Clinical Instructor or a Clinical Instructor.

Credit/No Credit grading only. Not open for credit to students with credit in KIN 490D.

490E. Clinical Practicum in Athletic Training (2)

Prerequisites: Consent of instructor and successful completion of ATEP 490D.

Clinical experiences designed to advance knowledge and skills to become a successful entry level certified athletic trainer. Minimum of 250 hours of clinical experience under the supervision of an Approved Clinical Instructor or a Clinical Instructor.

Credit/No Credit grading only. Not open for credit to students with credit in KIN 490E.

LATIN AMERICAN STUDIES

College of Liberal Arts

Directors: Norma Stoltz Chinchilla, Jayne Howell

Phone: (562) 985-4760, (562) 985-5192

Assistant Director: Alicia del Campo

Advisors: Jayne Howell, Alicia Del Campo

Phone: (562) 985-5192, (562) 985-2704

Office: FO3 312, AS 331

Affiliated Faculty: Luis Arroyo (Chicano and Latino Studies), Emily Berquist (History), Roland E. Bush (Comparative World Literature), Norma Stoltz Chinchilla (Women's Studies/Sociology), Margaret Costa (Kinesiology), Alejandra Cox Edwards (Economics), Jim Curtis (Geography), Alicia Del Campo (Romance, German, Russian Languages and Literatures), Antonia Garcia-Orozco (Chicano and Latino Studies), Bonnie Gasior (Romance, German, Russian Languages and Literatures), Liesl Haas (Political Science), Jayne Howell (Anthropology), Gary Hytrek (Sociology), Dennis Korheuer (History), Javier López-Zetina (Health Sciences), Claire E. Martin (Romance, German, Russian Languages and Literatures), Rita Palacios (Romance, German, Russian Languages and Literatures), Carlos Piar (Religious Studies), Heather Rae-Espinosa (Human Development), Raúl Reis (Journalism), José Rodríguez (Communication Studies), Victor Rodríguez (Chicano and Latino Studies), Clarissa Rojas (Chicano and Latino Studies), José Sánchez (Film and Electronic Arts), Anna Sandoval (Chicano and Latino Studies), Lise Sedrez (History), Carlos Silveira (Art Education), John Tsuchida (Asian and Asian American Studies), Julie Weise (International Studies)

Certificate in Latin American Studies

This certificate offers students, with a baccalaureate degree in any field, an opportunity to supplement their education with a focus on the interdisciplinary study of Latin America. Courses used to meet this certificate may be counted also, where applicable, toward General Education requirements, and the major or minor requirements of the cooperating departments. Recommended: successful completion of two college intermediate level courses in Spanish, Portuguese or any other language appropriate to concentration area of the equivalent fluency as determined by the program advisor.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

The following are the requirements for the Latin American Studies Certificate.

1. Consultation with the program advisor, including formal declaration of the Certificate, and application for graduation.
2. Completion of 24 units distributed as follows:
 - A. Core (required of all students).
Take one of the following:
LAS/HIST/SOC 161; SPAN 445
 - B. Electives. 21 units from the following courses, selected from at least two disciplines:
ANTH 323, 324, 345, 440*, 490*, 499*; AH 457C/557C, 458/558, 459/559 CHLS 352, 380, 395, 400, 420, 490*, 499*; CWL 440, 499*; ECON 490*, 499*; FEA 392C; HIST 362, 364, 366, 461, 462, 463,

466A, 466B, 466C, 490*, 495*, 498*; LAS 161/HIST 161/SOC 161; POSC 358, 359, 481, 497*, 499*, R/ST 467I; SOC 341, 490*, 499; SPAN 341, 441, 442, 444, 445, 450, 490*, 492, 493*, 550.

*Special Topics and Independent Study courses in the area of Latin American Studies (including Short Term Study Abroad) must be approved by the advisor.

Minor in Latin American Studies

This minor offers students majoring in any subject an opportunity to supplement their education with a focus on the interdisciplinary study of Latin America. Courses used to meet this minor requirement may be counted also, where applicable, toward General Education requirements, and the major or minor requirements of the cooperating departments. The successful completion of two college intermediate level courses in Spanish, Portuguese or any other language appropriate to the student's area of concentration of the equivalent fluency as determined by the program advisor is strongly recommended.

Requirements

The following are the requirements for the Latin American Studies minor.

1. Consultation with the program advisor, including formal declaration of the minor, and application for graduation.
2. Completion of 21 units distributed as follows:
 - A. Core (required of all students).
Take one of the following:
LAS/HIST/SOC 161; SPAN 445
 - B. Electives; 18 units from the following courses, selected from at least two disciplines:
ANTH 323, 324, 345, 440*, 490*, 499*; AH 457C/557C, 458/558, 459/559 CHLS 352, 380, 395, 400, 420, 490*, 499*; CWL 440, 499*; ECON 490*, 499*; FEA 392C; HIST 362, 364, 366, 461, 462, 463, 466A, 466B, 466C, 490*, 495*, 498*; LAS 161/HIST 161/SOC 161; POSC 358, 359, 481, 497*, 499*, R/ST 467I; SOC 341, 490*, 499; SPAN 341, 441, 442, 444, 445, 450, 490*, 492, 493*, 550

*Special Topics and Independent Study courses in the area of Latin American Studies (including Short Term Study Abroad) must be approved by the advisor.

Courses (LAS)

LOWER DIVISION

161. Introduction to Latin American Studies (3)

Prerequisite: Completion or concurrent enrollment in ENGL 100. Interdisciplinary overview of history, society, and culture in Latin American – Mexico, Central America, the Caribbean, and South America. Examines political, economic, social and cultural conditions that have produced conflict, change, and continuity in Latin America over the last five hundred years.

Same course as HIST 161 and SOC 161. Not open for credit to students with credit in HIST 161 and SOC 161.

LEGAL STUDIES

College of Liberal Arts

Director: Jason Whitehead (Political Science)

Email: jwhiteh2@csulb.edu

Telephone: (562) 985-4712

Certificate in Legal Studies

This certificate is designed for students who are interested in the study of law as a cultural product and as a field of critical inquiry. It is not a professional program in para-legal education. The certificate may be earned in conjunction with any baccalaureate degree. Courses taken in the program may be used to satisfy major, minor, other credential or general education requirements. No more than 12 units, however, may be in the candidate's major.

The Legal Studies Certificate may be earned concurrently with or following the award of the baccalaureate degree from CSULB or another accredited institution. Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

Twenty-four total units distributed as follows:

1. Three units which must include one of the following: CRJU 350 Constitutional Criminal Procedure; HIST 308I Law and Civilization; HIST 479 US Constitution: Origins & Early Development; PHIL 352I Philosophy of Law; POSC 311 Constitutional Law: Powers; POSC 312 Constitutional Law: Rights.
2. Twenty-one units selected from the Legal Studies Courses listed below. The courses taken in the program must be from a minimum of three departments. The selection of courses is made by the student in consultation with the adviser in the program.
3. Optional Project Paper (3 units which can be included as part of the 21 units required). To be written during the senior year under the supervision of a faculty member participating in the program. The paper can be either an exploratory project (in which a subject is researched in a detailed and original manner) or an analytic effort (where fewer sources are used but the discussion of the material is developed more fully).

Legal Studies Courses

ASAM 346; AFRS 332; AIS 485; BLAW 220, 320/520; CHLS 362; CLSC 410I; COMM 441I; CRJU 301, 340, 350, 420, 430; ECON 355; HIST 308I, 479, 480, 489; JOUR 430; PHIL 352I, 451I, 552; POSC 311, 312, 322, 376, 412, 414, 423, 424; PSY 495; SOC 342I; SW 350; WGSS 308.

LIBERAL ARTS, COLLEGE OF

Dean: Gerry Riposa

Associate Dean: Mark Wiley

Director, Facilities Planning and Technology: Mike Blazey

Director of Development: Howie Fitzgerald

Administrative Services Manager: Terie Bostic

Director, Learning Alliance: Bron Pellissier

Coordinator, Student Life and Development:
Zion Redie (562) 985-4181

College Secretary: Myriam Joseph

Educational Policy/Curriculum Coordinator: Cherie Dougan

Fiscal Coordinator: Dorothy Rypka

Public Relations: Pat Zaid

College Office: McIntosh Humanities Building, Room 209
Telephone: (562) 985-5381
FAX: (562) 985-2463

Credential Advisors

English - Kathleen DiVito (985-4220)

French, German, Spanish - Jean-Jacques Jura (985-2200)

Japanese - Hiroko Kataoka (985-4030)

Latin - Elaine Wida - (985-8660)

Social Science - Tim Keirn (985-4428)

Italian - Clorinda Donato (985-4316)

Introduction

The College of Liberal Arts provides courses in the Humanities and Social Sciences for all university students, as well as for majors in its disciplines. The College is also responsible for much of the General Education required of all students. The College of Liberal Arts is the center of the university's commitment to developing greater knowledge and understanding of international and multicultural issues in the contemporary world. Our motto is "The World is Our College." In teaching students, CLA faculty aim high to inspire them to continue learning, to celebrate diversity, and to engage the world.

Departments and Programs

Africana Studies
American Indian Studies
American Studies
Anthropology
Asian and Asian American Studies
Chicano and Latino Studies
Classics
Communication Studies
Comparative World Literature
Economics
English
Environmental Science and Policy
French and Francophone Studies
Geography
German
History
Human Development
International Studies Program
Italian
Japanese

Jewish Studies

Journalism and Mass Communication

Latin American Studies

Legal Studies

Linguistics

Medieval and Renaissance Studies

Philosophy

Political Science

Psychology

Religious Studies

Romance, German, Russian Languages and Literatures

Sociology

Spanish

Women's, Gender, and Sexuality Studies

Centers

Center for the Advancement of Philosophy in the Schools

Center for Applied Ethics

Center for Behavioral Research and Services

Center Cognitive Science

Center for European Studies

Center for First Amendment Studies

The George C. Graziadio Center for Italian Studies

Luster E. and Audrey Nichol Hauth Center for
Communication Skills

The Center for Medieval and Renaissance Studies

Center for the Study of Advanced Aeronautic
Technologies

The Center for Usability in Design and Accessibility

Yadunandan Center for India Studies

The Institute for Integrated Research in Materials,
Environments, and Society

Programs at a Glance

Bachelor of Arts:

Africana Studies, American Studies, Anthropology, Asian American Studies, Asian Studies, Business Economics, Chicano and Latino Studies, Chinese Studies, Classics, Communication Studies, Comparative World Literature, Economics, English, Environmental Science and Policy, French and Francophone Studies, Geography, German, History, Human Development, International Studies, Italian Studies, Japanese, Jewish Studies, Journalism and Mass Communication, Liberal Arts, Linguistics, Modern Jewish Studies, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Spanish, and Women's, Gender, and Sexuality Studies.

Master of Arts

Anthropology, Asian Studies, Communication Studies, Economics, English, French and Francophone Studies, Geography, German, Global Logistics, History, Linguistics, Philosophy, Political Science, Psychology, Religious Studies, Sociology, and Spanish

Master of Fine Arts in Creative Writing

Master of Science in Psychology

Certificates:

Africana Studies, American Indian Studies, Asian

Studies, Asian American Studies, Cartography and Geographical Information Science, Chicano and Latino Studies, Geographic Information Science, Japanese, Latin American Studies, Legal Studies, Medieval and Renaissance Studies, Peace Studies, Religious Studies, Russian-East European Studies, Teaching English as a Second Language, Technical and Professional Communication, and Urban Studies

Minors:

Africana Studies, American Indian Studies, American Studies, Anthropology, Asian American Studies, Business Economics, Chicano and Latino Studies, Comparative World Literature, Classical Studies, Communication Studies, Economics, English (Literature, Rhetoric and Composition, Creative Writing, or Special Emphasis), Environmental Science and Policy, French and Francophone Studies, Geography, German, Greek, History, Human Development, International Economics, International Studies, Italian, Jewish Studies, Journalism, Latin, Latin American Studies, Linguistics, Medieval and Renaissance Studies, Middle Eastern Studies, Philosophy, Political Science, Public Administration, Public Policy, Psychology, Religious Studies, Russian, Sociology, Spanish, and Women's, Gender, and Sexuality Studies.

Language Courses:

Arabic, Chinese (Mandarin), Cambodian (Khmer), French, German, Greek, Hebrew, Italian, Japanese, Korean, Latin, Russian, Spanish, and Swahili, Tagalog, Vietnamese.

Single Subject Teaching Credentials:

English, French, German, Italian, Japanese, Latin, Spanish, and Social Science.

Students planning to teach these subjects in secondary schools are strongly advised to consult the Credential Advisor in the appropriate program as early as possible so that they fulfill subject matter preparation requirements while completing an undergraduate major.

Student Activities

Most of the departments in the College of Liberal Arts have either a student association or honors organization which provides students with a program of activities. Students should contact the department of their major to inquire about the kinds of organizations available to them or contact the College Coordinator for Student Life and Development at 985-5814.

The College and Associated Students promote the College Student Council with its representation from each department acting as liaison between the College administration, faculty, and members of the College's student body. The Student Council provides a forum for the development of student leadership skills.

Internships

The College of Liberal Arts offers internships with on- and off-campus cooperating organizations designed to provide students with practice in the field under supervision. Many individual departments also offer discipline-based internships for advanced students.

Bachelor of Arts in Liberal Arts (120 units)

The B.A. in Liberal Arts is a degree completion program designed to provide working adults who have accrued some college credits with an alternative delivery format that is more conducive to their personal and professional lives, providing a stronger possibility of graduation. The program is designed in a cohort format which provides students opportunities for networking as well as an environment where students' shared interests, knowledge, and skills enhance the learning experience for all. The degree will be in the Liberal Arts, an area that is general enough to support a wide variety of transferable units as well as support students with wide-ranging career interests.

This program is designed for the convenience and ease of access for the working adult. The majority of the classes will be taught face-to-face on the CSULB campus on Wednesdays and Saturdays. The basic core of courses will occasionally be coupled with a class being offered partially or entirely online. The online courses will be drawn exclusively from the list of those courses previously approved through the normal University curriculum review process.

Admission Requirements

- Current transfer requirements for non-impacted majors (Minimum GPA of 2.0 in all transferable units attempted and good standing at last college attended).
- Complete with a "C" or better by the end of the prior Spring term for Fall admission or by the end of the prior Summer term for Spring admission the CSU GE requirements in Written Communication, Oral Communication, Critical Thinking, and Mathematics/Quantitative Reasoning.
- Complete a minimum of 30 semester units, or 45 quarter units, of C or better in courses approved to meet CSU General Education requirements, or be GE Certified for all Lower Division General Education requirements of the University
- Minimum of 78 units and at least 8 units from a four-year school.
- Maximum of 90 units to be counted toward the degree, at least 20 units from a four-year school, and at least 10 UD units.
- Essay of at least 1000 words on why the student wants to major in the Liberal Arts and what the student hopes to achieve by completing the degree. The essay should explicitly address what the student hopes to achieve in terms of the goals for student learning outcomes of the curriculum (as detailed in #3, below). This essay is the first element of the assessment plan for the degree program, and each essay will be reviewed by members of the Advisory Board and the Program Director.

Program Requirements

1. A minimum of 24 upper-division units, with at least two courses (6 units) in each of the three Areas below.
2. Three (1-3) units in CLA 499: Directed Studies: Professional Portfolio.
3. Remaining units (3) selected from any of the three Areas below.

Area I: Oral and Written Communication

COMM 334 Business and Professional Communication (3)
Prerequisite: COMM 130 or consent of instructor.

COMM 411 Communication in Conflict Resolution (3)
Prerequisites: GE Foundation requirements, completion of one or more GE Exploration courses, and upper division standing.

COMM 439 Communication and Popular Culture (3)
Prerequisite: None

ENGL 300 Advanced Composition (3)
Prerequisites: GE Foundation requirements and upper-division standing.

ENGL 317 Technical Communication (3)
Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

PHIL 352I Philosophy of Law (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

PHIL 381I Philosophy of Science (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

POSC 391 American Government (3)

Prerequisites: GE Foundation requirement.

R/ST 302I American Religious Diversity (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

SOC 346 Race, Gender and Class (3)

Prerequisite: GE Foundation requirements.

WGSS 318I U.S. Women of Color (3)

Prerequisites: ENGL 100 and upper division standing or consent of instructor.

Area II: Global Citizenship and Cross-Disciplinary Knowledge

ANTH 307I Modernization in Global Perspective (3)
Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

ANTH 412I Culture and Communication (3)
Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

ANTH 475 / LING 470 /WGSS 475 Language and Gender in Cross-Cultural Perspective
Prerequisite: None

CWL 320I Comic Spirit (3)
Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

CWL 350 Global Literature in American Culture (3)
Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

CWL 415I Ethnic Literature and Culture in America (3)
Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.

GEOG/IST 319I International Development (3)
Prerequisites: GE Foundation requirement, one Explorations course, upper-division standing.

GEOG 470 Political Geography (3)
Prerequisite: GEOG 360 or consent of instructor.

POSC 321 The Media and American Politics (3)
Prerequisites: GE Foundation requirement; POSC 100 or consent of instructor.

POSC 326 California Government in Comparative Perspective (3)
Prerequisites: GE Foundation requirement.

POSC 371 Introduction to International Politics (3)
Prerequisites: GE Foundation requirement; POSC 100.

PSY 384 Workplace Diversity: Barriers and Strategies (3)
Prerequisites: PSY 100, GE Foundation requirement and upper division standing

PSY 381 Introduction to Industrial-Organizational Psychology (3)
Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Area III: Cultures, Values and Beliefs

ANTH 353 Health and Healing (3)
Prerequisite: GE Foundation requirement.

ANTH 422 The Anthropology of Gender (3)
Prerequisites: Upper-division standing and ANTH 351 or consent of instructor.

Courses (C/LA)

LOWER DIVISION

190. Selected Topics in Liberal Arts (1-6)

Topics of special interest in the liberal arts.

May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

195. Introduction to the Learning Community-Transition to College Success (1)

Prerequisites: Open to entering freshmen in the College of Liberal Arts

Freshman seminar to promote student engagement in university life. Articulates expectations of the university and faculty, and encourages personal responsibility. Students will explore options regarding the choice of a major and career, and how to develop a personal academic plan. Offered fall semesters only.

230. The Home in Comparative Perspective (3)

Prerequisite: GE Foundation requirements.

Explores how the term "home" has been deployed in a number of different historical, political, social, economic, and geographical contexts. Analysis of primary documents and secondary texts. Conduct independent research and also explore personal meanings associated with the term "home."

250. Elementary Statistics (4)

Prerequisites: Knowledge of mathematical procedures usually covered in elementary high school algebra.

Introduction to descriptive and inferential statistics and their applications in social and behavioral science research; performance of statistical exercises by interactive computer. Emphasis upon knowledge of which statistical tests to use and how to interpret their results.

Same course as HDEV 250. Not open for credit to students with credit in ANTH 202, PSY 110, 210, SOC 250 or HDEV 250. (Discussion 3 hours, laboratory 2 hours.)

UPPER DIVISION

305. British Life and Culture (3)

Offers in-depth information on a wide range of social, artistic, and intellectual issues relevant to contemporary England. Although course is geared to students participating in the London Semester Program, materials covered are closely related to many topics covered in classes offered during students' other work on campus. Credit/No Credit grading only.

490. Selected Topics in Liberal Arts (1-3)

Topics of special interest in the liberal arts for intensive study.

May be repeated to a maximum of 9 units with different topics.

Topics announced in the *Schedule of Classes*.

A. Student Success Seminar

Prerequisite: Must have completed 30 units.

Student leaders selected for the College of Liberal Arts student success program will review best practice approaches and determine plans for assisting incoming students with their transition to the university. Offered in the fall semester.

B. Making a Difference with Leadership

Prerequisite: Must have completed 30 units.

Designed to foster organizational, interpersonal, and leadership skills for students who want to be considered for a facilitation role in a student success program in the College of Liberal Arts. Offered spring semester.

491. Selected Topics in Liberal Arts (2)

Topics of special interest in the liberal arts for intensive study.

Topics announced in the *Schedule of Classes*.

496A./596A. Interdisciplinary Research Seminar (3)

Prerequisite: Consent of instructor.

Intensive reading and discussion of the literature, methods and current issues in interdisciplinary topic in humanities and social sciences.

May be repeated to a maximum of 6 units with different topics in different semesters.

496B./596B. Interdisciplinary Research Seminar (3)

Prerequisite: C/LA 496A and consent of instructor.

Intensive research on interdisciplinary topic in humanities and social sciences.

May be repeated to a maximum of 6 units with different topics in different semesters.

499. Directed Studies: Professional Portfolio (1-3)

Prerequisite: Senior Standing in Liberal Arts Major; and consent of instructor.

In consultation with instructor, qualifying students assemble a portfolio of Liberal Arts coursework and readings illustrating their understanding and overview of a Liberal Arts education. Capstone-level reflection and assessment on completion of the major.

Credit/No Credit grading only.

GRADUATE LEVEL

590./490. Selected Topics in Liberal Arts (1-3)

Topics of special interest in the liberal arts for intensive study.

May be repeated to a maximum of 9 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

596A./496A. Interdisciplinary Research Seminar (3)

Prerequisite: Consent of instructor.

Intensive reading and discussion of literature, methods and current issues in interdisciplinary topic in humanities and social sciences.

May be repeated to 6 units with different topics in different semesters.

596B./496B. Interdisciplinary Research Seminar (3)

Prerequisite: C/LA 596A and consent of instructor.

Intensive research on interdisciplinary topic in humanities and social sciences.

May be repeated to 6 units with different topics in different semesters.

LIBERAL STUDIES

College of Education

Chair: Daniel J. O'Connor

Advisors: Nancy Brown, Karie Macdonald, Vannara Touch

Program Office: Academic Services (AS), Room 133

Telephone: (562) 985-4228

Faculty: Nat Hansuvadha, Timothy Keirn, Daniel J. O'Connor, Jessica Pandya

Office Coordinator: Estela Montiel

View the College of Education website at www.ced.csulb.edu

Bachelor of Arts in Liberal Studies (120 units)

The Liberal Studies major provides a rich, rigorous cross-disciplinary liberal arts program of study. There are two programs in the major: 1) The Integrated Teacher Education Program (ITEP) is for students intending to become teachers who wish to combine subject matter preparation for elementary teaching with coursework leading to a Multiple Subject teaching credential; 2) Track I is for students who seek subject matter preparation for elementary teaching as preparation for a post-baccalaureate credential program.

General Education and the Liberal Studies Major

The General Education requirements for students majoring in Liberal Studies are unique. The Liberal Studies program is not only an approved major, but also an approved alternate general education program. In completing the Liberal Studies major, students concurrently satisfy their general education requirements. Students changing to another major from Liberal Studies, however, will be subject to the standard university General Education requirements and will want to consult the University Center for Undergraduate Advising for General Education advisement.

The Liberal Studies Program

The Liberal Studies Integrated Teacher Education Program (ITEP) combines the study of academic subject matter for elementary school teaching with professional preparation, fieldwork, and student teaching. Successful completion of ITEP includes both a Bachelor of Arts degree and a Multiple Subject teaching credential.

The Liberal Studies Track I program is designed for those students who wish to pursue a Bachelor of Arts degree to prepare them in the academic subject areas relevant to elementary and special education teaching. Track I is an approved pre-professional program of subject matter preparation consistent with the standards established by the California Commission on Teacher Credentialing.

INTEGRATED TEACHER EDUCATION PROGRAM

Bachelor of Arts in Liberal Studies

Multiple Subject Credential Cross-Cultural and Academic Development Emphasis (code 200)

The Integrated Teacher Education Program (ITEP) combines the study of academic subjects aligned to California standards for the K-8 curriculum with professional preparation courses and field experiences leading to a Multiple Subject Credential.

Upon successful completion of the program, students will receive both a Bachelor of Arts in Liberal Studies and a Preliminary Multiple Subject Credential. Within the Integrated Teacher Education Program there are 102 units of required baccalaureate-level coursework and 34 units of credential-specific coursework.

Students in the ITEP program who do not advance to the Credential portion of the program will be eligible to change majors into the Track I program and receive a B.A. in Liberal Studies and may apply for admission to the post-baccalaureate Multiple Subject Credential Program.

There are multiple pathways to the teaching profession. ITEP is designed for students who begin their undergraduate education at CSULB or who transfer into the University in pursuit of both a baccalaureate degree as well as a Multiple Subject teaching credential. Prospective credential candidates who already hold a bachelor's degree, or who need information about other pathways and options in teacher credentialing, should refer to the sections of this catalog which describe programs in Teacher Education, Single Subject Teacher Education, and Advanced Studies in Education and Counseling. Further information about teacher preparation programs can also be obtained from the College of Education at (562) 985-9259 or by e-mail: cedinfo@csulb.edu or online at www.ced.csulb.edu.

General Education and the Integrated Teacher Education Program

As with other Liberal Studies majors, students in the Integrated Teacher Education Program have unique General Education requirements. ITEP is both an approved major and an approved alternate General Education program. ITEP students receive their General Education advisement within the Liberal Studies office. In completing ITEP, students concurrently satisfy their General Education requirements. Students changing their major from ITEP to a major other than Liberal Studies, however, will be subject to the standard University General Education requirements and will want to consult the University Center for Undergraduate Advising for their General Education advisement.

The ITEP Curriculum

The ITEP curriculum has two interrelated components. Students complete required coursework in the Liberal Studies Core and they complete ITEP Credential Coursework in the methodology of teaching, including student teaching. Admission to this final, credential portion of the program requires that students apply and be accepted into the Multiple Subject Credential Program at CSULB. In addition, a minimum of 125 hours of service learning, coordinated by the SERVE Program in the College of Education, must be completed prior to graduation. All courses in the Liberal Studies Core must be completed with a grade of "C" or better. All ITEP Credential Coursework must be completed with a GPA of 3.0 or higher and no individual grade lower than "C."

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Admission to the Multiple Subject Credential

Prior to enrollment in EDEL 300, ITEP students must be formally admitted into the Multiple Subject Credential Program (MSCP). Students should apply to the MSCP during the semester prior to enrolling in EDEL 300. All candidates are required to comply with all program policies and procedures detailed in the MSCP Handbook, which is available for purchase at the Campus Copy Center located in the bookstore. Pre-program advisement and brochure materials are available in the Teacher Preparation Advising Center (ED1-67). Prospective candidates should obtain a program application by attending one of the regularly scheduled group advisement meetings. See schedule at www.ced.csulb.edu/mscp. Applicants must:

1. Complete EDEL 200 with a minimum grade of "B."
2. Attain a grade point average of at least 2.67 in all baccalaureate course work or a grade point average of at least 2.75 in the last 60 semester or 90 quarter units attempted.
3. Complete and pass an interview with department faculty.
4. Submit two letters of recommendation.
5. Submit a typed personal statement describing why you have chosen teaching as a career, what you hope to accomplish as a teacher, and how you view the role of the teacher.
6. Submit a negative tuberculosis skin test or chest X-ray taken within the last three years. Tuberculosis clearance must be valid through student teaching.
7. Submit one photocopy of all university and/or college transcripts.
8. Submit proof of having taken the California Basic Educational Skills Test (CBEST). Note: You must take all three parts of the test. (Passage of the exam is required to advance to student teaching.) For alternatives to CBEST contact the Teacher Preparation Advising Center.
9. Demonstrate proficiency in reading and writing English by (1) attaining the minimum passing score of 37 on the reading portion of the CBEST and by (2) attaining the minimum passing score of 37 on the writing portion of the CBEST exam. (Passage of CBEST is required to advance to student teaching.) For alternatives means of

demonstrating proficiency in reading and writing English contact the Teacher Preparation Advising Center.

10. Attach a copy of a Certificate of Clearance, or a photocopy of a California emergency/substitute teaching permit.
11. Demonstrate ability to communicate orally in English at the level required of public school teachers by demonstration of English production skills in the course EDEL 380 (EDEL 200 for ITEP candidates) and through an oral interview with department faculty. In the case of candidates for a Bilingual Authorization Multiple Subject Credential, there is a bilingual interview requirement in English and the target language.
12. Demonstrate character and personality traits that satisfy the standards of the teaching profession and suitable aptitude for teaching in public schools through the application documentation, the personal interview, and performance in the course EDEL 200. Candidates must continue to demonstrate appropriate character and personality traits through completion of the program.
13. Submit the application packet, including documentation, by March 1 to begin pedagogy courses in summer or fall terms, and October 1 to begin pedagogy courses in winter or spring terms. THESE DEADLINES ARE STRICTLY ENFORCED.

The Liberal Studies Core

A minimum of 102 units distributed in Areas I, II, III, IV, V, and VI. No Core classes may be taken Credit/No Credit.

Area I: Language Arts (minimum 22 units)

Group 1. Written Communication:

Choose one course from: ASAM 100, AFRS 100, CHLS 104, ENGL 100

Group 2. Oral Communication:

Choose one course from: COMM 130, COMM 335

Group 3: Survey of Literature:

Choose one course from: CWL 100, ENGL 180, ENGL 250 A or B, ENGL 270 A or B, ENGL 375

Group 4. Applied Composition: Take ENGL 309

Prerequisites: None.

Group 5. Language Acquisition:

Choose one course from: CD 329, EDSP 454, LING 329

Group 6. Children's Literature:

Choose one course from: AFRS 415, COMM 352, ENGL 481

Group 7. Language Arts Capstone: Take L/ST 400

Prerequisites: Limited to Liberal Studies majors who have completed all Area I Core requirements with a "C" or better grade, or consent of department chair.

Area II: Mathematics (minimum 12 units)

Group 1. Real Numbers: Take MTED 110

Prerequisites: ELM or ELM exemption or MAPB 11.

Group 2. Probability and Activities-Based Statistics:

Take MTED 205

Prerequisites: ELM or ELM exemption or MAPB 11 and MTED 110.

Group 3. Geometry and Measurement:

Choose one course from: MTED 211 or MTED 312

Group 4. Mathematics Capstone: Take MTED 402

Prerequisites: "C" or better in both MTED 110, and either MTED 211 or 312 or the equivalent and a course in Critical Thinking.

Area III: Natural Science (minimum 14 units)

Group 1. Earth Science:

Choose from: GEOL 102 and GEOL 104, or GEOL 106*
(*GEOL 106 is the preferred course)

Group 2. Life Science: Take BIOL 200

Prerequisites: GE Foundation requirements.

Group 3. Physical Science: Take PHSC 112

Prerequisites/Corequisites: One course from Category B.2 of GE Foundation.

Group 4. Natural Science Capstone: Take SCED 401

Prerequisites: BIOL 200; PHSC 112; GEOL 106, or both GEOL 102 and 104; all with a "C" or better grade.

Area IV: History-Social Science (minimum 19 units)

Group 1. American History:

Choose one course from: HIST 172, HIST 300

Group 2. American Institutions:

Choose one course from POSC 100, POSC 326*, POSC 391 (*POSC 326 is limited to and only required of students who have met the U.S. Constitution requirement in a state other than California or through Advanced Placement credit and who must meet the Title V California State and Local Government requirement.)

Group 3. World History and Geography:

Take either: HIST/GEOG 250*, or HIST 211 plus GEOG 100 (*HIST/GEOG 250 is the preferred course)

Group 4. Multicultural Dimensions:

Choose one course from AFRS/AIS/ASAM/CHLS/ 215, AFRS/AIS/ ASAM/CHLS/WGSS 319, ANTH 421/LING 425

Group 5. California History: Take HIST 473

Prerequisites: None.

Group 6. History-Social Science Capstone: Take L/ST 471

Prerequisite: Limited to Liberal Studies majors who have completed all Area IV Core requirements with a "C" or better grade, or consent of department chair.

Area V: Arts and Humanities (minimum 15 units)

Group 1. Music: Take MUS 180

Prerequisites: None.

Group 2. Dance or Theater:

Choose one course from: CWL 124, CWL 324I, DANC 110, DANC 179, THEA 113, THEA 122, THEA 324I

Group 3. Ethics, Values and Beliefs:

Choose one course from: PHIL 100, PHIL 160, PHIL 203, PHIL 204, PHIL 405I, R/ST 100, R/ST 202, R/ST 485

Group 4. Visual Art: Take ART 300

Prerequisites: None.

Group 5. Arts Capstone: Take L/ST 404

Prerequisite: Limited to Liberal Studies majors who have completed all Area V Core requirements with a "C" or better grade, or consent of department chair.

Area VI: Critical Issues in Teaching and Learning (minimum 20 units)

Group 1. Teaching and Learning: Take EDEL 100

Prerequisites: None.

Group 2. Information and Technology Competencies:

Choose one course from: ETEC 110*, ETEC 444 (*ETEC 110 is the preferred course)

Group 3. Critical Thinking:

Choose one course from: A/ST 190, COMM 131, ENGL 102, ETEC 171, HIST 101, PHIL 170, POSC 105, PSY 130

Group 4. Introduction to Education: Take EDEL 200

Prerequisites: None.

Group 5. Child Development and Learning:

Choose one course from: EDP 301, HDEV 307I

Group 6. Family and School Partnerships:

Take EDSP 355A

Prerequisites: None.

Group 7. Physical Education: Take KIN 476

Prerequisite: Junior standing.

Group 8. Health Science: Take H SC 411A

Prerequisite: Upper-division standing. Corequisite: Current CPR Certification required.

ITEP Credential Coursework

All ITEP Credential Coursework must be completed with a GPA of 3.0 or higher and no individual grade lower than "C."

Multiple Subject Credential Courses (minimum 34 units):

Group 1. Diversity in Education: Take EDEL 300 (3)

Prerequisites: EDEL 100 and 200, or approved articulated course from non-ITEP credentialing pathways; admission to Multiple Subject Credential Program.

Group 2. Teaching and Learning Language Arts, K-8 (RICA):

Take EDEL 442 (3)

Prerequisite: Admission to the Multiple Subject Credential Program.

Group 3. Teaching and Learning Reading, K-8 (RICA):

Take EDEL 452 (3)

Prerequisite: Admission to the Multiple Subject Credential Program or Education Specialist Credential Program.

Group 4. Teaching and Learning Mathematics, K-8:

Take EDEL 462 (3)

Prerequisites: Admission to the Multiple Subject Credential Program.

Group 5. Teaching and Learning History-Social Science, K-8:

Take EDEL 472 (3)

Prerequisites: Admission to the Multiple Subjects Credential Program.

Group 6. Teaching and Learning Science, K-8:

Take SCED 475 (3)

Prerequisite: Admission to the Multiple Subject Credential Program.

Group 7. Student Teaching: Take EDEL 482 (16)

Prerequisites: Admission to 2042 Multiple Subject Credential Student Teaching including successful completion of Teacher Performance Assessment (TPA) Tasks 1 and 2.

Student Teaching in ITEP

As the final phase of the credential program, student teaching is a half-day for four days and a full day for one day per week for two semesters. All student teachers have one placement in a K-2 classroom where they gain experience with early literacy instruction utilizing a balanced and comprehensive approach to reading. The other placement is in an intermediate classroom (grades 3-6) or in a middle school classroom (grades 6-8). One student teaching placement must be in a public school.

A separate application is required to advance to student teaching. Applications for student teaching must be submitted in person to the Multiple Subject Student Teaching Office one semester prior to the first assignment. Application packets are available on the College of Education MSCP website. A link may also be found on the Liberal Studies website. Deadlines for submitting applications to student teach are:

March 1 - for Summer/Fall Student Teaching

October 1 - for Spring Student Teaching

Students should note that these deadlines are firm. Late applications are not accepted.

Advancement to Student Teaching Requirements

Students must meet the following requirements to advance to student teaching:

1. Demonstration of subject-matter competence by passage of all three parts of the California Subject Examinations for Teachers: Multiple Subjects (CSET: Multiple Subjects).
2. Passage of the California Basic Educational Skills Test (CBEST) or CTC-approved alternative.
3. A negative tuberculosis skin test or chest x-ray valid through completion of student teaching.
4. Proof of identity and character clearance (Certificate of Clearance).
5. Submission of a student teaching application by the appropriate deadline.

Please note: professional preparation pedagogy courses in the ITEP MSCP program may be taken prior to or concurrently with student teaching. All subject-specific pedagogy (methods) courses must be completed with a minimum cumulative grade-point average of 3.0 and no individual course grade lower than "C."

Bilingual Authorization for the Multiple Subject Credential

The Bilingual Authorization track prepares Multiple Subject teachers to work in dual language classrooms, English development classrooms, or where a language other than English is required for instruction, support, and communication with parents and other professional communication. With appropriate substitutions and/or additional course work, the Bilingual Authorization may be added to the Multiple Subject Preliminary credential. Candidates must demonstrate knowledge of the target culture, specific pedagogical skills, and fluency in speaking, listening, reading and writing in the target language. Candidates are prepared for Bilingual Authorization in one of four languages: Spanish, Korean, Mandarin, or Vietnamese.

Requirements

Students seeking Bilingual Authorization must complete the ITEP program requirements, including the credentialing requirements. They also must fulfill the following additional Bilingual Authorization requirements:

1. Bilingual pedagogy in the language of emphasis (one of the following, 3 units):

Spanish: EDEL 453S – Methodology for Spanish and English Instruction in a Bilingual Setting
Prerequisites: None.

Korean: EDEL 453K -- Methodology for Korean and English Instruction in a Bilingual Setting
Prerequisites: None.

Mandarin: EDEL 453M -- Methodology for Mandarin and English Instruction in a Bilingual Setting
Prerequisites: None.

Vietnamese: EDEL 453V -- Methodology for Vietnamese and English Instruction in a Bilingual Setting
Prerequisites: None.

2. Culture of emphasis (one of the following, 3 units):

Spanish: CHLS 340 – Latino Education in the U.S.
Prerequisites: None.

Korean: EDEL 455K -- Teaching the Korean American

Bicultural Student

Prerequisites: None.

Mandarin: EDEL 455C – Teaching the Chinese American

Bicultural Student

Prerequisites: None.

Vietnamese: EDEL 455V -- Teaching the Vietnamese American Bicultural Student

Prerequisites: None.

3. Language of emphasis proficiency:

All Bilingual Authorization candidates must demonstrate language of emphasis proficiency by passing the appropriate CSET: LOTE Subtest III (language and communication skills) prior to completion of the program. See the program advisor for recommended courses to prepare for the exam.

4. Student teaching in a bilingual classroom:

Bilingual Authorization candidates complete one semester of student teaching in a non-bilingual classroom and one semester in a language of emphasis classroom.

Education Specialist ITEP

Requirements

The Education Specialist ITEP Pathway allows students to work toward a Preliminary Education Specialist Credential while completing their MSCP ITEP requirements. Students should formally apply to the Education Specialist Credential program at the same time they apply to the MSCP. Education Specialist ITEP students must complete all ITEP program requirements, taking EDSP 454 in Area I, Group 6, and EDP 301 in Area VI, Group 4. Education Specialist ITEP students must complete all MSCP ITEP credential coursework and requirements as well with the following exception: Students will complete only one semester of student teaching in a general education classroom instead of two.

Education Specialist ITEP students will then complete all Education Specialist Preliminary credential coursework and Field Study as listed below:

EDP 405 Classroom Management

Prerequisites: None.

EDSP 480 Foundations of Inclusive Education

Prerequisite: Admission to Education Specialist Credential Program.

EDSP 534 Collaboration and Transition

Prerequisites: Full admittance to Education Specialist Credential Program or ITEP, and successful completion of EDSP 480.

EDSP 564 Assessment and Evaluation

Prerequisites: Admission to the Education Specialist Credential Program or consent of instructor.

EDP 560 Behavior Analysis and Interventions

Prerequisite: ED P 405.

EDSP 577 or 578 Instructional Methods and Strategies:

Mild/Moderate or Moderate/Severe

EDSP 587B or 588B Advanced Field Study and Seminar:

Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities

TRACK I

Requirements

The Track I program is both a major and an approved General Education program. No course in the Track I Core or Concentration may be taken Credit/No Credit and no course used to meet Core requirements may be counted toward the Concentration.

In addition, 125 hours of approved service-learning in an elementary or middle school must be completed prior to graduation as a means of learning about cultural diversity in the community, about current problems besetting students in the public schools, about successful intervention strategies for students needing special attention, and about promotion of individual civic responsibility.

Service Learning

The way to earn the required 125 hours of Service Learning is through participation in the Service Experience for Revitalizing Education (SERVE) program, which provides orientation and training in addition to school placements. To participate in SERVE, students must have a 2.0 grade-point average, current TB clearance, and be available for either 2 two-hour time blocks or 1 four-hour time block during public school hours over a 10 week period during the semester. For further information and the schedule for orientation and training sessions, contact the Liberal Studies office or SERVE office (ED1-17 or online at www.ced.csulb.edu).

The Liberal Studies Core

A minimum of 102 units distributed in Areas I, II, III, IV, V, and VI. No Core classes may be taken Credit/No Credit.

Area I: Language Arts (minimum 22 units)

Group 1. Written Communication:

Choose one course from: ASAM 100, AFRS 100, CHLS 104, ENGL 100

Group 2. Oral Communication:

Choose one course from: COMM 130, COMM 335

Group 3: Survey of Literature:

Choose one course from: CWL 100, ENGL 180, ENGL 250 A or B, ENGL 270 A or B, ENGL 375

Group 4. Applied Composition:

Take ENGL 309

Prerequisites: None.

Group 5. Language Acquisition:

Choose one course from: CD 329, EDSP 454, LING 329

Group 6. Children's Literature:

Choose one course from: AFRS 415, COMM 352, ENGL 481

Group 7. Language Arts Capstone: Take L/ST 400

Area II: Mathematics (minimum 12 units)

Group 1. Real Numbers: Take MTED 110

Prerequisites: ELM or ELM exemption or MAPB 11.

Group 2. Probability and Activities-Based Statistics:

Take MTED 205

Prerequisites: ELM or ELM exemption or MAPB 11 and MTED 110.

Group 3. Geometry and Measurement:

Choose one course from: MTED 211 or MTED 312

Group 4. Mathematics Capstone:

Take MTED 402

Prerequisites: "C" or better in both MTED 110, and either MTED 211 or 312 or the equivalent and a course in Critical Thinking.

Area III: Natural Science (minimum 14 units)

Group 1. Earth Science:

Choose from: GEOL 102 and GEOL 104, or GEOL 106* (*GEOL 106 is the preferred course)

Group 2. Life Science: Take BIOL 200

Prerequisites: GE Foundation requirements.

Group 3. Physical Science: Take PHSC 112

Prerequisites/Corequisites: One course from Category B.2 of GE Foundation.

Group 4. Natural Science Capstone: Take SCED 401

Prerequisites: BIOL 200; PHSC 112; GEOL 106, or both GEOL 102 and 104; all with a "C" or better grade.

Area IV: History/Social Science (minimum 19 units)

Group 1. American History:

Choose one course from: HIST 172, HIST 300

Group 2. American Institutions:

Choose one course from POSC 100, POSC 326*, POSC 391 (*POSC 326 is limited to and only required of students who have met the U.S. Constitution requirement in a state other than California or through Advanced Placement credit and who must meet the Title V California State and Local Government requirement.)

Group 3. World History and Geography:

Take either: HIST/GEOG 250*, or HIST 211 plus GEOG 100 (*HIST/GEOG 250 is the preferred course)

Group 4. Multicultural Dimensions:

Choose one course from AFRS/AIS/ASAM/CHLS/ 215, AFRS/AIS/ ASAM/CHLS/WGSS 319, ANTH 421/LING 425

Group 5. California History: Take HIST 473

Prerequisites: None.

Group 6. History/Social Science Capstone:

Take L/ST 471

Prerequisite: Limited to Liberal Studies majors who have completed all Area IV Core requirements with a "C" or better grade, or consent of department chair.

Area V: Arts and Humanities (minimum 15 units)

Group 1. Music: Take MUS 180

Prerequisites: None.

Group 2. Dance or Theater:

Choose one course from: CWL 124, CWL 324I, DANC 110, DANC 179, THEA 113, THEA 122, THEA 324I

Group 3. Ethics, Values and Beliefs:

Choose one course from: PHIL 100, PHIL 160, PHIL 203, PHIL 204, PHIL 405I, R/ST 100, R/ST 202, R/ST 485

Group 4. Visual Art: Take ART 300

Prerequisites: None.

Group 5. Arts Capstone: Take L/ST 404

Prerequisites: Limited to Liberal Studies majors who have completed all Area V Core requirements with a "C" or better grade, or consent of department chair.

Area VI: Critical Issues in Teaching and Learning (minimum 20 units)

Group 1. Teaching and Learning: Take EDEL 100

Prerequisites: None.

Group 2. Information and Technology Competencies:

Choose one course from: ETEC 110*, ETEC 444 (*ETEC 110 is the preferred course)

Group 3. Critical Thinking:

Choose one course from: A/ST 190, COMM 131, ENGL 102, ETEC 171, HIST 101, PHIL 170, POSC 105, PSY 130

Group 4. Introduction to Education: Take EDEL 200

Prerequisites: None.

Group 5. Child Development and Learning:
Choose one course from: EDP 301, HDEV 307I

Group 6. Family and School Partnerships:
Take EDSP 355A
Prerequisites: None.

Group 7. Physical Education: Take KIN 476
Prerequisite: Junior standing.

Group 8. Health Science: Take H SC 411A
Prerequisite: Upper-division standing. Corequisite: Current CPR Certification required.

Track I Subject Matter Concentration

The Subject Matter Concentration requires a minimum of 12 units in one of the thematic programs of study identified below. Students may choose to pursue a Subject Matter Concentration option that allows them to complete work toward a Subject Matter Authorization.

Subject Matter Concentration Options:

- I. Language Arts
- II. Mathematics
- III. Natural Science
- IV. History-Social Science
- V. Human and Child Development
- VI. Education Studies

Courses taken to satisfy the Subject Matter Concentration requirements shall be selected by the student in consultation with the department chair or designee. Once determined, the designated courses shall be articulated in a Subject Matter Concentration Plan. Normally the plan must be submitted before the student begins to take courses in the Concentration. Subsequent modifications of the Concentration curriculum must also be approved by the department chair or designee. No Concentration course may be taken Credit/No Credit. No course used to fulfill a Core requirement may be used to fulfill a Concentration requirement.

Courses (L/ST)

400. Language Arts Capstone: Language Arts Content and Standards for Elementary Classrooms (3)

Prerequisite: Limited to Liberal Studies majors who have completed all Area I Core requirements with a "C" or better grade, or consent of department chair.

Review, analysis, and assessment of K-8 California State English-Language Arts Content Standards and Curriculum Framework. Contemporary theory and practice of Language Arts with focus on reading, language and literacy development, and assessment.

Letter grade only (A-F).

404. Visual and Performing Arts Capstone: Visual and Performing Arts Content and Standards for Elementary Classrooms (3)

Prerequisite: Limited to Liberal Studies majors who have completed all Area V Core requirements with a "C" or better grade, or consent of department chair.

Review, analysis, and assessment of K-8 California State Visual and Performing Arts Content Standards and Curriculum Framework. Understanding relationships among the arts. Emphasis on arts criticism and various broader values (historical, social, aesthetic, ethical).

Letter grade only (A-F).

471. History-Social Science Capstone: History-Social Science Content and Standards for Elementary Classrooms (3)

Prerequisite: Limited to Liberal Studies majors who have completed all Area IV Core requirements with a "C" or better grade, or consent of department chair.

Review, analysis and assessment of K-8 California State History-Social Science Content Standards and Curriculum Framework. Literacy in the social sciences for K-8 students. Integrates geographical and historical analysis of California, Early American, and Pre-Modern World history within a global context.

Letter grade only (A-F).

LINGUISTICS

College of Liberal Arts

Department Chair: Malcolm A. Finney

Department Office: Psychology (PSY) 114

Telephone / FAX: (562) 985-5792 / (562) 985-2593

Website: www.csulb.edu/depts/ling

Faculty: Rebekha J. Abbuhl, Michael J. Fender, Malcolm A. Finney, Nancy Hall, Robert M. Hertz, Alexandra M. Jaffe, Wendy Klein, Lorraine E. Kumpf, Barbara LeMaster, Xiaoping Liang, Carol D. Lord

Advisors:

Undergraduate: Nancy Hall

Graduate: Rebekha J. Abbuhl

Administrative Coordinator: Phyllis L. Simon

Career Possibilities

English as a Second Language (ESL) Teacher • Bilingual Education Teacher • Intelligence Specialist • Researcher • Teacher • Linguist • Foreign Service Officer • Peace Corps Worker • Librarian • Interpreter • Immigration Officer • Lawyer • Customs Inspector • Import-Export Agent • Philologist • Writer • Editor • Sales Representative • Consultant (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.) Various entry-level positions in business and industry are available for graduates regardless of academic discipline.

Introduction

The department offers an undergraduate major and minor in Linguistics, an Interdisciplinary CLAD Minor, a Certificate in Teaching English to Speakers of Other Languages (TESOL), and the MA with four Options: TESOL, General, Special, and Language and Culture.

Students desiring general information should contact the department office. Advisors are available for individual appointments during the Fall and Spring semesters.

Undergraduate Programs

Bachelor of Arts in Linguistics (120 units)

Requirements

Lower Division:

Take the following courses:

LING 101 Introduction to the World's Languages (3)
Prerequisite: ENGL 100.

LING/ANTH 170 Introduction to Linguistics (3)
Prerequisite/corequisite: Any GE Foundation course.

Upper Division:

Take the following courses:

LING 325 Modern English Grammar (3)
Prerequisite: None

LING 329 Introduction to Language Acquisition (3)
Prerequisite: None

LING 420 Phonology (3)
Prerequisites: Consent of instructor.

LING 421 English Syntax (3)

Prerequisite: LING 325 or consent of instructor.

Take eight courses (24 units) from the following:

LING 301, 363I, 413, 423, 425, 426, 428, 433, 470, 472, 490.

Students may substitute up to 6 units of relevant upper-division coursework from other departments, with permission of the Linguistics Undergraduate Advisor.

Language Requirement

Sixteen units or equivalent are required. Four semesters (or their equivalent) of a language other than English, with either: (a) two semesters of an Indo-European language plus two semesters of a non-Indo-European language or (b) four semesters of any one language. Students with prior language experience can pass language requirement by examination or other evidence.

Minor in Linguistics

This minor consists of a minimum of 21 units, with at least one course selected from each of five categories. Although not required for the minor, foreign language courses are recommended. Students should be aware that some courses have prerequisites, including language proficiency.

Courses which are counted for a major may not also be counted for a minor, but students who have taken a course from any category as a part of their major may substitute an elective with approval of the Department Chair.

Requirements

Select at least one course from each category:

Category I Introduction:

LING/ANTH 170, LING 363I

Category II Phonology:

CD 330, LING 420, FREN 414, GERM 303

Category III Syntax:

LING 421, FREN 411, SPAN 426

Category IV Psycholinguistics and Neurolinguistics:

EDSP 454, LING 329

Category V Language, Culture, and Society:

ANTH 412I, 413

Electives to a program total of 21 units selected from:

Any course listed above; CHLS 341; LING 423, 426; PHIL 484; SPAN 427; Special Topics on linguistics subjects offered through participating departments. These topics are shown on an approved list available in the participating departments.

Interdisciplinary Minor in Crosscultural Language and Academic Development Studies

For requirements, see description in the Advanced Studies in Education and Counseling section of this catalog.

Graduate Programs

Master of Arts in Linguistics

This program is designed both for students who wish to pursue further graduate study and those seeking a terminal degree. The program seeks to blend theoretical and applied aspects of linguistics and draws from a variety of disciplines.

The M.A. offers three options and one concentration:

1. General Linguistics Option
2. Language and Culture Option
3. Teaching English to Speakers of Other Languages
4. Special Concentration

Graduate assistantships may be available to qualified students.

Prerequisites

1. A bachelor's degree with a 3.0 GPA for the most recent 60 units;
2. 18 units of undergraduate coursework (with a grade of "C" or above in each course) as follows:
 - A. Fifteen (15) units in Linguistics; the following courses or equivalent:
 - LING 301 Introduction to Research Methods (3)
Prerequisite: None
 - LING 325 Modern English Grammar (3)
Prerequisite: None
 - LING 329 Introduction to Language Acquisition (3)
Prerequisite: None
 - LING 420 Phonology (3)
Prerequisites: Consent of instructor.
 - LING 421 English Syntax (3)
Prerequisite: LING 325 or consent of instructor.
 - B. Three (3) units in Language Variation:
 - LING 379, 413, 425, 426, 470, 472.

Advancement to Candidacy

1. Satisfaction of the general university requirements for advancement to candidacy, including prerequisites, the Graduation Writing Assessment Requirement (GWAR) and 3.0 GPA.
2. Completion of the language other than English requirement, either:
 - A. Two courses of a language other than English at the upper-division level, or the equivalent, or
 - B. Two courses of an Indo-European language and two courses of a non-Indo European language at the lower-division level, or equivalent.
3. Completion of six units of course work within the program, exclusive of any classes used to meet prerequisites.
4. Approval of the candidate's graduate program by the Graduate Advisor, the Associate Dean for Instructional Programs of the College of Liberal Arts, and any other individuals identified by relevant university policy.
5. Advancement must take place no later than the semester before the student graduates.

Requirements

1. A minimum of 33 units of approved upper division and graduate courses for the thesis path or a minimum of 34 units of approved upper division and graduate courses of the comprehensive examination path, including
2. A minimum of 21 units at the 500 or 600 level;
3. The completion of the five course core requirement for the degree;
4. The completion of requirements of one of the options or the Special Concentration designated in the program;
5. Completion of one of two culminating experiences:
 - A. A thesis and its accompanying oral defense and oral examination (LING 698, 6 units).
 - B. The comprehensive examination and its accompanying graduate paper (LING 697, 1 unit).
6. A GPA of 3.00 on all courses included in the program.

Core

1. Linguistics Theory: Two courses from the following:
 - LING 620, 625, 633.
2. Language Variation: One course from the following:
 - LING 533, 540, 610, 650.
3. Language Acquisition:
 - LING/PSY 539 Language Acquisition (3)
Prerequisites: LING 329 or equivalent. Six units of linguistics or upper division psychology, or consent of instructor.
4. Linguistics Research: One course from the following:
 - LING 580/ANTH 570, LING 595, 596.

Option in General Linguistics

1. Take three courses in linguistics theory:
 - LING 620 Seminar in Syntactic Theory and Analysis (3)
Prerequisite: LING 421.
 - LING 625 Seminar in Phonetics and Phonology (3)
Prerequisite: LING 420.
 - LING 633 Discourse and Grammar (3)
Prerequisite: LING 421 or consent of instructor.
2. Take three courses in language variation:
 - LING 540 Sociolinguistics (3)
Prerequisite: Nine units of linguistics or consent of instructor.
 - LING 610 Historical Linguistics (3)
Prerequisites: LING 420 and 421 or equivalent.
 - LING 650 Seminar in Bilingualism (3)
Prerequisites: LING 420, 421 or consent of instructor.
3. Take one course in language acquisition:
 - LING 539 Language Acquisition (3)
Prerequisites: LING 329 or equivalent. Six units of linguistics or upper division psychology, or consent of instructor.
4. Take one course in linguistics research from the following:
 - LING 580/ANTH 570, 595, 596.
5. Elective courses: Select one (3 units, for thesis students) or three (9 units, for comprehensive exams students) from the following:
 - LING 423, 426, 470, 533, 575, 580/ANTH 570, 595, 596.
6. Culminating experience:
 - LING 697 Directed Research (1 unit; for comprehensive exams students), or
 - LING 698 Thesis (6 units; for thesis students)

Option in Language and Culture

1. Take the 15 unit core.
2. Take the specialization courses (12 units for thesis or 18 units for comprehensive exams).

Required Courses (9 units):

LING 533 Ethnography of Communication (3)
Prerequisite: Graduate standing.

LING 540 Sociolinguistics (3)
Prerequisite: Nine units of linguistics or consent of instructor.

ANTH 630 Seminar in Anthropological Linguistics (3)
Prerequisite: Consent of instructor.

Elective Courses (thesis students select one, 3 units; comprehensive exams students select three, 9 units):

LING 425/ANTH 421, LING 470/ANTH/WGSS 475,
LING 580/ANTH 570, LING 597, LING 633, LING 650

3. Culminating Experience

LING 697 Directed Research (1 unit, for comprehensive exams students), or

LING 698 Thesis (6 units, for thesis students)

Option in Teaching English to Speakers of Other Languages

The TESOL Option includes a 15 unit core, and either the Comprehensive Exam or Thesis.

Comprehensive Exam: (19 units) required:

Take all of the following courses:

LING 486 Second Language Teaching Methods (3)
Prerequisites: None

LING 500 Educational Linguistics (3)
Prerequisites: Nine units of linguistics or consent of instructor.

LING 561 Second Language Curriculum Dev (3)
Prerequisite: LING 325 or consent of the instructor.

LING 562 Second Language Testing and Assessment (3)
Prerequisite: LING 325 or consent of the instructor.

LING 593 Practicum in TESOL (3)
Prerequisite: LING 486.

Take one of the following:

LING 560 TESOL Composition (3)

LING 575 Literacy and Linguistics (3)

Take the following course for 1 unit:

LING 697 Directed Research (1)
Prerequisite: Advancement to candidacy for the M. A. in Linguistics.

Thesis: (18 units) required:

Take the following courses:

LING 486 Second Language Teaching Methods (3)
Prerequisites: None

LING 593 Practicum in TESOL (3)
Prerequisite: LING 486.

Take two of the following courses:

LING 500, 561, 562

Take the following course for 6 units:

LING 698 Thesis (6)
Prerequisite: Consent of graduate committee.

Special Concentration

This concentration is 12-18 units. Students electing this concentration must 1) consult with the Graduate Advisor about their proposal; 2) submit a written justification for the course of study they wish to take, including 3) a list of the classes which are proposed to meet the objectives of

this special program. Both the written justification and the course list are subject to approval. Other requirements of the program (e.g. a five course core, GPA, culminating experiences, etc.) cannot be waived or altered by use of the special concentration. Students wanting graduate credit for certain 400-level courses must consult with the Graduate Advisor before enrolling. Courses with an I suffix are not available for graduate credit.

Note: Graduate students are required to register for the higher (500-level) course whenever a course has a double number. Students may not repeat courses by taking them under different prefix designations, numbers or titles unless the course description specifically permits.

Graduate Certificate in Teaching English to Speakers of Other Languages

This certificate is open to students from any field who desire graduate level training for teaching English to speakers of other languages. While the program may be begun as an undergraduate, at least 18 units must be completed as a post-baccalaureate student.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Prerequisites

1. Baccalaureate degree with a GPA of 3.0 on last 60 units.
2. One introductory course in linguistics:
LING 325 Modern English Grammar (3) (or equivalent)
Prerequisites: None

Requirements

1. Twenty-four units, including:
 - A. 21 taken in residence;
 - B. 18 taken as a graduate student;
 - C. 12 taken at a 500-600 level.NOTE: Categories (A-C) combined need only equal 24 units.
2. A GPA of 3.0 in all courses included in the program.
3. Fulfill the Graduation Writing Assessment Requirement (GWAR).
4. One course in each of the following eight categories:
 - A. Language Acquisition:
LING 329 Introduction to Language Acquisition (3)
Prerequisites: None
 - B. Intermediate Level Linguistics. One course from:
LING 420 Phonology (3)
Prerequisites: Consent of instructor.
LING 421 English Syntax (3)
Prerequisite: LING 325 or consent of instructor.
 - C. Cross-cultural Communication:
LING 425/ANTH 421 Education Across Cultures (3)
Prerequisites: None
 - D. Basic TESOL Methodology:
LING 486 Second Language Teaching Methods (3)
Prerequisites: None
 - E. Curriculum:
LING 561 Second Language Curriculum Development (3)
Prerequisite: LING 325 or consent of the instructor.
 - F. Testing and Assessment:
LING 562 Second Language Testing & Assessment (3)
Prerequisite: LING 325 or consent of the instructor.

- G. Specialized Methodology. One course from:
 LING 560 TESOL Composition (3)
 LING 575 Literacy and Linguistics (3)
- H. Practicum:
 LING 593 Practicum in TESOL (3)
 Prerequisite: LING 486.

Students who have taken equivalent courses in the above categories but need units to complete certificate requirements may elect to take courses as advised. Students wanting graduate credit for 400-level courses which have not been approved for graduate credit by the home department must consult with the Program Director or Graduate Advisor before enrolling. Courses with an "I" suffix are not available for graduate credit, but may be used for the Certificate if they were taken while the student was an undergraduate.

Courses (LING)

LOWER DIVISION

101. Introduction to the World's Languages (3)

Prerequisite: ENGL 100.

General introduction to roles that the world's languages have played historically, socially, culturally and politically. Nature of language, how languages operate, differ, and relate to each other. Contact between languages and change over time. Spoken and written forms of language.

151. Fundamentals of American Sign Language I (3)

Prerequisite/Corequisite: One GE Foundation course.

For those who are beginning ASL, or who have had less than two years of high school ASL or equivalent. Introduction to pronunciation, receptive and expressive conversational skills without voice, and grammatical structures of American Sign Language (ASL). Development of appropriate linguistic/cultural behaviors and awareness of and respect for Deaf Culture.

Letter grade only (A-F).

152. Fundamentals of American Sign Language II (3)

Prerequisite: LING 151 or equivalent.

Second semester introduction to pronunciation, receptive and expressive conversational skills without voice, and grammatical structures of American Sign Language (ASL). Includes development of appropriate linguistic/cultural behaviors and awareness of and respect for Deaf Culture.

Letter grade only (A-F).

170. Introduction to Linguistics (3)

Prerequisite/corequisite: Any GE Foundation course.

Nature of language; its relation to culture; language structure and processes of change; language universals, contrasts and relationships.

Same course as ANTH 170. Not open for credit to students with credit in ANTH 170.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

301. Introduction to Research Methods (3)

Introduction to quantitative, qualitative and mixed method research in linguistics; basic statistics; writing a research report.

Letter grade only (A-F). May be used to satisfy the GEAR.

325. Modern English Grammar (3)

Study of the structural characteristics of English words, phrases and sentences. Traditional grammatical terminology, basic morphology, constituent structure, phrase structure, finite and non-finite clauses. Descriptive and prescriptive grammar; reference to pedagogical contexts.

Not open for credit to students with credit in ENGL 325. Letter grade only (A-F).

329. Introduction to Language Acquisition (3)

Introduction to the study of the acquisition of first and second languages. Linguistic perspectives on the development of phonological, syntactic, semantic, and pragmatic aspects of language. The influence of developmental stages and social and cultural factors on the individual.

Letter grade only (A-F). Not open for credit to students with credit in C D 329.

339. Linguistics for Crosscultural Academic Development [in Secondary School Settings] (3)

Principles of language structure, variation and usage for educators. First and second language acquisition, and related social, cultural and political issues regarding language behavior in middle and high schools. Influences on language attitudes, maintenance and shift.

Letter grade only (A-F). Not open for credit to students with credit in EDSE 339.

363I. Implications of Human Language (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Human language as examined from the perspectives of linguistics and related disciplines. Topics include language acquisition, individual and group differences in the acquisition and use of language, and the social meanings and cultural contexts of language use.

379. Sociolinguistics (3)

Prerequisite: LING/ANTH 170.

Survey of language variation and its relationship to social characteristics and processes. Study of regional and social dialects, interactional sociolinguistics, language attitudes research, sociolinguistic discourse analysis and the study of language policy and ideology as well as multilingualism. Application of sociolinguistics to educational and other contexts.

Letter grade only (A-F). Not open for credit to students with credit in EDEL 379.

413. Language and Culture (3)

Relation of language to social and cultural practices and processes; issues of meaning, identity and power within and across cultures.

Same course as ANTH 413. Not open for credit to students with credit in ANTH 413.

420. Phonology (3)

Prerequisites: Consent of instructor.

Study of the phonology of American English, using articulatory phonetic, phonemic, and distinctive feature analyses.

Letter grade only (A-F).

421. English Syntax (3)

Prerequisite: LING 325 or consent of instructor.

With the structure of American English as a reference point, this course provides an introduction to the analysis of a range of morphological and syntactic structures found in languages from a variety of language families.

Letter grade only (A-F). (Seminar)

423. Semantics (3)

Study of meaning in language.

Same course as ENGL 423. Not open for credit to students with credit in ENGL 423.

425. Education Across Cultures (3)

Cross cultural perspectives on formal and informal education and socialization, using theory and methods from anthropology and linguistics. Cultural variation in schooling and multiculturalism in U.S. American classrooms. Cultural, linguistic and educational issues facing indigenous, minority and immigrant populations in schools.

Same course as ANTH 421. Not open for credit to students with credit in ANTH 421.

426. History of the English Language (3)

Development of the English language from its beginnings to the present day.

Same course as ENGL 426. Not open for credit to students with credit in ENGL 426.

428. Applied Linguistics (3)

Linguistic research applied to the study and teaching of linguistics and language skills.

Not open for credit to students with credit in ENGL 428/524. Letter grade only (A-F).

431. Cultural and Linguistic Diversity in Schools (3)

Multicultural education, including concepts of culture, educational equity, social justice, multiple forms of diversity, and anti-bias/anti-racist curriculum. Models of English language acquisition, bilingual education theory, and instructional accommodations for diverse students.

Letter grade only (A-F). Ten hours fieldwork. Same course as EDEL 431. Not open for credit to students with credit in EDEL 431, EDP 431.

433. Survey of Discourse Analysis (3)

Introduction to discourse analysis; language structure from the viewpoint of production. The structure of genres: conversation, narrative, exposition, and others; language in special settings. Discourse analysis in theoretical and applied linguistics. Pragmatics and discourse; developmental issues.

Letter grade only (A-F).

438./538. Psycholinguistics (3)

How language works in the human mind: psychological factors involved in language production and comprehension, and the relation between language and cognition.

Letter grade only (A-F).

460./560. TESOL Composition (3)

Introduction to the rhetoric and composition of students with limited English proficiency. Attention to both the general principles of composition, and the specific issues that face students and teachers in an ESL context.

Letter grade only (A-F).

470. Language and Gender in Cross-Cultural Perspective (3)

Analysis of men's and women's communication in its social and cultural context; role of gender in interpreting conversational interactions in the U.S. and elsewhere; acquisition of gender differences; cultural dimensions of perceptions and stereotypes and their effect on communication.

Same course as ANTH 475, WGSS 475. Not open for credit to students with credit in ANTH 475, W/ST 475, WGSS 475.

472. Language and Discrimination (3)

Survey and analysis of discrimination on the basis of language as component of racial, ethnic, gender, and class discrimination. Historical and contemporary examples; related analysis of bias toward so-called non-standard varieties; analysis of the language of racism and sexism.

Letter grade only (A-F).

486. Second Language Teaching Methods (3)

Introduction to current methods and techniques for teaching second languages with a focus on teaching English to speakers of other languages. Classroom applications in second language settings.

Letter grade only (A-F).

490. Selected Topics in Linguistics (1-3)

Prerequisite: Consent of instructor.

Investigation of topics of current interest and concern to students in linguistics and allied areas.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

GRADUATE LEVEL

500. Educational Linguistics (3)

Prerequisites: Nine units of linguistics or consent of instructor.

Graduate introduction to role of language and linguistics in contemporary education; analysis of context of language acquisition; attitudes toward multilingualism; language policies which set guidelines and expectations for instruction; cultural factors which influence language acquisition.

Letter grade only (A-F). Not open for credit to students with credit in ED P 577.

533. Ethnography of Communication (3)

Prerequisite: Graduate standing.

Study of talk and other forms of communication from an ethnographic perspective. Emphasizes relevant methods and theories. Major topics presented include: language socialization, genres of speaking, intercultural communication, speech styles, strategic uses of language, and literacy.

Letter grade only (A-F). Same course as ANTH 530. Not open for credit to students with credit in ANTH 530.

538./438. Psycholinguistics (3)

How language works in the human mind: psychological factors involved in language production and comprehension, and the relation between language and cognition.

Letter grade only (A-F).

539. Language Acquisition (3)

Prerequisites: LING 329 or equivalent. Six units of linguistics or upper division psychology, or consent of instructor.

Theory and research on acquisition of first and subsequent languages in children and adults. Psycholinguistic perspectives on phonological, syntactic, semantic, and pragmatic aspects of language. Interacting roles of cognitive processes, individual differences, social influences, and cultural context will be stressed.

Letter grade only (A-F). Not open for credit to students with credit in PSY 539.

540. Sociolinguistics (3)

Prerequisite: Nine units of linguistics or consent of instructor.

Study of the linguistic and social antecedents, correlates, and consequences of language variation in the individual and society. Integration of theoretical models and practical fieldwork.

(2 hrs seminar, 3 hrs lab.)

560./460. TESOL Composition (3)

Introduction to the rhetoric and composition of students with limited English proficiency. Attention to both the general principles of composition, and the specific issues that face students and teachers in an ESL context.

Letter grade only (A-F).

561. Second Language Curriculum Development (3)

Prerequisite: LING 325 or consent of the instructor.

Study of the content of second language instruction, from

nongrammatical, communicative approaches to content-based instruction. The course will look at both K-12 and adult language instruction.

562. Second Language Testing and Assessment (3)

Prerequisite: LING 325 or consent of the instructor.

Testing and assessment of second language learners, including both standardized tests and teacher-developed modes of assessment.

Letter grade only (A-F).

575. Literacy and Linguistics (3)

Prerequisite: Six units in linguistics or consent of instructor.

General introduction to field of literacy studies. Examines relationship between oral and written language, native language literacy and biliteracy acquisition, pedagogical practices and issues, and cognitive and sociocultural approaches to literacy development.

Letter grade only (A-F). Not open for credit to students with credit in ED P 578.

580. Linguistic Field Methods (3)

Prerequisite: Completion of LING 420 and 421, or consent of instructor.

Introduction to linguistic field work with a native speaker of an unfamiliar non-European language. Phonetic transcription and investigation of phonological, morphological, and syntactic structures of the selected language within the context of linguistic universals.

Letter grade only (A-F). Same course as ANTH 570. Not open for credit to students with credit in ANTH 570.

590. Selected Topics in Linguistics (1-3)

Prerequisite: Consent of instructor.

Advanced study of special topics of current interest and concern to students in linguistics and allied areas.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

593. Practicum in TESOL (3)

Prerequisite: LING 486.

Classroom experience in teaching English to speakers of other languages supplemented by reading, discussion and research. Students must be available to be assigned to regularly scheduled ESL classes five hours per week, as well as for meetings with the instructor.

Letter grade only (A-F).

595. Qualitative Research Methods (3)

Prerequisites: Advancement to candidacy for the M.A. in linguistics. LING 301 or equivalent.

Comprehensive introduction to theory, nature, and use of qualitative methods. Emphasis on identifying research problems, evaluating published research, developing research design, employing data collection techniques, analyzing data, presenting findings, and preparing research proposals.

Letter grade only (A-F).

596. Quantitative Research Methods (3)

Prerequisites: Advancement to candidacy for the M.A. in linguistics. LING 301 or equivalent.

Comprehensive introduction to theory, nature, and use of quantitative methods. Emphasis on identifying research problems, evaluating published research, developing research design, employing data collection techniques, using statistical analyses, presenting findings, and preparing research proposals.

Letter grade only (A-F). (Seminars, 2 hours; Laboratory, 2 hours)

597. Directed Study in Linguistics (1-3)

Prerequisite: Consent of instructor and advisor.

Directed study on issues and topics in Linguistics. Not intended to replace available courses.

610. Historical Linguistics (3)

Prerequisites: LING 420 and 421 or equivalent.

Advanced study of language change, language families, and language relationships using the methods of comparative linguistics.

Letter grade only (A-F).

620. Seminar in Syntactic Theory and Analysis (3)

Prerequisite: LING 421.

Theories and practices of selected views of syntax in contemporary linguistics. Topic may vary from semester to semester.

Letter grade only (A-F).

625. Seminar in Phonetics and Phonology (3)

Prerequisite: LING 420.

Theory and practice of selected views of phonetics and phonology in contemporary linguistics.

(Seminar, 2 hours; Laboratory, 2 hours) Letter grade only (A-F).

633. Discourse and Grammar (3)

Prerequisite: LING 421 or consent of instructor.

Discourse analysis within linguistic theory and method. Focus on the relationship of discourse and grammar; relationship of morphosyntactic devices to discourse context and of information flow to grammar. Pragmatic motivation for grammatical systems. Relationships of grammar and genre.

Letter grade only (A-F).

650. Seminar in Bilingualism (3)

Prerequisites: LING 420, 421 or consent of instructor.

Advanced study of degrees of bilingualism and types of bilingual situations. Implications of bilingualism and bilingual social situations for linguistics and education.

Letter grade only (A-F).

697. Directed Research (1)

Prerequisite: Advancement to candidacy for the M. A. in Linguistics.

Research in linguistics on a topic connected with the Comprehensive Project and Examination for the Master's degree.

Letter grade only (A-F). May be repeated to a maximum of 3 units.

698. Thesis (1-6)

Prerequisite: Consent of graduate committee.

Planning, preparation and completion of a thesis in linguistics.

MANAGEMENT AND HUMAN RESOURCE MANAGEMENT

College of Business Administration

Department Chair: Judy P. Strauss

Department Office: College of Business Administration (CBA) 321

Telephone: (562) 985-4753

Faculty: David J. Abramis, Josh A. Arnold, Ming Chen, Philip S. Chong, Chailin Cummings, Eric Hansen Emeritus), Sal Kukalis, Dana McDaniel, Sabine Reddy, Vicki M. Scherwin, Roger R. Stanton (Emeritus), Judy P. Strauss, Xuemei (Sherry) Su, Mark Washburn, Jun Yan

Administrative Support Coordinator: Jacqueline Reyes

For MBA with Specialization in Management and Human Resources Management, see Business Administration, Graduate Programs.

Career Possibilities

Human Resource Manager • Management Trainee • Retail Manager • Buyer • Bank Manager • Credit Manager • Property Manager • Hotel Manager • Restaurant Manager • Office Manager • Project Manager • Sales Representative • Insurance Office Manager • Assessor • Industrial Traffic Manager • City Manager • Community Services Director (Some of these careers require additional education or experience.) Various entry-level trainee positions in business and industry are available for graduates regardless of academic discipline.

Undergraduate Programs

Bachelor of Science in Business Administration

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

In order to graduate with an undergraduate business degree from CSULB, a student must complete a minimum of 120 units. A majority of the upper division business courses, including economics and statistics, must be completed at this university. For details, refer to the CBA Policy on Course Transfers/Substitutions.

1. Lower Division:

Take all of the following:

ACCT 201 Elementary Financial Accounting (3)
Prerequisite: None

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher; one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

MATH 115 Calculus for Business (3)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

STAT 108 Statistics for Everyday Life (3)

Prerequisite: None.

Choose one of the following:

PHIL 170 Critical Reasoning (3)

Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

I S 100 Information Technology Literacy (3)

Prerequisite: None

2. All business and pre-business majors shall demonstrate computer literacy and competency prior to taking junior and senior level courses. Requires one of the following:

A. Passing score (70%) on the Computer Proficiency Examination (CPE).

B. With Credit (Cr) or "C" or better grade in a transfer equivalent course, complete:

IS 233 Introduction to Computer Systems and Applications (3)

Prerequisite: None

3. Upper Division:

A. Take all of the following:

CBA 300 International Business (3)

Prerequisite: None

ACCT 310 Cost Accounting for Managers (3)

Prerequisites: ACCT 201 or equivalent.

ECON 333 Managerial Economics (3)

Prerequisites: ECON 100, 101; MATH 115 or 122.

FIN 300 Business Finance (3)

Prerequisite: None

BLAW 320 Legal and Regulatory Environment of Business (3)

Prerequisite: None

IS 300 Management Information Systems (3)

Prerequisite: IS 233 or equivalent.

IS 301 Business Communications (3)

Prerequisite: None

IS 310 Business Statistics (3)

Prerequisite: MATH 114.

HRM 360 Organizational Behavior (3)

Prerequisite: None

MGMT 300 Principles of Management (3)

Prerequisite: None

MKTG 300 Marketing (3)

Prerequisite: None

B. The following Capstone course must be taken at CSULB as a senior and after the upper-division prerequisite core courses have been completed (ACCT 310, FIN 300, MGMT 300, MKTG 300, IS 301):
MGMT 425 Business Strategy and Policy (3)
Prerequisites: ACCT 310 or 320; MGMT 300, MKTG 300, FIN 300, IS 301.

C. Completion of option requirements.

4. Elective courses to total 120 units required. Students are encouraged to select electives for expansion of knowledge and intellectual interests as well as for preparation for business employment.

Option in Management (120 units)

This option prepares students for management of the business enterprise with attention to the need to create and maintain a desirable internal environment. Additionally, the interface of that environment with the external environment in relation to success of the enterprise is considered. Philosophical basis for the practice of management, ethical considerations and human values are stressed.

Requirements

1. Take the following course:
MGMT 454 Organization Theory (3)
Prerequisite: MGMT 300, IS 301.
2. Take 12 units selected from the following:
MGMT 326, 405, 406, 412, 413, 421, 426, 430, 455;
SCM 410, 411, 414; HRM 446

Option in Operations and Supply Chain Management (120 units)

The Operations and Supply Chain Management curriculum is designed to develop student competence in the conceptual, systematic, and analytical tools required for positions in manufacturing and service-oriented industries. Emphasis is placed on business process management and transformation, analytical and decision making skills, program or project management, managing client, supplier and channel relationships, end-to-end integrated supply chain knowledge and logistics application, total quality management/performance excellence, and lean thinking.

Requirements

1. Take nine units from the following:
SCM 410 Logistics Management (3)
Prerequisites: MGMT 300, IS 301.
SCM 411 Operations Planning and Control (3)
Prerequisites: MGMT 300, IS 301.
SCM 414 Supply Chain Management (3)
Prerequisite: SCM 410 and 411.
2. Take six units from the following:
MGMT 412, 413, 426, 430, 454, 455

Option in Human Resource Management (120 units)

The objectives of this option: (1) provide students with theoretical foundations for understanding how employees are motivated to accomplish organizational goals; (2) develop skills to attract, reward, develop and retain human resources; (3) develop an understanding of the strategic, theoretical, and practical approaches to human resources management; (4) develop aspiring leaders with a strong sense of ethics and social responsibility and an awareness of how societal changes necessitate organizational change.

Requirements

1. Take the following course:
HRM 361 The Human Resource Function (3)
Prerequisite: None
2. 12 units selected from the following:
HRM 440, 445, 446, 458, 460, 462, 463, 465

Minor in Human Resource Management Requirements

For Non-Business Students only (NOTE: the IS 301 prerequisite requirement is waived for the minor).

1. Take the following courses:
HRM 360 Organizational Behavior (3)
Prerequisite: None
HRM 361 The Human Resource Function (3)
Prerequisite: None
2. 12 units selected from the following:
HRM 440, 445, 446, 458, 460, 462, 463, 465

Minor in Entrepreneurship

Requirements

1. Take the following courses:
MGMT 300 Principles of Management & Operations (3)
MGMT 421 Entrepreneurship & New Venture Creation (3)
2. 12 units selected from ACCT 201; CBA 300; BLAW 320; FIN 300, 340, 495; HRM 360, 361; IS 300, 355, 380, 445, 483, 484; MKTG 300, 330, 492, 310, 410, 430, 465, 480, 490, 495; MGMT 495 (two topics) as approved by the Management area of the Management/HRM Department.

Management Courses (MGMT)

UPPER DIVISION

300. Principles of Management and Operations (3)

Recommended: IS 310.

Principles and theories of management, organization theory, planning and control techniques. Management of the overall organization and the production/operation systems of organizations.

Letter grade only (A-F).

326. Management and Society (3)

Issues of concern to business managers in dealing with the social environment. Business responsibility to stockholders, employees, customers, the government, and society. Issues including profits, consumerism, product safety, pollution, government regulation, and social accountability.

Letter grade only (A-F).

405. International and Comparative Management (3)

Prerequisites: MGMT 300, IS 301.

Functions of management in international business; comparative management studies, and the impact of the environment on management performance.

Letter grade only (A-F).

406. International Business Policy (3)

Prerequisite: MGMT 300, IS 301.

Developing multinational strategies and policies. International economics, economic development, international marketing, international finance, multinational planning, organization, and control. International transactions, economic and political integration, the competitiveness of countries, relations with host societies, and country studies.

Letter grade only (A-F). Case studies and research projects.

Management Courses (MGMT)

412. Production Control (3)

Prerequisites: MGMT 300, IS 301.

Scheduling, controlling, and evaluating manufacturing activities at the shop-floor level. Shop order release, dispatching, priority control, queue management, and input/output monitoring using MRP II software. Job sequencing and scheduling, just-in-time production, Kanban control, and optimized-production-technology (OPT). Use of software and simulations.

Letter grade only (A-F).

413. Managing Quality for Productivity (3)

Prerequisites: MGMT 300; Recommended: IS 301, 310.

Relationship between productivity and quality. Examination of the quality-assurance function, statistical quality control, and lot inspection. Relationship between productivity improvement, product quality, and manufacturing strategy.

Letter grade only (A-F).

421. Entrepreneurship and New Venture Creation (3)

Prerequisites: MGMT 300, IS 301.

Starting a new business. Being an entrepreneur in a free enterprise environment or an entrepreneur in an existing organization. Use of state-of-the-art theory to plan and evaluate business startups. Testing ideas with successful entrepreneurs and creating individual business plans.

Letter grade only (A-F).

425. Business Strategy and Policy (3)

Prerequisites: ACCT 310, 320 or 202; MGMT 300, MKTG 300, FIN 300 and IS 301.

Integration and application of knowledge theories and techniques derived from the study of business disciplines. Use of the case method and business simulations to formulate business strategies and plans. Written reports required.

Letter grade only (A-F).

426. Management and Information Systems (3)

Prerequisite: IS 301.

Concepts for evaluation and design of decision support systems, management decision models, socio-technical strategies for implementing information system changes.

Letter grade only (A-F).

430. Project Management (3)

Prerequisite: MGMT 300, IS 301.

Selection of project ideas and implementation of projects. Roles of team member and project manager. Project planning and organization. Budgeting, scheduling, monitoring and controlling, including computerized network models and project management software packages. Final project analysis and termination.

Letter grade only (A-F).

454. Organization Theory (3)

Prerequisite: MGMT 300, IS 301.

Design and adaptation of organizations. Development of tools for analysis and design. Exploration of organizational structure. The organization as a system of authority, a political system, and an information and coordination device. Cases and computer simulations.

Letter grade only (A-F).

455. Managerial Decision Making Processes (3)

Prerequisites: MGMT 300, IS 301; HRM 360 or 361.

Incorporates both quantitative and psychological aspects of decision making for management problems. Includes topics such as decision making with multiple objectives, decision tree,

risk management, game theory, utility theory, prospect theory, simulation, and responses to performance feedback.

Letter grade only (A-F).

495. Selected Topics in Management (1-3)

Prerequisites: GPA of 3.0 in Management courses, consent of instructor, IS 301.

Topics and issues of critical importance to management. Development of critical thinking, writing, and speaking skills.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in *Schedule of Classes*.

497. Directed Studies (1-3)

Prerequisites: Consent of instructor,

Individual projects, research, and study of advanced nature in management.

Letter grade only (A-F).

Human Resource Management Courses (HRM)

360. Organizational Behavior (3)

Overview of the dynamics of human behavior in organizations and implications for management. Motivation, personality and attitudes, human perception, groups and teams, norms, power and politics, conflict, learning, communication, job design, organizational culture, organizational change, leadership and cross-cultural issues.

Letter grade only (A-F).

361. The Human Resource Function (3)

Overview of human resource functions designed to attract, motivate, develop and retain employees. Planning, job analysis, recruitment, selection, placement, appraisal, compensation and benefit administration, training and development, communications, labor management relations and the international environment. Discussion, cases and student presentations.

Letter grade only (A-F).

440. Collective Bargaining (3)

Prerequisite: HRM 361, IS 301.

Roles of management, labor and government in structuring work environments. Nature of the process of negotiation and conflict resolution in organizations.

Letter grade only (A-F).

445. Compensation Administration (3)

Prerequisite: HRM 361, IS 301.

Compensation and benefits management as an integrating human resource management process. Development and administration of equitable compensation and benefit programs. Job analysis and evaluation, pay structures, salary surveys, individual compensation, incentive, systems and benefits administration. Discussion, cases and simulations.

Letter grade only (A-F).

446. Leadership and Motivation in Organizations (3)

Prerequisite: HRM 360, IS 301.

Determinants of effective leadership and successful methods of motivating employees to achieve organizational goals. Identification of appropriate styles of leadership and methods for developing and applying leadership skills. Case studies, research, and simulation exercises.

Letter grade only (A-F).

458. Managing Organizational Culture and Cultural Diversity (3)

Prerequisites: HRM 360 or 361; IS 301.

Impact of diversity, culture, and ethnic origin on the work experience. Interaction of language, gender, race, tradition, education, economic

structure, and organizational philosophy to create a set of rules for acceptable behaviors in complex organizations. Open dialogue, debate, outside research and group presentations.

Letter grade only (A-F).

460. Current Issues in Human Resource Management (3)

Prerequisite: HRM 360 or 361; IS 301.

Current and emerging issues concerning the management and development of people and organizations. Motivation, leadership, job performance, hiring, compensation, planning, selection, staffing, training, performance appraisal, careers, and quality of work life. Discussion, projects, and outside research.

Letter grade only (A-F).

462. Labor-Management Relations (3)

Prerequisite: IS 301.

Principles and practices influencing labor-management relationships. Development, aims, structure, and functions of labor and employer organizations; collective bargaining process; labor law and governmental intervention; impasse resolution; unions and minorities; employee organizations in government and professional sectors; comparative international systems.

Letter grade only (A-F).

463. Organizational Training and Development (3)

Prerequisite: HRM 360 or 361; IS 301.

Review of the field of training and development, including learning theory, training needs assessment, design and delivery of training and development programs, evaluation, and program management. Career development and organizational development. Case studies, research, simulation exercises, and student presentations.

Letter grade only (A-F).

465. Selection and Appraisal (3)

Prerequisite: HRM 361, IS 301.

Theories and techniques guiding personnel selection and appraisal processes. Determining staffing needs, conducting job analyses, writing job descriptions, developing recruitment strategies, affirmative action plans, and designing resumes. Designing effective appraisal systems and conducting productive performance appraisals. Cases and simulations.

Letter grade only (A-F).

497. Directed Studies (1-3)

Prerequisites: Consent of instructor and Department Chair, and 3.0 GPA or higher in human resources management courses.

Individual projects, study and research of advanced nature in human resources management.

Letter grade only (A-F).

Supply Chain Management Courses (SCM)

410. Logistics Management (3)

Prerequisites: MGMT 300, IS 301.

The management of materials into, within and out of an organization, including location planning, procurement, inventory control, transportation, warehousing, packaging and materials handling and order management. Focus is on the analytical and managerial methods essential for an integrated logistics system.

Letter grade only (A-F). Not open for credit to students with credit in MGMT 410.

411. Operations Planning and Control (3)

Prerequisites: MGMT 300, IS 301.

Strategic principles and tactical practices related to operations planning. Topics include process selection, facilities layout, work

systems design, inventory management, aggregate planning, master scheduling, MRP and ERP, scheduling and JIT production activity.

Letter grade only (A-F). Not open for credit to students with credit in MGMT 411.

414. Supply Chain Management (3)

Prerequisites: MGMT 300 and IS 301.

Management of value creation and the dynamic interaction of companies within a supply chain. Topics include supply chain drivers and performance, network planning, inventory positioning, supply chain coordination, and information sharing. Contemporary practices are discussed.

Letter grade only (A-F). Not open for credit to students with credit in MGMT 414.

MARKETING

College of Business Administration

Department Chair: Ingrid Martin

Department Office: College of Business Administration CBA 354

Website: <http://www.csulb.edu/depts/marketing>

Telephone: (562) 985-4769

Faculty: Mary Celsi, Pamela Miles Homer, David Horne, Ingrid Martin, Sungwook "Sam" Min, Risto Moio, Sayantani Mukherjee, Hieu Nguyen, Thuc "Doan" Nguyen, Tianjiao Qiu, Praveen Soni, Terrence H. Witkowski, Tao "Alex" Wu

Administrative Support Coordinator: Raquel Porter
For MBA with Specialization in Marketing, see Business Administration, Graduate Programs.

Career Possibilities

Social Media Planner, Sales Representative • Manager Trainee • Retail Buyer • Insurance Agent • Public Relations Specialist • Advertising Account Executive • Purchasing Agent • Retail Merchandising Manager • Brand Manager • Online Account Executive • Online Sales Manager • Media Sales Manager • Media Planner • New Product Manager • Real Estate Agent • Distribution Manager • Packaging Manager • Non-profit Fund Raiser • Event Coordinator and Publication Specialist • Market Research Analyst (Some of these careers require additional experience or education.) Various entry-level, trainee positions in business and industry are available for graduates regardless of academic discipline.

Undergraduate Programs

Bachelor of Science in Business Administration

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Requirements

In order to graduate with an undergraduate business degree from CSULB, a student must complete a minimum of 120 units. A majority of the upper division business courses, including economics and statistics, must be completed at this university. For details, refer to the CBA Policy on Course Transfers/Substitutions.

1. Lower Division:

Take all of the following:

ACCT 201 Elementary Financial Accounting (3)
Prerequisite: None

ECON 100 Principles of Macroeconomics (3)
Prerequisites: MATH 103 or higher; one GE Foundation course.

ECON 101 Principles of Microeconomics (3)
Prerequisite/Corequisite: MATH 103 or higher.

MATH 115 Calculus for Business (3)
Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

STAT 108 Statistics for Everyday Life (3)
Prerequisite: None

2. Critical Thinking Course Requirements:

Choose one of the following:

PHIL 170 Critical Reasoning (3)
Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

IS 100 Information Technology Literacy (3)
Prerequisite: None

3. All business and pre-business majors shall demonstrate computer literacy and competency prior to taking junior and senior level courses. Requires one of the following:

A. Passing score (70%) on the Computer Proficiency Examination (CPE).

B. With Credit (Cr) or "C" or better grade in a transfer equivalent course, complete:
IS 233 Introduction to Computer Systems and Applications (3)
Prerequisite: None

4. Upper Division:

A. Take all of the following:

CBA 300 International Business (3)
Prerequisite: None

ACCT 310 Cost Accounting for Managers (3)
Prerequisites: ACCT 201 or equivalent.

ECON 333 Managerial Economics (3)
Prerequisites: ECON 100, 101; MATH 115 or 122.

FIN 300 Business Finance (3)
Prerequisite: None

BLAW 320 Legal and Regulatory Environment of Business (3)
Prerequisite: None

IS 300 Management Information Systems (3)
Prerequisite: IS 233 or equivalent.

IS 301 Business Communications (3)
Prerequisite: None

IS 310 Business Statistics (3)
Prerequisite: MATH 114.

HRM 360 Organizational Behavior (3)
Prerequisite: None

MGMT 300 Principles of Management (3)
Prerequisite: None

MKTG 300 Marketing (3)
Prerequisite: None

B. The following Capstone course must be taken at CSULB as a senior and after the upper-division prerequisite core courses have been completed (ACCT 310, FIN 300, MGMT 300, MKTG 300, IS 301):
MGMT 425 Business Strategy and Policy (3)
Prerequisites: ACCT 310 or 320; MGMT 300, MKTG 300, FIN 300, IS 301.

C. Completion of option requirements.

5. Elective courses to total 120 units. Students are encouraged to select electives for expansion of knowledge and intellectual interests as well as for preparation for business employment.

Option in Marketing (120 units)

This option establishes that marketing is largely a social process, emphasizing that enterprises meet the needs of individuals or segments of society. The function of marketing is to determine those needs, provide the most effective means of informing actual and potential customers of the availability of services and goods, and deliver such services and goods.

Requirements

1. Nine units selected from the following courses:
MKTG 310, 330, 410, 420, 430, 437, 465, 480, 481, 492.
2. Take the following courses:
 - MKTG 470 Marketing Research (3)
Prerequisites: MKTG 300; IS 301, 310.
 - MKTG 490 Consumer Behavior (3)
Prerequisite: MKTG 300, IS 301.
 - MKTG 494 Marketing Management (3)
Prerequisites: MKTG 300, IS 301; senior marketing majors or consent of instructor.

Minor in Marketing

Requirements

1. Take the following course:
MKTG 300 Marketing (3)
Recommended: ECON 100, 101.
2. 15 units selected from the following courses:
MKTG 310, 330, 410, 420, 430, 437, 465, 470, 480, 481, 490, 492, 494 or CBA 300 as approved by the department.

Prerequisites

1. IS 310 is a prerequisite for MKTG 470;
2. MKTG 480 is a prerequisite for MKTG 481;
3. MKTG 300 is a prerequisite for MKTG 420, 430, 465, 470, 480, 481, 490 and 492.

Courses (MKTG)

UPPER DIVISION

300. Marketing (3)

Recommended: ECON 100, 101.

Relation of marketing system to other activities in the firm. Firms and domestic and world marketing environments. Economic and social effects on marketing. Human behavior's effects on marketing, communications, information systems, management problems and their solutions.

310. Retail Concepts and Policies (3)

Overview of the retail system. Retail decision making emphasized in relation to these areas: store operation and management, merchandise assortment and pricing, store location and layout, advertising and sales communication, consumer analysis, retail information systems, retail accounting and control.

Letter grade only (A-F).

330. Mass Marketing Communications: Advertising (3)

Principles and practices of advertising. Social and economic importance of advertising and its relation to modern business organization. Importance of an advertising plan, preparation of advertisements, copy and layout, media planning and application of information technology.

Letter grade only (A-F).

410. Services Marketing (3)

Prerequisite: MKTG 300, IS 301.

Applies marketing management techniques, marketing strategies, and processes for service evaluation and service quality improvement to service marketing. Characteristics of services marketing, service management, service evaluation, techniques for improvement, services marketing in global environments, and marketing techniques.

Letter grade only (A-F).

420. Sales Management (3)

Prerequisite: MKTG 300, IS 301.

Management of sales force. Sales Analysis, forecasting techniques, account and territory management and negotiations. Integrating the personal computer into the sales function.

Letter grade only (A-F).

430. Promotion Strategies (3)

Prerequisite: MKTG 300, IS 301.

Management of the promotional mix. Behavioral and data-based foundations for promotional strategies. Budgeting, allocation of promotional resources, and media models. Integration of promotional strategies into the marketing mix. Applications of information-based technologies and tools for analysis.

Letter grade only (A-F).

437. Digital Marketing and Media (3)

Prerequisite: MKTG 300, IS 301

Course Description: The role of digital media (e.g., e-commerce, social media, search optimization, mobile applications, online video, gaming) in consumer behavior and implications for marketing strategies. Digital marketing metrics, analysis of online business models, and future trends in digital marketing also discussed.

Letter grade only (A-F).

465. Business To Business Marketing (3)

Prerequisite: MKTG 300, IS 301.

Focus on business, government, and institutional markets. Comparison with consumer marketing. Analysis of business products/services and domestic/international strategy. Emphasis in relationship-management, e-commerce, supply chain, negotiation, technology innovation, brand assessment, trade, selling, and advertising strategy. Integration and application of information technology.

Letter grade only (A-F).

470. Marketing Research (3)

Prerequisites: MKTG 300; IS 301, 310.

Fundamentals of marketing and industrial research as an aid to problem-solving in business. Familiarization with current industry research efforts. Data collection, interviewing, and report-generation software. Analysis of data. Project, instrument and sampling designs.

Letter grade only (A-F).

480. International Marketing (3)

Prerequisite: MKTG 300, IS 301.

The study of global marketing theory and practice. The historical, economic, cultural, political, and legal factors that affect marketing decision-making outside the U.S. How to develop and present plans for exploiting global marketing opportunities.

Letter grade only (A-F).

481. International Marketing in Selected Markets (3)

Prerequisites: MKTG 300, IS 301.

Taught as a special topics seminar. Depending upon the instructor, topics may include marketing within specific regions such as Asia or Europe, marketing in developing countries, or international aspects of the marketing mix such as global advertising and global retailing.

Letter grade only (A-F).

490. Consumer Behavior (3)

Prerequisite: MKTG 300, IS 301.

Consumer behavior in a marketing context. Information processing, personality/lifestyle, group, social class, cultural/sub-cultural, and demographic factors to influence consumption behavior. Strategic and analytical thinking of consumer behavior both in profit and nonprofit contexts as well as relevant public policy applications.

Letter grade only (A-F).

492. New Products/New Services (3)

Prerequisite: MKTG 300 or consent of instructor; IS 301.

New product and new service development process from idea generation to launch; diffusion of innovation and sales forecast of new product; market entry strategy; branding of new product; business plan for new product/service.

Letter grade only (A-F).

494. Marketing Management (3)

Prerequisites: MKTG 300, IS 301; senior marketing majors or consent of instructor.

Strategies and techniques in marketing management. Application of prior material from marketing curriculum to problems and cases. Emphasis on problem identification and solution.

Letter grade only (A-F).

495. Selected Topics in Marketing (1-3)

Prerequisites: Consent of instructor, a GPA of 3.0 in marketing, IS 301.

Topics of current interest in marketing selected for intensive study.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

497. Directed Studies (1-3)

Prerequisites: Consent of instructor and department chair, on Dean's List and a 3.0 GPA or higher in marketing.

Individual projects, study and research of advanced nature in marketing.

MATHEMATICS AND STATISTICS

College of Natural Sciences and Mathematics

Department Chair: Robert A. Mena

Undergraduate Associate Chair: Kent G. Merryfield

Graduate Associate Chair: Wen-Qing Xu

Department Office: Faculty Offices (FO) 3 - 120

Telephone / FAX: (562) 985-4721 / (562) 985-8227

Website: www.csulb.edu/depts/math/

Faculty: Babette M. Benken, Joseph Bennish, John O. Brevik, Linda H. Byun, Bruce J. Chaderjian, Jen-Mei Chang, Joshua D. Chesler, Scott W. Crass, Linda J. DeGuire (Emerita), Yu Ding, Carl H. Dorn, Morteza Ebneshrashoob, Tangan Gao, Yihnan David Gau, Eun Heui Kim, Sung Eun Kim, YongHee Kim-Park, Olga Korosteleva, Melvin D. Lax, Chung-Min Lee, Xuhui Li, William G. Margulies, Robert A. Mena, Kent G. Merryfield, Hojin Moon, William L. Murray, Florence A. Newberger, Norma A. Noguera, Alan M. Safer, Angelo Segalla, James D. Stein (Emeritus), Kagba V. Suaray, Lindsay A. Tartre, Robert C. Valentini, Ngo N. P. Viet, Derming Wang, Saleem H. Watson, Wen-Qing Xu, Tianni Zhou, William K. Ziemer

Administrative Support Coordinator: Linda Dixon

ELM Coordinator: Larry Brownson

Advisors:

Undergraduate:

General - William L. Murray

Applied Math - Melvin D. Lax

Statistics - Hojin Moon

K-9th Teaching - Lindsay Tartre

Honors in the Major: Kent G. Merryfield

Credential: Angelo Segalla

Graduate:

General - John O. Brevik

Applied - Eun Heui Kim

Mathematics Education - Babette M. Benken

Statistics - Hojin Moon

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Mathematician • Statistician • Operations Research Analyst • Computer Programmer • Wage/Salary Analyst • Teacher • Systems Analyst • Financial Analyst • Corporate Accountant • Actuary • Surveyor • Information Scientist • Econometrist • Securities Analyst • Efficiency Engineer • Meteorologist • Technical Writer • Demographer (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.) Various entry-level trainee positions in business and industry are available for graduates regardless of academic discipline.

Introduction

Mathematics is fundamental to all scientific knowledge, including not only the traditional natural sciences but increasingly the social and economic sciences. Mathematics is also a vital aid to critical and philosophical thinking.

The Department offers instruction for students at all levels beyond high school mathematics. Its courses provide the computational and analytic skills needed for a variety of majors, as well as the advanced theoretical topics for specialists in mathematics.

Academic Advising and Facilitated Enrollment into Classes

All entering students who declare a major in a degree program offered by this department need to contact the College of Natural Sciences and Mathematics' Academic Advising Center (HSCI 167) and participate in the College's Science Safari to Success (for first time freshmen) or EONS (Enrollment and Orientation in the Natural Sciences and Mathematics for transfer students) Program. These programs are held in June-July for those starting in the Fall Semester and in January for those starting in the Spring Semester. Department advisors will be available to provide an overview of the students' chosen baccalaureate degree program, to assist with academic advisement, to provide information on the many career opportunities available, and to aid students in enrolling in classes. Contact the Jensen Student Access to Sciences and Mathematics Center (HSCI 164) or department office for additional information.

Concurrent and/or Summer Enrollment at Another College

Students who wish to take coursework at a community college or other college to meet curricular requirements while enrolled as undergraduates in the College of Natural Sciences and Mathematics must petition the appropriate department for prior approval to earn credit for specific courses. This policy applies to concurrent enrollment or summer enrollment. University policy must also be complied with; see 'Concurrent Enrollment' and 'Transfer of Undergraduate Credit' in this catalog. Courses not receiving prior approval will not be accepted for credit by the department.

Undergraduate Programs

Bachelor of Science in Mathematics (120 units)

This program requires a selection of fundamental courses in algebra, statistics, and analysis be taken. It is the most flexible program, in which the greatest number of electives may be chosen. Elective upper division mathematics courses are available which meet the needs of students preparing careers in industry and government, secondary teaching, and graduate study. Students who do not wish to complete the requirements for a declared option in applied mathematics or statistics may wish to elect courses in one or both of these areas as part of this degree program.

Requirements

Lower Division:

Take all the following courses:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 233 Fundamental Concepts for Adv Math (3)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)
Prerequisite: MATH 123 or 222.

CECS 174 Introduction to Programming and Problem Solving (3)
Prerequisite: CECS 100 and MATH 113 (or equivalent).

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following courses:

ENGL 101 Composition (3)
Prerequisite: ENGL 100.

ENGL 317 Technical Communication (3)
Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Upper Division:

A minimum of 30 units of approved courses selected in consultation with a major advisor, to include the following:

Take one of the following courses:

MATH 341 Number Theory (3)
Prerequisite: MATH 233.

MATH 347 Linear Algebra (3)
Prerequisites: MATH 233 and 247.

Take all of the following courses:

MATH 361A Introduction to Mathematical Analysis I (3)
Prerequisites: MATH 222 or 224, and MATH 233 or 247.

MATH 361B Introduction to Mathematical Analysis II (3)
Prerequisite: MATH 361A.

MATH 364A Ordinary Differential Equations I (3)
Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.

MATH/STAT 380 Probability and Statistics (3)
Prerequisite: MATH 222 or 224.

MATH 444 Introduction to Abstract Algebra (3)
Prerequisites: MATH 233 and 247 and at least one of MATH 341 or 347.

(may not include MATH 303I, 370A, 370B, or 409)

To allow flexibility, only 18 of the required 30 units are specified. Students should choose the remaining 12 units after discussing career goals and interests with an advisor.

Option in Applied Mathematics (120 units)

This option emphasizes mathematics frequently used in applications. The student may choose one of two suboptions: the first is aimed at applications in science and engineering, the second at applications in economics and management. Students are prepared for careers in industry, business, and government and for graduate study in applied mathematics.

Requirements

Suboption I: Application in Science and Engineering

Lower Division:

Take all the following courses:

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)
Prerequisite: MATH 123 or 222.

CECS 174 Introduction to Programming and Problem Solving (3)
Prerequisite: CECS 100 and MATH 113 (or equivalent).

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Take one of the following courses:

ENGL 101 Composition (3)
Prerequisite: ENGL 100.

ENGL 317 Technical Communication (3)
Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Take one of the following courses:

PHYS 254 Applied Modern Physics (3)
Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

EE 211 Electric and Electronic Circuits (3)
Prerequisites: (EE 210/210L or PHYS 152) and (MATH 123 or equivalent).

CE 205 Analytical Mechanics I (Statics) (3)
Prerequisite: PHYS 151. Prerequisite/Corequisite: MATH 123.

Upper Division:

Take all the following courses:

MATH 323 Introduction to Numerical Analysis (4)
Prerequisites: MATH 222 or 224, and a course in computer programming.

MATH 361A Introduction to Mathematical Analysis I (3)
Prerequisites: MATH 222 or 224, and MATH 233 or 247.

MATH 361B Introduction to Mathematical Analysis II (3)
Prerequisite: MATH 361A.

MATH 364A Ordinary Differential Equations I (3)
Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.

MATH 364B Ordinary Differential Equations II (3)
Prerequisite: MATH 364A or 370A.

MATH/STAT 380 Probability and Statistics (3)
Prerequisite: MATH 222 or 224.

MATH 470 Intro to Partial Differential Equations (3)
Prerequisite: MATH 364A or 370A.

A minimum of 9 units from the following:

MATH 423, 461, 463, 472, 473, 474, 479, 485; STAT 381, 482.

A minimum of 9 units from one of the following groups:

A. PHYS 310, 340A, 340B, 350, 410, 422, 450;

B. EE 310, 370, 382, 411, 460, 482;

C. CE 335, 359, 437, 438, 458; MAE 371, 373

Suboption II: Application in Economics and Management

Lower Division:

Take all the following courses:

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)
Prerequisite: MATH 123 or 222.

CECS 174 Introduction to Programming and Problem Solving (3)

Prerequisite: CECS 100 and MATH 113 (or equivalent).

Take one of the following courses:

ENGL 101 Composition (3)

Prerequisite: ENGL 100.

ENGL 317 Technical Communication (3)

Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Take one of the following groups:

1. ECON 100 Principles of Macroeconomics (3)

Prerequisites: MATH 103 or higher and one GE Foundation course.

ECON 101 Principles of Microeconomics (3),

Prerequisite/Corequisite: MATH 103 or higher.

or

2. ECON 300 Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

Upper Division:

Take all the following courses:

MATH 323 Introduction to Numerical Analysis (4)

Prerequisites: MATH 222 or 224, and a course in computer programming.

MATH 361A Introduction to Mathematical Analysis I (3)

Prerequisites: MATH 222 or 224, and MATH 233 or 247.

MATH 361B Introduction to Mathematical Analysis II (3)

Prerequisite: MATH 361A.

MATH 364A Ordinary Differential Equations I (3)

Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.

MATH/STAT 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

MATH 485 Mathematical Optimization (3)

Prerequisites: MATH 247 and at least one of MATH 323, 347 or 380.

STAT 381 Mathematical Statistics (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

STAT 482 Random Processes (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

Take a minimum of 6 units from the following courses:

MATH 364B, 423, 463, 470, 473, 474, 479; STAT 410

Take a minimum 15 units from one of the following groups:

A. Take both of the following courses:

ECON 310 Microeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

ECON 311 Macroeconomic Theory (3)

Prerequisites: ECON 100, ECON 101, and either MATH 115 or MATH 122, with grades of "C" or better in all prerequisite courses.

Take 9 units selected from the following

ECON 333, 410, 411, 420, 485, 486

B. Take both of the following courses:

ECON 333 Managerial Economics (3)

Prerequisites: ECON 100, 101 and either MATH 115 or 122.

SCM 410 Logistics Management (3)

Prerequisites: MGMT 300, IS 301.

Take 9 units selected from the following:

SCM 411, 414; MGMT 412, 413, 426

Option in Statistics (120 units)

This option provides a foundation in statistical methods. The courses required ensure that the student understands how the techniques are mathematically derived and how they

are applied. Statistical analysis is an essential part of any scientific investigation and is a vital tool in monitoring the quality of products and services and in forecasting.

Requirements

Lower Division:

Take all the following courses:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

CECS 174 Introduction to Programming and Problem Solving (3)

Prerequisite: CECS 100 and MATH 113 (or equivalent).

Take one of the following courses:

ENGL 101 Composition (3)

Prerequisite: ENGL 100.

ENGL 317 Technical Communication (3)

Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Upper Division:

Take a minimum of 34 units of MATH or STAT courses to include the following (but not MATH 303I, 370A or 370B):

MATH 323 Introduction to Numerical Analysis (4)

Prerequisites: MATH 222 or 224, and a course in computer programming.

MATH 361A Introduction to Mathematical Analysis I (3)

Prerequisites: MATH 222 or 224, and MATH 233 or 247.

STAT 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

STAT 381 Mathematical Statistics (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

STAT 410 Regression Analysis (3)

Prerequisite: STAT 381.

STAT 450 Multivariate Statistical Analysis (3)

Prerequisite: STAT 381; Prerequisite/Corequisite STAT 410.

STAT 475 Data Analysis with SAS (3)

Prerequisite: STAT 381 or consent of instructor.

Three units of the elective upper-division MATH or STAT courses may be replaced by MATH 233.

Option in Mathematics Education (120 units)

This option is for students preparing to teach mathematics at the secondary school level. Completion of this option meets subject matter competence requirements for the Single Subject Teaching Credential Mathematics. Consult the department's Mathematics Education Advisor early to plan the program.

Requirements

Lower Division:

Take all the following courses:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 233 Fundamental Concepts for Adv Math (3)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

Take one of the following courses:

ENGL 101 Composition (3)

Prerequisite: ENGL 100.

ENGL 300 Advanced Composition (3)

Prerequisites: GE Foundation requirements and upper-division standing.

ENGL 317 Technical Communication (3)

Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

Take one of the following sequences:

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

or

PHIL 170 Critical Reasoning (3)

Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

PHIL 270 Symbolic Logic I (3)

Prerequisite: None.

or

Eight units of a foreign language.

Upper Division:

Take all the following courses:

MATH 310 History of Early Mathematics (3)

Prerequisite/Corequisite: A 200-level mathematics course.

MATH 341 Number Theory (3)

Prerequisite: MATH 233.

MATH 355 College Geometry (3)

Prerequisite: MATH 247.

MATH/STAT 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

MATH 410 History of Modern Mathematics (3)

Prerequisites: MATH 247, 310 and at least three of the following: MATH 233, 341, 355, 361A, 380.

MATH 444 Introduction to Abstract Algebra (3)

Prerequisites: MATH 233 and 247 and at least one of MATH 341 or 347.

STAT 381 Mathematical Statistics (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

MTED 301 Computer Applications in Mathematics for Teachers (3)

Prerequisites: One year of high school geometry and one of MTED 110 or MATH 122.

MTED 411 Topics and Issues in Secondary School Mathematics (3)

Prerequisites: MATH 310, 341, 355, 380, 410, 444; EDSS 300M or consent of the instructor.

EDSS 300M. Introduction to Teaching - Mathematics (3)

Prerequisite: Advanced sophomore or junior standing.

Take one of the following courses:

MATH 361A Introduction to Mathematical Analysis I (3)

Prerequisites: MATH 222 or 224, and MATH 233 or 247.

MATH 364A Ordinary Differential Equations I (3)

Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.

Take 3 additional upper division mathematics units *excluding*:

MATH 303I, 370A, 370B, 409.

Single Subject Teaching Credential Mathematics

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective Math teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

Honors in Mathematics

Students majoring in the B.S. in Mathematics (all options) who would like an enriched academic program that includes a thesis may complete the Honors in the Major program described here. May also complete General Honors through the University Honors Program, in which case the thesis requirement may be met through the Honors in the Major.

Admission Requirements

Admission to the Honors in the Major program will be determined by the Honors in the Major Advisor.

1. Junior or senior standing with at least one year remaining before graduation.
2. Declared major of B.S. in Mathematics or any of its options.
3. Completion of the following:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

And at least two upper division MATH courses at the time of entry with grades of at least "C" in each course. Students may apply during the semester in which they expect to complete these courses.

4. GPA's of at least 3.500 in all courses in the major and in all upper division courses in the major at the time of application.
5. Submission of an application describing the student's academic background, reasons for applying, and willingness to commit to completion of the requirements, including a thesis.
6. Letter of recommendation from a CSULB faculty member familiar with the student's work and abilities.

Graduation Requirements

1. GPA of at least 3.500 in all upper division courses in the major and in all courses in Items 3, 4, and 5, below.
2. Completion of all requirements for the chosen option of the B.S. in Mathematics.
3. Completion of at least one of the following courses: MATH 347, 423, 451, 461, 463, 472, 479.
These courses may be included among the upper division units for the major, in item 2, if allowed in the student's major.

4. Completion of at least three units of any combination of: MATH 491 and/or MATH 496.
 5. Completion of 3 units of MATH 498H, Senior Thesis-Honors.
 6. It is a requirement for this Honors in the Major program that the 6 units of MATH 491, 496, and 498H be in addition to the Department of Mathematics and Statistics course requirements for the B.S.
 7. Presentation of thesis results in a public forum. This forum could be at a meeting of a scientific or professional organization or a campus or departmental forum, subject to the approval of the Honors in the Major Advisor.
- Substitutions to this program must be approved by the Honors in the Major Advisor.

Minor in Mathematics

Requirements

The Minor in Mathematics is available to any student not majoring in Mathematics or Applied Mathematics.

The student must complete 23 or more semester units as follows:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

And take 9 units of upper-division MATH or STAT courses to include MATH 361A but not MATH 370A.

The student may replace MATH 123 and 224 by MATH 222 and an additional 3 units of upper division MATH or STAT (excluding MATH 370A) not used to meet the above upper-division requirements.

Minor in Applied Mathematics

Requirements

The Minor in Applied Mathematics is available to any student not majoring in Mathematics or Applied Mathematics.

The student must complete 27 or more semester units as follows:

Lower Division:

Take all of the following courses:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

Upper Division:

Take all of the following courses:

MATH 323 Introduction to Numerical Analysis (4)

Prerequisites: MATH 222 or 224, and a course in computer programming.

MATH/STAT 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

Take one of the following courses:

MATH 364A Ordinary Differential Equations I (3)

Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.

MATH 370A Applied Mathematics I (3)

Prerequisites: MATH 123. Not open to Freshmen.

Take one course from the following:

MATH 364B, 423, 470, STAT 381, or 482.

The student may replace MATH 123 and 224 by MATH 222 and an additional course from MATH 364B, 423, 470, STAT 381, 482 not used to meet the above upper division requirements.

Minor in Statistics

Requirements

The Minor in Statistics is available to any non-Mathematics major. The student must complete 26 or more semester units by following one of two sequences:

Sequence One:

Take all of the following courses:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 222 Intermediate Calculus (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

MATH 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

STAT 381 Mathematical Statistics (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

Take any three of the following:

MATH 323, STAT 410, 450, 475, 482, 484, and/or 485

Sequence Two:

Take all of the following courses:

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

MATH 380 Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

STAT 381 Mathematical Statistics (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

Take any two of the following:

MATH 323, STAT 410, 450, 475, 482, 484, and/or 485

Graduate Programs

How to Apply

See department's website: www.csulb.edu/depts/math/

To apply for admission to a graduate program in the Department of Mathematics and Statistics, you must apply to the department and to the university.

To apply to the department, send one of the following appropriate

prerequisite worksheet (available online at above website or from the department office) to the Graduate Advisor by July 1 for fall admission or December 1 for spring admission:

- Pure Mathematics Prerequisite Worksheet;
- Applied Mathematics Prerequisite Worksheet;
- Applied Statistics Prerequisite Worksheet;
- Mathematics Education for Secondary Teachers Prerequisite Worksheet.

Master of Science in Mathematics

Prerequisites

1. A bachelor's degree in mathematics, or a bachelor's degree with a minimum of 24 upper division units in mathematics from an accredited college or university;
2. A grade of "C" or better in MATH 247, 361A-B, 364A and 444, or their equivalents. Deficiencies will be determined by the Graduate Advisor.

Advancement to Candidacy

The regulations governing the master's degree are those in effect at the time of advancement to candidacy. In addition to University requirements, the student must have completed all prerequisite courses listed above with no grade less than "C". Students must have fulfilled the Graduation Writing Assessment Requirement (GWAR) and should file for Advancement upon completion of at least six units (and no more than nine units) on the Program, with at least a 3.0 GPA. Program of study must be approved by the appropriate Graduate Advisor, Department of Mathematics and Statistics Chair, Associate Dean in the College of Natural Sciences and Mathematics, and Dean of Graduate Studies.

Requirements

1. A minimum of 30 graduate and approved upper-division units in mathematics including:
 - A. Three of the following courses: MATH 540A, 550A, 561A, or 562A.
 - B. Two additional courses selected from MATH 540B, 550B, 561B, or 562B.
 - C. An additional 3 units of 500-level mathematics courses.
2. Complete one of the following:
 - A. Pass a comprehensive written examination in two areas of Pure Mathematics. Specific requirements for passing of the comprehensive examinations can be found on the Department of Mathematics and Statistics website at www.csulb.edu/depts/math.
 - B. Subject to the approval of the Pure Mathematics Committee in the Department of Mathematics and Statistics, write a thesis in mathematics and defend it orally.

Option in Applied Mathematics

Prerequisites

1. A bachelor's degree in mathematics, physics, or engineering, or a bachelor's degree with at least 24 upper division units in mathematics from an accredited college or university.
2. A grade of "C" or better in MATH 247, 323, 361A/B, 364A, and MATH/STAT 380, or their equivalents. Deficiencies will be determined by the Graduate Advisor.

Advancement to Candidacy

The regulations governing the master's degree are those in effect at the time of advancement to candidacy. In addition to University requirements, the student must have completed all prerequisite courses listed above, with no grade less than "C". Students must have fulfilled the Graduation Writing Assessment Requirement (GWAR) and should file for Advancement upon completion of at least six units (and no more than nine units) on the program, with at least a 3.0 GPA. Program of study must be approved by the appropriate Graduate Advisor, Department of Mathematics and Statistics Chair, Associate Dean in the College of Natural Sciences and Mathematics.

Requirements

1. A minimum of 30 graduate and upper division units approved by the Graduate Advisor, and including:
 - A. Three of the following courses: MATH 563, 570, 576 and 579.
 - B. Three additional courses selected from: MATH 520, 521, 564, 573, 574, 575, 577, 578, and the course in 1.A not used to satisfy that requirement.
2. Complete one of the following:
 - A. Pass a comprehensive written examination in two subjects of Applied Mathematics. Specific requirements for passing of the comprehensive examinations can be found on the Department of Mathematics and Statistics website at www.csulb.edu/depts/math.
 - B. Subject to the approval of the Applied Mathematics Committee in the Department of Mathematics and Statistics, write a thesis in applied mathematics and defend it orally.
 - C. Subject to the approval of the Applied Mathematics Committee in the Department of Mathematics and Statistics, complete a non-proprietary applied mathematics thesis project with a local company under the guidance of a faculty advisor in applied mathematics and a project leader from the company. Write a final report on the thesis project and its outcomes, and defend it orally. Specific requirements for completion of the thesis project can be found on the Department of Mathematics and Statistics website at www.csulb.edu/depts/math.

Option in Mathematics Education for Secondary School Teachers

Option in Mathematics Education for Secondary School Teachers is designed for people holding a California Single Subject Teaching Credential in Mathematics and teaching in middle, junior high, or high schools. This option will give students greater expertise in mathematics and mathematics education (curriculum, teaching, learning, assessment and research). The program includes a blend of courses from pure and applied mathematics, statistics, mathematics education, and also may include coursework from the College of Education.

Prerequisites

1. A bachelor's degree in mathematics or mathematics education, or a bachelor's degree with at least 24 upper division units in mathematics from an accredited college or university.
2. A California Single Subject Credential in Mathematics.
3. Course work in mathematics should include MATH 247, 310, 341, 355, 361A or 364A, and MATH/STAT 380 or equivalent with a grade of "C" or better.

Advancement to Candidacy

The regulations governing the master's degree are those in effect at the time of advancement to candidacy. In addition to University requirements stated elsewhere in this catalog, must have completed prerequisites above and must have satisfied the Graduation Writing Assessment Requirement (GWAR). Must file for Advancement to Candidacy after completion of at least 6 units (and recommend filing before completing 9 units) on Program of Study, with an overall 3.0 grade-point average. Program of Study must be approved by Mathematics Education Graduate Advisor, Department of Mathematics and Statistics Chair and Associate Dean in the College of Natural Sciences and Mathematics.

Requirements

1. A minimum of 30 units of graduate level or approved upper division coursework which includes the following:
 - A. A minimum of 9 graduate or approved upper-division units of mathematics, including at least one 500-level mathematics course. If not previously taken for BS or credential, this course of study must include:
 - MATH 410 History of Modern Mathematics (3)
Prerequisites: MATH 247, 310 and at least three of the following: MATH 233, 341, 355, 361A, 380.
 - MATH 444 Introduction to Abstract Algebra (3)
Prerequisites: MATH 233 and 247 and at least one of MATH 341 or 347.
 - B. A minimum of 15 graduate units of mathematics education including:
 - 1) Take both of the following:
 - MTED 511 Mathematics Teaching and Learning (3)
Prerequisite: Consent of instructor.
 - MTED 512 Curriculum and Assessment in Math (3)
Prerequisite: MTED 511 or consent of instructor.
 - 2) At least 9 units in mathematics education chosen in consultation with the Mathematics Education Graduate Advisor from the following courses:
MTED 540, 550, 560, 580, 590
 - C. A minimum of 6 units of approved upper division or graduate electives from mathematics, mathematics education, or approved College of Education courses, chosen in consultation with the Mathematics Education Graduate Advisor. If the student plans to teach at the Community College level, she/he must take at least 18 units of graduate or approved upper division mathematics from Parts A and C. If the student intends to do a thesis he/she must take EDP 520 or the equivalent.
2. Complete one of the following two options:
 - A. Pass two comprehensive written examinations in mathematics education (one representing MTED 511/512 and one in a selected area - MTED 540, 550, 560, or 580);
 - B. Subject to the approval of the Mathematics Education Committee of the Department of Mathematics and Statistics, write a thesis in mathematics education and defend it orally (MTED 698);

Mathematics Education Thesis

Students choosing the thesis option must consult with the Mathematics Education Graduate Advisor to select a thesis advisor. A proposal is then written in consultation with the mathematics education faculty advisor who will guide the student in choosing the thesis topic and supervise the writing

process. After a thesis topic is chosen, it must be approved by the Mathematics Education Committee. A thesis committee of three faculty members, including the thesis advisor, is then chosen to approve the final work. During the writing of the thesis report, students must enroll in MTED 698.

Master of Science in Applied Statistics

Prerequisites

1. A bachelor's degree from an accredited college or university.
2. A grade of "B" or better in MATH 247, MATH/STAT 380, and STAT 381 or their equivalents.

Advancement to Candidacy

In addition to University requirements, the student must have completed all prerequisite courses listed above, with no grade less than "B". Students must have satisfied the Graduation Writing Assessment Requirement (GWAR) and should file for Advancement upon completion of at least six units (and no more than nine units) of the Program, with at least a 3.0 GPA. Program of study must be approved by the appropriate Graduate Advisor, Department of Mathematics and Statistics Chair, Associate Dean in the College of Natural Sciences and Mathematics.

Requirements

1. A minimum of 30 graduate and 400 level units in statistics (STAT) and could include upper division/graduate non-statistics units approved by the statistics graduate advisor, and including:
 - A. STAT 510, 520, 530.
 - B. Four additional courses selected from 500 level STAT courses or 400 level STAT courses.
 - C. A minimum of 18 units at the 500/600 level, including at least 15 units of graduate courses in statistics (STAT) other than STAT 697 or 698.
2. Complete one of the following:
 - A. Pass two comprehensive written examinations in Statistical Inference (STAT 520) and Experimental Design (STAT 530).
 - B. Subject to the approval of the Statistics Committee in the Department of Mathematics and Statistics, write a thesis in statistics and defend it orally.
 - C. Subject to the approval of the Statistics Committee in the Department of Mathematics and Statistics, complete a non-proprietary statistical project with an industrial company under the guidance of a faculty advisor in statistics. Write a final report and give an oral presentation of the project and its outcomes to the department. Specific requirements for completion of the project can be found on the department's statistics webpage at www.csulb.edu/depts/math.

Single Subject Teaching Credential in Mathematics

For information, refer to the undergraduate section in this department.

Early Start Mathematics Courses (ESM)

1. Early Start Basic Algebra (1)

Prerequisite: ELM score of 38 or less.

Arithmetic review, elementary algebra and geometry.

This course will satisfy the Early Start Program requirement for CSULB bound students. Cannot be taken for credit toward a university degree. Not open to students who are exempt from the ELM.

Credit/No Credit grading only. (Seminar 15 hrs)

3. Elem Algebra-Geometry (3)

Prerequisite: Prerequisite: ELM Score of 38 or less.

Arithmetic review, elementary algebra, and some basic geometry concepts. Cannot be taken for credit toward a university degree. Credit/No Credit grading only. Not open to students who are exempt from the ELM or who have not yet taken the ELM but are required to do so.

Credit/No Credit grading only. (Seminar 45 hrs.)

11. Early Start Enhanced Algebra (1)

Prerequisite: ELM score between 40 and 48 inclusive.

Intermediate algebra and geometry.

This course is designed to satisfy the Early Start Program requirement for CSULB bound students. Cannot be taken for credit toward a university degree. Not open to students who are exempt from the ELM

Credit/No Credit grading only. (Seminar 15 hrs.)

21. Basic Intermediate Algebra (3)

Prerequisite: Prerequisite: MAPB 1 or ELM Score between 40 and 48 inclusive.

Linear functions, their graphs, applications; proportions and percent change, applications to geometry and life; operations on radicals; rational exponents and scientific notation; dimensional analysis; sets, Venn diagrams, basic counting principles; combinations, permutations, probability; elementary data analysis; logarithmic, exponential functions, applications.

For students who will not need to take MATH 113, 114 or 115 or MTED 110. Cannot be taken for credit toward a university degree. Not open to students who are exempt from the ELM or who have not yet taken the ELM but are required to do so. Credit/No Credit grading only. (Lecture 3 hrs.)

33. Enhanced Intermediate Algebra (3)

Prerequisite: Prerequisite: MAPB 1 or ELM Score between 40 and 48 inclusive.

Polynomial, rational, radical expressions, equations; rational exponents, complex numbers; solutions, graphs of linear, quadratic equations, functions; linear systems; graphs of and operations on functions; including the difference quotient and inverses; logarithmic and exponential functions. Applications to science and business emphasized. Cannot be taken for credit toward a university degree. Not open to students who are exempt from the ELM or who have not yet taken the ELM but are required to do so. For students that intend to take MATH 113 or 115. Credit/No Credit grading only. (Lecture 4 hrs)

Mathematics Prebaccalaureate Courses (MAPB)

1. Elementary Algebra and Geometry (4)

Prerequisite: Appropriate ELM Score.

Arithmetic review, elementary algebra, and some basic geometry concepts. Cannot be taken for credit toward a university degree.

Credit/No Credit grading only. Not open to students who are exempt from the ELM or who have not yet taken the ELM but are required to do so. (Lecture 4 hrs.)

7. Basic Intermediate Algebra (3)

Prerequisite: MAPB 1 or appropriate ELM Score.

Linear functions, their graphs, applications; proportions and percent change, applications to geometry and life; operations on radicals; rational exponents and scientific notation; dimensional analysis; sets, Venn diagrams, basic counting principles; combinations, permutations, probability; elementary data analysis; logarithmic, exponential functions, applications.

Cannot be taken for credit toward a university degree. Not open to students who are exempt from the ELM or who have not yet taken the ELM but are required to do so. For students who will not need to take MATH 113, 115 or 117. Credit/No Credit grading only. (Lecture 3 hrs.)

11. Enhanced Intermediate Algebra (4)

Prerequisite: MAPB 1 or appropriate ELM Score.

Polynomial, rational, radical expressions, equations; rational exponents, complex numbers; solutions, graphs of linear, quadratic equations, functions; linear systems; graphs of and operations on functions, including the difference quotient and inverses; logarithmic and exponential functions. Applications to science and business emphasized.

Cannot be taken for credit toward a university degree. Not open to students who are exempt from the ELM or who have not yet taken the ELM but are required to do so. For students that intend to take MATH 113, 115 or 117. Credit/No Credit grading only. (Lecture 2 hrs., activity 2 hrs.)

Mathematics Courses (MATH)

Satisfying the Entry-Level Math (ELM) requirement (see "Undergraduate Programs" section of this catalog) is a prerequisite for all mathematics courses and mathematics education courses. Please contact the ELM Coordinator in the Department of Mathematics and Statistics for details regarding the ELM test score.

LOWER DIVISION

103. Mathematical Ideas (3)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 7 or 11.

Surveys variety of concepts in undergraduate mathematics. Includes elementary logic, numeration systems, rational and real numbers, modular number systems, elementary combinatorics, probability and statistics, using real world examples.

Not open for credit to students with credit in any MATH or MTED course numbered greater than 103, or the equivalent. (Lecture 3 hrs.)

109. Modeling with Algebra (3)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 7 or 11.

Data, functions, domain, range, representations of functions (verbal, numerical, graphical, algebraic), visualizing functions (increasing, decreasing, maximum, minimum, concave up, concave down). Linear functions, rate of change, slope, modeling data, systems of linear equations, linear inequalities. Exponentials, logs, growth decay, semi log plots for modeling.

Not open for credit to students with credit in any MATH or MTED course numbered greater than 103, or the equivalent. (Lecture 3 hrs.)

111. Precalculus Trigonometry (3)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

Trigonometric functions and applications. Arithmetic and graphical representation of complex numbers, polar form, DeMoivre's Theorem.

Not open for credit to students with credit in MATH 101, 117 or 122. (Lecture 3 hrs.)

113. Precalculus Algebra (3)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

Equations, inequalities. Functions, their graphs, inverses, transformations. Polynomial, rational functions, theory of equations. Exponential, logarithmic functions, modeling. Systems of equations, matrices, determinants. Sequences, series.

Not open for credit to students with credit in MATH 112, 115, 117, 119A, 120, or 122. For students who will continue to MATH 115, 117, 119A, 120, or 122. (Lecture 3 hrs.)

114. Finite Mathematics (3)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

Combinatorial techniques and introduction to probability. Equations of lines and systems of linear equations, matrices, introduction to linear programming.

Not open for credit to students with credit in MATH 233 or 380. (Lecture 3 hrs.)

Mathematics Courses (MATH)

115. Calculus for Business (4)

Prerequisite: Appropriate ELM score, ELM exemption, or MAPB 11.

Functions, derivatives, optimization problems, graphs, partial derivatives. Lagrange multipliers, intergration of functions of one variable. Applications to business and economics. Emphasis on problem-solving techniques. Not open for credit to students with credit in MATH 119A, 120, or 122.

(Lecture 3 hrs, activity 1 hr)

117. Precalculus Mathematics (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MAPB 11.

Polynomial, rational, exponential, logarithmic, and trigonometric functions. Complex numbers, conic sections, graphing techniques.

Not open for credit to students with credit in MATH 122. (Lecture 3 hrs., problem session 2 hrs.)

119A. Survey of Calculus I (3)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

Functions, limits and continuity, differentiation and integration of functions of one variable including exponential, logarithmic, and trigonometric functions. Graphing, optimization, parametric equations, integration by substitution and by parts, numerical integration. Applications to the life sciences. Emphasis on problem solving.

Not open for credit to students with credit in MATH 115, 120 or 122. (Lecture 3 hrs.)

119B. Survey of Calculus II (3)

Prerequisite: MATH 119A or 122.

Functions of several variables, partial derivatives, optimization. First order differential equations, second order linear homogeneous differential equations, systems of differential equations. Probability, random variables, difference equations. Introduces matrices, Gaussian elimination, determinants. Life science applications. Emphasis on problem solving.

Not open for credit to students with credit in MATH 123 or 224. (Lecture 3 hrs.)

120. Calculus for Technology (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 113.

Real and complex numbers and functions; limits and continuity; differentiation and integration of functions of one variable. Introduces calculus of several variables. Science and technology applications.

Not open for credit to students with credit in MATH 122. (Lecture 3 hrs., problem session 2 hrs.)

122. Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

Continuous functions. Derivatives and applications including graphing, related rates, and optimization. Transcendental functions. L'Hospital's Rule. Antiderivatives. Definite integrals. Area under a curve.

(Lecture 3 hrs., problem session 2 hrs.)

123. Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

Applications of the integral. Techniques of integration. Infinite series including convergence tests and Taylor series. Parametric equations. Polar coordinates. Introduces differential equations.

Not open for credit to students with credit in MATH 222. (Lecture 3 hrs., problem session 2 hrs.)

173. Programming in Mathematical Software (3)

Prerequisite: MATH 113 or equivalent.

Introduction to basic concepts and fundamental techniques for solving mathematical and scientific problems by using software MatLab and Maple. Structured problem solving and programming.

(Lecture 2 hrs, problem session, 2 hrs.) Letter grade only (A-F).

222. Intermediate Calculus (4)

Prerequisite: A grade of "C" or better in MATH 122.

Integration by parts and by partial fractions. Numerical integration. Improper integrals. Infinite series including series convergence tests and Taylor series. Vectors. Partial derivatives and directional derivatives. Double integrals. Introduces differential equations.

Enrollment restricted to CECS majors. Not open for credit to students with credit in MATH 123. Letter grade only (A-F). (Lecture 3 hrs., activity 2 hrs.)

224. Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

Vectors and three-dimensional analytic geometry. Partial derivatives and Lagrange multipliers. Multiple integrals. Vector calculus, line and surface integrals. Green's Theorem, Stokes' Theorem, and the Divergence Theorem.

(Lecture 3 hrs., problem session 2 hrs.)

233. Fundamental Concepts for Advanced Mathematics (3)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

Fundamentals of logic and set theory, counting principles, functions and relations, induction and recursion, introduction to probability, elementary number theory, congruences. Introduces writing proofs.

(Lecture 3 hrs.)

247. Introduction to Linear Algebra (3)

Prerequisite: MATH 123 or 222.

Matrix algebra, solution of systems of equations, determinants, vector spaces including function spaces, inner product spaces, linear transformations, eigenvalues, eigenvectors, quadratic forms, and applications. Emphasis on computational methods.

(Lecture 3 hrs.)

297. Directed Study (1-3)

Prerequisite: Consent of instructor.

For students who wish to undertake special study, at the lower division level, which is not a part of any regular course, under the direction of a faculty member. Individual investigation, studies or surveys of selected problems.

UPPER DIVISION

303I. Reflections in Space and Time (3)

Prerequisites: GE Foundation requirements, at least one GE Exploration course, upper-division standing.

An experimentally-driven investigation of the mathematical nature of symmetry and patterns. Considers the pervasive appearance and deep significance of symmetry and patterns in art and science. (Lecture 3 hrs.)

310. History of Early Mathematics (3)

Prerequisite/Corequisite: A 200-level mathematics course.

History of mathematics through seventeenth century, including arithmetic, geometry, algebra, and beginnings of calculus. Interconnections with other branches of mathematics. Writing component; strongly recommended students enrolling have completed the G.E. A.1 requirement.

(Lecture 3 hrs.)

323. Introduction to Numerical Analysis (4)

Prerequisites: MATH 222 or 224, and a course in computer programming.

Numerical solution of nonlinear equations, systems of linear equations, and ordinary differential equations. Interpolating polynomials, numerical differentiation, and numerical integration. Computer implementation of these methods.

(Lecture-discussion 3 hrs., problem session 2 hrs.)

341. Number Theory (3)

Prerequisite: MATH 233

Divisibility, congruences, number theoretic functions, Diophantine equations, primitive roots, continued fractions. Writing proofs.

(Lecture 3 hrs.)

347. Linear Algebra (3)

Prerequisites: MATH 233 and 247.

In-depth study of linear transformations, vector spaces, inner product spaces, quadratic forms, similarity and the rational and Jordan canonical forms. Writing proofs.

(Lecture 3 hrs.)

355. College Geometry (3)

Prerequisite: MATH 247.

Transformations, motions, similarities, geometric objects, congruent figures, axioms of geometry and additional topics in Euclidean and non-Euclidean geometry. Writing proofs.

(Lecture 3 hrs.)

361A. Introduction to Mathematical Analysis I (3)

Prerequisites: MATH 222 or 224, and MATH 233 or 247.

Rigorous study of calculus and its foundations. Structure of the real number system. Sequences and series of numbers. Limits, continuity and differentiability of functions of one real variable. Writing proofs.

(Lecture 3 hrs.)

361B. Introduction to Mathematical Analysis II (3)

Prerequisite: MATH 361A.

Riemann integration. Topological properties of the real number line. Sequences of functions. Metric spaces. Introduction to calculus of several variables. Writing proofs.

(Lecture 3 hrs.)

364A. Ordinary Differential Equations I (3)

Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.

First order differential equations; undetermined coefficients and variation of parameters for second and higher order differential equations, series solution of second order linear differential equations; systems of linear differential equations; applications to science and engineering.

(Lecture 3 hrs.)

364B. Ordinary Differential Equations II (3)

Prerequisite: MATH 364A or 370A.

Existence-uniqueness theorems; Laplace transforms; difference equations; nonlinear differential equations; stability, Sturm-Liouville theory; applications to science and engineering.

(Lecture 3 hrs.)

370A. Applied Mathematics I (3)

Prerequisites: MATH 123. Not open to Freshmen.

First order ordinary differential equations, linear second order ordinary differential equations, numerical solution of initial value problems, Laplace transforms, matrix algebra, eigenvalues, eigenvectors, applications.

Not open for credit to mathematics majors. (Lecture 3 hrs.)

370B. Applied Mathematics II (3)

Prerequisite: MATH 370A.

Arithmetic of complex numbers, functions of a complex variable, contour integration, residues, conformal mapping; Fourier series, Fourier transforms; separation of variables for partial differential equations. Applications.

Not open for credit to mathematics majors. (Lecture 3 hrs.)

380. Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

Frequency interpretation of probability. Axioms of probability theory. Discrete probability and combinatorics. Random variables. Distribution and density functions. Moment generating functions and moments. Sampling theory and limit theorems.

Letter grade only (A-F). (Lecture 3 hrs.) Same course as STAT 380. Not open for credit to student with credit in STAT 380.

409. Strategies for Graduate Admission (1)

Prerequisite: Senior or graduate standing.

The nature and expectations of doctoral programs in Mathematics and related fields. Intensive preparation for GRE mathematics subject exams.

Credit/No Credit grading only. Does not satisfy Mathematics major requirements. (Lecture-discussion 1 hr.)

410. History of Modern Mathematics (3)

Prerequisites: MATH 247, 310 and at least three of the following: MATH 233, 341, 355, 361A, 380.

History of mathematics from seventeenth century onward. Development of calculus, analysis, and geometry during this time period. Other topics discussed may include history of probability and statistics, algebra and number theory, logic, and foundations.

(Lecture 3 hrs.)

423. Intermediate Numerical Analysis (3)

Prerequisites: MATH 247 and 323.

Numerical solutions of systems of equations, calculation of eigenvalues and eigenvectors, approximation of functions, solution of partial differential equations. Computer implementation of these methods.

(Lecture 3 hrs.)

444. Introduction to Abstract Algebra (3)

Prerequisites: MATH 233 and 247 and at least one of MATH 341 or 347.

Groups, subgroups, cyclic groups, symmetric groups, Lagrange's theorem, quotient groups. Homomorphisms and isomorphisms of groups. Rings, integral domains, ideals, quotient rings, homomorphisms of rings. Fields. Writing proofs.

(Lecture 3 hrs.)

451. Differential Geometry (3)

Prerequisite: MATH 364A or 370A.

Structure of curves and surfaces in space, including Frenet formulas of space curves; frame fields and connection forms; geometry of surfaces in Euclidean three space; Geodesics and connections with general theory of relativity.

(Lecture 3 hrs.)

456. Dynamics and Geometry of Chaos (3)

Prerequisites: MATH 247, 361A, or consent of instructor.

An introduction to discrete dynamical systems in one and two dimensions. Theory of iteration: attracting and repelling periodic points, symbolic dynamics, chaos, and bifurcation. May include a computer lab component.

(Lecture 3 hrs.)

Mathematics Courses (MATH)

461. Introduction to Complex Analysis (3)

Prerequisite: MATH 361A.

Theory and applications of complex variables. Analytic functions, integrals, power series and applications.

Not open for credit to students with credit in MATH 562A. (Lecture 3 hrs.)

463. Multivariable Calculus (3)

Prerequisites: MATH 224, 247, and 361B.

Topology of Euclidean spaces. Partial derivatives. Derivatives as linear transformations. Inverse and implicit function theorems. Jacobians, vector calculus, Green's and Stokes' theorems. Variational problems.

(Lecture 3 hrs.)

470. Introduction to Partial Differential Equations (3)

Prerequisite: MATH 364A or 370A.

First and second order equations, characteristics, Cauchy problems, elliptic, hyperbolic, and parabolic equations. Introduction to boundary and initial value problems and their applications.

(Lecture 3 hrs.)

472. Fourier Analysis (3)

Prerequisite: MATH 364A or 370A.

Theory of Fourier series and Fourier transforms. Physics and engineering applications. Parseval's and Plancherel's identities. Convolution. Multi-dimensional transforms and partial differential equations. Introduction to distributions. Discrete and fast Fourier transforms.

(Lecture 3 hrs.)

473./573. Scientific Computing (3)

Prerequisites: MATH 323 and either 364A or 370A. (Undergraduates register in MATH 473; graduates in MATH 573.)

Introduction to programming languages, implementations of numerical algorithms for solution of linear algebraic equations, interpolation and extrapolation, integration and evaluation of functions, root finding and nonlinear equations, fast Fourier transforms, minimization and maximization of functions, numerical solutions of differential equations.

Not open for credit to students with credit in MATH 573.

474. Mathematics of Financial Derivatives (3)

Prerequisites: MATH 364A or MATH 370A, MATH 380, or consent of instructor.

Options, futures, and other financial derivatives; arbitrage; risk-neutral valuation; binomial trees; the log-normal hypothesis; the Black-Scholes-Merton formula and applications; the Black-Scholes-Merton partial differential equation; American options; exotic options; bond models and interest rate derivatives; credit risk and credit derivatives.

479./579. Mathematical Modeling (3)

Prerequisites: MATH 247, 323; 364A or 370A; one additional mathematics course, or consent of instructor. (Undergraduates register in MATH 479; graduates in MATH 579.)

Application of mathematics to develop models of phenomena in science, engineering, business, and other disciplines. Evaluation of benefits and limitations of mathematical modeling.

Letter grade only (A-F). (Lecture 3 hrs.)

485. Mathematical Optimization (3)

Prerequisites: MATH 247 and at least one of MATH 323, 347 or 380.

Linear and nonlinear programming: simplex methods, duality theory, theory of graphs, Kuhn-Tucker theory, gradient methods and dynamic programming.

(Lecture 3 hrs.)

491. Honors Seminar in Problem Solving (1)

Prerequisite: Consent of instructor.

Challenging problems from many fields of mathematics, taken largely from national and worldwide collegiate and secondary school competitions. Students required to participate in at least one national competition.

May be repeated to a maximum of 3 units. (Lecture-discussion 1 hr.)

495. Topics in Modern Mathematics (3)

Prerequisite: Consent of instructor.

Topics of current interest from mathematics literature.

496. Special Problems (1-3)

Prerequisite: Consent of instructor.

Student investigations in mathematics, applied mathematics, mathematics education, or statistics. May include reports and reviews from the current literature, as well as original investigations.

May be repeated to a maximum of 3 units. Letter grade only (A-F).

497. Directed Studies (1-3)

Prerequisites: Junior or senior standing and consent of instructor.

Readings in areas of mutual interest to student and instructor which are not a part of any regular course. A written report or project may be required.

May be repeated to a maximum of 3 units.

498H. Senior Thesis - Honors (3)

Prerequisites: Admission to Honors in the Major in Mathematics or to the University Honors Program, and consent of instructor.

Planning, preparation, completion, and oral presentation of a written thesis in mathematics, applied mathematics, mathematics education, or statistics.

Not available to graduate students. Letter grade only (A-F).

GRADUATE LEVEL

520. Finite Element Method (3)

Prerequisite: MATH 323, 361A, 364A. Recommended: MATH 470.

Variational forms and weak solutions of partial differential equations, Galerkin method, construction of elements, numerical algorithms for matrix equations and for one-dimensional and two-dimensional problems. Convergence analysis and error estimate. Numerical implementations of algorithms.

Letter grade only (A-F). (Lecture 3 hrs.)

521. Matrix Method in Data Analysis and Pattern Recognition (3)

Prerequisite: MATH 423 or 576.

Vector spaces and linear transformations, optimal orthogonal projections, eigenvalues, eigenvectors, SVD, generalized SVD, Fourier and wavelet transforms, convolution, tangent distance. Implementations include object recognition, handwritten digit classification, digital image processing, feature extraction, image deblurring, text mining.

Letter grade only (A-F). (Lecture 3 hrs.)

540A. Abstract Algebra I (3)

Prerequisite: MATH 444.

Group theory including symmetric groups; group actions on sets; Sylow theorems and finitely generated abelian groups; ring theory including polynomial rings, division rings, Euclidean domains, principal ideal domains, and unique factorization domains.

Letter grade only (A-F). (Lecture 3 hrs.)

540B. Abstract Algebra II (3)

Prerequisite: MATH 540A.

Modules; Field extensions; Finite fields; Splitting fields, Galois theory. Commutative ring theory including chain conditions and primary ideals. Topics of current interest.

Letter grade only (A-F). (Lecture 3 hrs.)

541. Elliptic Curves (3)

Prerequisites: MATH 341, 444 and consent of instructor.
Recommended: MATH 461 and 540A.

Fermat's method of descent; finite fields; Weierstrass normal form; integer, rational points on elliptic curves; group structures of rational points; Mordell's Theorem; computation examples. May include congruent numbers, Certicom's public cryptography challenges, Lenstra's factorization method, Birch/Swinnerton-Dyer Conjecture
Letter grade only (A-F). (Lecture 3 hrs.)

542. Algebraic Geometry (3)

Prerequisite: MATH 540A or consent of instructor.

An introduction to algebraic geometry: Algebraic sets; affine and projective varieties. Additional topics at the discretion of the instructor may include: Algebraic Curves; Intersection Theory; Invariant Theory; Computational Approaches.

Letter grade only (A-F). (Lecture 3 hrs.)

550A. Topology I (3)

Prerequisite: MATH 361B.

Fundamentals of point-set topology: metric spaces and topological spaces; bases and neighborhoods; continuous functions; subspaces, product spaces and quotient spaces; separation properties, countability properties, compactness, connectedness; convergence of sequences, nets and filters.

Letter grade only (A-F). (Lecture 3 hrs.)

550B. Topology II (3)

Prerequisite: MATH 550A.

Further topics in point-set topology: local compactness, paracompactness, compactifications; metrizability; Baire category theorem; homotopy and the fundamental group. Topics may also include uniform spaces, function spaces, topological groups or topics from algebraic topology.

Letter grade only (A-F). (Lecture 3 hrs.)

560A. Functional Analysis I (3)

Prerequisites: MATH 247, 361B.

Linear spaces, metric and topological spaces, normed linear spaces; four principles of functional analysis: Hahn-Banach, Open Mapping, Uniform Boundedness, and Closed Graph theorems; adjoint spaces; normed space convergence, conjugate spaces, and operator spaces; Banach Fixed Point theorem; Hilbert spaces.

Letter grade only (A-F). (Lecture 3 hrs.)

560B. Functional Analysis II (3)

Prerequisite: MATH 560A or consent of instructor.

Spectral theory of operators on normed spaces; special operators; elementary theory of Banach algebras; selected topics from applied functional analysis.

(Lecture 3 hrs.)

561A. Real Analysis I (3)

Prerequisite: MATH 361B.

Theory of measure and integration, focusing on the Lebesgue integral on Euclidean space, particularly the real line. Modes of convergence. Fatou's Lemma, the monotone convergence theorem and the dominated convergence theorem. Fubini's theorem.

Letter grade only (A-F). (Lecture 3 hrs.)

561B. Real Analysis II (3)

Prerequisite: MATH 561A or consent of instructor.

Lp spaces of functions. Holder's inequality. Minkowski's inequality. Norm convergence, weak convergence and duality in Lp. Further topics from convergence of Fourier series, measure-theoretic probability, the Radon-Nikodym theorem; other topics depending on time and interest.

Letter grade only (A-F). (Lecture 3 hrs.)

562A. Complex Analysis I (3)

Prerequisite: MATH 361B. Recommended: MATH 461.

Axiomatic development of real and complex numbers; elements of point set theory; differentiation and analytic functions, classical integral theorems; Taylor's series, singularities, Laurent series, calculus of residues.

Letter grade only (A-F). (Lecture 3 hrs.)

562B. Complex Analysis II (3)

Prerequisite: MATH 562A.

Multiple-valued functions, Riemann surfaces; analytic continuation; maximum modulus theorem; conformal mapping with applications, integral functions; gamma function, zeta function, special functions.

Letter grade only (A-F). (Lecture 3 hrs.)

563. Applied Analysis (3)

Prerequisites: MATH 361B and either 364A or 370A.

Hilbert Spaces, Lp spaces, Distributions, Fourier Transforms, and applications to differential and integral equations from physics and engineering.

Letter grade only (A-F). (Lecture 3 hrs.)

564. Applied Nonlinear Ordinary Differential Equations (3)

Prerequisites: MATH 361B; 364A or 370A.

Stability and asymptotic analysis, Perturbation methods, Phase plane analysis, Bifurcation, Chaos, Applications to science and engineering. (Lecture 3 hrs.)

570. Partial Differential Equations (3)

Prerequisites: MATH 364A and 463.

Cauchy's problem; classification of second order equations; methods of solution of hyperbolic, parabolic, and elliptic equations.

Letter grade only (A-F). (Lecture 3 hrs.)

573./473. Scientific Computing (3)

Prerequisites: MATH 323 and either 364A or 370A. (Undergraduates register in MATH 473; graduates in MATH 573.)

Introduction to programming languages, implementations of numerical algorithms for solution of linear algebraic equations, interpolation and extrapolation, integration and evaluation of functions, root finding and nonlinear equations, fast Fourier transforms, minimization and maximization of functions, numerical solutions of differential equations.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 473.

574. Stochastic Calculus and Applications (3)

Prerequisites: MATH 361B, 364A or 370A, 380.

Review of probability theory. Markov processes. Wiener processes. Stochastic integrals. Stochastic differential equations. Applications to Finance and Engineering.

(Lecture 3 hrs.)

575. Calculus of Variations (3)

Prerequisites: MATH 361B and either 364A or 370A

Solution methods for variational problems. First variation, Euler-Lagrange equation, variational principles, problems with constraints, boundary conditions, applications to physics and geometry. May include multiple integral problems, eigenvalue problems, convexity, and second variation.

Letter grade only (A-F). (Lecture 3 hrs.)

576. Numerical Analysis (3)

Prerequisites: MATH 323, 361B, 364A.

Advanced numerical methods. Introduction to error analysis, convergence, and stability of numerical algorithms. Topics may include solution of ordinary differential equations, partial differential equations, systems of linear and nonlinear equations, and optimization theory.

Letter grade only (A-F). (Lecture 3 hrs.)

Mathematics Courses (MATH)

577. Numerical Solution of Partial Differential Equations (3)

Prerequisite: MATH 423 or MATH 576 or consent of instructor.

Finite difference methods solving hyperbolic, parabolic, elliptic PDE'S; accuracy, convergence, and stability analysis. Selected initial-value boundary-value problems, characteristics, domain of dependence, matrix and von Neumann's methods of stability analysis. Solutions of large sparse linear systems. Finite element method.

(Lecture 3 hrs.)

578. Numerical Linear Algebra (3)

Prerequisites: MATH 247 and 323 or consent of instructor.

Numerical solutions of linear systems, least squares problems, eigenvalue problems. Matrix factorization: LU, QR, SVD, iterative methods. Error analysis. Applications with attention to linear algebra problems arising in numerical solutions of partial differential equations. Numerical implementation of algorithms.

Letter grade only (A-F). (Lecture 3 hrs.)

579./479. Mathematical Modeling (3)

Prerequisites: MATH 247, 364A or 370A, 323; one additional upper-division mathematics course, or consent of instructor. (Undergraduates register in MATH 479; graduates in MATH 579.)

Application of mathematics to develop models of phenomena in science, engineering, business, and other disciplines. Evaluation of benefits and limitations of mathematical modeling.

Letter grade only (A-F). (Lecture 3 hrs.)

695. Seminar in Mathematics (3)

Prerequisite: Consent of instructor.

Presentation and discussion of advanced work, including original research by faculty and students. Topics announced in the *Schedule of Classes*.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

697. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Research on a specific area in mathematics. Topics for study to be approved and directed by faculty advisor in the Department of Mathematics and Statistics.

Letter grade only (A-F).

698. Thesis or Project (1-6)

Prerequisite: Advancement to candidacy.

Formal report of research or project in mathematics.

May be repeated to a maximum of six units. Letter grade only (A-F).

Mathematics Education Courses (MTED)

Satisfying the Entry-Level Math (ELM) requirement (see "Undergraduate Programs" section of this catalog) is a prerequisite for all mathematics education courses.

LOWER DIVISION

110. The Real Number System for Elementary and Middle School Teachers (3)

Prerequisite: ELM or ELM exemption or MAPB 11.

Introduction to problem solving processes and strategies. Development and analysis of structure, properties, and operations of real number system. Concept and process development using appropriate models, manipulatives, and activities.

Not open for credit to Mathematics majors. (Lecture 2 hrs., activity 2 hrs.)

205. Activity Based Probability and Statistics for Elementary and Middle School Teachers (3)

Prerequisites: ELM or ELM exemption or MAPB 11 and MTED 110.

Activity-based exploration of randomization, data representation, measures of central tendency and dispersion. Analysis of experiments requiring hypothesizing, experimental design and data gathering. Basic laws of probability and set theory, combinations, permutations, and simulations.

Letter grade only (A-F). (Lecture 2 hrs., activity 2 hrs.) Not open for credit to mathematics (all options) and statistics majors or for students with credit in MTED 105.

211. Geometry and Measurement for Elementary Teachers (3)

Prerequisites: "C" or better in MTED 110 and one year of high school geometry.

Problem solving and hands-on modeling of real-world geometry situations focusing on patterning, informal geometry, congruence, similarity, constructions, transformations, tessellations, measurement in 1, 2, and 3 dimensions (English and Metric units). Computer applications are integrated into the course.

Not open for credit to Mathematics majors or any student with credit in MTED 312. (Lecture 2 hrs., activity 2 hrs.)

UPPER DIVISION

301. Computer Applications in Mathematics for Teachers (3)

Prerequisites: One year of high school geometry and one of MTED 110 or MATH 122.

Designed for pre-service or inservice teachers. Software evaluation; teacher tools (spreadsheets, databases, email, collaborative tools, and applications); mathematics using technology; programming; technology use issues in schools.

Satisfies California Level I teaching credential computer technology standard. Open for credit to pre-service or in-service teaching credential students only. (Lecture 2 hrs., activity 2 hrs.)

303. Number Systems, Probability and Statistics for Elementary and Middle School Teachers (3)

Prerequisite: California Teaching Credential.

Introduction to problem solving, development, analysis of the structure, properties and operations of the real number system. Concept and process development using appropriate models, manipulatives, and activities. Statistics including data representation, measures of central tendency and dispersion. Basic laws of probability and set theory, combinations, permutations, and simulations.

Letter grade only (A-F). (Lecture 2 hours, Activity 2 hours)

312. Geometry and Measurement for Mathematics Specialists in Elementary and Middle Schools (4)

Prerequisites: MTED 110 and one year of high school geometry.

Exploration, conjecture, justification of geometric relationships, applications relevant to teaching geometry (K-10). Problem solving, informal geometry, proof, non-Euclidean geometry, congruency, similarity, constructions, transformations, tessellations, measurement (English and Metric) in 1, 2, and 3 dimensions. Computer construction utility used.

Not open for credit to Mathematics majors. Letter grade only (A-F). (Lecture 2 hrs., activity 2 hrs.)

402. Problem Solving Applications in Mathematics for Elementary and Middle School Teachers (3)

Prerequisites: "C" or better in both MTED 110, and either MTED 211 or 312 or the equivalent and a course in Critical Thinking.

Problem solving processes and strategies; interrelates and applies content from many mathematics areas (real number system, algebra, number theory, geometry, measurement, probability and statistics); develops questioning strategies, fostering understanding of algebra and geometry. Technology integrated throughout.

Not open for credit to Mathematics majors. (Lecture 2 hrs., activity 2 hrs.)

411. Topics and Issues in Secondary School Mathematics (3)

Prerequisites: MATH 310, 341, 355, 380, 410, 444; EDSS 300M or consent of the instructor.

Analysis of topics and issues in secondary school mathematics curriculum. Problem solving, mathematical connections, communication, structures, conjecture, proof, manipulatives, technology, assessment. Observations/interview experiences and portfolio assemblage required. Intended for students preparing to enter Single Subject Credential Program in mathematics.

(Lecture 2 hrs., laboratory 3 hrs.)

415. History of Mathematics for Elementary and Middle School Teachers (4)

Prerequisite: "C" or better MTED 312.

Mathematics ideas throughout history with orientation toward various civilizations and cross-cultural views. Covers origins and interrelationships of areas of K-9 mathematics curriculum, including arithmetic, algebra, geometry, statistics and probability, cryptography, and other mathematics topics.

Not open for credit to mathematics (all options) or statistics majors or for students with credit in MATH 310 or MTED 315. Letter grade only (A-F). (Lecture 2 hrs; activity 2 hrs.)

420. Number Theory for Elementary and Middle School Teachers (4)

Prerequisite: "C" or better in MTED 312.

Concepts and justification involving basic properties of natural numbers, mathematics induction, Euclidean algorithm, and the Fundamental Theorem of Arithmetic. Topics include proofs and problem-solving with divisibility, primes and composites, and prime factorization; congruences and other examples.

Not open for credit to mathematics (all options) or statistics majors or for students with credit in MATH 341 or MTED 320. Letter grade only (A-F). (Lecture 2 hrs; activity 2 hrs.)

424. Algebraic Structures for Elementary and Middle School Teachers (4)

Prerequisite: "C" or better MTED 312.

Properties of real and complex numbers, groups, rings, reals and complex fields; polynomial equations and inequalities; polynomial, rational, radical, absolute value, exponential, and logarithmic functions; matrices and vectors.

Not open for credit to mathematics (all options) or statistics majors or for students with credit in MATH 444 or MTED 324. Letter grade only (A-F). (Lecture 2 hrs; activity 2 hrs.)

425. Functions, Models and Concepts of Calculus for Elementary and Middle School Teachers (4)

Prerequisite: "C" or better in MTED 312.

Numeric, symbolic, graphical, verbal representation of functions; sequences and sums. Intuitive development of concepts of limit, continuity, derivative, integral. Applications, including differential equations. Algebraic methods and technology emphasized in context of learning calculus. Not open for credit to mathematics (all options) or statistics majors or for students with credit in MTED 325. Letter grade only (A-F). (Lecture 2 hrs; activity 2 hrs.)

430. Connections, Integrations, and Reasoning in Mathematics for Teachers (4)

Prerequisites: "C" or better in MTED 205 or 300; MTED 312, 402, 415, 420, 424, and 425.

Examination, analysis, and integration of mathematics topics appropriate for elementary and middle school teachers. Topics will include problem solving, hypothesis and justification, and mathematics connections and communication.

Not open for credit to mathematics (all options) or statistics majors or for students with credit in MTED 403. Letter grade only (A-F). (Lecture 2 hrs; activity 2 hrs.)

495. Special Topics in Mathematics Education (1-3)

Prerequisite: Consent of instructor.

Topics of interest in Mathematics Education.

May be repeated to a maximum of 9 units with different topics in different semesters. Letter grade only (A-F).

GRADUATE LEVEL

500. Advanced Perspectives of Concepts Foundational to Algebra for Teachers (3)

Prerequisite: Multiple Subjects Credential, or consent of instructor.

Analytic investigation of foundational algebra concepts using representations, reasoning and proof, and problem solving. Topics include: number theory, properties of real numbers, proportional reasoning, algebra, discrete mathematics, and functions.

This course will not count toward any M.S. degree options in the Department of Mathematics and Statistics. Letter grade only (A-F). (Lecture 3 hrs.)

511. Mathematics Teaching and Learning (3)

Prerequisite: Consent of instructor.

Theories of mathematics teaching and learning. Key issues in mathematics and mathematics education. Historical development and contemporary views of various theoretical perspectives for teaching and learning mathematics, including the roles of standards and various mathematics and education organizations.

Letter grade only (A-F). (Lecture and Discussion, 3 hrs.)

512. Curriculum and Assessment in Mathematics (3)

Prerequisite: MTED 511 or consent of instructor.

Theories of mathematics curriculum and forms of assessment. Introduces major philosophies, issues, resources, and technologies pertaining to curricula and assessment of mathematics. Relevant histories and contemporary practices of design and implementation of curriculum and assessment of mathematics.

Letter grade only (A-F). (Lecture and Discussion, 3 hrs.)

540. Algebra in the School Curriculum (3)

Prerequisite: MTED 511; prerequisite or corequisite: MTED 512 or consent of instructor.

Issues/topics concerning algebraic learning using curricular standards. Examining texts, curricula, algebraic thinking, and teaching research. Common errors and possible remedies, algebra for mathematizing situations. Relationship of K-12 algebra curriculum to modern algebra and its structures. Fundamental theorem of algebra.

Letter grade only (A-F). (Lecture and Discussion, 3 hrs.)

550. Geometry and Measurement in the School Curriculum (3)

Prerequisite: MTED 511; prerequisite or corequisite: MTED 512 or consent of instructor.

Content, curriculum, standards, and research in learning and teaching geometry, spatial sense and measurement in K-12. Justification and proof, applications and abstraction, tools and technology in geometry teaching and learning. Current issues in teaching and learning of geometry and measurement.

Letter grade only (A-F). (Lecture and Discussion, 3 hrs.)

560. Analysis in the Secondary Curriculum (3)

Prerequisites: MTED 511 and MATH 361A; prerequisite or corequisite: MTED 512 or consent of instructor.

Fundamental concepts of calculus, functions, mappings, related topics and proofs in real and complex analysis, relating mathematics analysis to secondary curriculum. Issues and techniques in teaching and learning of mathematical analysis. Examination of mathematics education research and mathematics frameworks.

Letter grade only (A-F). (Lecture and Discussion, 3 hrs.)

580. Probability and Statistics in the School Curriculum (3)

Prerequisite: MTED 511; prerequisite or corequisite: MTED 512 or consent of instructor.

Content, curriculum, and research in learning and teaching probability and statistics in K-12 schools. Includes role of applications, abstraction, tools and technology in probability and statistics teaching and learning.

Letter grade only (A-F). (Lecture and Discussion, 3 hrs.)

Mathematics Education Courses (MTED)

590. Special Topics in Mathematics Education (1-3)

Prerequisite: Consent of instructor.

Advanced study of special topics in the field of mathematics education.

May be repeated for a total of six units with different topics. Letter grade only (A-F). (Seminar 1-3 hrs.)

697. Directed Studies in Mathematics Education (1-3)

Prerequisites: MTED 511, 512; EDP 520; Advancement to Candidacy; consent of instructor.

Research project in mathematics education.

Letter grade only (A-F).

698. Thesis in Mathematics Education (1-4)

Prerequisites: MTED 511, 512; EDP 520; Advancement to Candidacy; consent of instructor.

Research in mathematics education culminating in a formal report.

Letter grade only (A-F).

Statistics Courses (STAT)

108. Statistics for Everyday Life (3)

Exploratory data analysis, methods of visualizing data, descriptive statistics, misuse and manipulation of data in statistical analysis, probability, binomial and normal distributions, hypothesis testing, correlation and regression, contingency tables.

Not open for credit to students with credit in MATH 108, 180, 380; or MTED 105, 205. (Lecture 3 hrs.)

380. Probability and Statistics (3)

Prerequisite: MATH 222 or 224.

Frequency interpretation of probability. Axioms of probability theory. Discrete probability and combinatorics. Random variables. Distribution and density functions. Moment generating functions and moments. Sampling theory and limit theorems.

Letter grade only (A-F). Same course as MATH 380. Not open for credit to students with credit in MATH 380. (Lecture 3 hrs.)

381. Mathematical Statistics (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

Estimation and hypothesis testing. Maximum likelihood and method of moments estimation. Efficiency, unbiasedness, and asymptotic distribution of estimators. Neyman-Pearson Lemma. Goodness-of-fit tests. Correlation and regression. Experimental design and analysis of variance. Nonparametric methods.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 381.

410./510. Regression Analysis (3)

Prerequisite: STAT 381.

Simple linear regression: estimation and inference, prediction, analysis of residuals, detection of outliers, use of transformations. Multiple linear regression: influence diagnostics, multi-collinearity, selection of variables, simultaneous estimation and inference, validation techniques. Statistical software for data analysis used.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 480 or 590.

450./550. Multivariate Statistical Analysis (3)

Prerequisite: STAT 381; Prerequisite/Corequisite STAT 410. (Undergraduates register in STAT 450; graduates enroll in STAT 550.)

Discriminate analysis, principal components, factor analysis, cluster analysis, logistic regression, canonical correlation, multidimensional scaling, and some nonlinear techniques. Statistical software used.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 483 or 593.

475. Data Analysis with SAS (3)

Prerequisite: STAT 381 or consent of instructor.

Topics include: Statistical analysis including extraction, presentation of data in graphical form, creation, modification of datasets, interpretation of output, writing of reports. Provides SAS programming techniques for aforementioned topics preparation for SAS base certification.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 489.

482. Random Processes (3)

Prerequisites: MATH 247, and MATH 380 or STAT 380.

Further topics in probability. Markov processes. Renewal theory. Random walks. Queueing theory. Poisson processes. Brownian motion.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 382.

484. Actuarial Science: Models (3)

Prerequisite: STAT 381 or consent of instructor.

Statistical techniques applied to risk management. Expected utility theory, individual risk models, compound Poisson distributions and processes, ruin probability and first surplus, stop-loss and proportional reinsurance, statistical survival distributions and life tables, life annuity, actuarial present values, and premiums determination.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 484.

485. Actuarial Science: Financial Mathematics (3)

Prerequisite: STAT 381.

Simple and compound interests, stochastic approaches to interest and annuities, stochastic models of stock, Black-Scholes arbitrage pricing of options and other derivative securities, Markowitz portfolio optimization theory, Ito financial calculus, filtrations and martingales.

Letter grade only (A-F). (Lecture 3 hrs.)

495./595. Topics in Modern Statistics (3)

Prerequisite: Consent of instructor.

Topics of current interest from statistics literature.

Letter grade only (A-F). Course may be repeated to a maximum of 6 units with different topics. (Lecture 3 hrs)

497. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Junior or senior standing and consent of instructor. Not open to graduate students.

Letter grade only (A-F).

510./410. Regression Analysis (3)

Prerequisite: STAT 381.

Simple linear regression: estimation and inference, prediction, analysis of residuals, detection of outliers, use of transformations. Multiple linear regression: influence diagnostics, multi-collinearity, selection of variables, simultaneous estimation and inference, validation techniques. Statistical software for data analysis used.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 480 or 590.

520. Statistical Inference (3)

Prerequisite: STAT 381 or consent of instructor.

Properties of a random sample, convergence in probability, law of large numbers, sampling from the normal distribution, the central limit theorem, principles of data reduction, likelihood principle, point estimation, Bayesian estimation, methods of evaluating estimators, hypothesis testing, decision theory, confidence intervals.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 580.

530. Experimental Design (3)

Prerequisite: STAT 381 or consent of instructor.

Design of experiments to permit efficient analysis of sources of

variation with application to quality assurance. Factorial and fractional factorial designs; block designs; confounding. Fixed and random effect models. Effects of departure from assumptions; transformations. Response surface techniques. Taguchi methods.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 581.

532. Statistical Quality Control (3)

Prerequisite: STAT 381 or consent of instructor.

Introduction to methods of statistical quality control. Includes control charts, acceptance sampling, process capability analysis, and aspects of experimental design.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 584.

540. Survey Sampling (3)

Prerequisite: STAT 381 or consent of instructor.

Theory and practice of sampling from finite populations. Simple random sampling, stratified random sampling, systematic sampling, cluster sampling, properties of various estimators including ratio, regression, and difference estimators. Error estimation for complex samples.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 583.

544. Statistical Consulting (3)

Prerequisites: STAT 381 and STAT 410/510 or consent of instructor.

The methodology of statistical consulting: guidelines for client-consultant communications, presentations to clients, basics of writing final technical reports, thorough case studies involving advanced statistical analysis, invited client presentations, real-life projects, group discussions, written and oral statistical reports by students.

Letter grade only (A-F). (Lecture 3 hrs.)

550./450. Multivariate Statistical Analysis (3)

Prerequisite: STAT 381; Prerequisite/Corequisite STAT 410. (Undergraduates register in STAT 450; graduates enroll in STAT 550.)

Discriminate analysis, principal components, factor analysis, cluster analysis, logistic regression, canonical correlation, multidimensional scaling, and some nonlinear techniques. Statistical software used.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 483 or 593.

560. Nonparametric Statistics (3)

Prerequisite: STAT 410 or 510, or consent of instructor.

Alternatives to normal-theory statistical methods, analysis of categorical and ordinal data, methods based on ranks, measures of association, goodness of fit tests, order statistics.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 585.

570. Statistical Simulation (3)

Prerequisite: STAT 381 or consent of instructor.

Simulation modeling techniques; generation of discrete and continuous random numbers from given distributions; Monte Carlo methods; discrete event simulations, statistical analysis of simulated data; variance reduction; statistical validation; introduction to simulation languages; industry applications. Statistical packages used.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 587 or 487.

572. Computational Statistics (3)

Prerequisite: STAT 381 or consent of instructor.

Random number generation, sampling and subsampling, exploratory data analysis, Markov chain Monte Carlo methods, density estimation and EM algorithm. Topics of current interest.

Letter grade only (A-F). (Lecture 3 hrs.)

574. Data Mining (3)

Prerequisite: STAT 410, or 510, or consent of instructor.

Basics of data mining algorithms with emphasis on industrial applications. Prediction and classification techniques such as decision trees, neural networks, Multivariate Adaptive Regression Splines, and other methods. Several software packages utilized.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 586.

576. Data Informatics (3)

Prerequisite: STAT 410/510 or consent of instructor.

Genetic algorithms, fuzzy logic, discrete choice analysis, online analytical processing, structured query language, statistical database management, and text and web mining. Topics of current interest.

Letter grade only (A-F). (Lecture 3 hrs.)

580. Time Series (3)

Prerequisite: STAT 381 or consent of instructor.

Includes moving averages, smoothing, Box-Jenkins (ARIMA) models, testing for nonstationarity, model fitting and checking, prediction and model selection, seasonal adjustment, ARCH, GARCH, cointegration, state-space models. Statistical packages used throughout the course.

Letter grade only (A-F). (Lecture 3 hrs.) Not open for credit to students with credit in MATH 582.

590. Statistical Analysis of Medical Data (3)

Prerequisite: STAT 381 or consent of instructor.

Lifetime distributions, hazard and survival functions, censoring and truncation, Kaplan Meier and Nelson-Aalen estimators, Cox proportional hazard models, m-sample tests, goodness-of-fit tests, Bayesian survival analysis, analysis of multivariate survival data, exploring longitudinal data designs and models, clinical trials.

Letter grade only (A-F). (Lecture 3 hrs.)

595./495. Topics in Modern Statistics (3)

Prerequisite: Consent of instructor.

Topics of current interest from statistics literature.

Letter grade only (A-F). Course may be repeated to a maximum of 6 units with different topics. (Lecture 3 hrs)

695. Seminar in Applied Statistics (3)

Prerequisite: Consent of instructor.

Presentation and discussion of advanced work in applied statistics. May be repeated to a maximum of six units. Letter grade only (A-F).

697. Directed Studies in Applied Statistics (1-3)

Prerequisite: Consent of instructor.

Research on a specific area in applied statistics. Topic for study to be approved and directed by a statistics faculty member.

Letter grade only (A-F).

698. Thesis or Project (1-6)

Prerequisite: Advancement to candidacy.

Formal report of research or project in mathematics.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

MECHANICAL AND AEROSPACE ENGINEERING

College of Engineering

Department Chair: Hamid Hefazi

Department Office: ECS - 635

Telephone: (562) 985-1563

Website: <http://www.csulb.edu/colleges/coe/mae>

Faculty: Behnam Bahr, Eric Besnard, Christiane Beyer, Hsun-Hu Chen, Hsin-Piao Chen, Mihir Das (Emeritus), Ramin Esfandiari, Joshua Hamel, Hamid Hefazi, Min-Ten Jahn (Emeritus), Bei Lu, Panadda Marayong, Hamid Rahai, Praveen Shankar, Reza Toossi, Jalal Torabzadeh, Parviz Yavari, Hsien-Yang Yeh (Emeritus)

Undergraduate Advisors: Jalal Torabzadeh (ME Program Coordinator), Hsun Hu Chen (AE), Parviz Yavari (ET)

General Education Advising: Academic Advising - Horn Center

Graduate Advisors: Joshua Hamel (ME), Hsin-Piao Chen (AE)

Administrative Support Coordinator: Leanne Hayes

Students desiring detailed information should contact the department for referral to one of the faculty advisors.

Career Possibilities

Mechanical Engineer • Aerospace Engineer • Facilities Engineer • Manufacturing Engineer • Design Engineer • Sales Engineer • Plant Engineer • Safety Engineer • Tool Engineer • Project Engineer • Utilization/Test Engineer • Automotive Engineer • Production Engineer • Manufacturing Engineer • Standards Engineer • Industrial Engineer • Factory Plant Layout Engineer • Material Schedule • Tool Planner • Safety Engineer • Product Safety Engineer • Production Planner • Statistician • Staff Assistant • Specification Writer • Tooling Quality Assurance Worker • Quality Planning Analyst • Process Engineering • Estimator • Manufacturing Engineering • Quality Engineer • Supervisor • Vendor Quality • Production Engineer • Material Schedule • Quality Control Technician • Configuration Analyst • Quality Manager • Production Manager • Industrial Engineering • Production Safety Engineer • Safety Engineer • Metrologist • Liaison Worker • Methods and Time-Study Engineer • Traffic Control Engineer • Technical Sales Representative • Process Engineer • Estimator • Associate Engineer • Field Engineer (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Accreditation

The Bachelor of Science in Aerospace Engineering and the Bachelor of Science in Mechanical Engineering are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202 – telephone (410) 347-7700; website: <http://www.abet.org>.

Advisory Council

The Department of Mechanical and Aerospace Engineering is supported by a professional Advisory and

Development Council (ADC) comprised of outstanding engineers and executives from industry and government in Southern California. The role of the ADC is to form a liaison between the University and industry and to help the administration and faculty remain informed of modern engineering practices.

Programs at a Glance

Undergraduate

- Bachelor of Science in Aerospace Engineering (BSAE);
- Bachelor of Science in Mechanical Engineering (BSME);
- Bachelor of Science in Engineering (BSE) with options in Materials Engineering or Industrial Management Engineering;
- Bachelor of Science in Manufacturing Engineering Technology.

Graduate

- Master of Science in Aerospace Engineering (MSAE);
- Master of Science in Mechanical Engineering (MSME);
- Master of Science in Engineering (MSE) with an emphasis in Management Engineering;
- Ph.D. in Engineering and Industrial Applied Mathematics (offered jointly with Claremont Graduate University).

Post-Baccalaureate Certificate Programs

- Certificate in Aerospace Manufacturing
- Certificate in Heating, Ventilating, and Air-Conditioning (HVAC)
- Certificate in Industrial Plastics Processing and Design
- Certificate in Energy Conversion and Power Systems Engineering

Student Organizations

Students have the benefit of joining the student chapters of professional societies:

- AIAA (American Institute for Aeronautics and Astronautics)
- ASME (American Society for Mechanical Engineers)
- SAE (Society of Automotive Engineers)
- SPE (Society of Petroleum Engineers)
- ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers)
- SME (Society of Manufacturing Engineers)
- ASQ (American Society of Quality)
- SWE (Society of Women Engineers)
- Tau Beta Pi, Pi Tau Sigma

As student members of professional societies, students can attend local, regional, national, and international meetings and conferences, participate in student contests, become eligible for sponsored scholarships, interact with professionals from industry, and many other benefits.

Undergraduate Programs

MECHANICAL ENGINEERING PROGRAM

BSME Program Educational Objectives

The goal of the undergraduate program in mechanical engineering is to produce well-rounded engineers prepared for careers in mechanical engineering or related disciplines, utilizing an excellent education in the fundamentals of engineering mathematics, sciences, and design in order to:

- Create innovative solutions responsive to customer needs and meeting societal challenges;
- Apply their knowledge to communicating and translating ideas and plans into working engineering systems;
- Effectively function as a team member and/or leader in global, multi-disciplinary technical environments.

Student Learning Outcomes

The following student learning outcomes have been developed: knowledge of mathematics, science, and engineering; design and conduct experiments and analyze and interpret data; design a system, component, or process to meet desired needs within realistic constraints; function on multi-disciplinary teams; identify, formulate, and solve engineering problems; understanding of professional and ethical responsibilities; communicate effectively; understand the impact of engineering solutions in a global and societal context; knowledge of contemporary issues.

Bachelor of Science in Mechanical Engineering (129 units)

The opportunity to explore a particular area of interest is provided by additional elective courses in the senior year. Several industry and professional society sponsored scholarships and internships are available to upper division mechanical engineering students. Further information is available in the department office.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Minimum of 129 units including University General Education requirements. A grade of "C" or better must be achieved in all prerequisites for all required courses listed below.

Lower Division:

Take all of the following courses:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CE 205 Analytical Mechanics I (Statics) (3)

Prerequisite: PHYS 151 all with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

ENGR 101 Introduction to Engineering Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122

ENGR 102 Academic Success Skills (1)

Prerequisite: ENGR 101 with a grade of "C" or better.

MAE 101B Introduction to Mechanical Engineering (1)

Prerequisite: Freshman standing or consent of instructor.

MAE 172 Engineering Design Graphics I (3)

Prerequisites: None.

MAE 205 Computer Methods in MAE (2)

Prerequisites: MATH 122 with a grade of "C" or better.

MAE 272 Introduction to Manufacturing Processes (2)

Prerequisite: MAE 172 with a grade of "C" or better.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

Take one of the following choices:

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151 with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

or both of the following:

EE 210 Electro-Magnetic Foundations in EE (3)

Prerequisite: PHYS 151 with a grade of "C" or better.
Corequisites: MATH 123, EE 210L.

EE 210L Electro-Magnetic Foundations in EE Lab (1)

Corequisite: EE 210.

Upper Division:

Take all of the following courses:

CE 335 Fluid Mechanics (3)

Prerequisites: MATH 224 and C E 205 all with a grade of "C" or better.

CE 336 Fluid Mechanics Laboratory (1)

Prerequisite: ENGL 100 or equivalent all with a grade of "C" or better.
Prerequisite/Corequisite: C E 335.

CE 406 Cost Engineering and Analysis (3)

Prerequisite: GE Foundation requirements.

ECON 300 Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

MATH 370A Applied Mathematics I (3)

Prerequisites: MATH 123. Not open to Freshmen.

MAE 300 Engineering Instrumentation & Measurement (2)

Prerequisites: MATH 224, PHYS 151, 152 all with a grade of "C" or better.

MAE 305 Numerical Methods in MAE (3)

Prerequisites: MAE 205 and MATH 370A all with a grade of "C" or better.

MAE 322 Engineering Materials and Materials Processes (3)

Prerequisites: CHEM 111A, MATH 123, MAE 172 all with a grade of "C" or better.

MAE 330 Engineering Thermodynamics I (3)

Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.

MAE 336 Power Plant Design (3)

Prerequisite: MAE 330 with a grade of "C" or better.

MAE 337 Thermal Engineering Laboratory (2)

Prerequisite: MAE 336 with a grade of "C" or better.

MAE 361 Materials and Properties Laboratory (1)

Prerequisites: ENGL 100 or equivalent, MAE 300, 322, 373 all with a grade of "C" or better.

MAE 371 Analytical Mechanics Dynamics (3)

Prerequisites: CE 205, MAE 205 or CE 206 all with a grade of "C" or better.

MAE 373 Mechanics of Deformable Bodies (3)

Prerequisite: CE 205 all with a grade of "C" or better.

MAE 375 Kinematics & Dynamics of Mechanisms (3)

Prerequisites: MAE 272, 371 all with a grade of "C" or better.

MAE 376 Modeling & Analysis of Dynamic Systems (3)

Prerequisite: MAE 371; MATH 370A all with a grade of "C" or better.

MAE 409 Modern Computational Aspects in Mechanical Engineering (3)

Prerequisites: Senior standing in engineering and consent of instructor.

MAE 431 Heat Transfer Systems Design (3)

Prerequisites: MAE 305, 330; CE 335 all with a grade of "C" or better.

MAE 459 Professional Practice Seminar (1)

Prerequisite: Senior standing or consent of instructor.

MAE 471 Analysis & Design of Machine Components (3)

Prerequisites: MAE 373 and MAE 375 all with a grade of "C" or better.

MAE 472 Design of Mechanical Engineering Systems (3)

Prerequisites: MAE 330, 471 all with a grade of "C" or better.

MAE 476 Mechanical Control Systems I (3)

Prerequisite: MAE 376 with a grade of "C" or better.

MAE 490 Special Topics (3)

Prerequisites: Senior standing in engineering and consent of instructor.

AEROSPACE ENGINEERING PROGRAM

BSAE Program Educational Objectives

The goal of the undergraduate program in aerospace engineering is to produce well-rounded engineers prepared for careers in aerospace engineering or related disciplines, utilizing an excellent education in the fundamentals of engineering mathematics, sciences, and design in order to:

1. Create innovative solutions responsive to customer needs and meeting societal challenges;
2. Apply their knowledge to communicating and translating ideas and plans into working engineering systems;
3. Effectively function as a team member and/or leader in global, multi-disciplinary technical environments.

Student Learning Outcomes

The program aims at achieving the following student learning outcomes: skills in mathematics, physics, and chemistry, and a firm understanding of engineering science fundamentals that enables students to analyze real world

problems and propose appropriate solutions to these problems; knowledge of aerospace fundamental disciplines for the analysis and design of components; ability to work in teams and carry out a design from conceptual level to the realization of a manufacturing plan; ability to design and conduct experiments, as well as to analyze and interpret data; an understanding of professional and ethical responsibility; the ability to build on their knowledge and be trained to be lifelong learners; good oral, written and graphical communication skills; training in the role of the engineer in society; awareness of environmental concerns in the engineering profession; and knowledge of contemporary issues.

Bachelor of Science in Aerospace Engineering (128 units)

The curriculum is designed to supplement mathematics, science and basic engineering courses in order to give students the specialization needed in different areas of aerospace engineering. In addition to acquiring technical knowledge, graduates will have completed appropriate courses in communications and in humanistic social studies.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

A grade of "C" or better must be achieved in all of the required courses listed below. A minimum of 128 units is required.

There are two emphases in the BSAE Program: (1) Aeronautics, and (2) Astronautics. Aeronautics focuses on aerospace engineering as it relates to flight in the atmosphere, while Astronautics addresses space flight.

Core Requirements

Lower Division:

Take all of the following courses:

CE 205 Analytical Mechanics I (Statics) (3)

Prerequisite: PHYS 151 with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

ENGR 101 Introduction to Engineering Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122

ENGR 102 Academic Success Skills (1)
Prerequisite: ENGR 101 with a grade of "C" or better.

MAE 101A Introduction to Aerospace Engineering (1)
Prerequisites: None.

MAE 172 Engineering Design Graphics (3)
Prerequisites: None.

MAE 205 Computer Methods in Mechanical/Aerospace Engineering (2)
Prerequisites: MATH 122 with a grade of "C" or better.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

Take one of the following choices:
PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.
or both of the following:
EE 210 Electro-Magnetic Foundations in EE (3)
Prerequisite: PHYS 151 with a grade of "C" or better.
Corequisites: MATH 123, EE 210L.
EE 210L Electro-Magnetic Foundations in EE Lab (1)
Corequisite: EE 210.

Upper Division:
Take all of the following courses:
ECON 300 Fundamentals of Economics (3)
Prerequisites: GE Foundation requirements.
MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123. Not open to Freshmen.
MAE 300 Engineering Instrumentation and Measurement (2)
Prerequisites: MATH 224, PHYS 151, 152 all with a grade of "C" or better.
MAE 305 Numerical Methods in MAE (3)
Prerequisites: MAE 205 and MATH 370A all with a grade of "C" or better.
MAE 330 Engineering Thermodynamics I (3)
Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.
MAE 333 Engineering Fluid Dynamics (3)
Prerequisites: CE 205, MATH 370A all with a grade of "C" or better.
MAE 334 Aerodynamics I (3)
Prerequisite: MAE 333 with a grade of "C" or better.
MAE 350 Flight Mechanics (3)
Prerequisite: CE 205 with a grade of "C" or better.
MAE 365 Aerospace Structures I (3)
Prerequisite: MAE 373 with a grade of "C" or better.
MAE 371 Analytical Mechanics II (Dynamics) (3)
Prerequisites: CE 205, MAE 205 or CE 206 all with a grade of "C" or better.
MAE 373 Mechanics of Deformable Bodies (3)
Prerequisite: CE 205 with a grade of "C" or better.
MAE 374 Mechanical Properties of Materials Lab (1)
Prerequisites: ENGL 100 or equivalent, MAE 373, and MAE 300 all with a grade of "C" or better or consent of instructor.
MAE 381 Fundamentals of Space Dynamics (3)
Prerequisites: PHYS 152, MATH 370A, and MAE 371 all with a grade of "C" or better.

MAE 390 Aerospace Engineering Seminar (1)
Prerequisite: Upper division standing.

MAE 440 Aerodynamics Laboratory (1)
Prerequisites: MAE 300 and 334 all with a grade of "C" or better.

MAE 452 Propulsion (3)
Prerequisites: MAE 330 and 334 all with a grade of "C" or better.

MAE 465 Aerospace Structures II (3)
Prerequisite: MAE 365 with a grade of "C" or better.

MAE 478 Aerospace Systems Design I (3)
Prerequisites: MAE 334, 365, and 381 all with a grade of "C" or better.
Corequisite: MAE 434, 465, or 481.

MAE 479 Aerospace Systems Design II (3)
Prerequisite: MAE 478 with a grade of "C" or better.

Emphasis in Aeronautics:

Take all of the following courses:

MAE 434 Aerodynamics II (3)
Prerequisite: MAE 334 with a grade of "C" or better.

MAE 451 Aircraft Preliminary Design & Performance (3)
Prerequisite: MAE 334, 350 all with a grade of "C" or better, or consent of instructor.

MAE 453 Stability & Control of Aerospace Vehicles (3)
Prerequisite: MAE 350 or equivalent all with a grade of "C" or better.
Corequisite: MAE 334.

Choose two of the following courses:

MAE 422, 431, 435, 454, 476, 481, 483

Emphasis in Astronautics:

Take all of the following courses:

MAE 481 Space Systems Engineering (3)
Prerequisite: MAE 381 with a grade of "C" or better.

MAE 483 Space Flight and Orbital Mechanics (3)
Prerequisites: MAE 381 with a grade of "C" or better.

Choose three of the following courses:

MAE 422, 431, 434, 435, 451, 454, 453, 476

Bachelor of Science in Engineering

Option in Materials Engineering (135 units)

Not accepting new students as of Fall 2012.

Modern engineering applications in all fields require new materials with properties well beyond those obtainable with the alloys available years ago. New materials, such as composites, ceramics, polymers, semiconductors and their manufacturing processes, are needed for such diverse applications as air transports, undersea deep submergence vessels, magnetic and semiconducting devices. Scientific knowledge in this area has expanded recently at a rate comparable to that experienced by the field of electronics. The materials option is offered to meet the demand for materials oriented engineers.

Course work is directed towards the understanding of the properties of materials in terms of their atomic structure, and emphasis is placed on the behavior of materials in engineering applications. The laboratories have equipment for studies in this field and include facilities for the determination of crystal structure, microscopic and X-ray diffraction, and scanning electron microscope examination of solids, thermal and mechanical treatment and the determination of properties at low and high temperatures.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Minimum 135 units including University General Education requirements.

Lower Division:

Take all of the following courses:

CE 205 Analytical Mechanics I (Statics) (3)

Prerequisite: PHYS 151 with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

CH E 200 Chemical Engineering Fundamentals (3)

Prerequisites: CHEM 111A, MATH 122, PHYS 151 all with a grade of "C" or better.
Corequisite: CHE 210

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisites: CHEM 111A with a grade of "C" or better.

EE 211 Electric Circuits I (3)

Prerequisites: (EE 210/210L or PHYS 152) and (MATH 123 or equivalent) all with a grade of "C" or better.

EE 211L Electric Circuits Laboratory (1)

Corequisite: EE 211.

ENGR 101 Introduction to Engineering Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

MAE 172 Engineering Design Graphics (3)

Prerequisites: None.

MAE 205 Computer Methods in Mechanical/Aerospace Engineering (2)

Prerequisites: MATH 122 with a grade of "C" or better.

MAE 272 Introduction to Manufacturing Processes (2)

Prerequisite: MAE 172 with a grade of "C" or better.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Upper Division:

Take all of the following courses:

CE 406 Cost Engineering and Analysis (3)

Prerequisite: GE Foundation requirements.

CH E 415 Occupational and Environ Safety Engineering and Management (3)

Prerequisite: CHEM 327 with a grade of "C" or better or consent of instructor.

ECON 300 Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

EE 420 Solid State Electronic Devices (3)

Prerequisite: PHYS 254 with a grade of "C" or better or graduate standing.

MAE 322 Engineering Materials and Materials Processes (3)

Prerequisites: CHEM 111A, MATH 123, MAE 172 all with a grade of "C" or better.

MAE 330 Engineering Thermodynamics I (3)

Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.

MAE 361 Materials and Properties Lab (1)

Prerequisites: ENGL 100 or equivalent, MAE 300, 322, 373 all with a grade of "C" or better.

MAE 371 Analytical Mechanics II (Dynamics) (3)

Prerequisites: CE 205, MAE 205 or CE 206 all with a grade of "C" or better.

MAE 373 Mechanics of Deformable Bodies (3)

Prerequisite: CE 205 all with a grade of "C" or better.

MAE 374 Mechanical Properties of Materials (1)

Prerequisites: ENGL 100 or equivalent, MAE 373, and MAE 300 all with a grade of "C" or better or consent of instructor.

MAE 375 Kinematics and Dynamics of Mechanisms (3)

Prerequisites: MAE 272, 371 all with a grade of "C" or better.

MAE 409 Modern Computational Aspects in ME (3)

Prerequisites: Senior standing in engineering and consent of instructor.

MAE 459 Professional Practice Seminar (1)

Prerequisite: Senior standing or consent of instructor.

MAE 490 Special Topics (3)

Prerequisites: Senior standing in engineering and consent of instructor.

MATH 370A Applied Mathematics I (3)

Prerequisites: MATH 123 with a grade of "C" or better. Not open to Freshmen.

Take approved engineering elective courses.

For more information on admission to this program, please contact Dr. Jalal Torabzadeh, Undergraduate Advisor, Mechanical Engineering Program.

Option in Industrial Management Engineering (135 units)

Not accepting new students as of Fall 2012.

An interdisciplinary degree in which both the College of Business Administration and the College of Engineering provide courses which enable students to have a technical engineering background, plus a good foundation in business and management practices. The option consists of core engineering courses through the junior year, with the addition of business courses in accounting, business law, management, inventory practices and operations research. The elective structure is such that the student may specialize in either engineering, or a combination of both engineering and business.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 122 within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 123 and PHYS 151 within one calendar year.

Requirements

Lower Division:

Take all of the following courses:

ACCT 201 Elementary Financial Accounting (3)
Prerequisites: None.

BLAW 220 Intro to Law and Business Transactions (3)
Prerequisites: None.

CE 205 Analytical Mechanics I (Statics) (3)
Prerequisite: PHYS 151 all with a grade of "C" or better.
Prerequisite/Corequisite: MATH 123.

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

EE 211 Electric Circuits I (3)
Prerequisites: (EE 210/210L or PHYS 152) and (MATH 123 or equivalent) all with a grade of "C" or better.

EE 211L Electric Circuits Laboratory (1)
Corequisite: EE 211.

ENGR 101 Introduction to Engineering Profession (1)
Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122.

MAE 172 Engineering Design Graphics (3)
Prerequisites: None.

MAE 205 Computer Methods in Mechanical/Aerospace Engineering (2)
Prerequisites: MATH 122 with a grade of "C" or better.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Upper Division:

Take all of the following courses:

BLAW 320 Legal and Regulatory Environment Business (3)
Prerequisites: None.

CE 406 Cost Engineering and Analysis (3)
Prerequisite: GE Foundation requirements.

ECON 300 Fundamentals of Economics (3)
Prerequisites: GE Foundation requirements.

IS 310 Business Statistics (3)
Prerequisite: MATH 114.

MAE 305 Numerical Methods in MAE (3)
Prerequisites: MAE 205 and MATH 370A all with a grade of "C" or better.

MAE 310 Safety and Reliability in Systems Design I (3)
Prerequisites: MAE 205; MATH 370A all with a grade of "C" or better, or consent of instructor.

MAE 322 Engineering Materials/Materials Processes (3)
Prerequisites: CHEM 111A, MATH 123, MAE 172 all with a grade of "C" or better.

MAE 330 Engineering Thermodynamics I (3)
Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.

MAE 371 Analytical Mechanics II (Dynamics) (3)
Prerequisites: CE 205, MAE 205 or CE 206 all with a grade of "C" or better.

MAE 373 Mechanics of Deformable Bodies (3)
Prerequisite: CE 205 with a grade of "C" or better.

MAE 376 Modeling and Analysis of Dynamic Systems (3)
Prerequisite: MAE 371; MATH 370A all with a grade of "C" or better.

MAE 459 Professional Practice Seminar (1)
Prerequisite: Senior standing or consent of instructor.

MAE 476 Mechanical Control Systems I (3)
Prerequisite: MAE 376 with a grade of "C" or better.

MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123 all with a grade of "C" or better.

MGMT 300 Principles of Management and Operations (3)
Recommended: IS 310.

Choose one of the following courses:

SCM 411, MGMT 412, MGMT 413

Take approved electives to total at least 135 units.

For more information on admission to this program, please contact Dr. Jalal Torabzadeh, Undergraduate Advisor, Mechanical Engineering Program.

Bachelor of Science in Manufacturing Engineering Technology (133 units)

Not accepting new students as of Fall 2012.

The BSMET is designed to provide a solid technical foundation for its graduates, which will enable them to perform well in a variety of employment situations. The program focuses on the applications of current manufacturing and quality assurance technologies to solve real-world problems by offering a broad curriculum which covers current trends in industry.

The BSMET degree will prepare students for career positions as: manufacturing engineering technologist, manufacturing management, manufacturing process engineering technologist, line supervisor, research and development technologist, industrial/technical representative, industrial/technical sales, production technologist, or quality assurance technologist. Students have the opportunity to prepare for mid-management or

supervisory positions, as well as technical positions, sales, service or research.

BSMET students are offered a wide range of training opportunities in topics such as: materials, manufacturing processes, quality control, and different production environments. Moreover, the program emphasizes written and oral communication skills as well as modern methods of industrial administration and supervision. The program is designed to meet ABET criteria for accredited programs in engineering technology.

The BSMET program has been developed to accommodate students who may wish to transfer credits earned at other colleges or approved technical or military schools. It is recommended that prior to submitting an application for admission, prospective students should contact the BSMET Advisor to discuss admission requirements.

There are two emphases in the BSMET Program: (1) Manufacturing Processes and (2) Quality Assurance.

Degree Progress

Students must complete the following requirements within one calendar year of declaring the major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the year, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student's performance in the courses merits an additional semester to complete.

First-Time Freshmen: A grade of "C" or better must be achieved in MATH 111 and 113, and PHYS 100A within one calendar year.

Transfer Students: A grade of "C" or better must be achieved in MATH 122 and PHYS 100A&B within one calendar year.

Core Requirements

Lower Division:

Take all of the following courses:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

ENGR 101 Introduction to Engineering Profession (1)

Prerequisite/Corequisite: MATH 111 or MATH 113 or MATH 122

ENGR 102 Academic Success Skills (1)

Prerequisite: ENGR 101 with a grade of "C" or better.

ENGR 203 Engineering Problems and Analysis (3)

Prerequisite: MATH 122 all with a grade of "C" or better. Corequisite: ENGR 203L.

ENGR 203L Engineering Problems & Analysis Lab (1)

Prerequisite: MATH 122 all with a grade of "C" or better. Corequisite: ENGR 203.

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122 all with a grade of "C" or better.

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A with a grade of "C" or better.

ET 101 Introduction to Engineering Technology (1)

Prerequisites: None.

ET 170 Engineering Drafting and Design (3)

Prerequisite: Sophomore standing.

ET 202 Probability and Statistics for Technology (3)

Prerequisite: High school algebra. Corequisite: ET 202L.

ET 202L Probability & Statistics for Technology Lab (1)

Prerequisites: 2 yrs high school algebra, geometry, and intermediate algebra (or MATH 010) or equivalent. Corequisite: ET 202.

ET 204 Applied Mechanics-Statics (3)

Prerequisites: MATH 120, PHYS 100A all with a grade of "C" or better.

ET 205 Computer Systems and Programming (1)

Corequisite: ET 205L.

ET 205L Computer Systems & Programming Lab (1)

Corequisite: ET 205.

ET 244 Machine Tools (1)

Corequisite: ET 244L.

ET 244L Machine Tools Laboratory (1)

Corequisite: ET 244.

ET 250 Circuit Analysis (2)

Prerequisite: PHYS 100B all with a grade of "C" or better. Corequisite: ET 250L.

ET 250L Circuit Analysis Laboratory (1)

Prerequisite: PHYS 100B all with a grade of "C" or better. Corequisite: ET 250.

ET 264 Industrial Tooling (1)

Prerequisites: ET 170 all with a grade of "C" or better. Corequisite: ET 264L.

ET 264L Industrial Tooling Laboratory (1)

Prerequisites: ET 170 all with a grade of "C" or better. Corequisite: ET 264.

Upper Division:

Take all of the following courses:

ECON 300 Fundamentals of Economics (3)

Prerequisites: GE Foundation requirements.

ET 301 Engineering Materials (2)

Prerequisites: CHEM 111A all with a grade of "C" or better. Corequisite: ET 301L.

ET 301L Engineering Materials Laboratory (1)

Prerequisites: CHEM 111A all with a grade of "C" or better. Corequisite: ET 301.

ET 304 Applied Mechanics Strength of Materials (3)

Prerequisite: ET 204 with a grade of "C" or better.

ET 307 Industrial Safety (2)

Prerequisite: Junior Standing.

ET 309 Industrial Communications and Leadership (3)

Prerequisites: ET 101 with a grade of "C" or better.

ET 311 Quality Engineering Technology (3)

Prerequisites: ET 202, 202L all with a grade of "C" or better.

ET 312 Statistical Quality Control (3)

Prerequisite: ET 311 with a grade of "C" or better.

ET 313 QA, Inspection Measurement and Testing (2)

Prerequisite: ET 311 all with a grade of "C" or better. Corequisite: ET 313L.

ET 313L QA, Inspection Measurement & Testing Lab (1)

Prerequisite: ET 311 all with a grade of "C" or better. Corequisite: ET 313.

ET 335 Engineering Materials and Processes I (3)

Corequisite: ET 335L.

- ET 335L Engineering Materials Processes I Lab (1)
Corequisite: ET 335.
- ET 390 Applied Computer-Aided Design/Manufacturing (2)
Prerequisites: ET 170, 205, 205L all with a grade of "C" or better.
Corequisite: ET 390L.
- ET 390L Applied Computer-Aided Design and Manufacturing Laboratory (1)
Prerequisites: ET 170, 205, 205L all with a grade of "C" or better.
Corequisite: ET 390.
- ET 410 Cost Engineering and Analysis (3)
Prerequisites: Economics course, Junior standing.
- ET 418 Production Methods and Process Improvement (3)
Prerequisite: ET 410 with a grade of "C" or better.
- ET 435 Engineering Materials and Processes II (3)
Prerequisites: ET 335, 335L all with a grade of "C" or better.
Corequisite: ET 435L.
- ET 435L Engineering Materials & Processes II Lab (1)
Prerequisites: ET 335, 335L all with a grade of "C" or better.
Corequisite: ET 435.
- ET 461 Management of Manufacturing Operations (3)
Prerequisite: ET 410 with a grade of "C" or better.
- ET 498 Manufacturing Engr Tech Capstone Project (3)
Prerequisite: Senior standing.

Emphasis in Manufacturing Processes

This emphasis offers students a wide range of training in topics such as materials, manufacturing processes and different production environments. Written and oral communication skills and modern methods of industrial administration and supervision are emphasized. Program is designed to meet ABET criteria for accredited programs in engineering technology.

Requirements

Upper Division:

Take all of the following courses:

- ET 363 Kinematics of Mechanisms (3)
Prerequisites: ET 170, ET 204 all with a grade of "C" or better.
- ET 365 Fluid Power and Control (2)
Prerequisite: ET 204 with a grade of "C" or better.
Corequisite: ET 365L.
- ET 365L Fluid Power and Control Laborator (1)
Prerequisite: ET 204 with a grade of "C" or better.
Corequisite: ET 365.

Take 4 units of electives from the following courses:
ET 409C, 387, 387L

Emphasis in Quality Assurance

This objective of this emphasis is placed on specific job skills required of entry level professionals in the manufacturing industries including oral and written communication, and management principles. The program is applications-oriented. Designed to meet ABET criteria for accredited programs in engineering technology.

Requirements

Upper Division:

Take the following course:

- ET 419 Design of Experiments (3)
Prerequisite: ET 312 with a grade of "C" or better.

Take 2 units of electives from the following courses:
ET 409D, BLAW 220

Fieldwork Requirements

Fieldwork experience is required for the BS in Manufacturing Engineering Technology, consisting of no less than three months of full-time (40 hours/week or equivalent part-time) employment in an approved industry or governmental agency. The student must hold a position equivalent to a technician or higher which affords the opportunity to exercise responsibility usually given to those who have completed at least two years of college. The fieldwork must be completed prior to graduation, then certified and approved by the program advisor.

Certificate in Aerospace Manufacturing

Not accepting new students as of Fall 2012.

This 19-units certificate is designed to give students and working engineers an educational opportunity to focus on the complex and dynamic issues related to aerospace manufacturing.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

1. Consent of the Program Director.
2. Preparation of a Program Planner.
3. Satisfactory completion of the required courses as listed below.
4. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).
5. Completion of a Bachelor of Science degree in an approved major. The Certificate may be awarded concurrently with or subsequent to a baccalaureate degree.

Required Courses

The Certificate Program requires a minimum of 19 units:

- MAE 408 Systems Engineering and Integration (3)
Prerequisite: Senior standing or consent of instructor.
- ENGR 511 Quality Assurance in Manufacturing (3)
Prerequisites: CE 40 with a grade of "C" or better or consent of instructor, and graduate standing.
- ENGR 574 Adv Manufacturing Technology and Processes (3)
Prerequisites: Consent of instructor and graduate standing.

Students should consult with the program director to assess any needed prerequisites.

Certificate in Heating, Ventilating, and Air-Conditioning Engineering

Not accepting new students as of Fall 2012.

This 21-unit certificate is designed to prepare engineering and science students to design various HVAC systems. Students may also earn this certificate in conjunction with a bachelor's degree. Contact the Department of Mechanical and Aerospace Engineering for more information.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

1. Consultation with the Program Director and preparation of a Program Planner;
2. Satisfactory completion of the required courses, as listed below;
3. Approval of a special project and its satisfactory completion (MAE 491);

4. Completion of a Bachelor of Science degree in an approved major. The Certificate may be awarded concurrently with or subsequent to the baccalaureate degree.

Required Courses

The HVAC Certificate Program requires a minimum of 21 semester units, as indicated below:

Take all of the following:

MAE 300 Engineering Instrumentation and Measurement (2)

Prerequisites: MATH 224, PHYS 151, 152 all with a grade of "C" or better.

MAE 330 Engineering Thermodynamics I (3)

Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.

MAE 431 Heat Transfer Systems Design (3)

Prerequisites: MAE 305, 330; CE 335 all with a grade of "C" or better.

MAE 438 Heating, Ventilating, Air Conditioning, and Refrigeration (3)

Prerequisites: MAE 330, CE 335.

MAE 490E Special Topics: HVAC Systems Design and Equipment (3)

Prerequisites: MAE 330, CE 335 all with a grade of "C" or better.

MAE 491 Special Problems (3)

Prerequisite: Senior standing.

CE 336 Fluid Mechanics Laboratory (1)

Prerequisite: ENGL 100 or equivalent all with a grade of "C" or better.

Prerequisite/Corequisite: C E 335.

Take one of the following:

MAE 333, CE 335

Certificate in Industrial Plastics Processing and Design

Not accepting new students as of Fall 2012.

This certificate is an interdisciplinary program sponsored by the Mechanical and Aerospace Engineering and Chemical Engineering Departments. Study includes industrial production processes, material testing procedures, economics of the polymerics industry and degradation of polymerics. Students complete an individual project, consisting of the design of an item, choice of proper polymeric material for the particular application, choice of the processing operation and construction of the necessary molding tools and testing of the completed device. Contact the Department of Mechanical and Aerospace Engineering.

Requirements

1. A bachelor's degree in engineering. The certificate may be awarded concurrently with the degree.
2. Satisfactory completion of 22 units minimum from the courses listed below:

Polymeric Processing:

Take all the following courses:

CHE 200 Chemical Engineering Fundamentals (3)

Prerequisites: CHEM 111A, MATH 122, PHYS 151 all with a grade of "C" or better.

Corequisite: CHE 210

MAE 471 Analysis Design of Machine

Components (3)

Prerequisites: MAE 373 and MAE 375 all with a grade of "C" or better.

Take one of the following courses:

MAE 472, MAE 476

Take a minimum of 3 units in either of the following:

CHE 490 Special Problems (1-3)

Prerequisite: Consent of instructor.

MAE 491 Special Problems (1-3)

Prerequisite: Senior standing.

Properties of Polymers:

MAE 373 Mechanics of Deformable Bodies (3)

Prerequisite: CE 205 with a grade of "C" or better.

MAE 374 Mechanical Properties of Materials Lab (1)

Prerequisites: ENGL 100 or equivalent, MAE 373, and MAE 300 all with a grade of "C" or better or consent of instructor.

3. Approval of the certificate committee for admission to the certificate program. An advisor will be appointed to you at that time.
4. The advisor's approval of your completion of the special project.

Certificate in Energy Conversion and Power Systems Engineering

Not accepting new students as of Fall 2012.

The 27-unit certificate program is an undergraduate program designed to prepare students to become proficient in the analysis and design of power generating systems, such as direct conversion, coal burning, hydraulic, nuclear, solar, wind, and various other types of power plants.

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

1. Consultation with program advisors in Electrical or Mechanical and Aerospace Engineering Departments and preparation of a program planner;
2. Complete all of the following core courses:
 - CE 335 Fluid Mechanics (3)
Prerequisites: MATH 224 and C E 205 all with a grade of "C" or better.
 - EE 350 Energy Conversion Principles (3)
Prerequisites: (EE 202 or equivalent) and EE 211 and 211L all with a grade of "C" or better, or consent of instructor.
 - EE 452 Computer Applications in Power Systems (3)
Prerequisite: EE 350 with a grade of "C" or better or consent of instructor or graduate standing.
 - MAE 330 Engineering Thermodynamics I (3)
Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.
 - MAE 336 Power Plant Design (3)
Prerequisite: MAE 330 with a grade of "C" or better.
 - MAE 431 Heat Transfer Systems Design (3)
Prerequisites: MAE 305, 330; CE 335.
3. Completion of 9 units from the following list of electives:
EE 360, 453, 455, 458, 550, 551, 552, 553; MAE 490, 538;
4. Completion of a Bachelor of Science degree in an approved major. This certificate may be awarded concurrently with or subsequently to baccalaureate degree.

GRADUATE PROGRAMS

The goal of the Master's programs in mechanical and aerospace engineering, the MSAE and MSME degrees, is to provide students with the advanced engineering education needed to enhance their careers and pursue doctoral studies.

Admission to the MSAE or MSME degree programs requires a minimum GPA of 2.70 in the last 60 (semester) or 90 (quarter) upper-division major units attempted.

Master of Science in Mechanical Engineering

This program involves modern computational and experimental methods knowledge and skills which are of immediate practical importance. This knowledge is communicated in the advanced courses and used in the conduct of a thesis or project. The areas of emphasis within the MSAE program include:

- Dynamics, Vibration, Control, and Robotics
- Fluid and Thermal Sciences
- Materials
- Mechanics
- Design and Manufacturing

Further information may be obtained from the Department of Mechanical and Aerospace Engineering's website: <http://www.csulb.edu/colleges/coe/mae>.

To be considered for admission, the graduate applicant must have earned a bachelor's degree from an accredited institution, have been in good standing at the last institution attended, and have a grade point average (GPA) of at least 2.7 for the last 60 (semester) or 90 (quarter) upper-division major units attempted. The general Graduate Record Examination (GRE) is required.

Prerequisites

1. A bachelor's degree in an accredited curriculum in Mechanical Engineering, or other appropriate discipline, with a minimum grade point average of 2.70 in the last 60 (semester) or 90 (quarter) upper-division major units attempted.
2. Students must consult with the MSME graduate advisor prior to enrolling in any courses for their program.
3. Failure to attempt to fulfill the Graduation Writing Assessment Requirement (GWAR) during the first semester in the program will prevent registration in engineering courses in subsequent semesters.

Note: Before being admitted a qualified student without a mechanical engineering undergraduate degree MUST provide a written statement to the MSME graduate advisor that he/she understands that all deficiencies must be removed before attempting graduate-level courses.

Requirements

PLAN I

Completion of a minimum of 30 units beyond the bachelor's degree in upper-division and graduate courses approved by the student's Department Graduate Study Committee, including:

1. Eighteen units of 500- and/or 600-level courses in mechanical and aerospace engineering;
2. Six units of electives selected from approved upper-division or graduate courses from appropriate areas;
3. Completion of six units of MAE 698-Thesis and submission of a written thesis.

PLAN II

Completion of a minimum of 36 units beyond the bachelor's degree in upper-division and graduate courses

approved by the student's Department Graduate Study Committee, including:

1. Twenty-four units of 500- and/or 600-level courses in mechanical and aerospace engineering;
2. Six units of electives selected from approved upper-division or graduate courses from approved areas;
3. Completion of six units of MAE 697-Directed Research.

Advancement to Candidacy

Prior to formally starting their thesis or project (registering for MAE 697 or 698), students must apply for Advancement to Candidacy. Students applying for Advancement to Candidacy must:

1. Have completed ALL undergraduate deficiencies with grades of "C" or better;
2. Have attained an overall grade point average (GPA) of 3.0
3. Have completed at least 12 units applicable to the degree with a GPA of at least 3.0;
4. Have completed at least 12 units applicable to the degree with a GPA of at least 3.0;
5. Have fulfilled the Graduation Writing Assessment Requirement (GWAR). This requirement can also be met by presenting evidence that the student met the requirement while an undergraduate at CSULB or at certain CSU campuses.
6. Have their program of studies approved by the faculty coordinating their area of emphasis, the ME program graduate advisor, and department chair.

Master of Science in Aerospace Engineering

This program involves modern computational and experimental methods and provides the essential information which will permit students to acquire the knowledge and skills which are of immediate practical importance. This knowledge is communicated in the advanced courses listed in the MAE curriculum and used in the conduct of a thesis or project. The areas of emphasis within the MSAE program include:

- Space Systems Engineering
- Aerodynamics and Aircraft Systems Engineering
- Computational Fluid Dynamics
- Aerospace Structures and Materials

Both graduate and undergraduate programs benefit from the advice of an advisory committee comprised of senior staff from aerospace companies, government agencies, and universities. Further information may be obtained from the Department of Mechanical and Aerospace Engineering's website: <http://www.csulb.edu/colleges/coe/mae>.

To be considered for admission, the graduate applicant must have earned a bachelor's degree from an accredited institution, have been in good standing at the last institution attended, and have a grade point average (GPA) of at least 2.7 for the last 60 (semester) or 90 (quarter) upper-division major units attempted. The general Graduate Record Examination (GRE) is required.

Prerequisites

1. A bachelor's degree in an accredited curriculum in Aerospace or Mechanical Engineering with a minimum grade point average of 2.70 in the last 60 (semester) or 90 (quarter) upper-division major units attempted. Applicants with a lower

GPA may be admitted, subject to the successful completion of appropriate deficiencies assigned by the graduate advisor.

2. A bachelor's degree in engineering, mathematics, science or other appropriate discipline, with the requirement that essential undergraduate prerequisites in engineering be satisfied.

3. Graduate students must consult with the graduate advisor for information concerning procedures and requirements for appropriate approval of their courses of study prior to enrolling in their graduate programs.

Requirements

PLAN I

Completion of a minimum of 30 units beyond the bachelor's degree in upper-division and graduate courses approved by the student's Department Graduate Study Committee, including:

1. Eighteen units of 500- and/or 600-level courses in mechanical and aerospace engineering;
2. Six units of electives selected from approved upper-division or graduate courses from appropriate areas;
3. Completion of six units of MAE 698 Thesis and submission of a written thesis.

PLAN II

Completion of a minimum of 36 units beyond the bachelor's degree in upper-division and graduate courses approved by the student's Department Graduate Study Committee, including:

1. Twenty-four units of 500- and/or 600-level courses in mechanical and aerospace engineering;
2. Six units of electives selected from approved upper-division or graduate courses from approved areas;
3. Completion of six units of MAE 697-Directed Research.

Advancement to Candidacy

Prior to formally starting their thesis or project (registering for MAE 697 or 698), students must apply for Advancement to Candidacy. Students applying for Advancement to Candidacy must:

1. Have completed ALL undergraduate deficiencies with grades of "C" or better;
2. Have attained an overall grade point average (GPA) of 3.0
3. Have completed at least 12 units applicable to the degree with a GPA of at least 3.0;
4. Have fulfilled the Graduation Writing Assessment Requirement (GWAR). This requirement can also be met by presenting evidence that the student met the requirement while an undergraduate at CSULB or at certain CSU campuses.
5. Have their program of studies approved by the faculty coordinating their area of emphasis, the AE program graduate advisor, and department chair.

Master of Science in Engineering

Admission to the MSE graduate program requires a minimum GPA of 2.7 in the last 60 upper-division units attempted. For requirements, see the description in the College of Engineering section of this catalog.

The Mechanical and Aerospace Engineering Department

administers two emphases under the Master of Science in Engineering. The other prerequisites and requirements are the same as for the MSAE and MSME programs.

Management Engineering Emphasis

A special management perspective is required for the successful generation of technical products and services. In order to plan, design, direct and control technical projects, technical managers must be capable of inspiring and developing professional personnel. They must be able to integrate planning, manufacturing and budgetary concerns of the project and be able to easily communicate with general management.

This emphasis primarily admits students with a traditional engineering background. It emphasizes the management of engineering-based endeavors and does not require undergraduate business courses as prerequisites for graduate work. An individualized program is developed according to student's undergraduate degree, area of interest, or industrial application; interdisciplinary approaches are encouraged.

Ph.D. in Engineering and Industrial Applied Mathematics

For requirements, see the description in the College of Engineering section of this catalog.

Courses (MAE)

LOWER DIVISION

101A. Introduction to Aerospace Engineering (1)

Role of various types of engineering specialties in the development of an actual aerospace vehicle product. Current social, ethical and environmental issues in Aerospace Engineering solutions. Life-long learning skills using resources from professional societies and Internet are also emphasized.

Letter grade only (A-F). (Lecture-problem 1 hour)

101B. Introduction to Mechanical Engineering (1)

Prerequisite: Freshman standing or consent of instructor.

Introduction to mechanical engineering as a profession. Past, present, and future trends and related professional opportunities and challenges. Introduction to mechanical engineering curriculum studies. Social, economical, cultural, legal and ethical issues related to mechanical engineering and its applications.

Letter grade only (A-F)

172. Engineering Design Graphics (3)

Graphics concepts and visualization. Graphic expressions using CAD software, emphasis on industrial practice involving part and assembly drawings for actual products, standards, tolerances, surface finishes, and other attributes on drawings, production drawings, projects involving complete design of systems and subsystems.

Letter grade only (A-F). (Lecture-problems 2 hrs., design laboratory 3 hrs)

205. Computer Methods in Mechanical and Aerospace Engineering (2)

Prerequisites: MATH 122 with a grade of "C" or better.

Application of computer programming to engineering problem solving. Structured approach to problems. Input-output concepts for both numerical and graphical results.

Letter grade only (A-F). (Lecture-problems 1 hour, laboratory 3 hours)

272. Introduction to Manufacturing Processes (2)

Prerequisite: MAE 172 with a grade of "C" or better.

Manufacturing processes, properties of materials; metals production; foundry, casting, heat treatment; welding, powder metallurgy, plastics, metrology; working metals, press work; machine tool elements, numerical control; metal cutting/turning; drilling, boring, milling; shaping planning, sawing broaching; grinding, sanding; gears, gear-cutting, threads, thread-cutting. Letter grade only (A-F). (Lecture-problems 1 hour, laboratory 3 hours)

UPPER DIVISION

300. Engineering Instrumentation and Measurement (2)

Prerequisites: MATH 224, PHYS 151, 152 all with a grade of "C" or better.

Statistical analysis of experimental data, uncertainty analysis, various statistical distributions and test of goodness of fit, correlation coefficient and multivariable regression. Engineering instrumentation include types of passive/active transducers, electronics for instrumentation, computer-based data acquisition, and experiments on pressure, temperature, force measurements.

Letter grade only (A-F). (Lecture-problems 1 hour, Laboratory 3 hours)

305. Numerical Methods in Mechanical and Aerospace Engineering (3)

Prerequisites: MAE 205 and MATH 370A all with a grade of "C" or better.

Roots of linear and nonlinear algebraic equations. Solutions of simultaneous linear algebraic equations. Parametric notation of analytical curves and surfaces. Numerical interpolation and splines. Numerical integration and differentiation. Numerical solution of differential equations, initial-value and boundary-value problems. Individual and/or group projects.

Letter grade only (A-F). (Lecture-problems 3 hours)

310. Safety and Reliability in Systems Design I (3)

Prerequisites: MAE 205; MATH 370A all with a grade of "C" or better, or consent of instructor.

Intro probabilistic design analysis; safety and reliability, tools to assess adequacy of designs; identification of critical elements and practical design guidance; compliance with the requirements. Coherent use of concepts, tools, and programs to produce reliable, safe system designs. Group projects.

Letter grade only (A-F). (Lecture-problems 3 hours) Not open for credit to students with credit in ME 390.

322. Engineering Materials and Materials Processes (3)

Prerequisites: CHEM 111A, MATH 123, MAE 172 all with a grade of "C" or better.

Structure and properties of engineering materials. Phase and transformation diagrams. Heat treatments and mechanical processing. Manufacturing methods of metals, alloys, polymers, composites, ceramics, and semiconductors.

Letter grade only (A-F). (Lecture-problems 3 hours)

330. Engineering Thermodynamics I (3)

Prerequisites: MATH 224, PHYS 151 or equivalent, and CHEM 111A all with a grade of "C" or better or consent of instructor.

Laws of thermodynamics. Properties of liquids, gases and vapors. Sources of energy and conversion to work. Introduction to heat transfer and psychrometry.

Letter grade only (A-F). (Lecture-problems 3 hours)

333. Engineering Fluid Dynamics (3)

Prerequisites: CE 205, MATH 370A all with a grade of "C" or better.

Fluid statics. Formulation of the conservation of mass, momentum and energy using finite control volume analysis and differential analysis. Dimensional analysis. Viscous flow in pipes.

Letter grade only (A-F). (Lecture-problems 3 hours)

334. Aerodynamics I (3)

Prerequisite: MAE 333 with a grade of "C" or better.

The Bernoulli equation. Incompressible inviscid flow. Flow around circular cylinder, flow around thin airfoils. Panel method. Incompressible flow about wings of finite span. Vortex lattice method.

Letter grade only (A-F). (Lecture-problems 3 hours).

336. Power Plant Design (3)

Prerequisite: MAE 330 with a grade of "C" or better.

Design of power production systems, including steam power plants, gas turbines and auxiliary power units. Survey of alternate power sources including wind, solar, geothermal, ocean thermal and biomass. Group and/or individual design projects.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

337. Thermal Engineering Laboratory (2)

Prerequisite: MAE 336 with a grade of "C" or better.

Thermodynamics, heat transfer and fluid flow property measurements, measurement of heating value of fuels, energy and performance analysis of thermal systems, including internal combustion engines, power and heat generating systems, refrigeration and air-conditioning systems, and heat exchangers.

(Lecture-problems 1 hour, Laboratory 3 hours) Letter grade only (A-F).

350. Flight Mechanics (3)

Prerequisite: CE 205 with a grade of "C" or better.

Turbojets: level and other flights in the vertical plane, turning flight in the horizontal plane. Piston props: level and other flights in the vertical plane, turning flight in the horizontal plane. Performance analysis and design examples.

(Lecture-problems 3 hours). Letter grade only (A-F).

361. Materials and Properties Laboratory (1)

Prerequisites: ENGL 100 or equivalent, MAE 300, 322, 373 all with a grade of "C" or better.

Study of the effects of thermal processing and mechanical processing on the properties and microstructures of metals, alloys, and other materials. Determination of material properties using tensile test, torsion test, and beam test. Study of the statistical nature and reliability of test results.

(Laboratory 3 hours) Letter grade only (A-F).

365. Aerospace Structures I (3)

Prerequisite: MAE 373 with a grade of "C" or better.

Mechanical behavior of aerospace materials. Torsion of thin walled section beams. Bending and torsion of advanced beams. Analysis of stiffened box beams. Load transfer in stiffened panel structures. Failure criteria of aerospace materials.

(Lecture-problems 3 hours) Letter grade only (A-F).

371. Analytical Mechanics II (Dynamics) (3)

Prerequisites: CE 205, MAE 205 or CE 206 all with a grade of "C" or better.

Newton's Laws and the principles of work and energy and impulse and momentum applied to the study of particle and rigid body motion. Engineering application with emphasis on plane motion problems. Individual and/or group projects involving in-depth numerical analysis.

(Lecture-problems 3 hours) Letter grade only (A-F).

373. Mechanics of Deformable Bodies (3)

Prerequisite: CE 205 with a grade of "C" or better.

Application of the principles of mechanics to the design of structural and machine members and connections; stress analysis of beams and columns. Properties and strength of engineering materials. Design projects.

(Lecture-problems 3 hours) Letter grade only (A-F).

374. Mechanical Properties of Materials Laboratory (1)

Prerequisites: ENGL 100 or equivalent, MAE 373, and MAE 300 all with a grade of "C" or better or consent of instructor

Physical and mechanical properties of engineering materials and their relationship to structural elements; accuracy of measurements; statistical analysis of experimental data; professional laboratory reports.

(Laboratory 3 hours) Letter grade only (A-F).

375. Kinematics and Dynamics of Mechanisms (3)

Prerequisites: MAE 272, 371 all with a grade of "C" or better.

Fundamentals of linkages, cams, gears and gear trains. Velocity and acceleration analysis of machines leading to dynamic loading of machine parts; dynamic analysis and balancing of rotating machines; internal combustion engine balancing. Individual design projects.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

376. Modeling and Analysis of Dynamic Systems (3)

Prerequisite: MAE 371; MATH 370A all with a grade of "C" or better.

Modeling and analysis of dynamic systems including mechanical, electrical, electro-mechanical, and hydraulic systems. Use of complex algebra and Laplace transforms. Mathematical modeling of dynamic systems in state-space. Linear systems analysis in time and frequency domains. Introduction to feedback control systems.

(Lecture-problems 3 hours) Letter grade only (A-F).

381. Fundamentals of Spacecraft Dynamics (3)

Prerequisites: PHYS 152, MATH 370A, and MAE 371 all with a grade of "C" or better.

Space environments and their impact on spacecraft design. Space mission engineering. Spacecraft propulsion. Attitude dynamics and kinematics. Controls. Spacecraft attitude determination and control.

(Lecture-problems 3 hours) Letter grade only (A-F).

390. Aerospace Engineering Seminar (1)

Prerequisite: Upper-division standing.

Introduction to effective communication techniques and oral presentations. Guest speakers from industry cover topics such as an engineer's professional practice, social responsibilities, ethical and legal issues, as well as latest developments in Aerospace Engineering. Students write reports regarding these presentations.

(Seminar 1 hour) Letter grade only (A-F).

408./508. Systems Engineering and Integration (3)

Prerequisite: Senior standing or consent of instructor.

Introduction to tools and methods employed by systems engineers in aerospace industry. Development of system functions, requirements, verification and validation, and interfaces in the context of integrated product teams and the product life cycle. Trade studies and risk management.

(Lecture-Problems 3 hours) Letter grade only (A-F).

409. Modern Computational Aspects in Mechanical Engineering (3)

Prerequisites: Senior standing in engineering and consent of instructor.

Computational aspects of Mechanical Engineering. Subjects include finite element analysis of structures, fluids, or heat transfer; boundary element analysis.

May be repeated to a maximum of 6 units with consent of department. (Lecture-problems 3 hours.) Letter grade only (A-F).

A. Finite Element Methods I

Finite element methods for beam and truss elements. Systems of ordinary differential equations in a finite element formulation. Static and dynamic analysis of complex structures. Rigid elements in an elastic environment. Solid modeling for 1D, 2D, 3D structures using IDEAS.

B. Introduction to Computational Fluid Dynamics and Heat Transfer
Classification of partial differential equations and boundary conditions, finite difference and finite volume formulations, grid generation, stability analysis, numerical methods for inviscid flows, viscous laminar flows, compressible flows, conduction and convection heat transfer.

422./522. Composite Materials (3)

Prerequisite: MAE 373 with a grade of "C" or better.

Stress-strain relations for anisotropic materials. Classical lamination theory. Strength and failure theories for laminae and laminates. Micromechanics. Applications of composite structures. Additional projects will be required for MAE 522.

(Lecture-problems 3 hours) Letter grade only (A-F).

431. Heat Transfer Systems Design (3)

Prerequisites: MAE 305, 330; CE 335 all with a grade of "C" or better.

Analysis of heat transfer by conduction, convection and radiation. Investigation of steady state and transient heat transfer systems. Computer methods. Individual-group design projects problems in heat transfer such as electronic packaging, heat exchangers, heat engines, refrigerators, and thermal systems analysis.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

434. Aerodynamics II (3)

Prerequisite: MAE 334 with a grade of "C" or better.

Compressible flows. Subsonic and supersonic flows around airfoils and wings. Two-dimensional, incompressible boundary layers. Introduction to computational fluid dynamics (CFD). Aerodynamic design considerations. Projects are assigned and written reports are required.

(Lecture-problems 3 hours) Letter grade only (A-F).

435./535. Computational Fluid Dynamics I (3)

Prerequisites: MATH 370A, MAE 333 all with a grade of "C" or better.

Numerical methods for elliptic, parabolic, and hyperbolic equations, finite difference and volume methods, analysis of consistency, stability, and convergence, panel method, modeling and computation of boundary layer flows, full potential equation, grid generation, application to inviscid and viscous subsonic, transonic/supersonic flows.

(Lecture-Problems 3 hours) Letter grade only (A-F).

438. Heating, Ventilating, Air Conditioning, and Refrigeration (3)

Prerequisites: MAE 330, CE 335 all with a grade of "C" or better.

Basic HVAC system calculations. Thermodynamics and psychometrics, design conditions and load estimating, residential and non-residential heating and cooling load calculations, energy estimating methods, duct and pipe sizing, and life cycle costs.

(Lecture-Problems 3 hours) Letter grade only (A-F).

440. Aerodynamics Laboratory (1)

Prerequisites: MAE 300 and 334 all with a grade of "C" or better.

Experimental techniques in aerodynamics, wind tunnel measurements, use of Pitot tube, hot wire and Laser Doppler Velocimetry systems, flow visualization techniques, calibration of transducers. Computer controlled data acquisition and analysis. Projects are assigned and written reports and oral presentations are required.

Letter grade only (A-F). (Laboratory 3 hours)

451./551. Aircraft Preliminary Design and Performance (3)

Prerequisite: MAE 334, 350 all with a grade of "C" or better, or consent of instructor.

Complete aircraft preliminary design, including mission definition, specifications, and regulations. Preliminary takeoff weight and weight empty for a mission. Aircraft geometric characteristics are developed. Detailed aerodynamic data are estimated and used to calculate aircraft performance. Individual projects required for MAE 551.

The design project is conducted in teams for MAE 451 and individually for MAE 551. (Lecture-Design Project 3 hours) Letter grade only (A-F).

452. Propulsion (3)

Prerequisites: MAE 330 and 334 all with a grade of "C" or better.

Simple gas turbine cycle. Heat exchange and reheat gas turbine cycles. Gas turbine components. Ideal and actual thrust development in gas turbines. Principles of rocket engines. Solid, liquid and hybrid fuel rockets. Thrust and control in rockets.

(Lecture-problems 3 hours) Letter grade only (A-F).

453. Stability and Control of Aerospace Vehicles (3)

Prerequisite: MAE 350 or equivalent all with a grade of "C" or better.

Corequisite: MAE 334.

Physical dependence of airplane stability/control characteristics on airplane configuration and flight condition. Equations for static longitudinal, lateral and directional stability of airplanes. Neutral points, control effectiveness, trim in maneuvering flight. Configuration determinants. Transient modes. Additional Projects for MAE 553..

(Lecture-problems 3 hours) Letter grade only (A-F).

454./554. Avionics Systems (3)

Prerequisite: MAE 453 with a grade of "C" or better.

Avionics systems requirements definition and design. Systems used for guidance and navigation. Components of avionics systems (software, integrated circuits, devices, etc.). Integration of optics and electronics. Testing and certification.

(Lecture-Problems 3 hours) Letter grade only (A-F).

459. Professional Practice Seminar (1)

Prerequisite: Senior standing or consent of instructor.

Professional, social and moral responsibilities of engineers. Examination of ethical and legal issues, including intellectual property rights and regulatory codes and practices. Students are encouraged to participate in professional societies and attend professional seminars. Licensure is emphasized.

(Lecture-Problems 1 hour) Letter grade only (A-F).

465. Aerospace Structures II (3)

Prerequisite: MAE 365 with a grade of "C" or better.

Fracture mechanics. Fatigue failure. Structural stability. Elementary aeroelasticity. Energy principles. Finite element methods of aerospace structural analysis. Application of finite element computer programs. Projects are assigned and written reports are required.

(Lecture-problems 3 hours). Letter grade only (A-F).

471. Analysis and Design of Machine Components (3)

Prerequisite(s): MAE 373 and MAE 375 all with a grade of "C" or better.

Application of the principles of mechanics and physical properties of materials to the proportioning of machine elements, including consideration of function, safety, production and economic factors. Group and/or individual design projects of mechanical systems and/or subsystems.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

472. Design of Mechanical Engineering Systems (3)

Prerequisites: MAE 330, 471 all with a grade of "C" or better.

Capstone design course. Design experience includes conceptual design, literature review and analysis. Final design includes: drawings, manufacturing and assembly of prototype. Emphasis placed on identifying realistic constraints simulating industrial situations which affect design choices. Teamwork and interaction is encouraged.

(Lecture-Problems 2 hours, Design Laboratory 3 hours) Letter grade only (A-F).

474./574. Computer-Aided Manufacturing (3)

Prerequisites: MAE 322, 490A all with a grade of "C" or better.

Fundamental concepts in automation. High volume discrete parts production systems. Numerical control manufacturing systems. Computer process monitoring. Direct digital control. Group

techniques. Flexible manufacturing systems.

Letter grade only (A-F). (Lecture-Problems 2 hours, Laboratory 3 hours)

476. Mechanical Control Systems I (3)

Prerequisite: MAE 376 with a grade of "C" or better.

Feedback control systems in mechanical engineering. Modeling, analysis, and design. System performance and design criteria: stability, transient response, frequency response and compensation, root locus. Introduction to nonlinear control systems, state space analysis and design.

(Lecture-problems 2 hours, laboratory 3 hours) Letter grade only (A-F).

478. Aerospace System Design I (3)

Prerequisites: MAE 334, 365, and 381 all with a grade of "C" or better.

Corequisite: MAE 434, 465, or 481.

A capstone design experience which integrates aspects of aerospace systems design. Student teams complete a design during the two-semester course sequence. In the first semester course, the teams define the requirements and then work through the complete design in the second semester (MAE 479).

Letter grade only (A-F). (Lecture-Design Project 2 hours, Laboratory 3 hours)

479. Aerospace Systems Design II (2)

Prerequisite: MAE 478 with a grade of "C" or better.

Continuation of Aerospace Systems Design I (MAE 478).

The projects assigned in teams in MAE 478 are completed.

Manufacturing is included when appropriate. Regular design reviews (oral presentations and written reports) are essential components in grading.

(Lecture-Design Project 1 hour, Laboratory 3 hours) Letter grade only (A-F).

481. Spacecraft Systems (3)

Prerequisite: MAE 381 with a grade of "C" or better.

Systems engineering approach to spacecraft design. Spacecraft systems engineering and spacecraft and power subsystem. Radiative and conductive heat transfer. Thermal control subsystem. Telecommunications. Command and data handling. Team projects including spacecraft subsystem design are assigned. Written reports and oral presentations are required.

(Lecture-Problems 3 hours) Letter grade only (A-F).

483. Space Flight and Orbital Mechanics (3)

Prerequisites: MAE 381 with a grade of "C" or better.

Two-body problem. Predicting orbital positions. Kepler's equation. Orbital elements. Lambert's problem. Rocket dynamics. Rocket payloads and staging. Impulsive orbital transfer. Interplanetary mission analysis. Projects are assigned and written reports are required.

(Lecture-problems 3 hours). Letter grade only (A-F).

490. Selected Topics in Mechanical and Aerospace Engineering (3)

Prerequisites: Senior standing in engineering and consent of instructor.

Selected topics from recent advances in mechanical and aerospace engineering. Content may vary from semester to semester.

May be repeated to a maximum of 6 units with different topics.

(Lecture-problems 3 hours) Letter grade only (A-F).

A. CAD/CAM

Prerequisites: MAE 172; 272 or 350; 322 or 365; and 373; upper-division standing or consent of instructor.

Fundamentals of computer-aided design/computer-aided manufacturing (CAD/CAM). Creating, reading, and understanding databases for solid models. Assemblies and sub-assemblies. Design and analysis of mechanisms with linkages,

gears, springs, dampers. Tolerance analysis. CAM, multiple axis milling and turn, APT, G code. Design Optimization.

Not open for credit to students with credit in ME 405A.

B. Robotics Principles

Prerequisites: MAE 371, 376; upper-division standing or consent of instructor.

Introduction to robotic mechanics and control, with emphasis on spatial description and transformation, forward and inverse kinematics, velocity and force transformation, dynamics, linear control, and issues on actuation, sensing, and design.

Not open for credit to students with credit in ME 405B.

D. Hybrid Electrical Vehicles System Design

Not open for credit to students with credit in ME 405D.

E. HVAC Systems Design and Equipment

Prerequisites: MAE 330, CE 335.

Not open for credit to students with credit in ME 405E.

F. Petroleum Engineering

Prerequisites: Senior standing in engineering or science.

Overview of petroleum engineering operations, properties of petroleum reservoir rocks, single-phase and multiphase fluid-flow through porous media. Properties of reservoir fluids. Field trips.

G. Mechatronics

Prerequisites: EE 211, MATH 370A and MAE 300; Upper-Division standing or consent of instructor.

491. Special Problems (1-3)

Prerequisite: Senior standing.

Assigned topics in technical literature or laboratory projects and reports on same.

Requires consultation with the respective program's undergraduate advisor and submission of an Agreement for Independent Study form as a contract for the project and submission of a Special Problems Permission form each semester of enrollment. Instructor permission is required. May be repeated to a maximum of 3 units in different semesters. Letter grade only (A-F).

GRADUATE LEVEL

501. Engineering Analysis I (3)

Prerequisite: MATH 370A with a grade of "C" or better.

Differential equations, series solutions of differential equations (special functions), boundary-value problems and characteristic function representation, Laplace transforms, Fourier analysis, partial differential equations, formulating and solving problems in engineering for systems of differential equations and partial differential equations, complex analysis.

(Lecture-problems 3 hours) Letter grade only (A-F).

502. Engineering Analysis II (3)

Prerequisite: MAE 501 with a grade of "C" or better.

Linear algebra, matrix computations, systems of differential equations, eigenvalue problems, iterative solution of systems of algebraic equations, numerical methods for ordinary and partial differential equations, systems of nonlinear equations, optimization.

(Lecture-problems 3 hours) Letter grade only (A-F).

505. Quantitative Methods for Engineering Managers (3)

Prerequisite: MAE 501 or 502 or equivalents all with a grade of "C" or better.

Concepts and methods using quantitative approaches in engineering management decision-making. Computer-based tools used in management decision-making for subjective approaches. Probabilistic methods, forms of linear program model, network analysis, dynamic programming, Monte Carlo simulation and queuing models. Methods formulating problems are emphasized.

(Lecture-problems 3 hours) Letter grade only (A-F).

506. Management of Engineering Technology and Innovation (3)

Prerequisite: Graduate engineering standing.

Analysis of the principles and theory of engineering administrative organizations, information systems, management functions, decision making tools, strategies and administrative policy formulations.

(Lecture-problems 3 hours) Letter grade only (A-F).

507. Engineering Project Management (3)

Prerequisite: Graduate engineering standing.

Theory and philosophies of project management, principles of internal and industrial organization planning and control systems, motion in time study, industrial statistics, industrial research as aid to decision making.

(Lecture-problems 3 hours) Letter grade only (A-F).

508./408. Systems Engineering and Integration (3)

Prerequisite: Senior standing or consent of instructor.

Tools and methods employed by systems engineers in aerospace industry. Development of system functions, requirements, verification and validation, and interfaces in context of integrated product teams and the product life cycle. Trade studies and risk management. Projects assigned, written reports and oral presentations are required.

Additional projects required for MAE 508. (Lecture-Problems 3 hours) Letter grade only (A-F).

512./612. Computer Aided Design in Mechanical Engineering (3)

Prerequisites: MAE 490A, 501, 502. (Master's students register in MAE 512 or 612; Ph.D. students register in MAE 612) all with a grade of "C" or better.

Computer graphics in CAD/CAM. Includes geometrical transformations, viewing in three dimensions, modeling and object hierarchy, representation of 3D shapes, shading models and imaging databases and data transfer.

(Lecture-problems 3 hours) Letter grade only (A-F).

521. Engineering Metallurgy II (3)

Prerequisite: MAE 322 with a grade of "C" or better.

Properties and uses of structural steels: heat treatable steels; titanium alloys; nickel and cobalt base alloys; refractory metals; ultra high-strength steels; stainless steels; and metal matrix composite materials. Designing for fracture resistance.

(Lecture-Problems 3 hours) Letter grade only (A-F).

522./422. Composite Materials (3)

Prerequisite: MAE 373 with a grade of "C" or better.

Stress-strain relations for anisotropic materials. Classical lamination theory. Strength and failure theories for laminae and laminates. Micromechanics. Applications of composite structures. Additional projects will be required for MAE 522.

(Lecture-problems 3 hours) Letter grade only (A-F).

527. Metals and Plastics Manufacturing Processes (3)

Prerequisite: MAE 322 with a grade of "C" or better.

Theory of metal forming and plastics processing. Includes metal forging and rolling, metal and plastics extrusion, plastics injection molding, casting. Discussion of appropriate manufacturing methods.

(Lecture-problems 3 hours) Letter grade only (A-F).

529. Structural Analysis of Composite Laminates (3)

Prerequisite: MAE 522 with a grade of "C" or better or consent of instructor.

Beams, columns and rods of composite materials. Bending, vibration and buckling analysis of composite laminates. Shells of composite materials. Joining of composite material structures.

(Lecture-Problems 3 hours) Letter grade only (A-F).

531. Advanced Heat Transfer (3)

Prerequisites: MAE 431, 501 all with a grade of "C" or better.

Advanced topics in conduction and convection heat transfer, analytical and numerical solutions to multidimensional heat conduction equations in various geometries. Solutions to laminar and turbulent convective heat transfer problems. External and internal flows, free and forced convection, and mass transfer from external surfaces. Applications in thermal systems design.

(Lecture-problems 3 hours) Letter grade only (A-F).

532. Combustion I (3)

Prerequisites: MAE 336, 431 all with a grade of "C" or better.

Fundamentals of combustion engineering: fuels; chemical thermodynamics and chemical kinetics; premixed and diffusion flames; ignition and extinction; Hugoniot curves; flammability and explosion limits; pollutant formation and control; applications in spark-, and charged-ignition internal combustion engines; gas-fired and oil-fired furnaces.

(Lecture-Problems 3 hours) Letter grade only (A-F).

533. Gas Dynamics (3)

Prerequisite: MAE 333 or equivalent all with a grade of "C" or better.

Isentropic flow, normal and oblique shocks, Prandtl-Meyer flow, shock expansion theory, method of characteristics, nozzle flow, flow in ducts with friction and heat transfer, solutions of linearized potential equation with applications, slender body theory, similarity rules, transonic flow, shock wave/boundary layer interactions.

(Lecture-Problems 3 hours) Letter grade only (A-F).

535./435. Computational Fluid Dynamics I (3)

Prerequisites: MATH 370A, MAE 333 all with a grade of "C" or better.

Numerical methods for elliptic, parabolic, and hyperbolic equations, finite difference and finite volume methods, analysis of consistency, stability, and convergence, panel method, modeling and computation of boundary layer flows, etc.

Additional projects will be required for MAE 535. (Lecture-Problems 3 hours) Letter grade only (A-F).

537. Advanced Fluid Dynamics I (3)

Prerequisites: CE 335, MAE 431 all with a grade of "C" or better.

Dynamics of ideal, real and compressible flows, potential flow, vortex flow, the Navier Stokes equations, integral and differential equations for laminar flow, exact solutions for laminar flow, steady and unsteady compressible flows.

(Lecture-problems 3 hours) Letter grade only (A-F).

538. HVAC Systems, Energy Rating, and LEEDS (3)

Prerequisites: MAE 330, CE 335 all with a grade of "C" or better.

Building envelope and environment, HVAC equipment and systems, lighting, green design and energy rating systems, and LEEDS.

Additional projects required for MAE 538. (Lecture-Problems 3 hours) Letter grade only (A-F).

551./451. Aircraft Preliminary Design and Performance (3)

Prerequisites: MAE 334, 350 all with a grade of "C" or better, or consent of instructor.

Complete aircraft preliminary design, including mission definition, specifications and regulations. Preliminary takeoff weight and weight empty for a specific mission. Aircraft geometric characteristics are developed. Detailed aerodynamic data are estimated and used to calculate aircraft performance. The design project is conducted in teams for MAE 451 and individually for MAE 551.

(Lecture-Design Project 3 hours) Letter grade only (A-F).

553. Advanced Flight Dynamics and Control (3)

Prerequisite(s): MAE 502 or equivalent all with a grade of "C" or better.

Introduces the design and analysis of flight control systems. Topics

include linear and nonlinear flight dynamics, state space modeling, stability analysis, modern control system design and simulation.

(Lecture-problems 3 hours) Letter grade only (A-F).

554./454. Avionics Systems (3)

Prerequisite: MAE 553 with a grade of "C" or better.

Avionics systems requirements definition and design. Systems used for guidance and navigation. Components of avionics systems (software, integrated circuits, devices, etc.). Integration of optics and electronics. Testing and certification.

(Lecture-Problems 3 hours) Letter grade only (A-F).

563. Linear Finite Element Analysis (3)

Prerequisite: MAE 409A with a grade of "C" or better.

Finite element(FE) forms of differential equations. Isoparametric concepts. Dynamic response of damped elastic structures, modal and direct integration analysis. Automatic mesh generation via solid modeling using IDEAS, automatic adaptation to popular software such as: STRUDL, NASTRAN, ANSYS, and ABAQUS. FE fluid flow and heat transfer analysis.

(Lecture-problems 3 hours) Letter grade only (A-F).

567. Advanced Mechanics of Deformable Bodies (3)

Prerequisites: MAE 373, 374, 471 all with a grade of "C" or better or consent of instructor.

Analysis of stress and deflection in unsymmetrical bending, shear center for beams, curved beams. Stress concentration, deformation beyond the elastic limit. Energy method; Castigliano's Theorem; Rayleigh-Ritz technique.

(Lecture-problems 3 hours) Letter grade only (A-F).

568. Creep and Fatigue (3)

Prerequisites: MAE 322, 373 all with a grade of "C" or better, or consent of instructor.

Phenomena of creep and fatigue; effect on stress distribution in structural elements; buckling caused by creep; effects of space environment on fatigue; cumulative fatigue damage at normal and elevated temperatures.

(Lecture-problems 3 hours) Letter grade only (A-F).

572. Structural Design Optimization (3)

Prerequisite: MAE 373 with a grade of "C" or better or consent of instructor.

Structural optimization using calculus of variations. Method of Lagrange multipliers, unconstrained and constrained optimization, fast reanalysis techniques, sequential approximate optimization, sensitivity calculations of structural response, variational sensitivity analysis, approximation techniques, optimal design of laminated composite materials etc.

(Lecture-Problems 3 hours) Letter grade only (A-F).

573. Modern Control of Dynamic Systems (3)

Prerequisite: MAE 476 with a grade of "C" or better.

Advanced topics in analysis and design of modern control systems in mechanical engineering. Topics include state space, Riccati and Liapunov equations, Linear Quadratic Regulator (LQR), Kalman filter, etc. Optimization via calculus of variations, Pontryagin's minimum principle. Control of distributed-parameter systems with applications to structural dynamics.

Letter grade only (A-F). (Lecture-problems 3 hours)

574./474. Computer-Aided Manufacturing (3)

Prerequisites: MAE 322, 490A all with a grade of "C" or better.

Fundamental concepts in automation. High volume discrete parts production systems. Numerical control manufacturing systems. Computer process monitoring. Direct digital control. Group techniques. Flexible manufacturing systems. Additional projects will be required from M.S. students in a wide-range of Engineering applications.

Letter grade only (A-F). (Lecture-Problems 2 hours, Laboratory 3 hours).

575. Robot Modeling and Control (3)

Prerequisites: MAE 371, MATH 370A all with a grade of "C" or better.

Detailed study of rigid body dynamics with emphasis on robot arm analysis. Three-dimensional kinematic analysis. Rotational and homogeneous transformations. Eulerian angles. Denavit Hartenberg representation. Kinematic chains. Recursive formulas. Euler's moment equations and gyrodynamic. Multi-body analysis. Lagrange's equations. Special topics.

(Lecture-problems 3 hours) Letter grade only (A-F).

576. Engineering Vibrations (3)

Prerequisite: MAE 376 with a grade of "C" or better.

Fundamentals of mechanical vibrations, types of oscillatory motions. Single-Degree-of-Freedom (SDOF) and Multiple-Degree-of-Freedom (MDOF) systems. Free and forced vibrations, damping, vibration isolation, vibration measuring instruments, Modal analysis. Lagrange's equations. Introduction to Finite Element Method and modal testing.

(Lecture-problems 3 hours) Letter grade only (A-F).

578. Haptic Systems for Virtual Reality and Teleoperation (3)

Prerequisites: MAE 501; MAE 376 or 490B and 476 or equivalent all with a grade of "C" or better.

The course introduces haptic systems, which involve virtual and teleoperated environments that are displayed through force and/or tactile feedback. Topics covered include: human haptic sensing and control, design of haptic interfaces, teleoperation, modeling of virtual environments, control and stability issues.

(Lecture-Problems 3 hours) Letter grade only (A-F).

581. Space Vehicle Design (3)

Prerequisite: Graduate engineering standing or consent of instructor.

Space environments and their impact on spacecraft design. Space mission design. Payloads and communications. Integration of attitude determination and control, thermal, propulsion, configuration, telemetry, power, structures, and data handling subsystems.

(Lecture-Problems 3 hours) Letter grade only (A-F).

582. Rocket and Spacecraft Propulsion (3)

Prerequisite: Graduate engineering standing or consent of instructor.

Thrust and specific impulse. Compressible flows. Detailed analysis of liquid, solid and hybrid propulsion systems. Includes propellants, injection systems, combustion and chemical equilibrium, thrust chambers, nozzles and plumes. Electro-thermal thrusters. Plasmas and electromagnetic thrusters.

(Lecture-Problems 3 hours) Letter grade only (A-F).

583. Astrodynamics (3)

Prerequisite: MAE 502 or equivalent all with a grade of "C" or better, or consent of instructor.

Physical principles. Two-body and central force motion. Coordinate and time systems. Trajectory correction maneuvers. Position and velocity in conic orbits. Lambert's Problem. Celestial mechanics. Orbital perturbations. Numerical methods in orbital mechanics and mission analysis.

(Lecture-problems 3 hours) Letter grade only (A-F).

585. Spacecraft Attitude Determination and Control (3)

Prerequisite: MAE 501 or equivalent all with a grade of "C" or better, or consent of instructor.

Control systems. Spacecraft attitude dynamics and control. Stabilization methods and maneuvers. Impact of flexible structures.

(Lecture-Problems 3 hours) Letter grading only (A-F).

590. Selected Topics in Mechanical and Aerospace Engineering (1-3)

Prerequisites: MAE 501, 502 all with a grade of "C" or better, and other prerequisites as related to the topics offered, or consent of instructor.

Selected topics from recent advances in mechanical or aerospace engineering.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*. (Lecture-problems 3 hours).

612./512. Computer Aided Design in Mechanical Engineering (3)

Prerequisites: MAE 490A, 501, 502. (Master's students register in MAE 512 or 612; Ph.D. students register in MAE 612) all with a grade of "C" or better.

Computer graphics in CAD/CAM. Includes geometrical transformations, viewing in three dimensions, modeling and object hierarchy, representation of 3D shapes, shading models and imaging databases and data transfer. Additional projects required for MAE 612.

(Lecture-problems 3 hours) Letter grade only (A-F).

631. Thermal Radiation (3)

Prerequisite: Consent of instructor.

Fundamentals of thermal radiation, properties of matter, radiative exchange in enclosures, equation of transfer for radiative transfer in absorbing, emitting, scattering media, gas radiation, and solutions for gas flows.

(Lecture-problems 3 hours) Letter grade only (A-F).

632. Combustion II (3)

Prerequisites: MAE 501, 532 all with a grade of "C" or better.

Advanced topics in combustion: conservation equations for multi-component reacting systems; detonations and deflagrations; laminar and turbulent flames; flammability limits; ignition and extinction, combustion and radiation and their interactions.

(Lecture-problems 3 hours) Letter grade only (A-F).

633. Hypersonic Flow (3)

Prerequisite: MAE 533 with a grade of "C" or better.

Hypersonic shock and expansion-wave relations, similarity concepts, Newtonian theory and modified Newtonian theory, nonlinear small-disturbance theory, blunt body flows, hypersonic viscous/inviscid interactions, aerodynamic heating, real gas effects, waveriders, atmospheric reentry.

(Lecture-Problems 3 hours) Letter grade only (A-F).

635./735. Computational Fluid Dynamics II (3)

Prerequisite: MAE 535 with a grade of "C" or better.

Computational methods for solving Euler and Navier-Stokes equations, implicit and explicit schemes, upwind differencing and artificial diffusion, multi-grid techniques and convergence acceleration, unstructured grid techniques, turbulence modeling, application to inviscid and viscous subsonic, transonic, and supersonic flows, inverse problems and aerodynamic shape optimization.

(Lecture-Problems 3 hours) Letter grade only (A-F).

637. Advanced Fluid Dynamics II (3)

Prerequisites: MAE 431, 501, 537 all with a grade of "C" or better.

Transition to turbulent flow, wall bounded and free turbulent shear flows, numerical methods for turbulent flow, turbulence modeling.

(Lecture-problems 3 hours) Letter grade only (A-F).

638. Engineering Calculation Methods for Turbulent Flow (3)

Prerequisite: MAE 537 with a grade of "C" or better or consent of instructor.

Introduction to numerical methods for the solution of boundary-layer equations. Solution of two-dimensional internal and external turbulent boundary-layer problems. Unsteady flows, calculation of stability and transition.

(Lecture-problems 3 hours) Letter grade only (A-F).

642. Aeroelasticity (3)

Prerequisites: MAE 533, 576 all with a grade of "C" or better, or consent of instructor.

Deformations of airplane structures under static and dynamic loads. Natural modes and frequencies of complex airplane structures. Analysis of static aeroelasticity phenomena. Fundamental concepts of unsteady aerodynamics. Flutter of swept wings. Dynamic response phenomena. Computational aeroelasticity techniques.

Letter grade only (A-F). (Lecture-problems 3 hours)

639. Turbulence (3)

Prerequisites: MAE 532, 537 all with a grade of "C" or better.

Nature of turbulent flows, dynamics of turbulence, statistical description, homogeneous turbulence and spectral dynamics characteristics of turbulent shear flows.

(Lecture-problems 3 hours) Letter grade only (A-F).

663./763. Nonlinear Optimized Structures (3)

Prerequisite: MAE 563, or consent of instructor. (Master's students register in MAE 663, Ph.D. students register in MAE 763) all with a grade of "C" or better.

Analysis, optimization of frame with automatic mesh generation using I-DEAS, with popular software such as: STRUDL, NASTRAN etc. Generation, idealization of complex structures. Sensitivity, Buckling analysis etc. Required topics for Ph.D. students: advanced numerical methods for flutter and random analysis.

(Lecture-problems 3 hours) Letter grade only (A-F).

669. Design of Composite Structures (3)

Prerequisite: MAE 522 all with a grade of "C" or better or consent of instructor.

Design concepts and guidelines of composite structures. Strength and stiffness design of composite laminates. Optimum design. Fatigue and creep of composite structures. Design of bolted and bonded joints.

(Lecture-Problems 3 hours) Letter grade only (A-F).

671. Random and Nonlinear Vibrations (3)

Prerequisite: MAE 576 with a grade of "C" or better.

Characterization and transmission of random vibration; failure due to random vibration. Classification of nonlinear problems; exact, graphical and approximate solutions, singular points, stability.

Letter grade only (A-F). (Lecture-problems 3 hours)

672. Stress Analysis in Design (3)

Prerequisite: MAE 567 with a grade of "C" or better or consent of instructor.

Modes of failure and failure criteria. Stability of mechanical models, elastic bars and frames by kinetic and energy approaches; design of columns, beam columns and framed columns. Plastic collapse and limit analysis. Experimental methods of stress analysis.

(Lecture-problems 3 hours) Letter grade only (A-F).

673. Theory of Elasticity and Plasticity (3)

Prerequisite: MAE 567 with a grade of "C" or better.

Equations of the mechanics of elastic bodies. Plane problem. Bending, torsion, and extension of Prismatic Bodies. Three-dimensional problem. Propagation of waves in elastic media. Approximate methods. Theory of plasticity.

(Lecture-problems 3 hours) Letter grade only (A-F).

675. Modal Analysis (3)

Prerequisite: MAE 576 with a grade of "C" or better.

A thorough coverage of modal analysis techniques. Digital signal processing, including Fast Fourier Transform, Hilbert Transform, Structural Dynamics Theory, complex modes, state space, damping, nonsymmetries, modal parameter estimation techniques, and application of modal measurement methods suitable for practical vibration analysis problems.

Letter grade only (A-F). (Lecture-Problems 3 hours)

678. Robust Control (3)

Prerequisites: MAE 476 (or an equivalent undergraduate course in classical control systems and state-space design methods), MAE 502 (or an equivalent course in linear algebra and matrix theory) all with a grade of "C" or better. Experience in basic programming and MATLAB are highly recommended.

Introduces robust analysis and design for multivariable feedback control systems with uncertain dynamics or unknown parameters. Topics include: uncertainty modeling; robust stability; robust performance; μ synthesis; H infinity control; and applications of linear matrix inequalities.

Letter grade only (A-F). (Lecture-Problems 3 hours)

690. Selected Topics in Mechanical and Aerospace Engineering (1-3)

Prerequisites: MAE 501, 502 all with a grade of "C" or better, and other prerequisites as related to the topics offered, or consent of instructor.

Selected topics from recent advances in mechanical or aerospace engineering.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*. (Lecture-problems 3 hours).

691. Directed Studies (1-3)

Prerequisite: Graduate Standing in a Mechanical and Aerospace Engineering graduate program.

The study of information in the engineering and scientific literature on a current topic in mechanical or aerospace engineering under the direction of a faculty member. Submission of a final written report based on the literature surveyed.

Requires consultation with the respective program's graduate advisor and submission of an Agreement for Independent Study form as a contract for the project and submission of a Directed Studies permission form each semester of enrollment. Instructor permission is required. May be repeated to a maximum of 3 units in different semesters. Letter grade only (A-F).

697. Directed Research (1-6)

Prerequisite: Consent of instructor; Directed Research Permission and Agreement for Independent Study forms required each semester of enrollment.

Theoretical and experimental problems in MAE requiring extensive research and analysis.

May be repeated to a maximum of 6 units in different semesters. Not open for credit to students enrolled in MAE 698. Letter grade only (A-F).

698. Thesis (1-6)

Prerequisites: Graduate standing in a Mechanical and Aerospace Engineering graduate program and Advancement to Candidacy for the degree.

Planning, preparation, and completion of a thesis on a suitable topic in mechanical and aerospace engineering, following the library's prescribed format. The graduate advisor for the respective program and the thesis supervisor must be consulted prior to registration.

Submission of an Agreement for Independent Study form as a contract for the project and submission of a Thesis permission form are required for each semester of enrollment. Instructor permission is required. May be repeated to a maximum of 6 units in different semesters. Not open for credit to students who are enrolled in MAE 697. Letter grade only (A-F).

735./635. Computational Fluid Dynamics II (3)

Prerequisite: MAE 535 with a grade of "C" or better.

Methods for solving Euler and Navier-Stokes equations, implicit and explicit schemes, upwind differencing and artificial diffusion, multi-grid techniques and convergence acceleration, unstructured grid techniques, turbulence modeling, application to inviscid and viscous subsonic, transonic, and supersonic flows, etc.

Additional projects required for MAE 735. (Lecture-Problems 3 hours) Letter grade only (A-F).

763./663. Nonlinear Optimized Structures (3)

Prerequisite: MAE 563, or consent of instructor. (Master's students register in MAE 663, Ph.D. students register in MAE 763) all with a grade of "C" or better

Analysis, optimization of frame with automatic mesh generation using I-DEAS, with popular software such as: STRUDL, NASTRAN etc. Generation, idealization of complex structures. Sensitivity, Buckling analysis etc. Required topics for Ph.D. students: advanced numerical methods for flutter and random analysis.

(Lecture-problems 3 hours) Letter grade only (A-F).

795. Advanced Directed Studies (4)

Prerequisites: Master of Science degree or equivalent and formally admitted to the Ph.D. program in Engineering and Industrial Applied Mathematics.

Exploration of theoretical and experimental (if applicable) engineering problems in great depth with an emphasis on mathematical modeling and analysis. Students must present the findings in a formal report. Consultation with the respective program's graduate advisor and permission of faculty supervisor are required.

Submission of an Agreement for Independent Study form as a contract for the project and an Advanced Directed Studies permission form are required each semester of enrollment. May be repeated to a maximum of 8 units in different semesters. Letter grade only (A-F).

797. Advanced Directed Research (4)

Prerequisites: Master of Science degree or equivalent and formally admitted to the Ph.D. program in Engineering and Industrial Applied Mathematics. Exploration of theoretical and experimental (if applicable) engineering problems in great depth, with emphasis on mathematical modeling and analysis. Students must present the findings in a formal report and a seminar. Consultation with the respective program's graduate advisor and permission of faculty supervisor are required.

Submission of an Agreement for Independent Study form as a contract for the project and an Advanced Directed Research permission form are required each semester of enrollment. May be repeated to a maximum of 8 units in different semesters. Letter grade only (A-F).

798. Doctoral Dissertation (4-12)

Prerequisite: Enrollment is limited to students formally admitted to the Ph.D. program in Engineering and Industrial Applied Mathematics who have passed the preliminary examinations and research tool tests on completion of at least 48 units of course work. A written dissertation proposal containing an outline of the research to be undertaken must be submitted with references to relevant source material. Consultation with the respective program's graduate advisor and permission of faculty supervisor are required. Student may only embark upon the doctoral dissertation after having received a positive recommendation.

Submission of an Agreement for Independent Study form as a contract for the project and an Advanced Directed Research permission form are required each semester of enrollment. Students must enroll in a minimum of 4 units per semester. May be repeated to a maximum of 12 units in different semesters. Letter grade only (A-F).

MEDIEVAL AND RENAISSANCE STUDIES

College of Liberal Arts

Directors: Lloyd E. Kermode, Martine van Elk

Telephone: (562) 985-4212 or (562) 985-4222

Program Office: McIntosh Humanities Building (MHB), Room 512

Faculty: Clorinda Donato (Romance, German, Russian Languages and Literatures), Alice M. Doyle (Music), Stephen Fleck (Romance, German, Russian Languages and Literatures), Kristine K. Forney (Music), Bonnie Gasior (Romance, German, Russian Languages and Literatures), Cheryl Goldstein (Comparative World Literature), Stanley Jones (Religious Studies), Timothy Keirn (History), Marie Kelleher (History), Lloyd E. Kermode (English), Eileen Klink (English), Julia Miller (Art), Ilan Mitchell-Smith (English), Lawrence Nolan (Philosophy), Nhora Lucia Serrano (Comparative World Literature), Martine van Elk (English), Lisa Vollendorf (Romance, German, Russian Languages and Literatures)

Introduction

The Center offers two academic programs in Medieval and Renaissance Studies, a Minor available to undergraduate students and a Certificate available to both undergraduate and graduate students. The Center also sponsors professional events such as visiting speakers and seminars. Interested students should contact the program directors or visit the Center website at www.csulb.edu/centers/med-ren.

Minor in Medieval and Renaissance Studies

This minor offers an interdisciplinary study of the Middle Ages and the Renaissance. Interested students should contact the program's advisor prior to or during the first semester of taking classes toward the minor. These requirements may be counted, where applicable, toward the General Education requirements, the major, and minor.

The program consists of a minimum of 21 units selected in consultation with the program advisor in addition to demonstrated competence in a foreign language appropriate to the area of concentration. The 21 required units include+ 12 units of core classes and 9 electives chosen from these courses as well as from Music, Political Science, Philosophy, Religious Studies, RGLL, and Theatre.

Requirements

1. Six units chosen from the following courses:
HIST 316, 317, 332, 333.
2. Three units of an upper-division course in Literature:
CWL 330A, 349†, 414I, 422I, 430, 431, 432, 449†; ENGL 363, 432, 451, 452, 453, 461, 462, 463, 468, 469†, 489†, 498†; FREN 335, 470, 471, 472, 490†; GERM 398†, 415, 498†; GK 490†; ITAL 335, 414, 473, 490†; LAT 490†; SPAN 330†, 400, 438, 446†, 450, 490†.
3. Three units of an upper-division course in Art History:
AH 408, 409, 410, 423, 424, 425, 426, 427, 497†, 498†.
4. Nine additional units chosen from courses listed above (without repeating the required core) and the following:
AH 470A, 470B, HIST 318, 319, 334, 335, 351, 353,

400I, 409, 431, 443, 495†, 499†; MUS 360, 400R, 400S; PHIL 413, 490†; POSC 493†, 497†; RGR 450I; R/ST 314, 331I, 338I, 471I, 472I, 490†; THEA 221, 490†.

† courses that can only count towards the minor if the topic is relevant to medieval and Renaissance studies.

Certificate in Medieval and Renaissance Studies

Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

1. A bachelor's degree with an approved major. Certificate may be completed prior to the completion of the B.A. requirement or while in the process of working toward an advanced degree.
2. Consultation and approval of the program with a faculty advisor.
3. Intermediate level language proficiency on the college level, including a course in medieval or Renaissance literature of the language. It is expected that the language will be Anglo-Saxon, French, German, Greek, Italian, Latin, or Spanish, but with consent of the advisor another language may be substituted.
4. Twenty-four units selected from the following courses. Students should elect to concentrate in either the medieval or Renaissance period.
 - A. Required courses (12 units):
 - One of the following sequences for six units:
HIST 316 and 317, 317 and 332, or 332 and 333.
 - One of the following literature courses for three units:
CWL 330A, 431, 432, 531, 532; ENGL 451, 452, 453, 552, 553, 554.
 - One of the following Art History courses for three units:
AH 408, 409, 410, 423, 424, 425, 426, 427, 508, 509, 510, 523, 524, 525, 526, 527.
 - B. Nine units selected from the following courses (without repeating the required core):
AH 408, 409, 410, 423, 424, 425, 426, 427, 470A, 470B, 497†, 498†; CWL 330A, 349†, 414I, 422I, 430, 431, 432, 449†; ENGL 363, 432, 451, 452, 453, 462, 463, 468, 469†, 489†, 498†; FREN 335, 470, 471, 472, 490†; GERM 398†, 415, 498†; GK 490†; HIST 316, 317, 318, 319, 332, 333, 334, 335, 351, 353, 400I, 409, 431, 443, 495†, 499†; ITAL 335, 414, 473, 490†; LAT 490†; MUS 360, 400R, 400S; PHIL 413, 490†; POSC 493†, 497†; RGR 450I; R/ST 314; 331I, 338I, 471I, 472I, 490†; SPAN 330†, 400, 438, 446†, 450, 490†; THEA 221, 490†. Graduate courses: AH 508, 509, 510, 523, 524, 525, 526, 527, 570A, 570B, 597†, 598†; CWL 530, 531, 532, 549†, 550†; ENGL 550, 551, 552, 553, 554, 562, 568, 583†, 652, 653, 681†, 683†; FREN 570, 571, 572, 590†, 688†; GERM 511†; HIST 510†, 531, 543, 590†, 611†, 631†; MUS 561, 600R, 600S; PHIL 513, 590†, 630†, 690†; R/ST 590†; SPAN 500, 538, 546†, 550, 590†; THEA 690†.

C. Three units of directed research on a medieval or Renaissance topic in any of the following courses:

Undergraduate courses:

AH 495, 496, C/LT 499, ENGL 499, FREN 499, GERM 499, GK 499, HIST 498, ITAL 499, LAT 499, MUS 499, PHIL 499, POSC 499, R/ST 499, SPAN 499, THEA 498.

Graduate courses:

AH 595, 596, ENGL 598, 697, FREN 697, GERM 599, 697, HIST 695, 697, PHIL 697, POSC 599, 697, R/ST 697; SPAN 599, THEA 694.

†With an approved medieval or Renaissance topic; certain special studies topics may be repeated for credit with approval.

MILITARY SCIENCE

College of Health and Human Services

Program Director: Major Victor Stephenson

Program Office: HSDF 108

Faculty: Major Sean Malis, SFC Scott Mathis, Mr. Robert Lee, Ms. Debra McCall, SSG Jason Hoops

Website: www.csulb.edu/org/armyrotc

Career Possibilities

United States Army Officer, part-time or fulltime, with possible career fields in

• Aviation • Armor • Nurse Corps • Engineer • Finance • Military Intelligence • Infantry • Ordnance • Medical • Air Defense • Quartermaster • Field Artillery • Chemical • Signal • Transportation

Introduction

The Army Reserve Officers Training Corps (Army ROTC) is a four-year program. Students desiring to attain a commission as a Second Lieutenant in the U.S. Army must meet eligibility requirements and complete the Military Science/Army ROTC Advanced Course. To be eligible for the Commissioning Program, a student must be enrolled full time (12 units) at CSULB, have at least one and a half years remaining as a university student, be physically qualified, complete the advanced course and graduate prior to reaching their 31st birthday.

Financial Assistance

Many opportunities for financial assistance are available to students. For further information, please visit the website or visit the program office.

Equipment and Uniforms

All necessary equipment, uniforms and textbooks for participation in the Military Science/ROTC program are furnished to the student by the United States Government free of charge. Title to this property, other than expendable items, remains with the government.

Basic Course

The Basic Course is a one to two-year period where students may, without obligation, investigate the ROTC Program and the military as a full- or part-time career. Students may enter and leave during any semester.

ROTC Leaders Training Course

Transfer students who plan to participate in the two-year ROTC program need to make their intentions known directly to the Military Science Program no later than May of the year they plan to register at the university.

The government provides a transportation allowance to and from the 30-day Basic Camp and students will receive approximately \$600. No military obligation is incurred as a result of attendance.

Basic Training

Students who have successfully served on active duty or are members of Reserve or National Guard units, are qualified to enter the Advanced Course.

Leader Development/Assessment Course

The Advanced Course is a two-year period. To become a cadet, students must complete the Basic Course, ROTC Summer Basic Camp, or Basic Training. The cadet must also make a commitment to attend all required training activities and sign a contract to accept a commission in the United States Army. In return, the Military Science Department will provide \$350 - \$500 a month, classroom instruction, leadership opportunities, and feedback on cadet's leadership progress. A 32-day summer training camp will be provided for assessing and developing the cadet's leadership abilities. Cadets receive pay at the rate of one-half of Second Lieutenant's basic pay. Upon successful completion of the Advanced Course and graduation from the university, cadets will be eligible to be commissioned as a Second Lieutenant in the United States Army.

Required Related General Education Subjects

1. Written Communications: (Category A) ENGL 100
2. Human Behavior: (Category D) POSC 100
3. Computer Literacy
4. Mathematical Reasoning: (Category B) MATH 103 or 110

Courses (M S)

LOWER DIVISION

(Open to all University students)

101. Foundations of Officership (1)

Corequisite for ROTC Cadets: MS 101L.

Introduction to issues and competencies that is central to a commissioned officer's responsibilities, including: the Army Profession; personal development; physical well-being, leadership; values and ethics.

Letter grade only (A-F).

101L. Leadership Laboratory (1)

Prerequisite: Accepted as a cadet in the Army ROTC Program; Corequisite: MS 101.

Assists students in transition from a civilian into a cadet. Exposure to Army values and selected military skills. Introduction to Army leadership techniques through basic leadership experiences and assessment.

Credit/No Credit grading only.

102. Basic Leadership (1)

Prerequisite/Corequisite: MS 101 or consent of instructor. Corequisite for ROTC Cadets: MS 102L.

Expands upon topics introduced in MS 101 by focusing on communications, leadership, and problem solving. Course also includes information about the organization of the Army, employment benefits, and work experience of Junior Officers.

Letter grade only (A-F).

102L. Leadership Laboratory (1)

Prerequisites: Accepted as a cadet in the Army ROTC Program; Corequisite: MS 102.

Credit/No Credit grading only. (Activity 2 hours.)

201. Individual Leadership Studies (2)

Prerequisites: MS 101, 102 or concurrent enrollment in MS 102.
Corequisite for ROTC Cadets: MS 201L.

Using principles of action, experiential and discovery learning, students face challenging physical and mental tasks, including: personal development, goal setting, communication, problem solving, decision making, leadership, teamwork, group processes, stress management, physical fitness and application of lessons to officership.

Letter grade only (A-F).

201L. Leadership Laboratory (2)

Prerequisite: Accepted as a cadet in the Army ROTC Program;
Corequisite: MS 201.

Credit/No Credit grading only. (Activity 4 hours.)

202. Leadership and Teamwork (2)

Prerequisite: MS 201 or consent of instructor.
Corequisite for ROTC Cadets: MS 202L.

Continuation of MS 201. Continues to employ the principles of action, experiential, and discovery teaming.

Letter grade only (A-F).

202L. Leadership Laboratory (2)

Prerequisite: Accepted as a cadet in the Army ROTC Program;
Corequisite: MS 202.

Credit/No Credit grading only. (Activity 4 hours.)

UPPER DIVISION

301. Leadership and Problem Solving (3)

Prerequisites: MS 202 and consent of instructor.
Corequisite for ROTC Cadets: MS 301L.

Enables students with no prior military or cadet experience to learn essential cadet knowledge and skills necessary for the integration into the cadet battalion and successful performance of key cadet tasks. Students are introduced to the Leadership Development Program.

Letter grade only (A-F).

301L. Leadership Laboratory (1)

Prerequisite: Accepted as a cadet in the Army ROTC Program;
Corequisite: MS 301.

Serve in leadership positions in the military chain of command at squad, platoon, and company levels. Develop and execute unit plans and orders; train other students in basic skill building, teamwork, execute small unit tactics, and prepare for Leadership Development and Assessment Course.

Credit/No Credit grading only.

302. Leadership and Ethics (3)

Prerequisites: MS 301 and consent of instructor.
Corequisite for ROTC Cadets: MS 302L.

Continues the development of students as leaders in foundational areas of leadership, interpersonal communications, values and ethics.

Letter grade only (A-F).

302L. Leadership Laboratory (1)

Prerequisite: Accepted as a cadet in the Army ROTC Program;
Corequisite: MS 302.

Students serve in leadership positions in military chain of command at squad, platoon and company levels. Develop and execute unit plans and orders; train other students in basic skill building, teamwork, execute small unit tactics, and prepare for the Leadership Development and Assessment Course training and evaluation.

Credit/No Credit grading only.

401. Leadership and Management (3)

Prerequisites: MS 302 and consent of instructor.
Corequisite for ROTC Cadets: MS 401L.

Begin the final transition from cadet to lieutenant. Focus on the Army's training management system, coordinating activities with staff, and counseling skills.

Letter grade only (A-F).

401L. Leadership Laboratory (2)

Prerequisite: Accepted as a cadet in the Army ROTC Program;
Corequisite: MS 402.

Credit/No Credit grading only. May be repeated to a maximum of 4 units. (Activity 4 hours.)

402. Officership (3)

Prerequisites: MS 302 and consent of instructor.
Corequisite for ROTC Cadets: MS 402L.

Complete transition from cadet to Lieutenant. Examine unit ethical climate and commander's role as moral anchor of unit. Topics include military law and leadership, Army organization, tactical and strategic operations, administrative and logistical management. Includes Leadership Development and Assessment Course Capstone Exercise.

Letter grade only (A-F).

402L. Leadership Laboratory (2)

Prerequisite: Accepted as a cadet in the Army ROTC Program;
Corequisite: MS 402.

Credit/No Credit grading only. May be repeated to a maximum of 4 units. (Activity 4 hours.)

411. U.S. Military History (3)

Corequisite for ROTC Cadets: MS 401L or 402L.

Evolution of the art of war with emphasis placed on the changing nature of warfare as nations adjust to social, political, economic and technological developments.

Letter grade only (A-F).

497. Independent Studies (1-3)

Prerequisites: Consent of Program Director and prior approval of topic.

Individual studies with faculty supervision in an area of Military Science specialization.

Letter grade only (A-F). Limited to a maximum of 3 units per semester. May be repeated to a maximum of 6 units.

MUSIC

BOB COLE CONSERVATORY OF MUSIC

College of the Arts

Director: John A. Carnahan

Chair: Carolyn Bremer

Conservatory Office: University Music Center (UMC), Room C306
Telephone: (562) 985-4781
Website: www.csulb.edu/music

Faculty: David Anglin, John T. Barcellona, Richard P. Birkemeier, Carolyn Bremer, Ray Briggs, John A. Carnahan, Michael R. Carney, Shun-Lin Chou, Alicia Doyle, Kristine K. Forney, Rob Frear, H. Martin Herman, Roger C. Hickman, Jeff Jarvis, Deborah Mitchell, Johannes Mueller-Stosch, Donald J. Para, Alan Shockley, Jonathan Talberg, Raymond Torres-Santos, Leland Vail, Daniel Zanutto

Advisors:

Undergraduate: Leland Vail
Graduate Advisor: Alicia Doyle
Credential Advisor: Deborah Mitchell

Applied Music

Contact the Bob Cole Conservatory of Music for a complete list of applied faculty or visit the conservatory's website at www.csulb.edu/music

Administrative Coordinator: Debi Scroggins

Students desiring information should contact the Conservatory office for referral to one of the faculty advisors: Undergraduate Advisor, Music Education (credential) Advisor or Graduate Advisor.

Career Possibilities

Performer • Choral Director • Instrumental Conductor • Music Teacher • Music Director • Composer/Arranger • Copyist • Musical Instrument Sales Representative • Music Librarian • Music Critic • Music Editor • Performing Arts Manager (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The undergraduate music curriculum provides programs for the student: who wishes to become a professional musician; who wishes to enter the teaching profession; for whom music is part of a general education; or who is intending to pursue an advanced degree in music.

All entering freshmen and transfer students are required to take a theory placement test and performance audition which are regularly administered in Spring and late Fall and are also available at the beginning of registration week each semester. Each entering student should inquire at the Conservatory office for dates and details. In addition, new students are required to meet with the advisor prior to registration.

Each music major must declare a specialization in some performance area (voice, piano, or other orchestral instrument), develop ability in this area, appear in student recitals, and demonstrate progress to the satisfaction of the faculty. NOTE: Due to admissions limitations, the conservatory does not provide instruction in acoustic guitar. A limited number of jazz guitar students will be admitted each year.

All undergraduate music majors are required to pass a screening examination in applied music on their primary instrument or voice before advancement to upper division applied study. This Upper Division Screening Exam (UDSE) will cover repertoire that is determined by each applied area. Specific information regarding the test may be obtained in the Conservatory office or from the advisor. The exam will be administered at a regular jury after four (4) semesters of applied study, however transfer students may elect to take it earlier. Failure to pass the exam will result in automatic suspension of all music conservatory scholarship aid and continued applied study.

Each student must pass a piano proficiency examination regardless of the performance area (piano majors excepted). Detailed information may be obtained in the Conservatory office.

Participation in a major performance organization (MUS 100/300) is required of each music major each semester. The performance ensemble must be approved by the Conservatory. Undergraduates are also required to register for MUS 210A and 210B.

The Bob Cole Conservatory of Music offers graduate study leading to the Master of Arts or Master of Music degrees. The candidate should arrange for counseling with the Graduate Advisor through the Conservatory office. Special placement examinations or auditions are required to validate qualifications for graduate work in music.

All general requirements of the University must be met in addition to conservatory requirements listed below.

California State University, Long Beach is an accredited Institutional Member of the National Association of Schools of Music (NASM), 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, phone: 703-437-0700).

Undergraduate Programs

Bachelor of Arts in Music (120 units)

A non-performance-focused degree that sets music within the broader context of interdisciplinary studies, diversity, and contemporary thought. This degree has a basic music core, upper-division elective music units focused on popular, world, and film music as well as art music, an individualized track of non-music elective studies that focuses in at least two other disciplines (one major area and one or more minor areas), and a final research project culminating in a comprehensive senior paper.

Audition required prior to entrance for majors to assess performance standard; All applicants to the program must meet with the BA adviser prior to, or at the beginning of, the first semester of residence to review the statement of purpose and to draw up an individualized study plan.

Requirements

Music Theory (15-16 units)

Take all of the following:

MUS 141A Musicianship I (2)

Corequisite: MUS 142A.

MUS 141B Musicianship II (2)

Prerequisite: MUS 141A or satisfactory score on theory placement test. Corequisite: MUS 142B.

MUS 142A Harmony I (3)

Corequisite: MUS 141A.

MUS 142B Harmony II (3)

Prerequisites: MUS 141A & 142A or satisfactory score in theory placement test. Corequisite: MUS 141B.

MUS 341 Form and Analysis (3)

Prerequisites: MUS 241 or consent of instructor.

Take one course from the following:

MUS 372A, 342

Music History/Literature (18 units)

Take all of the following:

MUS 190* Listener's Approach to Music (3)

Prerequisites/Corequisites: ENGL 100 or another GE Foundation course.

MUS 290 Popular Music in America (3)

Prerequisite: GE Foundation requirements.

MUS 490* Introduction to Music Cultures (3)

Prerequisite: GE Foundation requirements.

*double-counts as GE

Take three courses from the following:

MUS 160, 360, 374, 363I, 364I

Performance Ensembles (6 units)

Take 6 units of the following:

MUS 100, 200, 201 and/or 300, 400, 401

(ensemble must meet Conservatory approval)

Applied Music (6 units)

Take 6 units of the following:

MUS 129/329

Complete Upper-Division Screening Exam (UDSE)

Piano Proficiency

Take the following:

Successful completion of the piano proficiency exam (equivalent to MUS 220B)

Music Forum

Take the following:

MUS 210A Writing About Music (1)

Prerequisite: None

MUS 210B Introduction to Basic Music Technology (1)

Prerequisite: None

Music History Electives (9 units)

Take 9 units the following:

MUS 393, 468I, 467, 471 (repeatable to 6 units), 363I, 364I (if not taken in Music History 18-unit core)

Interdisciplinary Cultural Studies (12 units, 6 upper division)

Take 6 units from one major discipline area and an additional 6 units in one or more areas. These areas can be, but are not limited to:

Anthropology; Africana Studies; Asian and Asian-American Studies; Comparative World Literature and Classics; Film Studies; Geography; History; International Studies; Journalism; Philosophy; Political

Science; Religious Studies; Romance, German, Russian Languages; and Women's, Gender, and Sexuality Studies

Final Exit Requirement (4 units)

MUS 496 Research Methods (3)

(taken penultimate semester of graduation)

Prerequisite: None

One of the following:

MUS 423C. Senior Thesis (1)

Prerequisites: MUS 360, 374, 496 and consent of Director of Music History.

MUS 423D. Senior Project (1)

Prerequisites: Senior standing and consent of instructor.

Bachelor of Music

The Bachelor of Music degree is a high-unit professional degree and requires 132 units for graduation. Music units include the core requirements and one option. Students interested in the BM program must successfully complete an audition for entrance to the program. This should be accomplished prior to entrance to the University. Students wishing to consider the BM program after they have enrolled at CSULB may not apply after they have completed more than a maximum of 96 units.

Music Education: Instrumental Music and Choral-Vocal Music Options

Core Requirements

1. *Music History and Literature*:

MUS 160 History of Music: Baroque/Classical (3)

Prerequisite: MUS 190.

MUS 190* Listener's Approach to Music (3)

Prerequisites/Corequisites: ENGL 100 or another GE Foundation course.

MUS 360 History of Music: Medieval/Renaissance (3)

Prerequisites: MUS 190.

MUS 374 History of Music: 19th/20th Century (3)

Prerequisites: MUS 190, 160 or consent of instructor.

MUS 490* Introduction to Music Cultures (3)

Prerequisite: GE Foundation requirements.

* Section by advisement, double-counts as GE - C.1

2. *Music Theory*:

MUS 141A Musicianship I (2)

Corequisite: MUS 142A.

MUS 141B Musicianship II (2)

Prerequisite: MUS 141A or satisfactory score on theory placement test. Corequisite: MUS 142B.

MUS 142A Harmony I (3)

Corequisite: MUS 141A.

MUS 142B Harmony II (3)

Prerequisites: MUS 141A and 142A or satisfactory score in theory placement test. Corequisite: MUS 141B.

MUS 240 Advanced Musicianship (2)

Prerequisites: MUS 141B and 142B or satisfactory score on theory placement test.

MUS 241 Counterpoint (3)

Prerequisites: MUS 141B and 142B.

MUS 341 Form and Analysis (3)

Prerequisites: MUS 241 or consent of instructor.

MUS 342 Materials of Modern Music (3)

Prerequisite: MUS 341.

3. *Major Performance Organization:*

MUS 100/300, one unit each semester in residence;

4. *Music Forum:*

MUS 210A Writing About Music (1)

Prerequisite: None

MUS 210B Introduction to Basic Music Technology (1)

Prerequisite: None

5. *Senior Recital:*

MUS 423A Senior Recital (1)

Prerequisites: MUS 341, 342. Corequisites: MUS 329 or 429.

6. *Keyboard Proficiency:*

Successful completion of conservatory's piano proficiency examination (equivalent to MUS 220B)

7. *Chamber Music:*

Take two units from the following:

MUS 200/400 and/or 201/401

Option in Instrumental Music (132 units)

Requirements

Take the following courses for 8 units:

MUS 129 Individual Instruction for Music Majors (1)

Prerequisite: None

MUS 329 Individual Instruction for Music Majors (1)

Prerequisite: Successful completion of Upper-Division Screening Exam on applied instrument or voice.

Take all the following courses:

MUS 122A Class Voice (1)

Prerequisite: None

MUS 125T Instrumental Methods: Music Technology (1)

Prerequisite: None

MUS 326 Conducting (2)

Prerequisites: Consent of instructor.

MUS 382A Instrumental Ensemble Lab (3)

Prerequisite: Three instrumental methods courses from MUS 125 series.

MUS 382B Beginning Jazz Ensemble Lab (1)

Prerequisite: None

MUS 386 Introduction to Music Education (3)

Prerequisite/Corequisite: Music major and consent of instructor.

MUS 419 Choral Master Class (1)

Prerequisites: Consent of instructor.

MUS 425 Advanced Instrumental Conducting (2)

Prerequisite: MUS 326 or consent of instructor.

MUS 480 Marching Band Techniques (2)

Prerequisite: None

MUS 482 Instrumental Rehearsal Techniques & Lit (3)

Prerequisite: MUS 326. Conducting and at least 3 MUS 125 Methods courses.

MUS 484 Arranging (2)

Prerequisites: MUS 142B and 125T.

MUS 485 Music for the Elementary Child (3)

Prerequisite: None

Take 5 additional courses from:

MUS 125A, 125B, 125C, 125D, 125E, 125F

Single Subject Teaching Credential in Music

Completion of this option meets the subject matter competence requirement for the Single Subject Teaching Credential in Music. In addition to meeting the subject matter competence requirement for the Teaching Credential,

prospective Music teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures. Prospective students should consult the conservatory's Music Education Advisor early to plan their program.

The Subject Matter Preparation Program has been approved by the California Commission on Teacher Credentialing.

Option in Choral-Vocal Music (132 units)

Requirements

Take the following courses for 8 units:

MUS 129 Individual Instruction for Music Majors (1)

Prerequisite: None

MUS 329 Individual Instruction for Music Majors (1)

Prerequisite: Successful completion of Upper-Division Screening Exam on applied instrument or voice.

Take all of the following courses:

MUS 125F Instrumental Methods: Guitar (1)

Prerequisite: None

MUS 125T Instrumental Methods: Music Technology (1)

Prerequisite: None

MUS 273A Diction for Singers (2)

Prerequisite: Consent of instructor.

MUS 273B French Diction for Singers (1)

Prerequisite: MUS 273A.

MUS 273C German Diction for Singers (1)

Prerequisites: MUS 273A.

MUS 326 Conducting (2)

Prerequisites: Consent of instructor.

MUS 327 Choral Organization/Rehearsal Techniques (2)

Prerequisite: None

MUS 386 Introduction to Music Education (3)

Prerequisite/Corequisite: Music major and consent of instructor.

MUS 419 Choral Master Class (1)

Prerequisites: Consent of instructor.

MUS 422 Advanced Choral Conducting and Literature

(2)

Prerequisites: MUS 326 and 327 or consent of instructor.

MUS 426 Vocal Development (2)

Prerequisite: Consent of instructor.

MUS 483A Choral Repertoire I (2)

Prerequisite: MUS 326 or consent of instructor.

MUS 483B Choral Repertoire II (2)

Prerequisites: MUS 326 or consent of instructor.

MUS 484 Arranging (2)

Prerequisites: MUS 142B and 125T.

MUS 485 Music for the Elementary Child (3)

Prerequisite: None

Take 3 courses from the following:

MUS 125A, 125B, 125C, 125D, 125E

Single Subject Teaching Credential in Music

Completion of this option meets the subject matter competence requirement for the Single Subject Teaching Credential in Music. In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective Music teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures. Prospective students should consult the conservatory's Music Education Advisor early to plan their program.

The Subject Matter Preparation Program has been approved by the California Commission on Teacher Credentialing.

Options in Performance, Composition and History and Literature

Core Requirements

1. Music History and Literature:

Take all the following courses:

MUS 160 History of Music: Baroque/Classical (3)
Prerequisite: MUS 190.

MUS 190* Listener's Approach to Music (3)
Prerequisites/Corequisites: ENGL 100 or another GE Foundation course.

MUS 360 History of Music: Medieval/Renaissance (3)
Prerequisites: MUS 190.

MUS 374 History of Music: 19th/20th Century (3)
Prerequisites: MUS 190, 160 or consent of instructor.

MUS 490* Introduction to Music Cultures (3)
Prerequisite: GE Foundation requirements.

* Section by advisement, double-counts as GE – C.1

2. Music Theory:

Take all the following courses:

MUS 141A Musicianship I (2)
Corequisite: MUS 142A.

MUS 141B Musicianship II (2)
Prerequisite: MUS 141A or satisfactory score on theory placement test. Corequisite: MUS 142B.

MUS 142A Harmony I (3)
Corequisite: MUS 141A.

MUS 142B Harmony II (3)
Prerequisites: MUS 141A & 142A or satisfactory score in theory placement test. Corequisite: MUS 141B.

MUS 240 Advanced Musicianship (2)
Prerequisites: MUS 141B and 142B or satisfactory score on theory placement test.

MUS 241 Counterpoint (3)
Prerequisites: MUS 141B and 142B.

MUS 341 Form and Analysis (3)
Prerequisites: MUS 241 or consent of instructor.

MUS 342 Materials of Modern Music (3)
Prerequisite: MUS 341.

3. Major Performance Organization:

MUS 100/300, one unit each semester in residence (keyboard majors only take maximum 4 semesters)
MUS 401A, B, D may satisfy Major Performance Organization requirement for junior and senior Jazz Studies majors;

4. Music Forum:

MUS 210A Writing About Music (1)
Prerequisite: None

MUS 210B Introduction to Basic Music Technology (1)
Prerequisite: None

5. Keyboard Proficiency:

Successful completion of conservatory's piano proficiency examination (equivalent to MUS 220B) (piano majors excepted)

Option in Performance (132 units)

Requirements

Core:

MUS 129, 229/429 maximum of 20 units with an achievement of senior level on major performance medium. Junior Recital (MUS 323) and Senior Recital (MUS 423A) are required of all students.

Piano:

Take 5 units of the following courses:
MUS 200 or 201, MUS 400 or 401

Take all of the following courses:
MUS 277 Keyboard Skills (2)
Prerequisite: None

MUS 427 Piano Pedagogy I (3)
Prerequisite: None

MUS 477 Piano Accompanying (2) (must take 2 times)
Prerequisite: MUS 277 or consent of instructor.

MUS 492A Studies in Keyboard Music (2)
Prerequisite: MUS 360 or consent of instructor.

MUS 492B Studies in Keyboard Music (2)
Prerequisite: MUS 360 or consent of instructor.

Electives:

Take five units from the following courses:
MUS 273A-B-C, 326, 428, 434A-B, 436, 460, 467, 478.

String Instruments:

Take 4 units of the following courses:
MUS 200 or 201, MUS 400 or 401

Take the following course:
MUS 326 Conducting (2)
Prerequisites: Consent of instructor.

Take 6 units from the following courses:
MUS 428, 460, 467, 471, 478 and 493.

Wind Instruments:

Take 4 units of the following courses:
(2 must be either woodwind or brass chamber music):
MUS 200 or 201, MUS 400 or 401

Take the following course:
MUS 326 Conducting (2)
Prerequisites: Consent of instructor.

Take 4 units of the following courses:
MUS 224 Performance and Styles (1), 200T
Saxophone Ensemble (1), 200J Jazz Combos (1)
MUS 424 Performance and Styles (1), 400T
Saxophone Ensemble (1), 400J Jazz Combos (1)

Take 6 units from the following courses:
MUS 428, 460, 467, 471, 478 and 493.

Percussion:

Take 4 units of the following courses
(2 must be percussion ensemble):
MUS 200 or 201, MUS 400 or 401

Take the following course:
MUS 326 Conducting (2)
Prerequisites: Consent of instructor.

Take 6 units from the following courses:
MUS 428, 460, 467, 471, 478 and 493.

Voice:

Take all of the following courses:
MUS 273A Diction for Singers (2)
Prerequisite: Consent of Instructor.
MUS 273B French Diction for Singers (1)
Prerequisite: MUS 273A.
MUS 273C German Diction for Singers (1)
Prerequisites: MUS 273A.
MUS 326 Conducting (2)
Prerequisites: Consent of instructor.
MUS 426 Vocal Development (2)
Prerequisite: Consent of instructor.

Take one of the following courses:
MUS 434A, MUS 434B

Take one course from the following:
MUS 428, 460, 467, 469, and 471

Take an additional two units from the following:
MUS 436, 434A or 434B

Completion of Bob Cole Conservatory of Music Foreign
Language Examination in French, German or Italian
(may be waived by completion of 101B level course
in French, German or Italian).

Opera:

Take all of the following courses:
MUS 273A Diction for Singers (2)
Prerequisite: Consent of Instructor.
MUS 273B French Diction for Singers (1)
Prerequisite: MUS 273A.
MUS 273C German Diction for Singers (1)
Prerequisites: MUS 273A.
MUS 426 Vocal Development (2)
Prerequisite: Consent of instructor.
MUS 436 Opera Repertoire (2)
Prerequisites: MUS 273B, C or consent of instructor.
Two years of voice study, completion of Bob Cole
Conservatory of Music Foreign Language Proficiency
Exam (may be waived upon successful completion of
101B level course in French, German, or Italian).
MUS 473 Advanced Diction for Singers (2)
Prerequisites: MUS 273A, 273B, or consent of instructor.

Take one of the following courses:
THEA 262, 114A

Take two units from one the following courses
(required as part of eight-unit activity requirement):
MUS 330, 331

Choose two courses from the following:
Theatre Elective (3)
Dance Elective (DANC 111A or 113A) (2)
MUS 469 Music of the Theatre (3)

Completion of Bob Cole Conservatory of Music Foreign
Language Examination in French, German or Italian (may
be waived by completion of 101B level course in French,
German or Italian).

Jazz Studies:

Take 4 units of the following courses:
MUS 200 or 201, MUS 400 or 401

Take all of the following courses:
MUS 271 Improvisation Techniques I (2)
Prerequisites: None

MUS 371 Improvisation Techniques II (2)
Prerequisites: None

MUS 372A Jazz Theory I (2)
Prerequisite: MUS 142B or consent of instructor.

MUS 372B Jazz Theory II (2)
Prerequisite: MUS 372A or consent of instructor.

MUS 393 Jazz, An American Music (3)
Prerequisite: GE Foundation requirement and upper division
standing.

MUS 416 Jazz Pedogogy (2)
Prerequisite: MUS 271 or consent of instructor.

MUS 474A Jazz Arranging I (2)
Prerequisite: MUS 372B or consent of instructor.

Take 4 units by advisement from the following:
MUS 370, 411A, 417, 442, 455, 456, 457, 474B or 497D

Completion of Bob Cole Conservatory Jazz Piano
Proficiency Examination (equivalent to MUS 221B)

Option in Composition (132 units)

Requirements

Take the following course:
MUS 129 to be taken each semester in residence until
successful completion of the Upper-Division Screening
Examination in applied music (4 unit minimum required).

Take all of the following courses:
MUS 244A Composition Workshop I (2)
Prerequisite: MUS 142A and consent of instructor.
MUS 244B Composition Workshop II (2)
Prerequisites: MUS 244A and consent of instructor.
MUS 344 Composition (2)
Prerequisites: MUS 244A-B; Corequisite MUS 329X.
MUS 423B Senior Composition Recital (1)
Prerequisites: Senior standing and consent of instructor.
MUS 444 Advanced Composition (2)
Prerequisites: MUS 344, Corequisite: 329X.

Take 21 units from the following courses (at least 3 units
must be selected from MUS 370, 455, 456, 457 or 497E):
MUS 271, 329X (may be repeated multiple times), 370,
371, 372, 411A, 411B, 441, 442, 443, 444, 455, 456, 457,
458, 497B-D-E-G, and THEA 449.

Take three units from the following courses:
MUS 200B, 326, 393, 400B, 415, 422, 425, and 474.

**Option in History and Literature
(132 units)**

Requirements

Take the following course:
MUS 129 taken each semester in residence until successful
completion of Upper-Division Screening Examination in
applied music (a minimum of 4 units is required).

Take all of the following courses:

MUS 423C. Senior Thesis (1)

Prerequisites: MUS 360, 374, 496 and consent of Director of Music History.

MUS 496 Research Methods (3)

Prerequisite: None

Take 6 units from the following courses:

MUS 363I, 364I, 393, 468I

Take 15 units from the following courses:

MUS 428, 441, 460, 467, 469, 471 (repeatable to 6 units), 478, 492A, 492B, 493 (repeatable to 6 units), 400R, 400S (repeatable to 3 units).

Completion of the Bob Cole Conservatory of Music Foreign Language Examination in French, German or Italian (may be waived by completion of 101B level course in French, German or Italian).

Take 3 units of upper-division coursework outside music, under advisement, to be related to Senior Thesis topic or include foreign language literature classes.

Minor in Music

Requirements

A minimum of 18 units, 9 must be upper division (300- and 400-level courses), taken from each of the following areas:

Music Theory – 2 units minimum selected from:

MUS 140, 141A/B, 142A/B, 240, 241, 341, and/or 342;

Music History – 3 units minimum selected from:

MUS 160, 190, 290, 360, 374, and/or 490;

Applied Music – 2 units minimum selected from:

MUS 119, 120A/B, 122A/B;

Performance Ensembles – 4 units minimum selected from:

MUS 100/300, 200/400, and/or 201/401;

Music electives by advisement.

Graduate Programs

Master of Arts in Music

The Master of Arts degree in Music provides academic concentrations in Musicology, Music Theory, and Music Education.

Prerequisites

1. A Bachelor of Arts degree with a major in music, a Bachelor of Music degree, or a bachelor's degree with a minimum of 24 units of upper division courses in music comparable to those required of a major in music at this University;
2. The student must request all institutions of higher learning attended to send official copies of transcripts directly to the Office of Admissions and Records and another set to the Conservatory of Music Graduate Advisor. Transcripts presented to the Admissions Office by the student are not acceptable. Graduates of California State University, Long Beach must follow these same procedures when making application to the Master of Arts in music program;
3. All applicants are required to complete the Bob Cole Conservatory Graduate Placement Examination before they register for courses applicable to the Master of

Arts degree. (Under special circumstances, a student may take the examination during the first semester in which he or she is registered in courses applicable to the degree.) Applicants for all options of the M.A. degree must present samples of their scholarly writings in music for review by the Graduate faculty. Applicants for the musicology concentration must show evidence of reading and translation ability in one foreign language (French or German);

4. A GPA of 3.00 or better in upper division Music courses. Students who do not meet the 3.00 GPA requirement or specified balance within the required 24 units of upper division music but who possess outstanding or unusual qualifications that promise a significant contribution to the Master of Arts program may petition for a special review from the Conservatory Graduate Committee.

Advancement to Candidacy

The prerequisites for advancement to candidacy are the same as those for the Master of Music.

Requirements

1. Completion of a minimum of 30 units of approved upper division and graduate courses with at least 24 units in the major. MUS 427, 428, 441, 495 and 499 are the only undergraduate classes allowed to count on a graduate program. All others must be taken at the 500- or 600-level. (The program may not include more than six units of transfer graduate credit);

2. Core courses required (13-15 units)

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following courses:

MUS 561, 562, 563, 564, 565; MUS 698 (for 4-6 units, dependent upon concentration).

3. Additional courses for Musicology concentration:

Take 3 units from the following courses:

MUS 561, 562, 563, 564, 565 (not taken in core)

Take 6 units selected from the following courses:

MUS 561, 562, 563, 564, 565, 566, 569, 571, 576, 578, 592, 593 (not taken in core)

Take 6 units of music electives (students in this concentration are strongly encouraged to elect theory as well as performance classes, especially Collegium Musicum and New Music Ensemble).

Take thesis for 6 units in this concentration.

4. Additional courses for Music Theory concentration:

Take 6 units from the following courses:

MUS 541 Seminar in Musical Analysis (3)

(may be repeated)

Prerequisites: None

Take 6 units of electives (students in this concentration are strongly encouraged to select additional history, composition, and performance classes, especially New Music Ensemble and Collegium Musicum).

Take thesis 6 units in this concentration.

5. Additional courses for Music Education Concentration:
 Take the following course:
 MUS 581 Foundations of Music Education (3)
 Prerequisites: None
- Take one of the following courses:
 EDP 400, 419
- Take 4 units chosen from the following courses:
 MUS 526, 554, 575, 580, 582, 585, 587, 595, 680
- Take 5-7 units of electives (students in this concentration are encouraged to elect performance and conducting classes).
- Take thesis for 4-6 units in this concentration, dependent upon project.
6. An oral defense of the thesis, recital, or project:
 MUS 698 Thesis or Project (6)
 Prerequisite: Advancement to Candidacy and consent of Director of Music History

Master of Music Degree

The Master of Music degree program provides professional concentrations in Composition, Conducting-Instrumental, Conducting-Choral, Jazz Studies, Opera Performance and Instrumental/Vocal Performance.

Prerequisites

1. A Bachelor of Music degree, or a Bachelor of Arts degree with a major in Music or a bachelor's degree, from an accredited institution, with a minimum of 24 upper division units of music comparable to those required at this University;
2. The student must request all institutions of higher learning attended to send official copies of transcripts directly to the Office of Admissions and Records and another set to the Conservatory of Music Graduate Advisor. Transcripts presented to the Admissions Office by the student are not acceptable. Graduates of California State University, Long Beach must follow these same procedures when making application to the Master of Music in music program;
3. All applicants are required to complete the Bob Cole Conservatory Graduate Placement Examination before they register for courses applicable to the Master of Music degree. (Under special circumstances, a student may take the examination during the first semester in which he or she is registered in courses applicable to the degree);
4. Criteria according to concentration:
 - A. Composition: submission and approval of a portfolio of representative original scores and evidence of baccalaureate-level competency as required in the Bachelor of Music Composition Option;
 - B. Conducting: successful completion of a conducting examination and approval by the conducting faculty;
 - C. Performance/Jazz Studies: Performance-Opera; Jazz Studies; and Instrumental/Vocal: an audition both at a performance level and with a repertory on an instrument or in voice acceptable to the faculty of the specific performance medium.
5. A GPA of 3.00 or better in upper division Music courses. Students who do not meet the 3.00 GPA requirement or specified balance within the required 24 units of upper

division music but who possess outstanding or unusual qualifications that promise a significant contribution to the Master of Music program may petition for a special review from the Conservatory Graduate Advisory Committee.

Advancement to Candidacy

1. Satisfy all the general University requirements, including fulfillment of the Graduation Writing Assessment Requirement (GWAR);
2. Remove all undergraduate deficiencies, which were determined by the Bob Cole Conservatory Graduate Placement Examination and/or the Dean of the College of the Arts;
3. Pass the Bob Cole Conservatory Qualifying Examinations;
4. Submit an approved project or thesis proposal, and a graduate degree program approved by the student's Thesis Committee, the Graduate Advisor, Conservatory Director, and the Dean of the College of the Arts;
5. GPA of 3.0 or higher.

Requirements

General requirements for all majors: Completion of a minimum of 30 units of approved upper division and graduate courses with at least 24 units in the major. MUS 427, 428, 441, 495 and 499 are the only undergraduate classes allowed to count on a graduate program. All others must be taken at the 500- or 600-level. (The program may not include more than six units of transfer graduate credit).

Master of Music Concentrations

Composition:

- Take the following courses:
 MUS 696 Research Methods (3)
 (should be taken the first time it is offered during the student's residency)
 Prerequisites: None
- MUS 541 Seminar in Musical Analysis (3)
 Prerequisites: None
- Take one course from the following:
 MUS 561, 562, 563, 564, 565 or 566
- An oral defense of the thesis, recital, or project
 MUS 698 Thesis or Project (1-6)
 Prerequisite: Advancement to Candidacy and consent of Director of Music History
- Take the following courses:
 MUS 544 Graduate Composition I (2)
 Corequisite: MUS 529X.
- MUS 545 Graduate Composition II (2)
 Prerequisite: MUS 544. Corequisite: MUS 529X.
- Take 2 units of the following:
 MUS 529X or 629X
 (taken concurrently with MUS 544 and MUS 545)
- Take 3 units selected from the following courses:
 MUS 555, 556, 557, 597E
- Take 6 units selected under advisement from:
 MUS 510, 511A, 511B, 512, 515, 516, 520, 522, 525, 529X, 543, 545, 555, 556, 557, and 597B-D-E-G
- Take 2 units of electives selected under advisement.

Composition with Interactive Technology:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following:

MUS 561, 562, 563, 564, 565 or 566 (3)

An oral defense of the thesis, recital, or project:

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of Director of Music History

Take 2 units of the following:

MUS 529X Individual Instruction for Music Majors:

Composition (1)

Prerequisites: None

Take the following courses:

MUS 558 Literature and Aesthetics of Interactive Media (3)

Prerequisites: None

MUS 600W Chamber Music: Laptop Ensemble (1)

(taken for 3 semesters)

Prerequisite: Consent of instructor.

Take 6 units selected from the following courses:

MUS 555, 556, 557, 597E

Take additional 3 units of electives by advisement.

Conducting – Instrumental:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following:

MUS 561, 562, 563, 564, 565 or 566

An oral defense of the thesis, recital, or project

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of Director of Music History

Take 2 units from the following:

MUS 500, 600, or 601

Take 4 units from the following:

MUS 529W or 629W

Take two courses by advisement from the following:

MUS 520, 525, 680

Take 5-6 units of electives selected by advisement

Conducting – Choral:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following:

MUS 561, 562, 563, 564, 565 or 566

An oral defense of the thesis, recital, or project

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of Director of Music History

Take 2 units from the following:

MUS 500, 600 or 601

Take 4 units from the following:

MUS 529W or 629W

Take all the following:

MUS 519 Choral Master Class (1) (take twice)

Prerequisite: Consent of instructor.

MUS 573 Advanced Diction for Singers (2)

Prerequisites: MUS 273A, 273B, or consent of instructor.

MUS 575 Studies in Choral Music (3)

Prerequisite: Consent of instructor.

Take 4 units of music electives by advisement

Jazz Studies:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

An oral defense of the thesis, recital, or project

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of Director of Music History

Take all of the following:

MUS 510 Improvisation Styles and Literature (3)

Prerequisites: MUS 372, 393, 474, or consent of instructor.

MUS 512 Advanced Techniques in Jazz Arranging (3)

Prerequisite: MUS 474B or consent of instructor

MUS 513 History and Analysis of Jazz Styles (3)

Prerequisites: MUS 372, 393, or consent of instructor.

MUS 516 Pedagogy of Jazz (2)

Prerequisite: MUS 271 or consent of instructor.

MUS 601 Selected Topics - Jazz Ensemble (1)

Prerequisite: Consent of instructor.

Take 7 units selected by advisement from the following:

MUS 511A, 514, 517, 529Y, 629, 543, 555, 556, 557, 597A/D

Opera Performance:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following:

MUS 561, 562, 563, 564, 565 or 566

An oral defense of the thesis, recital/project report

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of Director of Music History

Take 4 units from the following:

MUS 529Q or 629Q

Take 2 units of the following:

MUS 530 Opera (1)

Prerequisites: Consent of instructor.

Take all of the following:

MUS 526 Vocal Development (2)

Prerequisite: Consent of instructor.

MUS 536 Opera Repertoire (2)

Prerequisites: MUS 273B,C or consent of instructor.

MUS 573 Advanced Diction for Singers (2)

Prerequisites: MUS 273A, 273B, or consent of instructor.

THEA 490 Selected Topics in Theatre Arts (3)

Prerequisites: Consent of instructor.

Take 2 units of electives chosen by advisement
(students in this concentration are strongly
encouraged to take MUS 569)

All applicants required to complete the Conservatories'
Diction and Repertoire

Diagnostic Exam** before registering in courses
applicable to the Master of Music degree.

Instrumental Performance:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the
student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following:

MUS 561, 562, 563, 564, 566 or 566

An oral defense of the thesis, recital, or project:

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of
Director of Music History

Take 6 units from the following:

MUS 500, 600 or 601

(2 must be approved Major Performance
Organization*)

Take 8 units from the following:

MUS 529 or 629

(section by advisement)

Take 3 units of electives by advisement

Piano Performance:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the
student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following:

MUS 561, 562, 563, 564, 565 or 566

An oral defense of the thesis, recital, or project

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of
Director of Music History

Take 8 units from the following:

MUS 529 or 629

(section by advisement)

Take 4 units from the following:

MUS 592A/B, one or both semesters may be waived
by examination or by "A" grade in 492A/B. If waived,
units must be substituted with approved academic
course(s)

Take the following courses:

MUS 577 Piano Accompanying (2)

Prerequisite: MUS 277 or consent of instructor.

MUS 600G Chamber Music: Piano Ensemble (1)

Prerequisite: Consent of instructor.

Select 2 more electives units from:

MUS 600 Chamber Music (1)

(recommended - MUS 600B, G, P, S, and/or U) by
advisement.

Prerequisite: Consent of instructor.

Vocal Performance:

Take the following courses:

MUS 696 Research Methods (3)

(should be taken the first time it is offered during the
student's residency)

Prerequisites: None

MUS 541 Seminar in Musical Analysis (3)

Prerequisites: None

Take one course from the following:

MUS 561, 562, 563, 564, 565 or 566

An oral defense of the thesis, recital, or project:

MUS 698 Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of
Director of Music History

Take 6 units from the following:

MUS 500, 530, or 601

(4 must be approved Major Performance Organization*)

Take 8 units from the following:

MUS 529 or 629

(section by advisement)

Take one course by advisement from the following:

MUS 526, 534A, 534B, 536, 573.

All applicants are required to complete the Conservatories'
Diction and Repertoire

Diagnostic Exam** before registering in courses applicable
to the Master of Music degree.

*Approved Major Performance Organizations (MUS 500, 530, 601)
by area:

Winds and Brass: Wind Symphony, Symphonic Band, Concert Band,
Symphony Orchestra, Concert Jazz Orchestra

Percussion: Wind Symphony, Symphonic Band, Concert Band,
Symphony Orchestra

Strings: Symphony Orchestra

Voice: Chamber Choir, University Choir, 49er Chorus, Opera

Opera: Chamber Choir, University Choir, 49er Chorus, Opera

Jazz studies: Concert Jazz Orchestra, Studio Jazz Band, Pacific
Standard Time, Jazz 'N' Tonic

** Students in the Vocal Performance and Opera concentrations
of the Master of Music degree are expected to show evidence of
diction studies in various languages and French and German song
repertoire for entrance. A diction examination will determine strengths
and weaknesses in undergraduate-level knowledge in these areas.
The exam results are used in the advising process to determine
remedial work and for guidance in choice of electives. Students
showing deficiencies may be required to take specific relevant
elective courses.

The Vocal Performance/Opera Placement Examination
is given in the week prior to the beginning of classes. It is
required of all entering students, including those holding
bachelor's degrees from CSULB. Prospective graduate
students in voice and opera must call the Music Conservatory

Office (562) 985-4781 to register for the Vocal Performance/Opera Placement Examination Placement Examination in addition to the Music Conservatory Placement Examination required of all entering graduate students.

Teaching Credentials

Students seeking a degree in Music Education refer to the Instrumental Music and Choral-Vocal Music options under B.M. degree. All students entering the credential program after August 31, 2003 will be following the SB2042 credential program and should consult the Single Subject Credential Program requirements in this catalog. For further information consult with the Conservatory credential advisor.

Music Performance

Opportunities to participate in various instrumental and vocal ensembles are available to all students regardless of major. Before enrolling in a performing group, students should apply to the director of the organization in which they wish to participate. Music performance courses may be repeated; up to 8 units of credit in MUS 100 or 300 may be counted toward a bachelor's degree. Simultaneous enrollment in more than one organization is permitted.

Single Subject Teaching Credential in Music

For information, refer to the undergraduate section in this department.

Music Courses (MUS)

LOWER DIVISION

100. Selected Topics - Major Performance Organization (1)

Prerequisite: Consent of instructor.

May be repeated to a maximum of 8 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (3-5 hrs reh.)

- A. Concert Band
- B. Symphonic Band
- C. Wind Symphony
- E. Forty-Niner Chorus
- F. University Choir
- G. Chamber Choir
- J. Symphony Orchestra

119. Group Piano for the Non-Major (1)

Beginning level repertoire and technical exercises for dexterity emphasized. Simple chord progressions and basic improvisational skills taught. Knowledge of reading music preferred but not required.

May be repeated to a maximum of 2 units. (2 hrs lab)

120A-B. Class Piano (1,1)

Technique, tone production, rhythm, sight-reading, interpretation and keyboard facility.

(2 hrs lab)

122A-B. Class Voice (1-1)

Fundamental techniques of singing, tone production, voice placement, breathing, diction, repertoire, and song interpretation.

(2 hrs lab)

125. Selected Topics - Instrumental Methods (1)

Class instruction in applied music and technology. Limited to music majors and minors.

Letter grade only (A-F). May be repeated to a maximum of 8 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (2 hrs lab)

- A. Single Reeds/Flute
- B. Double Reeds
- C. Brass
- D. Percussion
- E. Strings
- F. Guitar
- R. Basic Musical Instrument Repair
- T. Music Technology

129. Selected Topics - Individual Instruction for Music Majors (1)

Open to music majors only. Private lessons in major performance medium. Application must be made to Director of the Bob Cole Conservatory of Music during semester prior to registration. Registration subject to conservatory's approval.

May be repeated to a maximum of 4 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

- A. Baritone/Tuba
- B. French Horn
- C. Trombone
- D. Trumpet
- E. Harpsichord
- F. Organ
- G. Piano
- J. Percussion
- K. Double Bass
- L. Cello
- M. Viola
- N. Violin
- O. Guitar
- P. Harp
- Q. Voice
- R. Bassoon
- S. Clarinet
- T. Flute
- U. Oboe
- V. Saxophone

130. Opera (1)

Prerequisites: Consent of instructor.

Performance of excerpts and complete works for lyric theatre; solo and ensemble coaching; intensive language and diction training; preparation and performance of entire role in original language; additional areas include stage management, scheduling, costuming, set construction.

(3 hrs or more lab)

131. Music Theater (1)

Prerequisite: Consent of instructor.

Performance of musical theater works and operas. Additional areas include stage management, scheduling, costuming, and set construction.

May be repeated to a maximum of 4 units, only 2 of which may count toward degree. (2 hrs reh.)

140. Basic Music Theory (2)

Notation and reading of music. Written, aural and performance experience with scales, intervals, chords, and melodies. Provides essential background for more advanced courses in music theory.

Course fee may be required.

141A. Musicianship I (2)

Corequisite: MUS 142A.

Study of basic skills in music reading, ear training, sight-singing, melodic and harmonic dictation. Computer assisted instruction is available.

Course fee may be required.

141B. Musicianship II (2)

Prerequisite: MUS 141A or satisfactory score on theory placement test. Corequisite: MUS 142B.

Study of skills in music reading, ear training, sight-singing, and melodic and harmonic dictation through modulation and chromatic harmony. Computer assisted instruction is available.

Course fee may be required.

142A. Harmony I (3)

Corequisite: MUS 141A.

Beginning principles of part-writing, to include modal counterpoint, concepts of chord progression, chord prolongation, and analysis in diatonic and chromatic tonal music.

142B. Harmony II (3)

Prerequisites: MUS 141A & 142A or satisfactory score in theory placement test. Corequisite: MUS 141B.

Principles of part-writing, to include modal counterpoint, concepts of chord progression, chord prolongation, and analysis in diatonic and chromatic tonal music.

160. History of Music: Baroque/Classic (3)

Prerequisite: MUS 190.

Chronological survey of music and musical styles from 1600 to 1750 with selected readings, recordings, and scores for in-depth study. Primarily for music majors and minors, but open to others who can read music.

Letter grade only (A-F).

180. Exploring Music (3)

Fundamentals of music, listening skills, and simple compositional techniques introduced and developed through basic performance skills on recorder and simple percussion instruments. K-6 language arts and social science content standards addressed pertaining to appropriate performance/listening activities.

Non-music majors only. Letter grade only (A-F).

190. Listener's Approach to Music (3)

Prerequisites/Corequisites: ENGL 100 or another GE Foundation course.

Non-technical course open to all students. Materials, forms and styles of music with extensive listening.

200. Selected Topics - Chamber Music (1)

Prerequisite: Consent of instructor.

May be repeated to a maximum of 12 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (2 hrs or more rehearsal)

- A. Brass Ensemble
- B. New Music Ensemble
- C. String Ensemble
- D. University String Quartet
- E. University Wind Quintet
- F. University Brass Quintet
- G. Piano Ensemble
- H. Vocal Jazz Ensemble II
- I. Men's Chorus
- J. Jazz Combos
- K. Performance
- L. Brass Chamber Music
- M. Percussion Ensemble
- N. Steel Drum Orchestra
- O. Woodwind Chamber Music

- P. String Chamber Music
- Q. Women's Chorus
- R. Collegium-Vocal
- S. Collegium-Instrumental
- T. Saxophone Ensemble
- U. Directed Accompanying
- V. Studio Orchestra
- W. Laptop Ensemble
- X. World Percussion Group
- Y. World/Traditional Music Performance
- Z. University Percussion Quartet

201. Selected Topics - Jazz Ensemble (1)

Prerequisite: Consent of instructor.

May be repeated to a maximum of 8 units with different topics in same semester. Topics announced in the *Schedule of Classes*. (3 hrs or more rehearsal)

- A. Concert Jazz Orchestra
- B. Studio Jazz Band
- D. Vocal Jazz Ensemble I

210A. Writing About Music (1)

Basics of research and writing skills unique to the study of music. Includes introduction to music library resources, internet research and music criticism.

Credit/No Credit grading only.

210B. Introduction to Basic Music Technology (1)

Introduction to basic music technology including files types, compression, digital audio, recording, sequencers, and notation programs.

Credit/No Credit grading only.

220A-B. Class Piano (1-1)

Continuation of 120A-B.

(2 hours laboratory.)

221A. Class Jazz Piano I (1)

Prerequisite: Successful completion of conservatory's keyboard proficiency exam.

Basic jazz keyboard skills including realization of jazz harmony and progressions with idiomatic chord voicings.

Letter grade only (A-F). (2 hours lab)

221B. Class Jazz Piano II (1)

Prerequisite: MUS 221A or consent of instructor.

Advanced Keyboard realization of jazz harmony, performing idiomatic chord voicings and chord progressions performed with metronome and by memory.

Letter grade only (A-F). (2 hours lab)

224. Orchestral Literature: Performance and Styles (1)

Prerequisites: Consent of Instructor.

Performance of standard orchestral repertoire in instrumental sectional for Brass and/or Woodwinds or Strings.

Letter grade only (A-F). Repeatable to 8 units in different semesters. (2 hrs. rehearsal)

229. Selected Topics - Individual Instruction for the Music Major (2)

Open to performance majors only.

Private lessons in major performance medium. Application must be made to Director of the Bob Cole Conservatory of Music during semester prior to registration. Registration subject to conservatory's approval.

May be repeated to a maximum of 8 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

- A. Baritone/Tuba
- B. French Horn
- C. Trombone

D. Trumpet
E. Harpsichord
F. Organ
G. Piano
J. Percussion
K. Double Bass
L. Cello
M. Viola
N. Violin
O. Guitar
P. Harp
Q. Voice
R. Bassoon
S. Clarinet
T. Flute
U. Oboe
V. Saxophone

240. Advanced Musicianship (2)

Prerequisites: MUS 141B and 142B or satisfactory score on theory placement test.

Study of advanced skills in ear training and sight singing.

Letter grade only (A-F). Course fee may be required.

241. Counterpoint (3)

Prerequisites: MUS 141B and 142B.

Analysis and writing of canons, two-part inventions, and fugues.

244A. Composition Workshop I (2)

Prerequisite: MUS 142A and consent of instructor.

Survey of contemporary techniques in composition, music notation and contemporary literature. Short compositions in workshop setting for beginning composers.

Letter grade only (A-F).

244B. Composition Workshop II (2)

Prerequisites: MUS 244A and consent of instructor.

Survey of contemporary techniques in composition, music notation and contemporary literature. Short compositions in workshop setting for beginning composers.

Letter grade only (A-F).

271. Improvisation Techniques I (2)

Basic techniques in improvisation, beginning with simple question and answer phrases and progressing to extended solos. Detailed and applied knowledge of chord progressions.

(1 hr lec, 2 hrs lab)

273A. Diction for Singers (2)

Prerequisite: Consent of Instructor.

Focus on IPA, International Phonetic Alphabet, and its application in English and Italian. Repertoire focuses on correct pronunciation of art song, choral repertoire, and opera arias.

Letter grade only (A-F).

273B. French Diction for Singers (1)

Prerequisite: MUS 273A.

Focus on mastering application of International Phonetic Alphabet with phonetic transliteration skills to French language. Content focuses on correct pronunciation of art songs, choral repertoire, and opera arias.

Letter grade only (A-F).

273C. German Diction for Singers (1)

Prerequisites: MUS 273A.

Focus on mastering application of International Phonetic Alphabet with phonetic transliteration skills to German language. Content focuses on correct pronunciation of art song, choral repertoire, and opera aria.

Letter grade only (A-F).

277. Keyboard Skills (2)

Open to Music majors only.

Development of basic technical skills at the piano, including sight-reading, harmonization at the keyboard, chord and scale identification, score analysis, and beginning ensemble playing.

Not open for credit to students with credit in MUS 277A.

290. Popular Music in America (3)

Prerequisite: GE Foundation requirements.

Artistic and socio-economic influences on popular music in America from 1840 to present. Special consideration of impact on "pop" music of various cultures and ethnic groups within U.S.

295. Selected Topics (3)

Topics of current interest in various fields of music selected for special presentation and development.

Topics announced in the *Schedule of Classes*. (3 hours lecture)

UPPER DIVISION

300. Selected Topics - Major Performance Organization (1)

Prerequisite: Consent of instructor.

May be repeated to a maximum of 8 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (3-5 hrs reh.)

- A. Concert Band
- B. Symphonic Band
- C. Wind Symphony
- E. Forty-Niner Chorus
- F. University Choir
- G. Chamber Choir
- J. Symphony Orchestra

323. Junior Recital (1)

Prerequisite: MUS 241.

Recital of standard literature for solo instrument or voice in performance option of Bachelor of Music degree. Enrollment restricted to music majors passing conservatory's qualifying examination.

326. Conducting (2)

Prerequisites: Consent of instructor.

Introduction to principles and techniques of conducting and ensemble organization. Study and interpretation of instrumental and choral repertoire using class as laboratory ensemble.

Letter grade only (A-F). (1 hour lecture, 2 hours lab).

327. Choral Organization and Rehearsal Techniques (2)

Rehearsal techniques for the choral musician as well as study of audition techniques, choral tone development, diction, and score preparation as well as organization and management of choral programs.

329. Selected Topics - Individual Instruction for Music Majors (1)

Prerequisite: Successful completion of Upper-Division Screening Exam on applied instrument or voice.

Open to music majors only. Private lessons in major performance medium. Application must be made to Director of the Bob Cole Conservatory of Music during semester prior to registration. Registration subject to conservatory's approval.

May be repeated to a maximum of 10 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

- A. Baritone/Tuba
- B. French Horn
- C. Trombone
- D. Trumpet
- E. Harpsichord
- F. Organ

G. Piano
 J. Percussion
 K. Double Bass
 L. Cello
 M. Viola
 N. Violin
 O. Guitar
 P. Harp
 Q. Voice
 R. Bassoon
 S. Clarinet
 T. Flute
 U. Oboe
 V. Saxophone
 W. Conducting
 X. Composition

330. Opera (1)

Prerequisites: Consent of instructor.

Performance of excerpts and complete works for lyric theatre: solo and ensemble coaching; intensive language and diction training; preparation and performance of entire role in original language; additional areas include stage management, scheduling, costuming, set construction.

May be repeated to a maximum of 4 units, only 2 of which may count toward degree. (3 hrs or more reh.)

331. Music Theater (1)

Prerequisite: Consent of Instructor.

Performance of musical theater works and operas. Additional areas include stage management, scheduling, costuming, and set construction.

May be repeated to a maximum of 4 units, only 2 of which may count toward degree. (2 hrs reh.)

332. Opera Coaching (1)

Prerequisite: Consent of instructor. Corequisite: MUS 330.

One-on-one and small group coaching for opera majors.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (3-5 hrs reh.)

341. Musical Form and Analysis (3)

Prerequisites: MUS 241 or consent of instructor.

Intensive analysis of the historical development of form in tonal music from the early Baroque through the early 20th century.

342. Materials of Modern Music (3)

Prerequisite: MUS 341.

Continuation of intensive analysis of representative compositions of 20th Century with emphasis on writing in selected 20th Century styles.

344. Composition (2)

Prerequisites: MUS 244A-B; Corequisite MUS 329X.

Further exploration of contemporary techniques in composition, music aesthetics and contemporary literature.

Not open for credit to students with credit in MUS 344A. Letter grade only (A-F).

360. History of Music: Medieval/Renaissance (3)

Prerequisites: MUS 190.

Chronological survey of music and musical readings, recordings, and scores for in-depth study. Primarily for music majors and minors, but open to others who read music.

Letter grade only (A-F).

363I. Music and the Visual Arts (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing, and one of following courses: MUS 190, ART 110 or AH 111A.

Explores interrelationships between visual arts and music in Western culture by comparing artistic methodologies employed by important visual artists to those employed by important composers of art music from 18th through 20th Centuries.

364I. Music and the Temporal Arts (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing, and one of following courses: MUS 190, DANC 110, THEA 122, or ENGL 180.

Study of interrelationships of temporal arts (works of poets, writers, choreographers, and playwrights) and music of important composers of 18th through 20th Centuries.

370. Introduction to Music Technology (3)

Introduction to principles of sound recording, sound production, sound reinforcement, MIDI, and electronic music.

371. Improvisation Techniques II (2)

Continuation of MUS 271.

(1 hr lec, 2 hrs lab)

372A. Jazz Theory I (2)

Prerequisite: MUS 142B or consent of instructor.

Jazz notation, chord progressions, chord voicing, voice-leading, jazz harmonization, chord-scale relationships, functional and non-functional harmony, jazz rhythm and form.

Not open for credit to students with credit in MUS 372. Letter grade only (A-F).

372B. Jazz Theory II (2)

Prerequisite: MUS 372A or consent of instructor.

Analysis of music by jazz masters such as Thad Jones, Bob Brookmeyer, Bob Mintzer, Thelonious Monk, Duke Ellington, and John Coltrane. Includes introduction to many great improvisers through analysis and performance of solo transcription and composition in representative styles.

Letter grade only (A-F).

374. History of Music: Nineteenth/Twentieth Centuries (3)

Prerequisites: MUS 190, 160 or consent of instructor.

Chronological survey of music and musical styles from 1800 to present, with selected readings, recordings, and scores for in-depth study. Primarily for music majors and minors, but open to others who read music.

Letter grade only (A-F).

382A. Instrumental Ensemble Lab (3)

Prerequisite: Three instrumental methods courses from MUS 125 series.

Examination of organizational procedures for beginning/intermediate band and instructional techniques relating to Grade I-II music literature, investigation of contemporary music methodologies, and experience conducting ensemble class sessions. Performance on secondary instruments is required.

382B. Beginning Jazz Ensemble Lab (1)

Examination of organizational and instructional techniques relating to beginning jazz ensemble performance, as well as performance on secondary instruments and conducting ensemble class sessions.

(2 hrs lab)

385. Children's Music (3)

Prerequisite: MUS 180 or consent of instructor.

Exploration of classical and folk music, enhancing K-6 California Content Standards including adaption of instruction for English learners and special-needs students. Use of melodic, rhythmic, and harmonic instruments appropriate to age/development of K-6 students.

Non-music majors only.

386. Introduction to Music Education (3)

Prerequisite/Corequisite: Music major and consent of instructor.

Provides philosophical and pedagogical theory required for design and execution of appropriate music instructional programs at general classroom, middle school, and secondary levels. Includes MIDI, sequencing, and tutorial/managerial software in music classroom/rehearsal setting.

Not open for credit to students with credit in MUS 286. Letter grade only (A-F).

393. Jazz, An American Music (3)

Prerequisite: GE Foundation requirement and upper division standing.

Presents development of various musical styles, forms, improvisations, significant musical concepts and major figures in past, present and future of jazz, an American music.

400. Selected Topics - Chamber Music (1)

Prerequisite: Consent of instructor.

May be repeated to a maximum of 16 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (2 hrs rehearsal)

- A. Brass Ensemble
- B. New Music Ensemble
- C. String Ensemble
- D. University String Quartet
- E. University Wind Quintet
- F. University Brass Quintet
- G. Piano Ensemble
- H. Vocal Jazz Ensemble II
- I. Men's Chorus
- J. Jazz Combos
- K. Performance
- L. Brass Chamber Music
- M. Percussion Ensemble
- N. Steel Drum Orchestra
- O. Woodwind Chamber Music
- P. String Chamber Music
- Q. Women's Chorus
- R. Collegium-Vocal
- S. Collegium-Instrumental
- T. Saxophone Ensemble
- U. Directed Accompanying
- V. Studio Orchestra
- W. Laptop Ensemble
- X. World Percussion Group
- Y. World/Traditional Music Performance
- Z. University Percussion Quartet

401. Selected Topics - Jazz Ensemble (1)

Prerequisite: Consent of instructor.

May be repeated for a maximum of 8 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (3 hours or more rehearsal)

- A. Concert Jazz Orchestra
- B. Studio Jazz Band
- D. Vocal Jazz Ensemble I

411A./511A. Film Scoring (3)

Prerequisites: MUS 372, 474, or consent of instructor.

Overview of the current trends and practices involved in creating and integrating music to moving picture. Students gain experience producing music cues for film, television and video games.

Letter grade only (A-F).

411B./511B. Advanced Film Scoring Project (3)

Prerequisites: MUS 411A or consent of instructor.

Students gain advanced experience creating music cues for film, television and video games. Real-world concepts and problems will be explored with an emphasis on preparing the student for a successful career in media composition.

Letter grade only (A-F).

414./514. Techniques for the Jazz Vocalist (2)

Basic stylistic requirements for solo singing in the jazz idiom. Includes analysis of established jazz singers and styles, vocal production for a jazz sound, microphone technique, repertoire, transposition, and lyric interpretation.

Letter grade only (A-F).

415./515. Advanced Concepts in Jazz Theory (3)

Prerequisites: MUS 372, 393, 474, or consent of instructor.

Reviews development of musical styles, forms, genres, significant musical concepts and problems. Theoretical work emphasizes detailed study of harmony, form, idioms, combination of idioms, and use of experimental materials. Study will include detailed analysis of major modern jazz artists.

Letter grade only (A-F).

416./516. Jazz Pedagogy (2)

Prerequisite: MUS 271 or consent of instructor.

Organization and management of school jazz programs, addressing rehearsal techniques, improvisation, repertoire, and conducting.

Letter grade only (A-F).

417./517. Business of Music (2)

Overview of business and artistic process of music industry. Includes popular music, music and media, operation of retail music stores, and film, theatrical, and concert music. Also includes recent changes in digital recording, broadcasting technology, copyright laws, and legal issues.

Letter grade only (A-F).

419./519. Choral Master Class (1)

Prerequisites: Consent of instructor.

Advanced conducting laboratory with emphasis on advanced conducting, vocal, and rehearsal techniques as well as performance practices.

Letter grade only (A-F). May be repeated to a maximum of 4 units.

422./522. Advanced Choral Conducting and Literature (2)

Prerequisites: MUS 326 and 327 or consent of instructor.

Choral technique, style, and interpretation; choral schools and composers since 16th century; contemporary secular and sacred choral compositions. Class used as laboratory group.

(1 hr lec, 2 hr lab)

423A. Senior Recital (1)

Prerequisites: MUS 341, 342. Corequisites: MUS 329 or 429.

Individual recital of standard literature for solo instrument or voice. Enrollment restricted to Music majors passing conservatory's qualifying examination.

Letter grade only (A-F).

423B. Senior Composition Recital (1)

Prerequisites: Senior standing and consent of instructor.

Individual recital of original music written during composition studies while in program. Enrollment restricted to Bachelor of Music composition majors passing conservatory's qualifying examination.

Letter grade only (A-F).

423C. Senior Thesis (1)

Prerequisites: MUS 360, 374, 496 and consent of Director of Music History.

In-depth research paper representing systematic study of significant problem, style, or repertoire. Finished product must show thorough command of relevant literature, critical thinking and writing, and original approach. Proposal (outline, abstract, and bibliography) must be submitted for topic approval.

Letter grade only (A-F).

423D. Senior Project (1)

Prerequisites: Senior standing and consent of instructor.

Final project or internship with music or arts organization subject to approval of supervising faculty member.

Letter grade only (A-F).

424. Orchestral Literature: Performance and Styles (1)

Prerequisites: Consent of Instructor.

Performance of standard orchestral repertoire in instrumental sectional for Brass and/or Woodwinds or Strings.

Letter grade only (A-F). Repeatable to 8 units in different semesters. (2 hrs. rehearsal)

425./525. Advanced Instrumental Conducting (2)

Prerequisite: MUS 326 or consent of instructor.

Principles and techniques of instrumental conducting and organization. Study and interpretation of instrumental literature using class laboratory.

(1 hr lec. 2 hrs lab)

426./526. Vocal Development (2)

Prerequisite: Consent of instructor.

Theory and techniques of teaching voice.

427. Piano Pedagogy (3)

Study of philosophies, psychology, and piano teaching methods for children, as well as intermediate and advanced level students.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

428. Seminar in Musical Styles (3)

Prerequisites: MUS 160, 341, 360, 374.

Study development of musical styles, forms, genres, and significant musical concepts and problems. For Music majors only.

429. Selected Topics - Individual Instruction for Music Majors (2)

Prerequisite: Successful completion of Upper-Division Screening Exam on applied instrument or voice.

Private lessons in major performance medium. Application must be made to the Director of the Bob Cole Conservatory of Music during semester prior to registration. Registration is subject to conservatory's approval.

May be repeated to a maximum of 12 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

- A. Baritone/Tuba
- B. French Horn
- C. Trombone
- D. Trumpet
- E. Harpsichord
- F. Organ
- G. Piano
- J. Percussion
- K. Double Bass
- L. Cello
- M. Viola
- N. Violin
- O. Guitar
- P. Harp
- Q. Voice
- R. Bassoon
- S. Clarinet
- T. Flute
- U. Oboe
- V. Saxophone
- W. Conducting
- X. Composition

434A./534A. German Song Repertoire (2)

Prerequisites: MUS 273A, C.

Preparation of German song literature for performance, with coaching in language, musical styles, and vocal and accompanying techniques.

Letter grade only (A-F).

434B./534B. French Song Repertoire (2)

Prerequisites: MUS 273A, B.

Preparation of French song literature for performance, with coaching in language, musical styles, and vocal and accompanying techniques.

Letter grade only (A-F).

436./536. Opera Repertoire (2)

Prerequisites: MUS 273B, C or consent of instructor. Two years of voice study, completion of Bob Cole Conservatory of Music Foreign Language Proficiency Exam (may be waived upon successful completion of 101B level course in French, German, or Italian).

Preparation of varied portfolio of voice-appropriate selections from standard operatic repertoire in English, French, German and Italian. Include translation, lyric diction, ornamentation, tools for role study, rehearsal and audition techniques.

Letter grade only (A-F).

441. Studies in Musical Analysis (3)

Prerequisites: MUS 341, 342.

Intensive individual and class analysis of representative compositions of various periods and styles.

442. Orchestration (3)

Prerequisite: MUS 241.

Range, characteristics, and transpositions of all standard orchestral instruments by writing and/or transcribing music. Preparation and proofreading of scores and parts. Readings of student assignments.

443./543. Advanced Orchestration (3)

Prerequisite: MUS 442.

Techniques of arranging, transcribing, and composing for standard chamber ensembles, chorus and orchestra. Readings of student orchestrations will be included whenever possible.

444. Advanced Composition (2)

Prerequisites: MUS 344, Corequisite: 329X.

Advanced studies in music composition, music aesthetics, and listening methodologies.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters.

454./554. School, Society, and Music Education (3)

Historical, in-depth examination of direction and influence of music education within America's general education curriculum. Focus on how music education has reflected and addressed changing needs of schooling and society from singing school movement and Jeffersonian era to today.

Letter grade only (A-F).

455./555. Computers and Sound (3)

Introduction to software for sound synthesis, sequencing, digital audio, and sound processing. Listening and analysis of contemporary electronic music literature also emphasized. Course culminates in creative composition or research project.

Letter grade only (A-F).

456./556. Sound Design (3)

Introduces students to principles of composition and analysis of electro-acoustic media through application of music software, sampling, digital media, digital signal processing, and psychoacoustics. Culminates in collaborative creative project involving video, web, or live theater.

Letter grade only (A-F).

457./557. Composition with Digital Media (3)

Computer created projects that combine visual media (including web-based), and electronic music. Analysis of interdisciplinary and mixed media works, collaborative work in electronic arts and readings in critical theory and multimedia.

Letter grade only (A-F).

458./558. Literature and Aesthetics of Interactive Media (3)

Explore artists'/composers' use of interactive media from the intermediality and limited interactivity of Wagner's and Scriabin's works, to the latest software-driven and web-based constructions, to gain a better understanding of the philosophical and musical context for the students' works.

460./566. Studies in Performance Practices (3)

Prerequisites: MUS 160, 360 or consent of instructor.

Surveys issues of historical performance in vocal and instrumental music, focusing on primary sources. Spans various genres and eras.

467./576. Studies in Gender and Music (3)

Prerequisite: MUS 374 or consent of instructor.

Surveys issues surrounding women as musicians (performers and composers), comparative studies of role men and women have played in music, and feminist criticism of music.

Letter grade only (A-F).

468I. Music and Film (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing, and one of following courses: MUS 190, FEA 310, THEA 122, ENGL 180, or ART 110.

Study of interrelationships of dramatic, visual, and musical arts in film, with special emphasis on role of music.

469./569. Music of the Theater (3)

Prerequisites: MUS 374.

History and development of music for stage from 1600 to present, its conventions and styles. Analysis of representative masterworks. May be repeated to a maximum of 6 units in different semesters.

471./571. Studies in Ethnomusicology (3)

Prerequisites: MUS 374 or consent of instructor.

Emphasis on theory and methodology of ethnomusicological study. Investigation of music of particular non-western or popular cultures. For music majors only.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

473./573. Advanced Diction for Singers (2)

Prerequisites: MUS 273A, 273B, or consent of instructor.

Advanced principles of diction and International Phonetic Alphabet (IPA) applied to lyric Italian, French, German, and English repertoire; intended for Senior and Graduate level vocalists and choral conductors. Special studies possible in other languages.

Letter grade only (A-F).

474A./574A. Jazz Arranging I (2)

Prerequisite: MUS 372B or consent of instructor.

Fundamentals of Jazz arranging, including 4-part writing, harmonic practices and philosophies of arranging.

Not open for credit to students with credit in MUS 474. Letter grade only (A-F).

474B./574B. Jazz Arranging II (2)

Jazz arranging for big band through detailed analysis of known big band writers. Emphasis on reharmonization, the idiomatic use of counterpoint, styles and song forms.

Letter grade only (A-F).

477./577. Piano Accompanying (2-2)

Prerequisite: MUS 277 or consent of instructor.

Instruction and training in techniques of accompanying singers, instrumentalists, and ensembles.

May be repeated to a maximum of 6 units in different semesters.

478./578. Musical Instruments of World (3)

Prerequisites: MUS 360 or consent of instructor.

Open to music majors and minors. Study of origins and history of musical instruments in western and non-western world, with emphasis on cross-cultural influences, iconographical and organological issues, and scientific classification.

Letter grade only (A-F).

480./580. Marching Band Techniques (2)

Marching fundamentals, charting formations, precision drills, parade techniques and half-time pageantry.

482./582. Instrumental Rehearsal Techniques and Literature (3)

Prerequisite: MUS 326. Conducting and at least 3 MUS 125 Methods courses.

Procedures for organization and development of instrumental programs and literature for performing groups.

483A./583A. Choral Repertoire I (2)

Prerequisite: MUS 326 or consent of instructor.

Examination of five genres of choral repertoire: Mass, motet, cantata, oratorio, and madrigal. Traditional and contemporary choral repertoire for public school teachers and church choir directors.

Letter grade only (A-F).

483B./583B. Choral Repertoire II (2)

Prerequisites: MUS 326 or consent of instructor.

Survey of choral and choral/orchestral works from Renaissance to 20th century.

Letter grade only (A-F).

484. Arranging (2)

Prerequisites: MUS 142B and 125T.

Arranging techniques for choir, band, and orchestra in grades K-12.

Letter grade only (A-F).

485./585. Music for the Elementary Child (3)

Examination of approaches to developing musical and aesthetic sensitivities in children. Students create vocal, instrumental and listening experiences appropriate for use in grades K-6. Intended for music education majors. Others by consent of instructor.

487./587. Microcomputers and Music Learning (3)

Prerequisites: MUS 125T or consent of instructor.

Music education applications of microcomputers, including: existing instructional software and hardware, administrative applications, criteria for software and hardware selection, MIDI music composition, and contemporary issues and trends.

490. Introduction to Music Cultures (3)

Prerequisite: GE Foundation requirements.

Music of various world cultures and ethnic groups representative of diversity of United States. Includes music's function, social organization including age and gender roles, distinctive characteristics, types of instruments, and cultural performance standards.

492A./592A. Studies in Keyboard Music (2)

Prerequisite: MUS 360 or consent of instructor.

Survey of evolution of keyboard music including clavichord, harpsichord, piano, and organ from 13th century to Beethoven.

492B./592B. Studies in Keyboard Music (2)

Prerequisite: MUS 360 or consent of instructor.

Survey of evolution of keyboard music including clavichord, harpsichord, piano, and organ from Beethoven to present.

493./593. Selected Topics - Instrumental Music (3)

A seminar-format class on one of various topics in instrumental music, including but not limited to: symphonic literature, survey of program music, history of the concerto, chamber music survey, and history of the wind band.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

495. Selected Topics in Music (3)

Prerequisite: Consent of instructor.

Topics of current interest in various fields of music selected for special presentation and development.

May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

496./696. Research Methods (3)

Principles of research and writing about music, thesis preparation, and citation/bibliographic format. Serves as introduction to graduate study in music. Required of all MA and MM candidates in music.

497./597. Selected Topics - Music Composition (3)

Prerequisite: Consent of instructor.

Topics of current interest in field of music composition selected for special presentation and development.

Letter grade only (A-F). Topics announced in the *Schedule of Classes*.

- B. Sound Design for Theatre
- D. Contemporary and Computer Music Notation
- E. Composition with Interactive Technologies
- G. From Poetry to Song: Composing Art Songs

499. Special Studies (1-3)

Prerequisite: Consent of instructor.

Individual research or group investigation of selected topics.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL

500. Selected Topics - Major Performance Organization (1)

Prerequisite: Consent of instructor.

Letter grade only (A-F). May be repeated to a maximum of 8 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (3-5 hrs reh.)

- A. Concert Band
- B. Symphonic Band
- C. Wind Symphony
- E. Forty-Niner Chorus
- F. University Choir
- G. Chamber Choir
- J. Symphony Orchestra

510. Improvisation Styles and Literature (3)

Prerequisites: MUS 372, 393, 474, or consent of instructor.

Explores various musical styles, forms, genres, and significant musical concepts in Jazz Improvisation. Theoretical work emphasizes detailed study of harmonic and linear forms, digital patterns and scales, combination of idioms, patterns, use of experimental material, transcriptions and historic implications.

Letter grade only (A-F).

511A./411A. Film Scoring (3)

Prerequisites: MUS 372, 474, or consent of instructor.

Overview of the current trends and practices involved in creating and integrating music to moving picture. Students gain experience producing music cues for film, television and video games.

Letter grade only (A-F).

511B./411B. Advanced Film Scoring Project (3)

Prerequisites: MUS 511A or consent of instructor.

Students gain advanced experience creating music cues for film, television and video games. Real-world concepts and problems will be explored with an emphasis on preparing the student for a successful career in media composition.

Letter grade only (A-F).

512. Advanced Techniques in Jazz Arranging (3)

Prerequisite: MUS 474B or consent of instructor

Advanced scoring techniques used with big band arranging and orchestrating for studio/pops orchestra. Includes ranges and capabilities of instruments and scoring for traditional and contemporary instrumentation. Requires the composition of a major work to be recorded by CSULB Studio Orchestra.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

513. History and Analysis of Jazz Styles (3)

Prerequisites: MUS 372, 393, or consent of instructor.

Explores development of various musical styles, forms, genres, and significant musical concepts and problems in Jazz History.

Letter grade only (A-F).

514./414. Techniques for the Jazz Vocalist (2)

Basic stylistic requirements for solo singing in the jazz idiom. Includes analysis of established jazz singers and styles, vocal production for a jazz sound, microphone technique, repertoire, transposition, and lyric interpretation.

Letter grade only (A-F).

515./415. Advanced Concepts in Jazz Theory (3)

Prerequisites: MUS 372, 393, 474, or consent of instructor.

Reviews development of musical styles, forms, genres, significant musical concepts and problems. Theoretical work emphasizes detailed study of harmony, form, idioms, combination of idioms, and use of experimental materials. Study will include detailed analysis of major modern jazz artists.

Letter grade only (A-F).

516./416. Pedagogy of Jazz (2)

Prerequisite: MUS 271 or consent of instructor.

Organization and management of school jazz programs, addressing rehearsal techniques, improvisation, repertoire, and conducting.

Letter grade only, (A-F).

517./417. Business of Music (2)

Overview of business and artistic process of music industry. Includes popular music, music and media, operation of retail music stores, and film, theatrical, and concert music. Also includes recent changes in digital recording, broadcasting technology, copyright laws, and legal issues.

Letter grade only (A-F).

519./419. Choral Master Class (1)

Prerequisite: Consent of instructor.

Advanced conducting laboratory with emphasis on advanced conducting, vocal, and rehearsal techniques as well as performance practices.

Letter grade only (A-F). May be repeated to a maximum of 4 units.

520. Graduate Conducting Seminar (3)

Prerequisite: Consent of instructor.

Advanced baton technique, interpretation, securing proper sound, organizing routine, and program making.

Letter grade only (A-F).

522./422. Advanced Choral Conducting and Literature (2)

Prerequisites: MUS 326 and 327 or consent of instructor.

Choral technique, style, and interpretation; choral schools and composers since 16th century; contemporary secular and sacred choral compositions. Class used as laboratory group.

Letter grade only (A-F). (1 hr lec., 2 hrs lab)

524. Orchestral Literature: Performance and Styles (1)

Prerequisites: Consent of Instructor.

Performance of standard orchestral repertoire in instrumental sectional for Brass and/or Woodwinds or Strings.

Letter grade only (A-F). May be repeated to a maximum of 8 units in different semesters. (2 hrs. rehearsal)

525./425. Advanced Instrumental Conducting (2)

Prerequisite: MUS 326 or consent of instructor.

Principles and techniques of instrumental conducting and organization. Study and interpretation of instrumental literature using class laboratory.

(1 hr lec. 2 hrs lab)

526./426. Vocal Development (2)

Prerequisite: Consent of instructor.

Theory and techniques of teaching voice.

Letter grade only (A-F).

529. Selected Topics - Individual Instruction for Music Majors (1)

Open to graduate students in music only. Private lessons in major performance medium. Application must be made to Graduate Advisor of the Bob Cole Conservatory of Music during semester prior to registration. Registration is subject to conservatory's approval.

May be repeated to a maximum of 10 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

- A. Baritone/Tuba
- B. French Horn
- C. Trombone
- D. Trumpet
- E. Harpsichord
- F. Organ
- G. Piano
- J. Percussion
- K. Double Bass
- L. Cello
- M. Viola
- N. Violin
- O. Guitar
- P. Harp
- Q. Voice
- R. Bassoon
- S. Clarinet
- T. Flute
- U. Oboe
- V. Saxophone
- W. Conducting
- X. Composition
- Y. Jazz Writing/Arranging

530. Opera (1)

Prerequisites: Consent of instructor.

Performance of excerpts and complete works for lyric theatre; solo and ensemble coaching; intensive language and diction training; preparation and performance of entire role in original language;

additional areas include stage management, scheduling, costuming, set construction.

Letter grade only (A-F). May be repeated to a maximum of 4 units. (3 hrs or more reh.)

531. Music Theater (1)

Prerequisite: Consent of Instructor.

Performance of musical theater works and operas. Include stage management, scheduling, costuming, and set construction.

(2 hrs reh.)

532. Opera Coaching (1)

Prerequisite: Consent of instructor. Corequisite: MUS 530.

One-on-one and small group coaching for opera majors.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters. (3-5 hrs reh.)

534A./434A. German Song Repertoire (2)

Prerequisites: MUS 273A, C.

Preparation of German song literature for performance, with coaching in language, musical styles, as well as vocal and accompanying techniques.

Letter grade only (A-F).

534B./434B. French Song Repertoire (2)

Prerequisites: MUS 273A, B.

Preparation of French song literature for performance, with coaching in language, musical styles, as well as vocal and accompanying techniques.

Letter grade only (A-F).

536./436. Opera Repertoire (2)

Prerequisites: MUS 273B,C or consent of instructor.

Preparation of varied portfolio of voice-appropriate selections from standard operatic repertoire in English, French, German and Italian. Include translation, lyric diction, ornamentation, tools for role study, rehearsal and audition techniques.

Letter grade only (A-F).

541. Seminar in Musical Analysis (3)

Analysis of forms and techniques of musical compositions in various genres and styles.

May be repeated to a maximum of 6 units.

543./443. Advanced Orchestration (3)

Prerequisite: MUS 442.

Techniques of arranging, transcribing, and composing for standard chamber ensembles, chorus and orchestra. Readings of student orchestrations will be included whenever possible.

544. Graduate Composition I (2)

Corequisite: MUS 529X.

Study of contemporary techniques in composition, music aesthetics, and contemporary literature.

Letter grade only (A-F).

545. Graduate Composition II (2)

Prerequisite: MUS 544. Corequisite: MUS 529X.

Advanced studies in musical composition, music aesthetics, and listening methodologies.

Letter grade only (A-F). Course may be repeated to a maximum of 4 units in different semesters.

554./454. School, Society, and Music Education (3)

Historical, in-depth examination of direction and influence of music education within America's general education curriculum. Focus on how music education has reflected and addressed changing needs of schooling and society from singing school movement and Jeffersonian era to today.

Letter grade only (A-F).

555./455. Computers and Sound (3)

Introduces students to music software for sound synthesis, sequencing, digital audio, and sound processing. Listening and analysis of contemporary electronic music literature is also emphasized. Course culminates in creative composition or research project.

Letter grade only (A-F).

556./456. Sound Design (3)

Introduces students to principles of composition and analysis of electro-acoustic media through application of music software, sampling, digital media, digital signal processing, and psychoacoustics. Course culminates in collaborative creative project involving video, web, or live theater.

Letter grade only (A-F).

557./457. Composition with Digital Media (3)

Computer created projects that combine visual media (including web-based), and electronic music. Analysis of interdisciplinary and mixed media works, collaborative work in electronic arts and readings in critical theory and multimedia.

Letter grade only (A-F).

558./458. Literature and Aesthetics of Interactive Media (3)

Explore artists'/composers' use of interactive media from the intermediality and limited interactivity of Wagner's and Scriabin's works, to the latest software-driven and web-based constructions, to gain a better understanding of the philosophical and musical context for the students' works.

561. Seminar in Medieval and Renaissance Music (3)

Prerequisite: MUS 360, or consent of instructor.

Topics in development of musical styles and genres from Gregorian Chant through late sixteenth-century sacred and secular polyphony.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

562. Seminar In Baroque Music (3)

Prerequisites: MUS 341, 360, or consent of instructor.

Stylistic analysis and inquiry into cultural background of composers and genres.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

563. Seminar In Classical Music (3)

Prerequisites: MUS 341, 360, or consent of instructor.

Music from Rococo to end of eighteenth century. Philosophical attitudes in relation to musical styles.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

564. Seminar in Romantic Music (3)

Prerequisites: MUS 342, 374 or consent of instructor.

Music from Beethoven to end of nineteenth century.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

565. Seminar In 20th-Century Music (3)

Prerequisites: MUS 342, 374, or consent of instructor.

Stylistic analysis and music; aesthetic and socioeconomic problems of contemporary music; survey of new music.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

566./460. Studies in Performance Practices (3)

Prerequisites: MUS 160, 360 or consent of instructor.

Surveys issues of historical performance in vocal and instrumental music, focusing on primary sources. Spans various

genres and eras.

Letter grade only (A-F).

569./469. Music of the Theater (3)

Prerequisites: MUS 374.

History and development of music for stage from 1600 to present, its conventions and styles. Analysis of representative masterworks.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

571./471. Studies in Ethnomusicology (3)

Prerequisite: MUS 374 or consent of instructor.

Emphasis on theory and methodology of ethnomusicological study. Investigation of music of particular non-western or popular cultures. For music majors only.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

573./473. Advanced Diction for Singers (2)

Prerequisites: MUS 273A, 273B, or consent of instructor.

Advanced principles of diction and International Phonetic Alphabet (IPA) applied to lyric Italian, French, German, and English repertoire; intended for Senior and Graduate level vocalists and choral conductors. Special studies possible in other languages.

Letter grade only (A-F).

574A./474A. Jazz Arranging I (2)

Prerequisite: MUS 372B or consent of instructor.

Fundamentals of Jazz arranging, including 4-part writing, harmonic practices and philosophies of arranging.

Not open for credit to students with credit in MUS 574. Letter grade only (A-F).

574B./474B. Jazz Arranging II (2)

Jazz arranging for big band through detailed analysis of known big band writers. Emphasis on reharmonization, the idiomatic use of counterpoint, styles and song forms.

Letter grade only (A-F).

575. Studies in Choral Music (3)

Prerequisite: Consent of instructor.

Studies in research techniques for choral musicians and exploration of choral masterworks including score preparation, performance practice considerations, and historical investigation. Rehearsal techniques and principles and procedures necessary to effective choral teaching also examined.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

576./467. Studies in Gender and Music (3)

Prerequisites: MUS 374 or consent of instructor.

Surveys issues surrounding women as musicians (performers and composers), comparative studies of role men and women have played in music, and feminist criticism of music.

Letter grade only (A-F).

577./477. Piano Accompanying (2-2)

Prerequisite: MUS 277 or consent of instructor.

Instruction and training in art and techniques of accompanying for singers, instrumentalists, and ensembles.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semester.

578./478. Musical Instruments of World (3)

Prerequisites: MUS 360 or consent of instructor.

Open to music majors and minors. Study of origins and history of musical instruments in western and non-western world, with emphasis on cross-cultural influences, iconographical and organological issues, and scientific classification.

Letter grade only (A-F).

580./480. Marching Band Techniques (2)

Marching fundamentals, charting, formations, precision drills, parade techniques and half-time pageantry.

Letter grade only (A-F).

581. Foundations of Music Education (3)

Open to graduate music majors only. Survey of contemporary aesthetic, philosophical, psychological and sociological trends in music education.

Letter grade only (A-F).

582./482. Instrumental Rehearsal Techniques and Literature (3)

Procedures for organization and development of instrumental programs and literature for performing groups.

Letter grade only (A-F).

583A./483A. Choral Repertoire I (2)

Prerequisites: MUS 326 or consent of instructor.

Examination of five genres of choral repertoire: Mass, motet, cantata, oratorio, and madrigal. Traditional and contemporary choral repertoire for public school teachers and church choir directors.

Letter grade only (A-F).

583B./483B. Choral Repertoire II (2)

Prerequisites: MUS 326 or consent of instructor.

Survey of choral and choral/orchestral works from Renaissance to 20th century.

Letter grade only (A-F).

585./485. Music for Elementary Child (3)

Examination of approaches to developing musical and aesthetic sensitivities in children. Students create vocal, instrumental and listening experiences appropriate for use in grades K-6. Intended for music education majors. Others by consent of instructor.

Letter grade only (A-F).

587./487. Microcomputers in Music Learning (3)

Prerequisites: MUS 125T or consent of instructor.

Music Education applications of microcomputers, including: existing instructional software and hardware, administrative applications, criteria for software and hardware selection, MIDI music composition, and contemporary issues and trends.

Letter grade only (A-F).

592A./492A. Studies in Keyboard Music (2)

Prerequisite: MUS 360 or consent of instructor.

Survey of evolution of keyboard music including clavichord, harpsichord, piano, and organ from 13th century to Beethoven.

Not open for credit to students with credit in MUS 592.

592B./492B. Studies in Keyboard Music (2)

Prerequisite: MUS 360 or consent of instructor.

Survey of evolution of keyboard music including clavichord, harpsichord, piano, and organ from Beethoven to present.

593./493. Selected Topics - Instrumental Music (3)

Prerequisite: MUS 374.

Seminar in instrumental music spanning at least two epochs of music history and covering at minimum, two of five categories: solo sonata (excluding keyboard), chamber music, orchestral/symphonic, wind ensemble/band, and orchestral/concerto.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

595. Selected Topics in Music (1-3)

Prerequisite: Consent of graduate advisor and instructor.

Topics of current interest in various fields of music selected for special presentation and development.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

597./497. Selected Topics - Music Composition (3)

Prerequisite: Consent of graduate advisor and instructor.

Topics of current interest in various fields of music selected for special presentation and development.

Letter grade only (A-F). Topics announced in the *Schedule of Classes*.

- B. Sound Design for Theatre
- D. Contemporary and Computer Music Notation
- E. Composition with Interactive Technologies
- G. From Poetry to Song: Composing Art Songs

598. Teaching Music in the University (1)

Prerequisite: position as TA or GA in the Bob Cole Conservatory of Music or consent of instructor.

Seminar on teaching methods, goals, and objectives; covers regulations and responsibilities; preparation of course materials; assessment and evaluation tools; technology in classroom. Required of first-term TAs and GAs with teaching responsibilities.

Letter grade only (A-F). May be repeated to a maximum of 3 units.

599. Special Studies (1-3)

Prerequisite: Consent of Graduate Advisor and instructor.

Individual research or group investigation of selected topics.

Letter grade only (A-F). May be repeated to a maximum of 6 units of credit.

600. Selected Topics - Chamber Music (1)

Prerequisite: Consent of instructor.

Letter grade only (A-F). May be repeated to a maximum of 8 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. (2 hrs reh.)

- A. Brass Ensemble
- B. New Music Ensemble
- C. String Ensemble
- D. University String Quartet
- E. University Wind Quintet
- F. University Brass Quintet
- G. Piano Ensemble
- H. Vocal Jazz Ensemble II
- I. Men's Chorus
- J. Jazz Combos
- K. Performance
- L. Brass Chamber Music
- M. Percussion Ensemble
- N. Steel Drum Orchestra
- O. Woodwind Chamber Music
- P. String Chamber Music
- Q. Women's Chorus
- R. Collegium-Vocal
- S. Collegium-Instrumental
- T. Saxophone Ensemble
- U. Directed Accompanying
- V. Studio Orchestra
- W. Laptop Ensemble
- X. World Percussion Group
- Y. World/Traditional Music Performance
- Z. University Percussion Quartet

601. Selected Topics - Jazz Ensemble (1)

Prerequisite: Consent of instructor.

May be repeated to a maximum of 8 units with different topics in same semester. Topics announced in *Schedule of Classes*. (3 hrs or more reh.)

- A. Concert Jazz Orchestra
- B. Studio Jazz Band
- D. Vocal Jazz Ensemble I

629. Selected Topics - Individual Instruction for Music Majors (2)

Open to graduate students in music only. Private lessons in their major performance medium. Application must be made to Graduate Advisor of the Bob Cole Conservatory of Music during semester prior to registration. Registration is subject to conservatory's approval.

Letter grade only (A-F). May be repeated to a maximum of 12 units with different topics in the same semester. Topics announced in the *Schedule of Classes*.

- A. Baritone/Tuba
- B. French Horn
- C. Trombone
- D. Trumpet
- E. Harpsichord
- F. Organ
- G. Piano
- J. Percussion
- K. Double Bass
- L. Cello
- M. Viola
- N. Violin
- O. Guitar
- P. Harp
- Q. Voice
- R. Bassoon
- S. Clarinet
- T. Flute
- U. Oboe
- V. Saxophone
- W. Conducting
- X. Composition

640. Seminar in Music Theory (3)

Prerequisites: MUS 541 and consent of instructor.

Intensive seminar focusing on analytical and theoretical issues in music. May center on individual composer, theoretical technique, or history of theory.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters

680. Seminar in Instrumental Music Teaching (3)

Prerequisite: Consent of instructor.

Principles, procedures, and materials used in teaching instrumental music in public schools. Special attention given to methods and materials used in instrument classes.

Letter grade only (A-F).

696./496. Research Methods (3)

Principles of research and writing about music, thesis preparation, and citation/bibliographic format. Serves as introduction to graduate study in music. Required of all MA and MM candidates in music.

Letter grade only (A-F).

698. Thesis or Project (1-6)

Prerequisite: Advancement to Candidacy and consent of Director of Music History

Planning, preparation, research, and completion of recital/project report or thesis. Enrollment limited to graduate candidates who have passed qualifying examination for their program and who have approved project/thesis proposal.

Letter grade only (A-F).

NATURAL SCIENCES AND MATHEMATICS, COLLEGE OF

Dean: Laura Kingsford

Associate Dean for Curriculum and Instruction:
Henry C. Fung

Associate Dean for Research and External Support:
Andrew Z. Mason

Director for Instructional and Research Facilities:
Robert L. Loeschen

Director of Development: MaryAnne Horton

Administrative Services Manager: Henry Wu

Assistant to the Dean: Lane Olsen-Cooper

College Office: Hall of Science (HSCI), Room 160
Telephone / FAX: (562) 985-4707 / (562) 985-2315
Website: <http://www.cnsm.csulb.edu>

Departments

Biological Sciences

Brian T. Livingston, Chair (562) 985-4806

Chemistry and Biochemistry

Krzysztof Slowinski, Chair (562) 985-4941

Geological Sciences

Robert D. Francis, Chair (562) 985-4809

Mathematics and Statistics

Robert A. Mena, Chair (562) 985-4721

Physics and Astronomy

Chuheee Kwon, Chair (562) 985-4924

Science Education

Laura Henriques, Chair (562) 985-4801

CNSM Academic Advising Center

Advisor: Angela Tuan

Office: HSCI 164

Telephone: (562) 985-1587

Jensen Student Access to Science and Mathematics Center

Co-Directors: Henry C. Fung, Aimee Arreygue

Office: HSCI 164

Telephone / FAX: (562) 985-4682 / (562) 985-5104

CNSM Science Learning Center

Jim McKibben, Director (562) 985-4841

Introduction

The College of Natural Sciences and Mathematics provides quality educational opportunities in the life, physical sciences, and mathematics. Alumni of the College demonstrate that science and mathematics graduates are well-prepared to enter graduate and professional schools or to assume responsible positions in industry or government.

The College takes its responsibilities in teacher preparation in the sciences and mathematics very seriously. It participates in projects that provide a stronger, more rigorous, and more engaging set of teacher preparation programs at CSULB. There is funding from the National Science Foundation, NASA, and the Knight Foundation, and in collaboration with Colleges of Education and Liberal Arts, Long Beach Unified School District, and Long Beach City College.

Departments

Biological Sciences

Chemistry and Biochemistry

Geological Sciences

Mathematics and Statistics

Ocean Studies Institute

Physics and Astronomy

Science Education

Programs at a Glance

Bachelor of Arts:

Chemistry, Physics

Bachelor of Science:

Biochemistry, Biology, Chemistry, Earth Science, Environmental Science and Policy, Geology, Marine Biology, Mathematics, Microbiology, Physics

Master of Science:

Biochemistry, Biology, Chemistry, Geology, Mathematics, Microbiology, Physics, Science Education, Statistics

Certificates:

Biotechnology

Minors:

Applied Mathematics, Biology, Chemistry, Geology, Physiology, Mathematics, Microbiology, Physics, Statistics

Single Subject Teaching Credentials:

Biological Science, Chemistry, Geosciences, Mathematics, Physics

College of Natural Sciences and Mathematics' Academic Advising Center

Ideally, all students participate in the Science Safari to Success (for first time freshmen) or EONS (Enrollment and Orientation in Natural Sciences and Mathematics) for transfer students. Programs offered each July (for those entering in August-September) and January (for those entering in January). A department advisor will be available to assist in developing an academic plan. During the semester, students may obtain academic advising by contacting the CNSM Academic Advising Center (HSCI-164) and/or appropriate advisor(s) in the department offering the chosen degree program.

The CNSM Academic Advising Center located in the Hall of Science, Room 164 (HSCI-164) collaborates with the College's undergraduate advisors to provide its majors with academic advising and support services so students can achieve their personal, academic, and career goals. Some of the services provided to CNSM majors include information and resources about academic programs; selection and sequence of courses; assistance with enrollment for courses; helping majors develop short- and long-term goals; assistance in navigating academic requirements, policies, and procedures; and providing appropriate referrals and career planning. The Academic Advising Center staff is available for appointments and some walk-in assistance. Please contact the Academic Advising Center for more information.

Jensen Student Access to Science and Mathematics (SAS) Center and Programs Offered

The Center (HSCI 164) is dedicated to promoting success for students who pursue majors in the College and those who take courses in its departments. It also facilitates several externally funded programs. The Center provides space for studying, tutoring, mentoring, computer access, and meeting sites for student-centered activities. The Center serves as the resource center for health profession advising, graduate school opportunities, and summer research opportunities and fellowships.

There are a host of activities and programs that strive to involve students and promote their success in science and mathematics. Several federally funded programs, the Center is dependent on external funding, focus on underrepresented students and address the diversity of our campus. In addition to fostering involvement of students in science and mathematics, they feature an ethnic identity that provides a unique encouragement for our science majors.

MARC/MBRS Programs. The College hosts both programs funded by The National Institutes of General Medical Sciences: Minority Access to Research Careers (MARC) and Research Institute for Scientific Enhancement (MBRS-RISE). Both programs have the goal of increasing the number and quality of students from specifically targeted groups/populations who pursue careers in scientific research. Students supported by these programs carry out state-of-the-art biomedical research projects in conjunction with a member of the faculty. MARC is an honors program (GPA 3.0) for upper division students, while MBRS-RISE supports students as early as the freshman year and also upper division transfer students. As a result of their research activities, most students present papers at scientific conferences and often co-author publications appearing in leading scientific journals. MARC/MBRS-RISE students are active in various outreach and mentoring activities.

Beckman Scholars Program. The program focuses on students who have the potential to achieve distinction in their academic fields. Support is provided for students working toward bachelor's degrees in chemistry, biology, or physics in the form of student stipends, laboratory supplies and funds for travel to appropriate scientific meetings. Students receive rigorous training by faculty members in a variety of techniques involved in nucleic acid research, protein biochemistry, biophysics, etc.

Bridges to the Baccalaureate Program. This program is funded by the National Institutes of General Medical Sciences and its goal is to provide historically underrepresented community college students with research opportunities in the biomedical sciences and to facilitate transition into baccalaureate and doctorate granting institutions.

G-DEP Program. The Geoscience Diversity Enhancement Program (G-DEP) is a partnership between CSULB Departments of Geological Sciences, Geography, and Anthropology, and several community colleges and local high schools to improve the research and educational experiences of underrepresented students in geoscience (geologic, physical geographic, archaeologic and environmental sciences disciplines). The program seeks the transition of underrepresented students from community colleges to study geosciences at the undergraduate level.

LS-AMP Program. The College hosts the National Science Foundation's Louis Stokes Alliance for Minority Participation (LS-AMP) program. Its goal is to improve the mathematics and science preparation for historically underrepresented students majoring in the sciences, mathematics, and engineering and to enhance their opportunities for graduate studies.

Noyce Program. The CSULB Robert Noyce Scholarship Program, funded by the National Science Foundation, encourages talented science, technology, engineering, and mathematics (STEM) majors to become K-12 mathematics and science teachers. The program provides scholarships for CSULB students to complete their bachelor's and/or a single subject credential in mathematics or science. Noyce Scholars receive \$15,000 per year for two years maximum. Scholarship recipients, in return, must serve two years as a mathematics or science teacher in a high-need school district within six years following graduation or completion of the program.

Physics Teacher Education Coalition (PhysTEC) Program. The CSULB PhysTEC Program, supported by the American Physical Society, National Science Foundation, and the CSULB's College of Natural Sciences and Mathematics, is a collaborative project between the Department of Physics and Astronomy, Department of Science Education, and the Teacher-in-Residence program recruited from local high schools. The PhysTEC Program aims to increase the number of physics majors earning teaching credentials at CSULB by actively recruiting, providing opportunities for early teaching experiences, and continuing the support structures for teachers at all levels. For additional information, please see <www.physicsatthebeach.com>.

Physical Science and Mathematics Scholarship Program. The CSULB Physical Science and Mathematics Scholarship (PSMS) Program, funded by the National Science Foundation, is to increase diversity in the science, technology, engineering, and mathematics workforce and graduate studies. Qualified students are eligible for scholarships and access to best practices which contribute to student success and competitive applications for advanced studies. More information is available at <www.csulb.edu/psmscholarship>.

Science Enrichment and Peer Mentor Programs. This program is designed to provide first time freshmen in the College of Natural Sciences and Mathematics with the guidance and personal support. The program assists students to enroll in classes appropriate for their major and background, provides them with enriched learning experiences, and peer role models during their first academic year. The Science Enrichment Program begins the week prior to the start of the fall semester. To be part of the program, students must be declared science or math majors. Peer mentoring provides students opportunities for tutoring to strengthen academic and communication skills.

Honors in Biological Sciences. This program was initiated by a grant from the Howard Hughes Medical Institute. Open to students with majors or career goals in the life sciences or related fields, it features an honors curriculum including courses in bioinformatics and research design as well as undergraduate research leading to a senior honors thesis and presentation at scientific conferences.

Health Professions Advising Office (HPAO). This program provides a wide range of advising and support services for students pursuing preparation and application to professional schools. The HPAO offers individual counseling, academic planning, application assistance, and many other resources designed specialty for students interested in medicine, dentistry, veterinary, pharmacy, optometry, podiatry, chiropractic, physician assistant, physical therapy, and graduate nursing.

College of Natural Sciences and Mathematics' Science Learning Center

The CNSM Science Learning Center is located in Hall of Science, Room 110 (HSCI-110). This is a hands-on museum that houses many displays and exhibits from the College's six departments; Biological Sciences, Chemistry and Biochemistry, Geological Sciences, Mathematics and Statistics, Physics and Astronomy, and Science Education. The exhibits demonstrate concepts that are easier to understand through direct physical involvement and personal discovery. Visitors are encouraged to turn the handles, push the buttons, and twist the knobs to enable the visitor's personal discoveries of science behind the display. These exhibits compliment the K-12 science curricula. The Science Learning Center also has a 27 foot Mobile Science Museum. Converted from a motor home into a hands-on laboratory, it makes visits to local schools, industry, and community events. Groups interested in visiting the CNSM Science Learning Center, or arranging for a visit by the Mobile Science Museum may contact the Science Learning Center for additional information (562-985-4841).

Student Research Opportunities

Faculty members in the College involve more than 200 students annually, both undergraduate and graduate, in a variety of research activities. Many of these students are supported by research grants, especially during the summer months. Each year many of these students present the results of their research at scientific conferences. It is not unusual for a student to co-author an article appearing in a major scientific journal.

Early each fall semester, the College, in collaboration with the Jensen Student Access to Sciences and Mathematics Center, hosts an Annual Research Symposium for students to present their findings of the research conducted in laboratories of CNSM faculty. The Symposium is open to members of the University and the greater Southern California community.

The Electron Microscopy Facility

The study of the natural sciences requires observation of the macroscopic, microscopic, and sub-microscopic character of our universe. The College has a modern Electron Microscope (EM) Facility, utilizing a Joel-1200EXII transmission electron microscope (TEM), which is used by several undergraduate courses in addition to undergraduate and graduate research projects. The EM Facility also houses additional TEMs and an AMR 1000 scanning electron microscope has analytical capabilities.

Student Organizations

The College of Natural Sciences and Mathematics Student Council sponsors annual events. There are various social and academic-related programs that offer peer support, as well as opportunities for students and faculty to interact outside of the classroom.

Other student-led groups offer activities for students who are planning careers in one of the health professions (medicine, dentistry, etc.). The Organization of PreProfessional Students (T.O.P.P.S.) and Association of Pre-Dental Students (A.P.D.S.) have speaker series with representatives from professional schools; the group also holds social functions and provides a peer advising network. Chicanos/Latinos for Community Medicine (CCM) sponsors community outreach activities, an annual workshop on interviewing techniques, and an annual conference on applying to medical/professional schools.

Southern California Marine Institute (SCMI)

The Institute operates a number of research vessels, and provides the mechanism whereby students from CSU Ocean Studies Consortium campuses at Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona, San Diego, and San Marcos, as well as Occidental College and the University of Southern California can share courses and degree programs. In addition, Institute staff conduct research and facilitate the research of CSU faculty. The major focus is on harbors and coastal areas, with emphasis on environmental issues.

California Desert Studies Consortium

CSULB participates in the California Desert Studies Consortium, which has a Desert Studies Center in the heart of the Mojave Desert at Soda Springs near the town of Baker. The surrounding area consists of typical Mojave Desert with dry lakes, sand dunes, and mountain ranges; it is the gateway to Death Valley and the Kelso Dunes. The Center has facilities for teaching field classes and for research. California State Universities at Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona, and San Bernardino are the Consortia members.

Institute for Integrated Research in Materials, Environment, and Society (IIRMES)

IIRMES promotes and enhances educational and research opportunities for faculty, graduate and undergraduate students and the greater community at large. The major goals and accompanying benefits include research and scholarly activity; development of instructional programs to provide student training and research; and contribution to community service. IIRMES promotes cross-application of analytical techniques; facilitates access to state-of-the-art instrumentation for researchers; sponsors colloquia, lectures, and conferences; promotes interdisciplinary workshops and collaborations with other universities to create research possibilities for faculty and students; promotes educational programs and research opportunities for CSULB undergraduate and graduate students; provides analytical services for scientific community; and serves as a core CSU facility for elemental microanalysis.

CSUPERB Core Facility for Micro-Chemical Elemental Analysis (FEMCA)

California State University Program for Education and Research in Biotechnology (CSUPERB) has created a core facility for elemental micro-chemical analysis (FEMCA). FEMCA's principal goal is to enhance the educational and research opportunities of students and faculty members in the CSU system who wish to pursue novel research in biotechnology. The facility builds on strong interdisciplinary ties between the biological, chemical, and physical sciences. FEMCA is housed within IIRMES for molecular and elemental analysis; scanning, transmission and atomic force microscopy; as well as purpose-built clean-room facilities for organic and inorganic extractions and sample preparation.

Center for Education in Proteomics Analysis (CEPA)

A grant from the W.M. Keck Foundation and supplemental funds provided by the College of Natural Sciences and Mathematics at CSULB enabled purchase of an Applied Biosystems 4800 Matrix Assisted Laser Desorption Ionization, tandem Time of Flight Mass Spectrometer for protein and polypeptide analysis and identification. CEPA is part of IIRMES' Facility for Elemental Micro Chemical Analysis (FEMCA), and is the only one of its kind in the USA that focuses on the use of this technology for undergraduate training and research.

Courses (NSCI)

LOWER DIVISION

190A. Experience Success Program - 1 (1)

Prerequisite: Open to Freshman only.

Learn and adopt organizational time management study and test taking skills. Increase your awareness of science and mathematics related career options. Make connections with CNSM programs, resources, and people.

Letter grade only (A-F). (Seminar 1 hr)

190B. Experience Success Program - 2 (1)

Prerequisite: NSCI 190A.

Explore science/math careers via job shadowing experiences and community based mini-internships. Learn about summer internship and research opportunities.

Letter grade only (A-F). (Seminar 1 hr.)

UPPER DIVISION

305. Origami in Science, Mathematics, and Education (3)

Prerequisites: GE Foundation requirements.

Hands-on instruction in the creation of origami works of fine art. Applications of folding materials in science, engineering, mathematics, and as a pedagogical tool in education.

(Lecture 3 hrs.)

308. Community and Careers in the Health Professions (3) S

Prerequisites: GE Foundation requirements, one or more Exploration courses, upper division standing, and 3 units of Natural Sciences coursework.

Service-learning, capstone course developing students' critical thinking and analyzing issues on health care delivery including biomedical ethics. Students are required to provide service in

a community health care agency. Provides understanding of community needs and fosters greater civic responsibility.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

309I. Women in Science (3) F,S

Prerequisites: GE Foundation requirements, 6 units of GE science courses, upper-division standing, and consent of instructor.

Accomplishments of women in natural science, engineering, and mathematics and obstacles precluding easy access to these careers for women. Includes women's historical roles in science, contributions made, and contributions ignored or devalued by peers. Disciplines include science, history, and sociology.

Letter grade only (A-F). Same course as WGSS 309I. Not open for credit to students with credit in W/ST 309I or WGSS 309I. (Lecture 3 hrs.)

375I. Science and Society (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing; 3 units of GE natural science courses.

Studying major discoveries in life and physical sciences impacting our lives. Examining technological advances, discussions of what is science, how is it done, and is it beneficial or destructive? Recent discoveries and underlying basic science also will be critically evaluated.

Letter grade only (A-F). (Lecture 3 hrs)

490. Special Topics in the Natural Sciences (1-3)

Prerequisites: At least upper division standing in the College of Natural Sciences and Mathematics and consent of instructor.

Faculty and student discussions and analysis of a current topic in the natural sciences.

May be repeated to a maximum of 6 units with different topics.

Letter grade only (A-F). (Lecture 1-3 hrs.)

492. Internships In Natural Science (3)

Prerequisites: Major in the College of Natural Sciences and Mathematics, completion of 9 units of upper division science coursework, a 2.5 GPA overall or 2.75 GPA in the student's major, and consent of instructor prior to registration.

Qualifying students placed in a major or career-related assignment in private industry or at a public agency. May be placed in either a volunteer or paid work assignment. Teacher aide positions may be used for students interested in pursuing a career in science education in K-12 schools.

Learning assignments will be arranged through the Career Development Center and the instructor. Final written report required. Class attendance and internships to be arranged by the instructor. Minimum of 120 hours of field experience required. Credit/No credit grading only. May be repeated to a maximum of 6 units

496. Investigations in Natural Sciences and Mathematics (1-3)

Prerequisites: Consent of instructor.

Supervised study of current topics in the natural sciences or mathematics by a faculty member in the College of Natural Sciences and Mathematics.

Letter grade only (A-F).

GRADUATE LEVEL

501. Project Management for Scientists (3)

Prerequisites: Consent of instructor. Not open to majors in the College of Business Administration.

Best practices utilized in scientific project management; includes project initiation, team dynamics, planning, scheduling, risk management, control, closure and evaluation. Applying gained knowledge to manage a project in their own scientific discipline.

Letter grade only (A-F). (Lecture 3 hrs)

502. Leadership and Management for Scientists (3)

Prerequisites: Consent of instructor. Not open to majors in the College of Business Administration. On-line only

Prepares students entering science-related careers with a foundation in management skills. Fundamentals of leadership, teamwork, motivation, planning, and organizational strategy and structure are presented along with human resource management topics including performance management, recruitment and selection, compensation and employment law.

Letter grade only (A-F). (3 hours activity)

503. Accounting and Finance for Scientists (3)

Prerequisites: Consent of instructor. Not open to majors in the College of Business Administration. On-line only.

Introduction to concepts of accounting and financial management, focusing on scientific grants and contracts. Topics include: budgeting, planning and control; break-even, cost benefit and financial statement analysis; time-value of money; risk-return; capital and long term financing and investments.

Letter grade only (A-F). (3 hours activity)

504. Introduction to Regulatory Science (3)

Prerequisites: Consent of instructor. Not open to majors in the College of Business Administration. On-line only

Introduction to legal and regulatory issues important in engineering, technology, and scientific activities in the pharmaceutical, and medical device industries

Letter grade only (A-F). (3 hours activity)

505. Professional Ethics (3)

Prerequisites: Consent of instructor. Not open to majors in the College of Business Administration. On-line only

Introduction to the standards of professional practice and codes of ethics in the responsible conduct of scientific research. Course objectives fulfill the federally mandated requirements and professional standards for training in the area of scientific ethics and best practices.

Letter grade only (A-F). (3 hours activity)

NURSING, SCHOOL OF

College of Health and Human Services

Director of School of Nursing: Loucine Huckabay

Director of Graduate Program: Savitri Singh-Carlson

Director of Undergraduate Program: Beth Keely

School Office: Nursing Building (NUR), Room 60H
Telephone: (562) 985-4463

Faculty: Margaret Brady, Lyn Callahan, Natalie Cheffer, Catherine Cummings, Rebecca Dahlen, Kathryn Deitch, Joy Goebel, Loucine Huckabay, Ahlam Jadalla, Leayn Johnson (Emerita), Lina Kavar, Beth Keely, Bonnie Kellogg (Emerita), Jarline Ketola, Farideh Khoiny, David Kumrow, Ruth G. Mullins (Emerita), Barbara J. Nelms, Alice Noquez, Nancy Oliver (Emerita), Sharon L. Roberts (Emerita), Savitri Singh-Carlson, Judy E. Smith, Christine Talmadge (Emerita), Eileen Watson, Barbara White.

Students desiring information should contact the school office for dates of opening counseling sessions.

Career Possibilities

Office Nurse • Nurse Consultant • Public Health Nurse • School Nurse • Clinical/Staff Nurse • Industrial Nurse • Private Duty Nurse • Home Health Care Nurse • Clinical Specialist • Nurse Practitioner • Armed Forces Officer • Nurse Supervisor • Teacher • Training Director • Public Health Education (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Undergraduate Programs

Bachelor of Science in Nursing

This program prepares students to become professional nurses. Two distinct categories of students are eligible for admission: The “basic student” who enters the University without having completed a first level nursing program and the “registered nurse student” who, having completed the first level, desires further study to expand their nursing capabilities to the BSN professional level.

The “basic student” is eligible to take the examination for licensure to practice as a registered nurse upon completion of the program. All graduates are recommended for certification as a public health nurse in the State of California. The program is accredited by the California State Board of Registered Nursing, and the Commission on Collegiate Nursing Education (Commission on Collegiate Nursing Education, 1 Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, phone: 202-887-6791).

Bachelor of Science in Nursing – Basic (135 units)

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

In order to be considered for admission to the Nursing major, students must complete a series of prerequisite courses: written communication, oral communication,

critical thinking, mathematics, BIOL 207, BIOL 208, CHEM 140, and MICR 200. Each course must be completed with a “C” or better grade; when all prerequisites are completed the GPA for the prerequisite courses must be “B” or better (3.0 or better). Applicants to the nursing major are normally admitted by the time they reach junior standing. Applicants will only be considered if they will have less than 90 total baccalaureate units earned prior to the term of program entrance.

Degree Progress for Pre-Nursing Majors

Pre-Nursing majors must complete the following requirements within four semesters of being admitted as a Pre-Nursing major or declaring a Pre-Nursing major. Some students may need to take courses during Summer Session to meet these requirements. At the end of the four semesters after Declaration of a Pre-Nursing major, students who have not met the requirements must either declare another major or meet with an Academic Advisor to determine if the student’s performance in the courses merits an additional semester to complete.

At the end of the second semester, pre-nursing students must have a grade of “C” or better in general education certified written communication, oral communication, critical thinking, and mathematics courses as well as a combined GPA of 3.0 or better in these prerequisite courses.

Pre-Nursing students with an ELM score that places them in MAPB 1 or MAPB 7 or MAPB 11 may petition for an additional semester.

At the end of the fourth semester, pre-nursing students must have a “C” grade or better in BIOL 207, BIOL 208, CHEM 140, and MICR 200 as well as a combined GPA of 3.0 or better in these prerequisite courses.

At the end of the fourth semester, Pre-Nursing students must apply to become Nursing majors. Candidates must complete a General Assessment Test and should contact the school to learn how to take the General Assessment Test. In reviewing applications, a personal profile is developed for each applicant based on GPA, in prerequisite courses and the General Assessment Test. The largest weight in the profile is derived from the prerequisite science course GPA, with typical grade point averages for these courses being 3.25 or higher and no grades below a “C.” Candidates with the highest profile scores are selected for admission. It is anticipated that about seventy-two (72) students will be admitted each Fall and Spring semesters from hundreds of applicants.

Requirements

Natural Science Prerequisites:

Take all of the following courses:

CHEM 140 General, Organic, and Biochemistry (5)
Prerequisites: A GE math course (may be taken concurrently); high school chemistry or equivalent.

BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.

BIOL 208 Human Anatomy (4)
Prerequisites: GE Foundation requirements.

MICR 200 General Microbiology for Health Professional (or equivalent) (4)

Prerequisites: CHEM 11A or 140 with a grade of "C" or better and GE Foundation requirements.

Prerequisite General Education Courses:

English Composition, Quantitative Reasoning, Oral Communication, and Critical Thinking.

Support courses:

Take all of the following courses:

NUTR 339 Metabolic Functions of Nutrients (1)

Prerequisites: CHEM 140; BIOL 207, or consent of instructor.

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

SOC 100 Principles of Sociology (3)

Prerequisites/Corequisites: A GE Foundation course.

Nursing Courses:

Take all of the following courses:

NRSRG 200 Introduction to Nursing Health Care (6)

Prerequisites: Admission to the nursing program. Corequisites: NRSRG 202, 302, 305, NUTR 339 or consent of instructor.

NRSRG 202 Health Care Communication (2)

Prerequisites: Admission to the nursing program, or consent of instructor. Corequisites: NRSRG 200, 302, 305, NUTR 339.

NRSRG 250 Intermediate Nursing Health Care (6)

Prerequisites: NRSRG 200, 202, 302, 305, NUTR 339, or consent of instructor. Corequisites: NRSRG 260, 312, or consent of instructor.

NRSRG 260 Older Adult Health Care (4)

Prerequisites: NRSRG 200, 202, 302, 305, NUTR 339, or consent of instructor. Corequisites: NRSRG 250, 312, or consent of instructor.

NRSRG 302 Foundations of Clinical Pharmacology (2)

Prerequisites: BIOL 207, 208, CHEM 140, MICR 200 or consent of instructor. Corequisites: NRSRG 200, 202, 305 and NUTR 339.

NRSRG 305 Pathophysiology for Nurses (3)

Prerequisites: BIOL 207, 208, CHEM 140, MICR 200 or consent of instructor. Corequisites: NRSRG 200, 202, 305 and NUTR 339.

NRSRG 312 Health Assessment (3)

Prerequisites: NRSRG 200, 202, 302, 305, NUTR 339, or consent of instructor. Corequisites: NRSRG 250, 260, or consent of instructor.

NRSRG 331 Critical Care Nursing (5)

Prerequisites: NRSRG 250, 260, 312, or consent of instructor. Corequisites: NRSRG 341 or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 341 Psychiatric/Mental Health Nursing (6)

Prerequisites: PSY 100, SOC 100, NRSRG 250, 260, 312, or consent of instructor. Corequisites: NRSRG 331, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 353 Legal Aspects of Health Care (2)

Prerequisites: NRSRG 331, 341, or consent of instructor. Corequisites: NRSRG 361, 372, or consent of instructor.

NRSRG 361 Child Health Care (7)

Prerequisites: NRSRG 331, 341, or consent of instructor. Corequisites: NRSRG 353, 361, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 372 Health Care of the Childbearing Family (6)

Prerequisites: NRSRG 331, 341, or consent of instructor. Corequisites: NRSRG 353, 361, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 400 Health Care Delivery Systems (3)

Prerequisites: NRSRG 353, 361, 372, or consent of instructor; for RNs: NRSRG 305, 309, or consent of instructor. Corequisites: NRSRG 402 or consent of instructor.

NRSRG 402 Community Health Nursing (7)

Prerequisites: NRSRG 353, 361, 372, or consent of instructor; for RNs NRSRG 305, 312, or consent of instructor. Corequisites: NRSRG 400, or consent of instructor.

NRSRG 450 Nursing Research (3)

Prerequisites: NRSRG 400, 402. Corequisites: NRSRG 452 or 453 or 454.

NRSRG 451 Nursing Leadership and Management (2)

Prerequisites: NRSRG 400, 402. Corequisites: NRSRG 450, 452 or 453 or 454. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 458 NCLEX-RN Preparatory Course (1)

Prerequisites: NRSRG 400, 402. Corequisites: NRSRG 450, 452 or 453 or 454.

Select one of the following:

NRSRG 452 Advanced Nursing in Critical Care (6)

Prerequisites: NRSRG 400, 402, or consent of instructor. Corequisites: NRSRG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 453 Adv Nursing in Maternal-Child Health (6)

Prerequisites: NRSRG 400, 402, or consent of instructor. Corequisites: NRSRG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 454 Advanced Medical, Surgical, Community,

Mental Health Nursing (6)

Prerequisites: NRSRG 400, 402, or consent of instructor. Corequisites: NRSRG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Criminal background check, health insurance, immunizations, medical clearance, and malpractice insurance are required for clinical coursework.

To be recommended to the California Board of Registered Nursing (BRN) to take the licensure exam as a Registered Nurse, students must successfully complete the RN Prelicensure Exit Assessment. The results of this assessment will not impact the conferring of the bachelor's degree.

Bachelor of Science in Nursing – Registered Nurse (120 units)

Admission

Registered Nurse Applicants are required to apply for admission to the University and do the following:

1. Hold a current license or be eligible for license to practice in California;
2. Graduation from an Accredited Associate Degree program or evaluation of diploma program for equivalency by an Accredited Associate Degree program;
3. Have 56 to 70 transferable units;
4. Maintain malpractice and health insurance throughout clinical coursework and submit to a criminal background check;
5. Attend a group counseling session for RN students and complete the RN application form;
6. Submit official transcripts of any previous college work to the School of Nursing;
7. Fulfill the Graduation Writing Assessment Requirement (GWAR) either prior to admission or within the first semester in the program.

Graduates of diploma schools of nursing are urged to seek information/admission to a community college that offers the opportunity to earn academic credit for a diploma nursing program.

Requirements

Support Courses:

Take the following:

CHEM 140 General, Organic, and Biochemistry (5)

Prerequisites: A GE math course (may be taken concurrently); high school chemistry or equivalent.

Take one of the following:

PSY 310 Intermediate Statistics (3)

Prerequisites: PSY 100, 210, GE Foundation requirement and upper division standing.

EDP 419 Educational Statistics (3)

Prerequisites: Satisfactory completion of an undergraduate mathematics course suitable for general education math credit and, if required by the major, a lower-division statistics course.

Take all of the following:

NRSRG 305 Pathophysiology for Nurses (3)

Prerequisites: BIOL 207, 208, CHEM 140, MICR 200 or consent of instructor. Corequisites: NRSRG 200, 202, 305 and NUTR 339.

NRSRG 309 Dimensions of Professional Nursing (2)

Prerequisites: Admission to the ADN to BSN program. Support courses: CHEM 140, NRSRG 305.

NRSRG 312 Health Assessment (3)

Prerequisites: NRSRG 200, 202, 302, 305, NUTR 339, or consent of instructor. Corequisites: NRSRG 250, 260, or consent of instructor.

NRSRG 400 Health Care Delivery Systems (3)

Prerequisites: NRSRG 353, 361, 372, or consent of instructor; for RNs: NRSRG 305, 309, or consent of instructor. Corequisites: NRSRG 402 or consent of instructor.

NRSRG 402 Community Health Nursing (7)

Prerequisites: NRSRG 353, 361, 372, or consent of instructor; for RNs NRSRG 305, 312, or consent of instructor. Corequisites: NRSRG 400, or consent of instructor.

NRSRG 450 Nursing Research (3)

Prerequisites: NRSRG 400, 402. Corequisites: NRSRG 452 or 453 or 454.

NRSRG 451 Nursing Leadership and Management (2)

Prerequisites: NRSRG 400, 402. Corequisites: NRSRG 450, 452 or 453 or 454. Satisfactory level ATI testing including remediation as appropriate.

Take one of the following:

NRSRG 452 Advanced Nursing in Critical Care (6)

Prerequisites: NRSRG 400, 402, or consent of instructor. Corequisites: NRSRG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 453 Adv Nursing in Maternal-Child Health (6)

Prerequisites: NRSRG 400, 402, or consent of instructor. Corequisites: NRSRG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

NRSRG 454 Advanced Medical, Surgical, Community, Mental Health Nursing (6)

Prerequisites: NRSRG 400, 402, or consent of instructor. Corequisites: NRSRG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Course of Study

A specific combination of general education, prerequisites, nursing and elective courses totaling 135 units for the basic program and 120 units for the R.N. program are required for

graduation. All nursing courses in the nursing program must be taken in sequence. Admission to the first course is by application which will be accepted upon successful attainment of the criteria listed above. The last date to file applications for each semester will be available in the School of Nursing. Progress in the nursing major requires that students maintain a cumulative 2.0 GPA on all units attempted and attain a minimum of a "C" grade in each of the nursing courses as well as all required support courses. The student who earns less than a grade of "C" must repeat that course prior to being admitted to the next course in the nursing course sequence. A nursing course may be repeated one time. A break in the sequence of nursing courses necessitates readmission on a space-available basis.

Graduate Programs

Master of Science in Nursing

This degree is available to qualified students who desire advanced studies. The program is approved by the Board of Registered Nursing, and accredited by the Commission on Collegiate Nursing Education (1 Dupont Circle, NW, Suite 530, Washington, DC, 20036-1120, phone: 202-887-6791).

A Master of Science (MS) degree in Nursing is offered for the following specialties: Nurse Practitioner (Adult-Geriatric, Family, Pediatric, Psychiatric-Mental Health, and Women's Health), Clinical Nurse Specialist - Adult, and Nursing Administration. In addition, two dual degree programs are offered: Master of Science in Nursing /Master of Public Health (MSN/MPH) and Master of Science in Nursing / Master of Science in Health Care Administration (MSN/MSHCA)."

Nurse Practitioner Concentration

Specialty Areas: Family, Pediatric, Adult-Geriatric, Women's Health, and Psychiatric-Mental Health

Prerequisites

1. A bachelor's degree in nursing preferred: A bachelor's degree in a related field will be considered;
2. Current license to practice as a registered nurse in California;
3. Admission to graduate standing in nursing at the University;
4. A college level course in statistics;
5. A physical assessment course which includes clinical practice, must have been taken within last five years;
6. An upper division or graduate level course in pathophysiology;
7. An upper division community health nursing course with lab for non-BSN applicants;
8. An overall GPA of 3.0 or better in the undergraduate program.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy;
2. Completion of all undergraduate deficiencies;
3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
4. Approval of the school graduate director and Associate Dean of the College of Health and Human Services.

Requirements

1. Completion of a minimum of 38-45 units in approved upper division and graduate courses;
2. An overall GPA of 3.0 or better in the undergraduate program.

Core Courses

For all Nurse Practitioner specialties, take the following courses:

NRS 510 Advanced Pathophysiology for Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program and completion of upper division pathophysiology course, or consent of instructor.

NRS 520 Advanced Pharmacology for Advanced Practice Nursing (3)
Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRS 540 Health Care Economics, Policy, and Management for Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRS 550 Human Diversity and Psychosocial Issues in Health Care for Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRS 560 Foundations of Theoretical and Professional Roles in Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRS 596 Research Methods in Nursing (3)
Prerequisites: Admission to the graduate nursing program, or consent of instructor.

For Family, Adult-Geriatric, Women's Health, and Psychiatric-Mental Health Nurse Practitioner specialties, take the following additional core courses:

NRS 530 Advanced Physical Assessment for Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program and completion of basic physical assessment course, or consent of instructor.

NRS 530L Advanced Physical Assessment Lab (1)
Prerequisites: Admission to graduate program or consent of instructor. Corequisites: NRS 530.

For Pediatric Nurse Practitioner specialty only, take the following additional core courses:

NRS 535 Advanced Pediatric Physical Assessment and Health Promotion (2)
Prerequisites: Admission to the pediatric nurse practitioner program or school nurse credential program or consent of the instructor. Corequisites: NRS 535L.

NRS 535L Advanced Pediatric Physical Assessment Laboratory (1)
Prerequisites: Admission to the pediatric nurse practitioner program or school nurse credential program or consent of the instructor. Corequisites: NRS 535.

Specialty Courses

Family Nurse Practitioner Specialty

Family Nurse Practitioner Theory Courses:

NRS 620 Family Theories for Advanced Practice Nursing I (3)
Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRS 620A, 620B.

NRS 621 Family Theories for Advanced Practice Nursing II (3)
Prerequisites: NRS 620, 620A, 620B, or consent of instructor. Corequisites: NRS 621A, 621B.

Family Nurse Practitioner Clinical Courses:

NRS 620A Family Clinical Studies for Advanced Practice Nursing I (3)
Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRS 620, 620B.

NRS 620B Family Clinical Studies for Advanced Practice Nursing I (3)
Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRS 620, 620A.

NRS 621A Family Clinical Studies for Advanced Practice Nursing III (3)
Prerequisites: NRS 620, 620A, 620B, or consent of instructor. Corequisites: NRS 621, 621B.

NRS 621B Family Clinical Studies for Advanced Practice Nursing IV (3)
Prerequisites: NRS 620, 620A, 620B, or consent of instructor. Corequisites: NRS 621, 621A.

Pediatric Nurse Practitioner Specialty

Pediatric Nurse Practitioner Theory Courses:

NRS 650 Pediatric Theories for Advanced Practice Nursing I (3)
Prerequisites: NRS 510, 520, 535, 535L, 540, 550, 560, and 596. Corequisites: NRS 650A and 650B.

NRS 651 Pediatric Theories for Advanced Practice Nursing II (3)
Prerequisites: NRS 650, 650A, 650B. Corequisites: NRS 651A and 651B.

NRS 652 Pediatric Theories for Advanced Practice Nursing III (3)
Prerequisites: NRS 651, 651A, 651B. Corequisites: NRS 652A.

Pediatric Nurse Practitioner Clinical Courses:

NRS 650A Pediatric Clinical Studies for Advanced Practice Nursing I (3)
Prerequisites: NRS 510, 520, 535, 535L, 540, 550, 560, and 596 or consent of instructor. Corequisites: NRS 650 and 650B.

NRS 650B Pediatric Clinical Studies for Advanced Practice Nursing II (3)
Prerequisites: NRS 510, 520, 535, 535L, 540, 550, 560, and 596 or consent of instructor. Corequisites: NRS 650 and 650A.

NRS 651A Pediatric Clinical Studies for Advanced Practice Nursing III (3)
Prerequisites: NRS 650, 650A, and 650B. Corequisites: NRS 651 and 651B.

NRS 651B Pediatric Clinical Studies for Advanced Practice Nursing IV (3)
Prerequisites: NRS 650, 650A, and 650B. Corequisites: NRS 651 and 651A.

NRS 652A Pediatric Clinical Studies for Advanced Practice Nursing V (3)
Prerequisites: NRS 651, 651A, 651B. Corequisites: NRS 652.

Adult-Geriatric Nurse Practitioner Specialty

Adult-Geriatric Nurse Practitioner Theory Courses:

NRS 630 Adult-Geriatric Theories for Advanced Practice Nursing I (3)
Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRS 630A, 630B.

NRSRG 631 Adult-Geriatric Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSRG 630, 630A, 630B, or consent of instructor. Corequisites: NRSRG 631A, 631B.

Adult-Geriatric Nurse Practitioner Clinical Courses:

NRSRG 630A Adult-Geriatric Clinical Studies in Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSRG 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRSRG 630, 630B.

NRSRG 630B Adult-Geriatric Clinical Studies in Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program and NRSRG 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRSRG 630, 630A.

NRSRG 631A Adult-Geriatric Clinical Studies in Advanced Practice Nursing III (3)

Prerequisites: NRSRG 630, 630A, 630B, or consent of instructor. Corequisites: NRSRG 631, 631B.

NRSRG 631B Adult-Geriatric Clinical Studies in Advanced Practice Nursing IV (3)

Prerequisites: NRSRG 630, 630A, 630B, or consent of instructor. Corequisites: NRSRG 631, 631A.

Psychiatric-Mental Health Nurse Practitioner Specialty

Psychiatric-Mental Health Nurse Practitioner Theory Courses:

NRSRG 640 Psychiatric-Mental Health Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSRG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSRG 640A, 640B.

NRSRG 641 Psychiatric-Mental Health Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSRG 640, 640A, 640B, or consent of instructor. Corequisites: NRSRG 641A, 641B.

Psychiatric-Mental Health Nurse Practitioner Clinical Courses:

NRSRG 640A Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSRG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSRG 640, 640B.

NRSRG 640B Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program and NRSRG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSRG 640, 640A.

NRSRG 641A Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: NRSRG 640, 640A, 640B, or consent of instructor. Corequisites: NRSRG 641, 641B.

NRSRG 641B Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: NRSRG 640, 640A, 640B, or consent of instructor. Corequisites: NRSRG 641, 641A.

Women's Health Nurse Practitioner Specialty

Women's Health Nurse Practitioner Theory Courses:

NRSRG 610 Women's Health Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSRG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSRG 610A, 610B.

NRSRG 611 Women's Health Theories for Advanced Practice Nursing II (3)

Prerequisites: Admission to the graduate nursing program and NRSRG 610, 610A, 610B, or consent of instructor. Corequisites: NRSRG 611A, 611B.

NRSRG 612 Women's Health Theories for Advanced Practice Nursing III (3)

Prerequisites: NRSRG 611, 611A, 611B. Corequisite: NRSRG 612A.

Women's Health Nurse Practitioner Clinical Courses:

NRSRG 610A Women's Health Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program in the women's health nurse practitioner specialty and NRSRG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSRG 610, 610B.

NRSRG 610B Women's Health Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program in the women's health nurse practitioner specialty and NRSRG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSRG 610, 610A.

NRSRG 611A Women's Health Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: Admission to the graduate nursing program and NRSRG 610, 610A, 610B, or consent of instructor. Corequisites: NRSRG 611, 611B.

NRSRG 611B Women's Health Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: Admission to the graduate nursing program and NRSRG 610, 610A, 610B, or consent of instructor. Corequisites: NRSRG 611, 611A.

NRSRG 612A. Women's Health Clinical Studies for Advanced Practice Nursing V (3)

Prerequisites: Admission to the graduate nursing program, NRSRG 611, 611A, and 611B. Corequisite: NRSRG 612.

For all Nurse Practitioner specialties, take one of the following culminating courses:

NRSRG 692 Nursing Directed Project (1-4)

Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRSRG 596 and consent of school graduate advisor.

NRSRG 695 Professional Literature (3)

Prerequisites: NRSRG 510, 520, 530, 530L, 540, 550, 560, 596, 680 class series and NRSRG 680L or 680 A/B class series, and advancement to candidacy, or consent of instructor and graduate advisor.

NRSRG 698 Thesis (1-4)

Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRSRG 596, consent of school graduate advisor.

Nursing Administration Concentration

Prerequisites

1. A bachelor's degree in nursing preferred: A bachelor's degree in a related field will be considered;
2. Current license to practice as a registered nurse in California;
3. Admission to graduate standing in nursing at the University;
4. A college level course in statistics;
5. A physical assessment course which includes clinical practice, must have been taken within last five years;
6. An upper division or graduate level course in pathophysiology;
7. An upper division public health nursing course with lab for non-BSN applicants;
8. An overall GPA of 3.0 or better in the undergraduate program.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy;
2. Completion of all undergraduate deficiencies;

3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
4. Approval of the school graduate director and Associate Dean of the College of Health and Human Services.

Requirements

1. Completion of a minimum of 39 units in approved upper division and graduate courses;
2. An overall GPA of 3.0 or better.

Core Courses

For Nursing Administration Concentration, take the following courses:

NRSG 559 Nursing Administration (3)

Prerequisites: None.

NRSG 560 Foundations of Theoretical and Professional Roles in Advanced Practice Nursing (2)

Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRSG 596 Research Methods in Nursing (3)

Prerequisites: Admission to the graduate nursing program and upper division statistics, or consent of instructor.

HCA 510 Human Resources Management in Health Care (3)

Prerequisites: None.

HCA 524 Advanced Legal and Ethical Aspects of Health Administration (3)

Prerequisites: None.

Nursing Administration Theory Courses:

NRSG 676 Administrative Theories for Nursing Practice I (3)

Prerequisites: NRSG 559, HCA 510, 515 or consent of instructor. Corequisites: NRSG 676L.

NRSG 677 Administrative Theories for Nursing Practice II (3)

Prerequisites: NRSG 676, 676L, HCA 502, 505 or consent of instructor. Corequisites: NRSG 677L.

NRSG 678 Administrative Theories for Nursing Practice III (3)

Prerequisites: NRSG 677, 677L, HCA 537, or the consent of the instructor. Corequisites: NRSG 678L.

Nursing Administration Clinical Courses:

NRSG 676L Advanced Administrative Nursing Clinical I (3)

Prerequisites: NRSG 559, HCA 510, HCA 515 or consent of instructor. Corequisites: NRSG 676.

NRSG 677L Adv Administrative Nursing Clinical II (3)

Prerequisites: NRSG 676, 676L, HCA 502, 505 or consent of instructor. Corequisites: NRSG 677, HCA 537.

NRSG 678L Adv Administrative Nursing Clinical III (3)

Prerequisites: NRSG 677, 677L, HCA 537 or consent of instructor. Corequisites: NRSG 678.

Completion of one of the following electives or other course with consent of Graduate Director:

HCA 502, 505, 515, 517, 530, 535

Take one of the following culminating courses:

NRSG 692 Nursing Directed Project (1-4)

NRSG 698 Thesis (1-4)

Master of Science in Nursing, Option in Clinical Nurse Specialist – Adult

This program of 52-53 units is designed to expand the scope of advanced practice nursing within acute and chronic care settings. The curriculum will prepare graduates for eligibility for taking the national clinical nurse specialist certification examination.

Prerequisites

1. A bachelor's degree in nursing preferred: A bachelor's degree in a related field will be considered.
2. Current license to practice as a registered nurse in California.
3. Admission to graduate standing in nursing at the University;
4. A college level course in statistics;
5. A physical assessment course which includes clinical practice, must have been taken within the last five years;
6. An upper division or graduate level course in pathophysiology;
7. An upper division community health nursing course with lab for non-BSN applicants;
8. An overall GPA of 3.0 or better in the undergraduate program.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy;
2. Completion of all undergraduate deficiencies;
3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
4. Approval of the school graduate director and Associate Dean of the College of Health and Human Services.

Requirements

1. Completion of a minimum of 52-53 units in approved upper division and graduate courses;
2. An overall GPA of 3.0 or better in the graduate program.

Core Courses

For all Clinical Nurse Specialist, take the following courses:

NRSG 510 Advanced Pathophysiology for Advanced Practice Nursing (2)

Prerequisites: Admission to the graduate nursing program and completion of upper division pathophysiology course, or consent of instructor.

NRSG 520 Advanced Pharmacology for Advanced Practice Nursing (3)

Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRSG 530 Advanced Physical Assessment for Advanced Practice Nursing (2)

Prerequisites: Admission to the graduate nursing program and completion of basic physical assessment course, or consent of instructor.

NRSG 530L Advanced Physical Assessment Lab (1)

Prerequisites: Admission to graduate program or consent of instructor. Corequisites: NRSG 530.

NRSG 590. Independent Study (1)

Prerequisite: Consent of a nursing faculty member.

NRSG 540 Health Care Economics, Policy, and Management for Advanced Practice Nursing (2)

Prerequisites: Admission to graduate nursing program or consent of instructor.

NRSG 550 Human Diversity and Psychosocial Issues in Health Care for Advanced Practice Nursing (2)

Prerequisites: Admission to graduate nursing program or consent of instructor.

NRSG 560 Foundations of Theoretical and Professional Roles in Advanced Practice Nursing (2)

Prerequisites: Admission to graduate nursing program or instructor consent.

NRS 596 Research Methods in Nursing (3)
Prerequisites: Admission to the graduate nursing program and upper division statistics, or consent of instructor.

Education Core Courses:

NRS 556A Conditions of Learning and Instruction in Nursing (3)
Prerequisites: None.

NRS 556B Curriculum Development in Nursing (3)
Prerequisites: None.

NRS 556C. Microteaching in Nursing (3)
Prerequisites: Graduate standing; NRS 556A and 556B.

NRS 556L Theoretical Concepts in Nursing
Education: Practice Teaching (4)
Prerequisites: NRS 556A or consent of instructor.

Theory Courses:

NRS 600 Theories for Advanced Practice Nursing in Adult Care CNS I: Patient/Family (3)
Prerequisites: NRS 510, 520, 590 (1 unit), 530, 530L, 540, 550, 560, 596, 556A, 556B, 556C and 556L or consent of instructor. Corequisites: NRS 600L.

NRS 601 Theories for Advanced Practice Nursing in Adult Care CNS II: Staff Development (3)
Prerequisites: NRS 600, 600L, or consent of instructor. Corequisites: NRS 601L.

NRS 602 Theories for Advanced Practice Nursing in Adult Care CNS III: Organizational Systems (3)
Prerequisites: NRS 601, 601L, or consent of instructor. Corequisites: NRS 602L.

Clinical Courses:

NRS 600L Clinical Studies for the CNS in Adult Care I: Patient/Family (3)
Prerequisites: NRS 510, 520, 590 (1 unit), 530, 530L, 540, 550, 560, 596, 556A, 556B, 556C and 556L or consent of instructor. Corequisites: NRS 600.

NRS 601L Clinical Studies for the CNS in Adult Care II: Staff Development (3)
Prerequisites: NRS 600, 600L, or consent of instructor. Corequisites: NRS 601.

NRS 602L Clinical Studies for the CNS in Adult Care III: Organizational Systems (3)
Prerequisites: NRS 601, 601L, or consent of instructor. Corequisites: NRS 602.

For Clinical Nurse Specialists, take one of the following culminating courses:

NRS 692 Nursing Directed Project (1-4)
Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRS 596 and consent of school graduate advisor.

NRS 695 Comprehensive Exam (3)
Prerequisites: NRS 510, 520, 530, 530L, 540, 550, 560, 596, 680 class series and NRS 680L or 680 A/B class series, and advancement to candidacy, or consent of instructor and graduate advisor.

NRS 698 Thesis (1-4)
Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRS 596, consent of school graduate advisor.

Master of Science in Nursing/Master of Public Health

The School of Nursing and the Department of Health Science offer this program. The curriculum prepares graduates for eligibility for a California Clinical Nurse Specialist certification and for taking the national Clinical Nurse Specialist certification examination.

Prerequisites

1. A bachelor's degree in nursing preferred: A bachelor's degree in a related field will be considered;
2. Current license to practice as a Public Health Nurse in California;
3. Admission to graduate standing in nursing at the University;
4. A college level course in statistics;
5. An ethics course;
6. A cultural diversity course;
7. Current professional resume describing applicant's relevant experience;
8. An overall GPA of 3.0 or better in the undergraduate program.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy;
2. Completion of all undergraduate deficiencies;
3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
4. Fulfillment of the Graduate Record Examination (GRE);
5. Approval of the school graduate director and Associate Dean of the College of Health and Human Services.

Requirements

1. Completion of a minimum of 56-57 units in approved Nursing and Health Science upper division and graduate courses;
2. If a student after entering the concurrent MSN/MPH program returns to a single degree program, all requirements for the single degree program must be met;
3. An overall GPA of 3.0 or better in the graduate program.

Health Science Core Courses:

HSC 508 Administrative Relationships in Health Education Programs (3)
Prerequisite: Undergraduate major in Health Science or related field.

HSC 528 Advanced Environmental Health (3)
Prerequisite: H SC 422 or consent of instructor.

HSC 535 Health Promotion and Risk Reduction (2)
Prerequisites: H SC 421 or consent of instructor.

H SC 570 Theoretical Concepts and Issues in Health Science (3)
Prerequisites: None.

H SC 581 Curriculum Dev in Health Education (3)
Prerequisites: H SC 430, 440.

HSC 624 Seminar in Community Analysis and Program Planning (3)
Prerequisites: H SC 625 or consent of instructor.

HSC 625 Advanced Community Health Education (3)
Prerequisites: H SC 401 and 485; or consent of instructor.

Take one of the following courses:

H SC 500 Principles of Epidemiology (3)
Prerequisites: H SC 301 and H SC 403.

MICR 429 Epidemiology of Infectious Diseases (3)
Prerequisites: BIOL 260; MICR 320, 322; all of a grade of "C" or better.

Take one of the following courses:

H SC 503 Advanced Community Health Statistics (3)
Prerequisite: HSC 403 or equivalent.

BIOL 565 Experimental Design/Regression Analysis (4)
Prerequisites: BIOL 260; MATH 119B or 123; 6 units of upper division biological science all with a grade of "C" or better.

Take one of the following courses:

HSC 696 Research Methods (3)

Prerequisites: Undergraduate major in Health Science or related field; undergraduate course in statistics.

NRSG 596 Research Methods in Nursing (3)

Prerequisites: Admission to the graduate nursing program and upper division statistics, or consent of instructor.

Nursing Theory Courses:

NRSG 560 Foundations of Theoretical and Professional

Roles in Advanced Practice Nursing (2)

Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRSG 565 Theories Community Public Health

Nursing (3)

Prerequisites: Admission to graduate nursing program and NRSG 560, or consent of instructor.

NRSG 670 Community/Health Theories for Advanced

Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSG 565, or consent of instructor. Corequisites: NRSG 670L.

NRSG 671 Community/Health Theories for Advanced

Practice Nursing II (3)

Prerequisites: NRSG 670 and 670L or consent of instructor. Corequisites: NRSG 671L.

NRSG 672 NRSG Community/Health Theories for

Advanced Practice Nursing III (3)

Prerequisites: NRSG 671, 671L or consent of instructor. Corequisites: NRSG 672L.

Nursing Clinical Courses:

NRSG 670L Advanced Community/Public Health

Nursing Clinical I (3)

Prerequisites: Admission to graduate nursing program and NRSG 565 or consent of instructor.

NRSG 671L Advanced Community/Public Health

Nursing Clinical II (3)

Prerequisite(s): NRSG 670 and 670L, or consent of instructor. Corequisites: NRSG 671.

NRSG 672L Advanced Community/Public Health

Nursing Clinical III (3)

Prerequisite(s): NRSG 671, 671L or consent of instructor. Corequisites: NRSG 672.

For Master of Science in Nursing/Master of Public Health, take one of the following culminating courses:

692. Nursing Directed Project (1-4)

Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRSG 596 and consent of school graduate advisor.

NRSG 698 Thesis (1-4)

Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRSG 596, consent of school graduate advisor.

Master of Science in Nursing/Master of Science in Health Care Administration

The School of Nursing and the Department of Health Care Administration offer this program. The curriculum prepares graduates to be a Nurse Leader with Health Care Administration in the healthcare setting.

Prerequisites

1. A bachelor's degree in nursing preferred. A bachelor's degree in a related field will be considered;
2. Current license to practice as a Public Health Nursing license in California or eligibility for certificate in California;
3. Admission to graduate standing in nursing at the University;

4. An introductory level statistics course or equivalent.
5. Current professional resume describing applicant's relevant experience;
6. Take the following course (or equivalent): ACCT 201.
7. Take one of the following courses (or equivalent): ECON 101, 300.
8. Submission of a minimum score of 500 on a recent Graduate Management Admissions Test (GMAT) or a total score of a minimum 1000 on the Graduate Record Examination (GRE).
9. An overall GPA of 3.0 or better in the last 60 units of the undergraduate program.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy;
2. Completion of all undergraduate deficiencies;
3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
4. Fulfillment of the Graduate Record Examination (GRE) at the required minimum scores;
5. Approval of the school graduate director and Associate Dean of the College of Health and Human Services.

Requirements

1. Completion of a minimum of 53-54 units in approved Nursing and Health Care Administration upper division and graduate level courses;
2. If a student after entering the concurrent MSN/HCA program returns to a single degree program, all requirements for the single degree program must be met;
3. An overall GPA of 3.0 or better in the graduate program.

Health Care Administration Core Courses:

HCA 502 The Health Care System (3)

Prerequisites: None.

HCA 505 Organization and Systems of Health Care (3)

Prerequisites: None.

HCA 510 Human Resources Management in Health Care (3)

Prerequisites: None.

HCA 515 Advanced Financial Management in Health Care (3)

Prerequisites: ACCT 201 or 500.

HCA 524 Advanced Legal and Ethical Aspects of Health Administration (3)

Prerequisites: None.

HCA 530 Strategic Planning and Marketing in Health Care (3)

Prerequisites/Corequisites: HCA 502.

HCA 535 Quantitative Methods for Health Admin (3)

Prerequisites: Statistics.

HCA 550 Continuous Quality Improvement in Health Services (3)

Prerequisites: HCA 502.

Take one of the following courses:

HCA 698A. Project Part I (3)

Prerequisites: Completion of all 500-level courses and advancement to candidacy, or consent of instructor.

NRSG 596 Research Methods in Nursing (3)

Prerequisites: Admission to the graduate nursing program and upper division statistics, or consent of instructor.

Nursing Theory Courses:

NRS 560 Foundations of Theoretical and Professional Roles in Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRS 559 Nursing Administration (3)
Prerequisites: None.

NRS 676 Admin Theories for Nursing Practice I (3)
Prerequisites: NRS 559, HCA 510, 515 or consent of instructor. Corequisites: NRS 676L.

NRS 677 Admin Theories for Nursing Practice II (3)
Prerequisites: NRS 676, 676L, HCA 502, 505 or consent of instructor. Corequisites: NRS 677L.

NRS 678 Administrative Theories for Nursing Practice III (3)
Prerequisites: NRS 677, 677L, HCA 537, or the consent of the instructor. Corequisites: NRS 678L.

Nursing Clinical Courses:

NRS 676L Administrative Theories for Nursing Practice I (3)
Prerequisites: NRS 559, HCA 510, HCA 515 or consent of instructor. Corequisites: NRS 676.

NRS 677L Advanced Admin Nursing Clinical II (3)
prerequisites: NRS 676, 676L, HCA 502, 505 or consent of instructor. Corequisites: NRS 677, HCA 537.

NRS 678L Advanced Admin Nursing Clinical III (3)
Prerequisites: NRS 677, 677L, HCA 537 or consent of instructor. Corequisites: NRS 678.

For Master of Science in Nursing/Master of Sciences in Health Care Administration, take one of the following culminating courses:

HCA 698B Project Part II (3)
Prerequisites: Completion of all HCA 500-level courses, HCA 698A, and consent of the instructor.

NRS 692 Nursing Directed Project (1-4)
Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRS 596 and consent of school graduate advisor.

NRS 698 Thesis (1-4)
Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRS 596, consent of school graduate advisor.

Graduate Certificate Nurse Practitioner

This certificate is awarded to students who complete 32-38 units of post-masters course work in one of the Nurse Practitioner specialty areas. Applications from students who hold a masters degree in nursing as a nurse practitioner will be reviewed individually.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Prerequisites

1. Copies of transcripts of Baccalaureate in Nursing and Masters in Nursing degrees.
2. Copy of State of California RN licensure.
3. Three letters/checklists of references
4. Completion of the School of Nursing Graduate Program Application and university application.

Requirements

1. Completion of a minimum of 32-38 units in approved upper division and graduate courses;
2. An overall GPA of 3.0 or better.

Core Courses

For all Certificate in Nurse Practitioner specialties, take the following courses:

NRS 510 Advanced Pathophysiology for Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program and completion of upper division pathophysiology course, or consent of instructor.

NRS 520 Advanced Pharmacology for Advanced Practice Nursing (3)
Prerequisites: Admission to the graduate nursing program, or consent of instructor.

NRS 540 Health Care Economics, Policy, and Management for Advanced Practice Nursing (2)
Prerequisites: Admission to graduate nursing program or consent of instructor.

NRS 550 Human Diversity and Psychosocial Issues in Health Care for Advanced Practice Nursing (2)
Prerequisites: Admission to graduate nursing program or consent of instructor.

NRS 560 Foundations of Theoretical and Professional Roles for Advanced Practice Nurses (2)
Prerequisites: Admission to graduate nursing program or instructor consent.

For Family, Adult-Geriatric, Women's Health, and Psychiatric-Mental Health Nurse Practitioner specialties, take the following additional core courses:

NRS 530 Advanced Physical Assessment for Advanced Practice Nursing (2)
Prerequisites: Admission to the graduate nursing program and completion of basic physical assessment course, or consent of instructor.

NRS 530L Advanced Physical Assessment Lab (1)
Prerequisites: Admission to graduate program or consent of instructor. Corequisites: NRS 530.

For Pediatric Nurse Practitioner specialty only, take the following additional core courses:

NRS 535 Advanced Pediatric Physical Assessment and Health Promotion (2)

NRS 535L Advanced Pediatric Physical Assessment Laboratory (1)

Specialty Courses

Family Nurse Practitioner Specialty

Family Nurse Practitioner Theory Courses:

NRS 620 Family Theories for Advanced Practice Nursing I (3)
Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRS 620A, 620B.

NRS 621 Family Theories for Advanced Practice Nursing II (3)
Prerequisites: NRS 620, 620A, 620B, or consent of instructor. Corequisites: NRS 621A, 621B.

Family Nurse Practitioner Clinical Courses:

NRS 620A Family Clinical Studies for Advanced Practice Nursing I (3)
Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRS 620, 620B.

NRS 620B Family Clinical Studies for Advanced Practice Nursing II (3)
Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRS 620, 620A.

NRSG 621A Family Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: NRSG 620, 620A, 620B, or consent of instructor. Corequisites: NRSG 621, 621B.

NRSG 621B Family Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: NRSG 620, 620A, 620B, or consent of instructor. Corequisites: NRSG 621, 621A.

Pediatric Nurse Practitioner Specialty

Pediatric Nurse Practitioner Theory Courses:

NRSG 650 Pediatric Theories for Advanced Practice Nursing I (3)

Prerequisites: NRSG 510, 520, 535, 535L, 540, 550, 560, and 596. Corequisites: NRSG 650A and 650B.

NRSG 651 Pediatric Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSG 650, 650A, 650B. Corequisites: NRSG 651A and 651B.

NRSG 652 Pediatric Theories for Advanced Practice Nursing III (3)

Prerequisites: NRSG 651, 651A, 651B. Corequisites: NRSG 652A.

Pediatric Nurse Practitioner Clinical Courses:

NRSG 650A Pediatric Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: NRSG 510, 520, 535, 535L, 540, 550, 560, and 596 or consent of instructor. Corequisites: NRSG 650 and 650B.

NRSG 650B Pediatric Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: NRSG 510, 520, 535, 535L, 540, 550, 560, and 596. Corequisites: NRSG 650 and 650A.

NRSG 651A Pediatric Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: NRSG 650, 650A, and 650B. Corequisites: NRSG 651 and 651B.

NRSG 651B Pediatric Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: NRSG 650, 650A, and 650B. Corequisites: NRSG 651 and 651A.

NRSG 652A Pediatric Clinical Studies for Advanced Practice Nursing V (3)

Prerequisites: NRSG 651, 651A, 651B. Corequisites: NRSG 652.

Adult-Geriatric Nurse Practitioner Specialty

Adult-Geriatric Nurse Practitioner Theory Courses:

NRSG 630 Adult-Geriatric Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRSG 630A, 630B

NRSG 631 Adult-Geriatric Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSG 630, 630A, 630B, or consent of instructor. Corequisites: NRSG 631A, 631B.

Adult-Geriatric Nurse Practitioner Clinical Courses:

NRSG 630A Adult-Geriatric Clinical Studies in Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRSG 630, 630B.

NRSG 630B Adult-Geriatric Clinical Studies in Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560, 596 and clinical pre-test, or consent of instructor. Corequisites: NRSG 630, 630A.

NRSG 631A Adult-Geriatric Clinical Studies in Advanced Practice Nursing III (3)

Prerequisites: NRSG 630, 630A, 630B, or consent of instructor. Corequisites: NRSG 631, 631B.

NRSG 631B Adult-Geriatric Clinical Studies in Advanced Practice Nursing IV (3)

Prerequisites: NRSG 630, 630A, 630B, or consent of instructor. Corequisites: NRSG 631, 631A.

Psychiatric-Mental Health Nurse Practitioner Specialty

Psychiatric-Mental Health Nurse Practitioner Theory Courses:

NRSG 640 Psychiatric-Mental Health Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSG 640A, 640B.

NRSG 641 Psychiatric-Mental Health Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSG 640, 640A, 640B, or consent of instructor. Corequisites: NRSG 641A, 641B.

Psychiatric-Mental Health Nurse Practitioner Clinical Courses:

NRSG 640A Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSG 640, 640B.

NRSG 640B Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSG 640, 640A.

NRSG 641A Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: NRSG 640, 640A, 640B, or consent of instructor. Corequisites: NRSG 641, 641B.

NRSG 641B Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: NRSG 640, 640A, 640B, or consent of instructor. Corequisites: NRSG 641, 641A.

Women's Health Nurse Practitioner Specialty

Women's Health Nurse Practitioner Theory Courses:

NRSG 610 Women's Health Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSG 610A, 610B.

NRSG 611 Women's Health Theories for Advanced Practice Nursing II (3)

Prerequisites: Admission to the graduate nursing program, and NRSG 610, 610A, 610B, or consent of instructor. Corequisites: NRSG 611A, 611B.

NRSG 612 Women's Health Theories for Advanced Practice Nursing III (3)

Prerequisites: NRSG 611, 611A, 611B. Corequisite: NRSG 612A.

Women's Health Nurse Practitioner Clinical Courses:

NRSG 610A Women's Health Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program in the women's health nurse practitioner specialty and NRSG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSG 610, 610B.

NRSNG 610B Women's Health Clinical Studies for Advanced Practice Nursing II (3)
Prerequisites: Admission to graduate nursing program in the women's health nurse practitioner specialty and NRSNG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSNG 610, 610A.

NRSNG 611A Women's Health Clinical Studies for Advanced Practice Nursing III (3)
Prerequisites: Admission to the graduate nursing program and NRSNG 610, 610A, 610B, or consent of instructor. Corequisites: NRSNG 611, 611B.

NRSNG 611B Women's Health Clinical Studies for Advanced Practice Nursing IV (3)
Prerequisites: Admission to the graduate nursing program and NRSNG 610, 610A, 610B, or consent of instructor. Corequisites: NRSNG 611, 611A.

NRSNG 612A. Women's Health Clinical Studies for Advanced Practice Nursing V (3)
Prerequisites: Admission to the graduate nursing program, NRSNG 611, 611A, and 611B. Corequisite: NRSNG 612.

H SC 430 School Health Program (3)
Prerequisites: HSC 301.

EDSP 350 Education of Exceptional Individuals (3)
Prerequisites: None.

C D 373 Audiology I (3)
Prerequisites: CD 261.

Electives

Take 6 units from the following courses:
FCS 409, EDP 432, H SC 427, C D 432.

Health Services (School Nurse) Credential (code 600)

The Health Services (School Nurse) credential is required of registered nurses working in the California school system.

Prerequisites for Post-Master's Students

1. Copies of transcripts of Baccalaureate in Nursing and Masters in Nursing (with a Pediatric Nurse Practitioner or Family Nurse Practitioner specialty) degrees;
2. Copy of State of California RN licensure and entitlement as a Nurse Practitioner;
3. Three letters/checklists of reference;
4. Completion of the School of Nursing Graduate Program Application and university application.

Requirements

1. Completion of 12 units in approved upper division and graduate courses.
2. Complete the following with a grade of "B" or better:
NRSNG 536 Theories and Practice of School Nursing (3)
Prerequisites: Admission to the School Nurse Credential Program, NRSNG 535, CD 353 or 431/531 and HSC 430, or consent of instructor. Corequisites: NRSNG 536L.

NRSNG 536L School Nursing Clinical (3)
Prerequisites: Admission to the School Nurse Credential Program, NRSNG 535, CD 353 or 431/531 and HSC 430, or consent of instructor. Corequisites: NRSNG 536.

H SC 430 School Health Program (3)
Prerequisites: HSC 301.

C D 373 Audiology I (3)
Prerequisites: CD 261.

School Nurse Credential (code 600)

The School Nurse credential is required of registered nurses working in the California school system.

Prerequisites for Post-Baccalaureate Students

1. Completion of Post-Baccalaureate application for School Nurse Services Credential Program.
2. Official transcript of Baccalaureate degree in nursing from an accredited university. Candidates must have a minimum overall GPA of 3.0 in their undergraduate program.
3. Copy of State of California Registered Nurse License or eligibility for California Public Health Nursing Certificate.
4. Copy of current unexpired cardiopulmonary resuscitation card (adult, child, and infant) and copy of unexpired first aid card.
5. Basic Physical Assessment course completed within 5 years.
6. One-page written statement describing motivation and purpose for obtaining the Post-Baccalaureate School Nurse Service Credential.
7. Three letters of recommendation.
8. Completion of the School of Nursing Graduate Program Application and university application.

Requirements

1. Completion of 24 units in approved upper division and graduate courses.
2. Complete the following with a grade of "B" or better:
NRSNG 535 Advanced Pediatric Physical Assessment and Health Promotion (2)
Prerequisites: Admission to the pediatric nurse practitioner program or school nurse credential program or consent of the instructor. Corequisites: NRSNG 535L.
NRSNG 535L Advanced Pediatric Physical Assessment Laboratory (1)
Prerequisites: Admission to the pediatric nurse practitioner program or school nurse credential program or consent of the instructor. Corequisites: NRSNG 535.
NRSNG 536 Theories & Practice of School Nursing (3)
Prerequisites: Admission to the School Nurse Credential Program, NRSNG 535, CD 353 or 431/531 and HSC 430, or consent of instructor. Corequisites: NRSNG 536L.
NRSNG 536L School Nursing Clinical (3)
Prerequisites: Admission to the School Nurse Credential Program, NRSNG 535, CD 353 or 431/531 and HSC 430, or consent of instructor. Corequisites: NRSNG 536.

Courses (NRSNG)

LOWER DIVISION

199. Special Topics (3)

Overview of health care professions with a primary focus on the nursing profession, including, nursing history, educational preparation and the roles of nurses, ethics, patients' and nurses' Bill of Rights, medical terminology and math for health care professions.

Letter grade only (A-F).

200. Introduction to Nursing Health Care (6)

Prerequisites: Admission to the nursing program. Corequisites: NRSNG 202, 302, 305, NUTR 339 or consent of instructor. Support Courses: SOC 100 or PSY 100.

Introduction to physical and social science principles which provide basis for beginning level nursing theory and practice within the framework of nursing process, self care, and evidence based practice. Guided utilization of theory and skill in a clinical laboratory.

Letter grade only (A-F). Course fee may be required. (Lecture-discussion 3 hours, laboratory 9 hours)

202. Health Care Communication (2)

Prerequisites: Admission to the nursing program, or consent of instructor. Corequisites: NRSNG 200, 302, 305, NUTR 339. Support courses SOC 100 or PSY 100.

Conceptual foundations for the nurse-client relationship, therapeutic communication, responding to special client needs and professional issues within a clinically oriented cultural framework.

Letter grade only (A-F). (Lecture-discussion, 2 hours)

250. Intermediate Nursing Health Care (6)

Prerequisites: NRSNG 200, 202, 302, 305, NUTR 339, or consent of instructor. Corequisites: NRSNG 260, 312, or consent of instructor. Support courses: SOC 100 or PSY 100.

Application of recognized physical and social science principles and current research findings to intermediate level nursing theory. Guided laboratory experience to assist in gaining skills in application of selected nursing process activities in simulation and in direct patient care.

Letter grade only (A-F). Course fee may be required. (Lecture-discussion 3 hours, laboratory 9 hours)

260. Older Adult Health Care (4)

Prerequisites: NRSNG 200, 202, 302, 305, NUTR 339, or consent of instructor. Corequisites: NRSNG 250, 312, or consent of instructor. Support courses: SOC 100 or PSY 100.

Study of unique needs of aging population. Focus on health promotion and delivery of care. Application of nursing process and evidence based practice in caring for aging clients in a variety of settings.

Letter grade only (A-F). (Lecture-discussion, 2 hours, laboratory 6 hours)

UPPER DIVISION

302. Foundations of Clinical Pharmacology (2)

Prerequisites: BIOL 207, 208, CHEM 140, MICR 200 or consent of instructor. Corequisites: NRSNG 200, 202, 305, and NUTR 339.

Systematic study of medications used for major body system disorders, their pharmacologic and therapeutic classifications, modes of action, dosages, routes of administration, contraindications and toxic effects. Special emphasis is placed on clinical nursing implications and patient teaching.

Letter grade only (A-F).

305. Pathophysiology for Nurses (3)

Prerequisites: BIOL 207, 208, CHEM 140, MICR 200 or consent of instructor. Corequisites: NRSNG 200, 202, 302, and NUTR 339.

The study of the pathogenesis of body systems throughout the lifespan. Emphasis is on pathophysiological processes, understanding disease trajectory and interventions to limit disease progression. The importance of the nurses' role in reducing morbidity and mortality is emphasized. Not open for credit to students with credit in BIOL 304.

Letter grade only (A-F). (Lecture-Discussion 3 hours)

309. Dimensions of Professional Nursing (2)

Prerequisite: Admission to the ADN to BSN program. Support courses: CHEM 140, NRSNG 305.

Focuses on analysis of transition from a technical to a professional baccalaureate prepared nurse. Content includes: program and University orientation, role changes, ethics, dimensions of nursing, and training in completion of a research based paper and presentation.

Letter grade only (A-F). (Lecture-Discussion)

312. Health Assessment (3)

Prerequisites: NRSNG 200, 202, 302, 305, NUTR 339, or consent of instructor. Corequisites: NRSNG 250, 260, or consent of instructor. Support courses: SOC 100 or PSY 100.

Provides opportunity to learn and apply techniques of history taking and physical examination which are used by nurses in identification

of patient problems. Includes demonstration and practice of physical assessment methodology.

Letter grade only (A-F). (Lec-discussion 2 hrs, activities/lab 3 hrs)

331. Critical Care Nursing (5)

Prerequisites: NRSNG 250, 260, 312, or consent of instructor. Corequisites: NRSNG 341 or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Advanced study of acute and critically ill multicultural patients. Utilizes complex knowledge and applications required to provide comprehensive evidence based nursing care to patients and families experiencing critical illness or injury in a variety of settings.

Letter grade only (A-F). (Lecture-discussion 2 hours, Lab 9 hours)

341. Psychiatric/Mental Health Nursing (6)

Prerequisites: PSY 100, SOC 100, NRSNG 250, 260, 312, or consent of instructor. Corequisites: NRSNG 331, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Apply theories and implement evidence based care for clients with psychiatric/mental health issues, including psychosocial concepts; cultural, ethical, economic, and legal influences; and wellness of individuals and family groups. Development of professional role in psychiatric mental health nursing.

Letter grade only (A-F). (Lecture-discussion 3 hours, lab 9 hours)

353. Legal Aspects of Health Care (2)

Prerequisites: NRSNG 331, 341, or consent of instructor. Corequisites: NRSNG 361, 372, or consent of instructor.

Presents legal duties and responsibilities of nurses in delivery of health care services. Professional licensure regulations, scope of nursing practice, and ethical issues related to nursing practice are emphasized.

Letter grade only (A-F).

361. Child Health Care (7)

Prerequisites: NRSNG 331, 341, or consent of instructor. Corequisites: NRSNG 353, 372, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Foundational basis of care for pediatric patients from birth to adolescence based on developmental theory and evidence based practice. Assessment of physical, psychological, and cultural issues while planning, implementing, and evaluating age appropriate nursing care for well and ill children.

Letter grade only (A-F). (Lecture-discussion 4 hours, Laboratory 9 hours)

372. Health Care of the Childbearing Family (6)

Prerequisites: NRSNG 331, 341, or consent of instructor. Corequisites: NRSNG 353, 361, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Theory and application of health care needs for the child bearing family including health promotion and disease prevention. Gynecologic, obstetric, and women's health are explored within the context of cultural, psychosocial influences, and evidence based practice.

Letter grade only (A-F). (Lecture-discussion 3 hours, Lab 9 hours)

400. Health Care Delivery Systems (3)

Prerequisites: NRSNG 353, 361, 372, or consent of instructor; for RNs: NRSNG 305, 309, or consent of instructor. Corequisites: NRSNG 402 or consent of instructor.

Study of health care delivery systems with emphasis on role of nursing, less well defined problems and their causes, and in-depth study of impact of political, economic and social, ethical, and international issues of health care system.

Letter grade only (A-F).

402. Community Health Nursing (7)

Prerequisites: NRSNG 353, 361, 372, or consent of instructor; for RNs NRSNG 305, 312, or consent of instructor. Corequisites: NRSNG 400, or consent of instructor.

Satisfactory level ATI testing including remediation as appropriate.

Experience in working with diversified health problems of individuals, families, communities and systems with an emphasis on development of appropriate evidence based nursing interventions for underserved populations and communities. Multi-level disaster preparedness is addressed.

Letter grade only (A-F). (Lecture discussion 4 hours, 9 hours lab)

450. Nursing Research (3)

Prerequisites: NRSNG 400, 402. Corequisites: NRSNG 452 or 453 or 454.

Emphasizes application of research theory to evidence-based nursing practice, including ethics in nursing research and research process.

Letter grade only (A-F). (Lecture-Discussion)

451. Nursing Leadership and Management (2)

Prerequisites: NRSNG 400, 402. Corequisites: NRSNG 450, 452 or 453 or 454. Satisfactory level ATI testing including remediation as appropriate.

Principles of leadership and management as they apply to front line management positions in healthcare. Emphasis on understanding role and responsibilities of professional nurse as leader and manager of patient care services within a variety of settings.

Letter grade only (A-F). (Lecture-Discussion). Not open for credit to students with credit in NRSNG 450L.

452. Advanced Nursing Critical Care (6)

Prerequisites: NRSNG 400, 402, or consent of instructor. Corequisites: NRSNG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Provides advanced theoretical concepts and clinical experiences in critical care/emergency department with application of management/leadership theories to select populations. Integration of evidence based practice and critical care nursing knowledge critical to new professional roles.

Letter grade only (A-F). (Lecture-discussion 2 hrs, supervision 4 hrs)

453. Advanced Maternal Child Health in Nursing (6)

Prerequisites: NRSNG 400, 402, or consent of instructor. Corequisites: NRSNG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Provides advanced theoretical concepts and clinical experiences in maternal child nursing with application of management/leadership theories to select populations. Integration of evidence based practice and maternal child nursing knowledge critical to new professional roles.

Letter grade only (A-F). (Lecture-discussion 2 hrs, supervision 4 hrs)

454. Advanced Medical, Surgical, Community, Mental Health Nursing (6)

Prerequisites: NRSNG 400, 402, or consent of instructor. Corequisites: NRSNG 450, 451, or consent of instructor. Satisfactory level ATI testing including remediation as appropriate.

Provides advanced theoretical concepts and clinical experiences in a variety of nursing specialties with application of management/leadership theories to select populations. Integration of evidence based practice and nursing knowledge critical to new professional roles.

Letter grade only (A-F). (Lecture-discussion 2 hrs, supervision 4 hrs)

458. NCLEX-RN Preparatory Course (1)

Prerequisites: NRSNG 400, 402. Corequisites: NRSNG 450, 452 or 453 or 454.

Provides the student with competencies and strategies to enhance transition from student to baccalaureate prepared nurse. Students gain understanding of the role of the National Council of State Boards of Nursing (NCSBN) in developing and administering the RN licensing examination.

Credit/No Credit grading only. Credit reflects work at the level of "B" or better.

481. Parenting (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Effective parenting with emphasis on common parenting concerns and developmental tasks of parents and children.

482. Health Assessment of the Aging Client (3)

Prerequisites: GERN 400I or equivalent and upper standing or consent of instructor.

Assessment of physical, psycho-social status of aging client as they affect health and well being, and identification of actual or potential health related problems using a variety of tools and techniques.

Same course as GERN 482. Not open for credit to students with credit in GERN 482. (Lecture-Discussion, 3 hrs.)

490. Independent Study (1-3)

Prerequisite: Consent of any nursing faculty. Students who have made arrangements with a faculty advisor for appropriate learning objectives may enroll.

May be repeated to a maximum of 6 units.

499./599. Selected Topics in Nursing (1-3)

Prerequisite: Consent of instructor.

Topics consistent with contemporary nursing or curricular trends.

May be repeated to a maximum of 3 units with different topics. Topics announced in the *Schedule of Classes*.

GRADUATE LEVEL

502. Genetics in Nursing Practice (3)

Prerequisites: Senior standing or graduate standing or consent of instructor.

Overview of genetics implications for nurses as they provide health services to clients of all ages, diverse ethnic, cultural, life-style and geographic areas. Will explore basic mechanisms of genetic inheritance and impact that genetics has on health promotion, disease prevention and policy implications.

Letter grade only (A-F).

510. Advanced Pathophysiology for Advanced Practice Nursing (2)

Prerequisites: Admission to the graduate nursing program and completion of upper division pathophysiology course, or consent of instructor.

Builds upon knowledge developed in undergraduate Pathophysiology course. Integration and communication between organs systems will be explored to gain greater knowledge of disturbances at cellular level which predictably result in organ and system dysfunction.)

Letter grade only (A-F). Lecture-Activity)

511A. Advanced Pathophysiology for Clinical Nurse Specialists (2)

Prerequisite: Admission to the Acute Care Adult CNS graduate nursing program or consent of instructor.

Presents the principles underlying the disturbance of human functional and homeostatic mechanisms. Disturbances at the cellular level are explored to enable the student to build an understanding of resultant aberrant organ and system function.

Letter grade only (A-F).

520. Advanced Pharmacology for Advanced Practice Nursing (3)

Prerequisites: Admission to the graduate nursing program, or consent of instructor.

Deals with use of drugs in providing perinatal care, family planning services and/or routine health care.

Letter grade only (A-F).

521A. Advanced Pharmacology for Clinical Nurse Specialists (CNS) (3)

Prerequisite: Admission to the Acute Care Adult CNS graduate nursing program.

Designed to provide advanced knowledge about pharmacological agents utilized in the management of a variety of acute care clinical situations. Content will focus on the role of CNS.

Letter grade only (A-F).

530. Advanced Physical Assessment for Advanced Practice Nursing (2)

Prerequisites: Admission to the graduate nursing program and completion of basic physical assessment course, or consent of instructor.

Designed for advanced practice nurses and a prerequisite to each specialty track. Through classroom instruction, web based instruction and self-assessment, and on-site clinical review and practice, advanced assessment and diagnostic skills are developed.

Letter grade only (A-F).

530L. Advanced Physical Assessment Laboratory (1)

Prerequisites: Admission to graduate program or consent of instructor. Corequisites: NRS 530.

Application of theoretical knowledge of advanced physical assessment in supervised clinical settings appropriate to the specialty of the advanced practice nursing student

Credit/No Credit grading only. (Technical activities/laboratory 3 hours)

535. Advanced Pediatric Physical Assessment and Health Promotion (2)

Prerequisites: Admission to the pediatric nurse practitioner program or school nurse credential program or consent of the instructor. Corequisites: NRS 535L.

Theoretical content for the pediatric nurse practitioner and school nurse related to advanced pediatric health assessment and promotion. Developmental, cultural, spiritual, and psychosocial dimensions of the child and family are incorporated throughout the assessment process.

Letter grade only (A-F). (Seminar 1 hour, laboratory 2 hours)

535L. Advanced Pediatric Physical Assessment Laboratory (1)

Prerequisites: Admission to the pediatric nurse practitioner program or school nurse credential program or consent of the instructor. Corequisites: NRS 535.

Application of theoretical knowledge of advanced pediatric physical assessment in supervised clinical settings appropriate to the specialty of the advanced practice nursing student.

Letter grade only (A-F). (Clinic off-campus, 3 hours)

536. Theories and Practice of School Nursing (3)

Prerequisites: Admission to the School Nurse Credential Program, NRS 535, CD 353 or 431/531 and HSC 430, or consent of Instructor. Corequisites: NRS 536L.

Focuses on normal/pathological conditions and the organizational, philosophical, and legal aspects in the delivery of school health programs as well as emphasizing the theoretical bases for the practice of school nursing in the school setting.

Letter grade only (A-F).

536L. School Nursing Clinical (3)

Prerequisites: Admission to the School Nurse Credential Program, NRS 535, CD 353 or 431/531 and HSC 430, or consent of instructor. Corequisites: NRS 536.

The clinical component of the school nurse program. The student will demonstrate the application of theory within the school setting. The focus of the course is on the implementation of the role of the school nurse.

Credit/No Credit grading only. (9 hours clinical/week)

540. Health Care Economics, Policy and Information Management for Advanced Practice Nursing (2)

Prerequisites: Admission to graduate nursing program or consent of instructor.

Description: Designed to provide an understanding of the economic and political environment of US healthcare system. Principles of organizational theory, health policy, advocacy, informatics and technology are applied within context of advanced practice role. Issues related to healthcare economics are explored.

Letter grade only (A-F). (Lecture-Discussion)

550. Human Diversity and Psychosocial Issues in Health Care for Advanced Practice Nursing (2)

Prerequisites: Admission to graduate nursing program or consent of instructor.

Focus on understanding and developing advanced practice nurses in providing culturally appropriate care to individuals, families, groups, and communities with diverse backgrounds. Patterns of human interaction that foster and neglect health and quality of life are analyzed. Contemporary issues are explored.

Letter grade only (A-F). (Lecture-Discussion)

551A. Spanish Language Competency for Advanced Nursing Practice (3)

Prerequisite: Consent of instructor.

Provides foundational knowledge and skills to enable advanced practice nurse (APN) to learn and apply principles of cultural competency and Spanish language skills to role of nurse practitioner in conducting a health history and physical assessment for diverse Spanish speaking populations.

551B. Spanish Language Competency for Advanced Nursing Practice (3)

Prerequisite: NRS 551A or consent of instructor.

Principles of cultural competency and Spanish language skills for diagnosing and treating Spanish speaking patients: focuses on hematology, musculoskeletal II, cardiovascular, neurology, dermatology I & II, family violence/substance abuse, nutrition/weight management, developmental disorders, genetics, mental health, ophthalmology, and infectious diseases.

556A. Conditions of Learning and Instruction in Nursing (3)

Application of theories of learning and instruction to patient/student teaching-learning situations. Content covered includes conditions of learning, models of instruction, transfer of learning, behavior modification techniques, variables influencing learning and instruction, and evaluation of instruction.

Letter grade only (A-F).

556B. Curriculum Development in Nursing (3)

A systematic study of principles of curriculum development as they apply to different types of nursing programs. Focuses on relationship among philosophy, objectives, selection and organization of learning experiences and evaluative process.

Letter grade only (A-F).

556C. Microteaching in Nursing (3)

Prerequisites: Graduate standing; NRS 556A and 556B.

Focuses on instructional skills and the application of instruction in the practice of nursing within a microteaching laboratory setting. Supervised teaching situations are used to practice educational strategies specific to nursing education settings.

Letter grade only (A-F).

556L. Theoretical Concepts in Nursing Education: Practice Teaching (4)

Prerequisites: NRS 556A or consent of instructor.

Application of instructional skills and theories of learning in professional nursing settings. Working in actual supervised teaching situations, students practice skills that can be utilized in a variety of educational situations.

Letter grade only (A-F)

559. Nursing Administration (3)

Application of management theories to administration, organizational theory, structure and culture, leadership theories and decision-making processes in clinical settings. Legal-ethical parameters of nursing administration are threaded throughout course.

Letter grade only (A-F).

560. Foundations of Theoretical and Professional Roles for Advanced Practice Nurses (2)

Prerequisites: Admission to graduate nursing program or instructor consent.

Study of theoretical frameworks and professional roles influencing advanced practice nursing. Analyze and implement major theoretical frameworks for advanced practice. Begin dynamic process of role development by exploring role boundaries and collaborative practice.

Letter grade only (A-F). (Lecture-Discussion)

565. Theories of Community/Public Health Nursing (3)

Prerequisites: Admission to graduate nursing program and NRSG 560, or consent of instructor.

Analysis, synthesis and application of theories from nursing, public health, and other disciplines to community/public health nursing practice. Exploration of population-focused theory and provision of health promotion and prevention services to underserved populations and communities.

(Seminar, 3 hours) Letter grade only (A-F).

590. Independent Study (1-3)

Prerequisite: Consent of a nursing faculty member.

Independent research under supervision of a nursing faculty member.

Letter grade only (A-F).

596. Research Methods in Nursing (3)

Prerequisites: Admission to the graduate nursing program and upper division statistics, or consent of instructor.

Nursing research process, including use and testing of nursing theories, development of research proposals including conceptualization of problem, literature search, study design, data collection, analysis and interpretation of findings.

Letter grade only. (A-F). (Lecture-Discussion.)

599./499. Selected Topics in Nursing (1-3)

Prerequisite: Consent of instructor.

Topics consistent with contemporary nursing or curricular trends.

Letter grade only (A-F). May be repeated to a maximum of 3 units with different topics. Topics announced in the *Schedule of Classes*.

600. Theories for Advanced Nursing Practice in Adult Care Clinical Nurse Specialist I: Patient/Family (3)

Prerequisites: NRSG 510, 520, 590 (1 unit), 530, 530L, 540, 550, 560, 596, 556A, 556B, 556C and 556L or consent of instructor. Corequisites: NRSG 600L.

Emphasis is on the Clinical Nurse Specialist's (CNS) sphere of influence impacting the health outcomes of diverse patients with multiple, complex health problems and their families by developing advanced competencies necessary for the management of multiple therapeutic interventions.

Letter grade only (A-F). Not open for credit to students with credit in NRSG 673.

600L. Clinical Studies for the CNS in Adult Care I: Patient/Family (3)

Prerequisites: NRSG 510, 520, 590 (1 unit), 530, 530L, 540, 550, 560, 596, 556A, 556B, 556C and 556L or consent of instructor. Corequisites: NRSG 600.

Focuses on implementation of CNS roles of teacher, expert clinician, manager of care, and research in a variety of acute and chronic care settings. Sphere of influence is primarily patient and family related.

Letter grade only (A-F). Not open for credit to students with credit in NRSG 673L.

601. Theories for Advanced Nursing Practice in Adult Care Clinical Nurse Specialist II: Staff Development (3)

Prerequisites: NRSG 600, 600L or consent of instructor.

Corequisites: NRSG 601L.

Deals with the development of advanced skills and competencies in the management of staff development, educational programs, motivation, consultation, and personnel ethics as they apply to the CNS's sphere of influence in staff development.

Letter grade only (A-F). Not open for credit to students with credit in NRSG 674.

601L. Clinical Studies for the CNS in Adult Care II: Staff Development (3)

Prerequisites: NRSG 600, 600L, or consent of instructor.

Corequisites: NRSG 601.

Focuses on the clinical implementation of the CNS roles of educator, expert clinician, manager of care, and researcher in a variety of acute and chronic care settings as they apply to the CNS's sphere of influence in staff development.

Letter grade only (A-F). Not open for credit to students with credit in NRSG 674L.

602. Theories for Advanced Nursing Practice in Adult Care Clinical Nurse Specialist III: Organizational Systems (3)

Prerequisites: NRSG 601, 601L, or consent of instructor.

Corequisites: NRSG 602L.

Focuses on development of advanced skills and competencies in CNS roles as managers of care, change agents, consultants and teachers in a variety of acute and chronic care settings as they apply to CNS's sphere of influence in organizational systems.

Letter grade only (A-F). Not open for credit to students with credit in NRSG 675.

602L. Clinical Studies for the CNS in Adult Care III: Organizational Systems (3)

Prerequisites: NRSG 601, 601L, or consent of instructor.

Corequisites: NRSG 602.

Focuses on clinical implementation of CNS roles as managers of care, change agents, consultants and teachers in a variety of acute and chronic care settings as they apply to CNS's sphere of influence in organizational systems.

Letter grade only (A-F). Not open for credit to students with credit in NRSG 675L.

610. Women's Health Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSG 610A, 610B.

Epidemiology, etiology, differential diagnoses, management, and prevention of common health problems of women before, during, and after the childbearing cycle in ambulatory health care settings with a focus on the role of the nurse practitioner.

Letter grade only (A-F). Not open for credit to students with credit in NRSG 667.

610A. Women's Health Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program in the women's health nurse practitioner specialty and NRSG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSG 610, 610B.

One of two courses designed to apply theoretical knowledge and laboratory skills in the management of common health problems of women before, during, and after the childbearing cycle in ambulatory health care settings. Emphasizes the role of the nurse practitioner in gynecology.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRSG 667A.

610B. Women's Health Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program in the women's health nurse practitioner specialty and NRSNG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSNG 610, 610A.

One of two courses designed to apply theoretical knowledge and laboratory skills in the management of common health problems of women before, during, and after the childbearing cycle in ambulatory health care settings. Emphasizes the role of the nurse practitioner in obstetrics.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 667B.

611. Women's Health Theories for Advanced Practice Nursing II (3)

Prerequisites: Admission to the graduate nursing program and NRSNG 610, 610A, 610B, or consent of instructor.

Corequisites: NRSNG 611A, 611B.

Epidemiology, etiology, differential diagnoses, management, and prevention of complex health problems of women before, during, and after the childbearing cycle in ambulatory health care settings with a focus on the role of the nurse practitioner.

Letter grade only (A-F). Not open for credit to students with credit in NRSNG 668.

611A. Women's Health Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: Admission to the graduate nursing program and NRSNG 610, 610A, 610B, or consent of instructor.

Corequisites: NRSNG 611, 611B.

One of two courses designed to apply theoretical knowledge and laboratory skills in the management of complex health problems of women before, during, and after the childbearing cycle in ambulatory health care settings. Emphasizes the role of the nurse practitioner in gynecology.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 668A.

611B. Women's Health Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: Admission to the graduate nursing program and NRSNG 610, 610A, 610B, or consent of instructor.

Corequisites: NRSNG 611, 611A.

One of two courses designed to allow the student to apply the knowledge and skills of caring for complex health problems of women before, during, and after the childbearing cycle in ambulatory health care settings with a focus on the role of the nurse practitioner. This clinical course focuses on obstetrics.

Letter grade only (A-F). Not open for credit to students with credit in NRSNG 668B.

612. Women's Health Theories for Advanced Practice Nursing III (3)

Prerequisites: NRSNG 611, 611A, 611B. Corequisite: NRSNG 612A.

Epidemiology, etiology, differential diagnoses, management, and prevention of multifaceted health problems of women before, during, and after the childbearing cycle in ambulatory health care settings with a focus on the role of the nurse practitioner.

Letter grade only A-F. (3 hours discussion)

612A. Women's Health Clinical Studies for Advanced Practice Nursing V (3)

Prerequisites: Admission to the graduate nursing program, NRSNG 611, 611A, and 611B. Corequisite: NRSNG 612.

Designed to allow students the opportunity to apply theoretical knowledge of multifaceted women's health problems in supervised clinical practice in ambulatory health care settings with a focus on the role of the women's health nurse practitioner.

Letter grade only (A-F).

620. Family Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSNG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSNG 620A, 620B.

Presents epidemiology, pathophysiology, clinical presentation, diagnosis, and management of common diseases across life span. Role of family nurse practitioner in health promotion and disease prevention emphasized.

Letter grade only (A-F). Not open for credit to students with credit in NRSNG 682.

620A. Family Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSNG 510, 520, 530, 530L, 540, 550, 560, 596, or consent of instructor.

Corequisites: NRSNG 620, 620B.

Allows opportunity to apply theoretical knowledge in supervised clinical settings in family practice. An emphasis placed on socialization into family nurse practitioner role.

Credit/No Credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 682A.

620B. Family Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program and NRSNG 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRSNG 620, 620A.

Second of two clinical courses that allows expanded theoretical knowledge in supervised clinical settings in family practice. Emphasis placed on socialization into family nurse practitioner role.

Credit/No Credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 682B.

621. Family Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSNG 620, 620A, 620B, or consent of instructor. Corequisites: NRSNG 621A, 621B.

Presents epidemiology, pathophysiology, clinical presentation, diagnosis, and management of common diseases across life span. Role of family nurse practitioner in health promotion and disease prevention emphasized.

Letter grade only (A-F). Not open for credit to students with credit in NRSNG 683.

621A. Family Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: NRSNG 620, 620A, 620B, or consent of instructor. Corequisites: NRSNG 621, 621B.

Allows additional opportunity to apply theoretical knowledge in supervised clinical settings in family practice. Emphasis placed on socialization into family nurse practitioner role.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 683A.

621B. Family Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: NRSNG 620, 620A, 620B, or consent of instructor. Corequisites: NRSNG 621, 621A.

Second of two clinical courses designed to allow additional opportunity to apply theoretical concepts and expand clinical knowledge.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 683B.

630. Adult/Geriatric Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRSNG 510, 520, 530, 530L, 540, 550, 560, 596, or consent of instructor. Corequisites: NRSNG 630A, 630B.

Epidemiology, etiology, differential diagnoses, management and prevention of selected health problems of adult/geriatric patient in primary, secondary and tertiary settings and role of nurse practitioner in these settings in a changing healthcare environment. Letter grade only (A-F). Not open for credit to students with credit in NRS 686.

630A. Adult/Geriatric Clinical Studies in Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560, 596, or consent of instructor.

Corequisites: NRS 630, 630B.

Designed to allow adult and geriatric nurse practitioner student to apply theoretical knowledge in supervised clinical practice with adult and geriatric patients. Emphasis placed on beginning socialization into nurse practitioner role.

Credit/No Credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRS 686A.

630B. Adult/Geriatric Clinical Studies in Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560, 596, or consent of instructor.

Corequisites: NRS 630, 630A.

Designed to allow adult and geriatric nurse practitioner students to apply theoretical knowledge in supervised clinical practice with adult and geriatric patients. Emphasis is placed on beginning socialization into nurse practitioner role.

Credit/No Credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRS 686B.

631. Adult/Geriatric Theories for Advanced Practice Nursing II (3)

Prerequisites: NRS 630, 630A, 630B, or consent of instructor. Corequisites: NRS 631A, 631B.

Epidemiology, etiology, differential diagnoses, management and prevention of additional selected health problems of adult/geriatric patient in primary, secondary and tertiary settings, and a further delineation of role of nurse practitioner in these changing healthcare environment.

Letter grade only (A-F). Not open for credit to students with credit in NRS 687.

631A. Adult/Geriatric Clinical Studies in Advanced Practice Nursing III (3)

Prerequisites: NRS 630, 630A, 630B, or consent of instructor. Corequisites: NRS 631, 631B.

Designed to allow adult and geriatric nurse practitioner students to apply theory into the clinical practice with the adult-geriatric patients. Emphasis is placed on continuing to socialize into the nurse practitioner role.

Letter grade only (A-F). (Laboratory 9 hours). Not open for credit to students with credit in NRS 687A.

631B. Adult/Geriatric Clinical Studies in Advanced Practice Nursing IV (3)

Prerequisites: NRS 630, 630A, 630B, or consent of instructor. Corequisites: NRS 631, 631A.

Second of two designed to allow adult/geriatric nurse practitioner student to apply theory into clinical practice with adult and geriatric patients. Emphasis placed on continuing to socialize into nurse practitioner role.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRS 687B.

640. Psychiatric-Mental Health Theories for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRS 640A, 640B.

Study of pathology, diagnostic methods, indications for referral,

and management for nurse practitioner students of medical, psychological, and social problems of clients of psychiatric facilities and community mental health agencies.

Letter grade only (A-F). Not open for credit to students with credit in NRS 688.

640A. Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRS 640, 640B.

First clinical practicum for nurse practitioner students that focuses on application of mental health concepts. Theories from prerequisite and concurrent courses are applied and tested.

Credit/No credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRS 688A.

640B. Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: Admission to graduate nursing program and NRS 510, 520, 530, 530L, 540, 550, 560 and 596, or consent of instructor. Corequisites: NRS 640, 640A.

Second clinical practicum for nurse practitioner students that focuses on application of mental health concepts. Theories from prerequisite and concurrent courses are applied and tested.

Credit/No credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRS 688B.

641. Psychiatric-Mental Health Theories for Advanced Practice Nursing II (3)

Prerequisites: NRS 640, 640A, 640B, or consent of instructor. Corequisites: NRS 641A, 641B.

Advanced study of pathology, diagnostic methods, indications for referral, and management for nurse practitioner students of medical, psychological, and social problems of clients of psychiatric facilities and community mental health agencies.

Letter grade only (A-F). Not open for credit to students with credit in NRS 689.

641A. Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: NRS 640, 640A, 640B, or consent of instructor. Corequisites: NRS 641, 641B.

First supervised clinical practicum for nurse practitioner students focused on application of complex mental health concepts. Theories from prerequisite and concurrent nursing theory courses are applied and tested in clinical setting.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRS 689A.

641B. Psychiatric-Mental Health Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: NRS 640, 640A, 640B, or consent of instructor. Corequisites: NRS 641, 641A.

Second supervised clinical practicum for nurse practitioner students focused on application of complex mental health concepts.

Theories from prerequisite and concurrent nursing theory courses are applied and tested in clinical setting.

Letter grade only (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRS 689B.

650. Pediatric Theories for Advanced Nursing I (3)

Prerequisites: NRS 510, 520, 535, 535L, 540, 550, 560, and 596. Corequisites: NRS 650A and 650B.

Theoretical based content for providing care in the role of a pediatric nurse practitioner. Content focuses on preventive health care, well child care, disease management, professional issues, and related research.

Letter grade only (A-F). (Discussion 3 hours) Not open for credit to students with credit in NRS 684.

650A. Pediatric Clinical Studies for Advanced Practice Nursing I (3)

Prerequisites: NRSNG 510, 520, 535, 535L, 540, 550, 560, and 596 or consent of instructor. Corequisites: NRSNG 650 and 650B.

First clinical course of pediatric nurse practitioner program. Emphasis on application of theory to preventative health care, management of well child and common pediatric problems.

Credit/No Credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 684A.

650B. Pediatric Clinical Studies for Advanced Practice Nursing II (3)

Prerequisites: NRSNG 510, 520, 535, 535L, 540, 550, 560, and 596. Corequisites: NRSNG 650 and 650A.

Second clinical course of pediatric nurse practitioner program. Emphasis on application of theory to preventative health care, management of well child and common pediatric problems.

Credit/No Credit grading only. (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 684B.

651. Pediatric Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSNG 650, 650A, 650B. Corequisites: NRSNG 651A and 651B.

Diagnosis, treatment and management of common pediatric conditions/disorders by the pediatric nurse practitioner. The specific topics covered are the management of common pediatric diseases including: infectious, ENT, ophthalmic, dental, respiratory, dermatologic, gastrointestinal, genitourinary, and musculoskeletal disorders.

Letter grade only (A-F). (Discussion 3 hours) Not open for credit to students with credit in NRSNG 685.

651A. Pediatric Clinical Studies for Advanced Practice Nursing III (3)

Prerequisites: NRSNG 650, 650A, and 650B. Corequisites: NRSNG 651 and 651B.

First of two clinical courses that deal with application of theory related to assessment, diagnosis, and management by the pediatric nurse practitioner of common pediatric health care problems in clinical settings.

Letter grade only. (A-F). (Laboratory 9 hours) Not open for credit to students with credit in NRSNG 685A.

651B. Pediatric Clinical Studies for Advanced Practice Nursing IV (3)

Prerequisites: NRSNG 650, 650A, and 650B. Corequisites: NRSNG 651 and 651A.

Application of theory related to assessment, diagnosis, and management by the pediatric nurse practitioner of common pediatric health care problems in clinical settings.

Letter grade only. (A-F). (Laboratory 9 hours) Not open cor credit to students with credit in NRSNG 685B.

652. Pediatric Theories for Advanced Practice Nursing III (3)

Prerequisites: NRSNG 651, 651A, 651B. Corequisites: NRSNG 652A.

Diagnosis, treatment, and management of complex and chronic pediatric diseases by the pediatric nurse practitioner. The specific topics covered are the management of endocrine, metabolic, cardiac, hematologic, atopic, rheumatoid, autoimmune, neurologic, genetic, and mental disorders in children.

Letter grade only (A-F). (3 hours discussion)

652A. Pediatric Clinical for Advanced Practice Nursing V (3)

Prerequisites: NRSNG 651, 651A, 651B. Corequisites: NRSNG 652.

Demonstrate, at an advanced level, the application of theory from previous and concurrent course work concerning assessment,

diagnosis, and management of common and chronic pediatric health care problems.

Letter grade only (A-F). (9 hours laboratory)

660B. Theoretical Base for Advanced Nursing Practice (3)

Prerequisites: Admission to graduate nursing program, Pathophysiology, and Physical Assessment, or consent of instructor.

Relationship of psycho-social theory to health care with an emphasis on application of theory to clinical practice. Various sections will focus on different areas of clinical interest.

Letter grade only (A-F).

670. Community Health Theories for Advanced Nursing Practice I (3)

Prerequisites: Admission to graduate nursing program and NRSNG 565, or consent of instructor. Corequisites: NRSNG 670L.

Examination of Community/Public Health Nursing roles in health program and policy planning for aggregates, populations and communities. Theories of community programs and health policy planning explored for underserved and ethnically diverse populations.

(Seminar 3 hours). Letter grade only (A-F).

670L. Advanced Community/Public Health Nursing Clinical I (3)

Prerequisites: Admission to graduate nursing program and NRSNG 565 or consent of instructor. Corequisite: NRSNG 670.

Experiences in selected community health settings to prepare for advanced nursing practice focus on assessment, planning, and policy development for culturally diverse populations.

Credit/No Credit grading only. (Clinical 9 hours)

671. Community Health Theories for Advanced Practice Nursing II (3)

Prerequisites: NRSNG 670 and 670L or consent of instructor. Corequisites: NRSNG 671L.

Examination of the Community/Public Health Nursing (C/PHN) roles in health program and policy implementation for aggregates, populations, and communities. Theories of community health programs and health policy implementation will be explored for underserved and ethnically diverse populations.

(Seminar, 3 hours) Letter grade only (A-F).

671L. Advanced Community/Public Health Nursing Clinical II (3)

Prerequisite(s): NRSNG 670 and 670L, or consent of instructor. Corequisites: NRSNG 671.

A laboratory course offering clinical experiences in selected community health settings to prepare the student for advanced nursing practice.

(Clinical 9 hours) Letter grade only (A-F).

672. Advanced Community Health Theories for Advanced Practice Nursing III (3)

Prerequisites: NRSNG 671, 671L or consent of instructor. Corequisites: NRSNG 672L.

Focus on leadership role of the C/PHN in the integration of nursing and public health theories in evaluation and internalization strategies for health programs and policies for underserved and ethnically diverse populations.

Letter grade only (A-F).

672L. Community/Public Health Clinical Studies for Advanced Nursing Practice III (3)

Prerequisite(s): NRSNG 671, 671L or consent of instructor. Corequisites: NRSNG 672.

Clinical course offering leadership experiences in selected community health settings to prepare the student for advanced nursing practice in program and health policy evaluation.

Letter grade only (A-F).

676. Administrative Theories for Advanced Nursing Practice I (3)

Prerequisites: NRS 559, HCA 510, 515 or consent of instructor. Corequisites: NRS 676L.

Focus on principles and theories of management that deal with the human element in nursing administration. The specific topics covered are the allocation of human resources and budgeting, stress management, motivation, morale and job satisfaction, conflict management and collective bargaining.

Letter grade only (A-F). (Discussion)

676L. Administrative Theories for Nursing Practice I (3)

Prerequisites: NRS 559, HCA 510, HCA 515 or consent of instructor. Corequisites: NRS 676.

Application of theories and principles of allocation of resources to administration of nursing services and participating in dealing with factors influencing human performance in nursing administration, such as stress management, motivation, job satisfaction, conflict resolution and collective bargaining.

Letter grade only (A-F). (Technical activities/laboratory 9 hours)

677. Administrative Theories for Advanced Nursing Practice II (3)

Prerequisites: NRS 676, 676L, HCA 502, 505 or consent of instructor. Corequisites: NRS 677L.

The administration of nursing services in different types of health care delivery systems with emphasis on managed care and issues such as long-term care delivery systems, health care policy and health care reform will be discussed in great depth.

Letter grade only (A-F). (Discussion)

677L. Advanced Administrative Nursing Clinical II (3)

Prerequisites: NRS 676, 676L, HCA 502, 505 or consent of instructor. Corequisites: NRS 677, HCA 537.

The application of principles related to managed care to administration of nursing services. The learner will be an active participant in dealing with issues related to long-term care, health care policy and health care reform.

Letter grade only (A-F). (Technical activities/laboratory 9 hours)

678. Administrative Theories for Nursing Practice III (3)

Prerequisites: NRS 677, 677L, HCA 537, or the consent of the instructor. Corequisites: NRS 678L.

Focus on selected principles and theories of learning and instruction as they relate to staff development, competency-based education and program evaluation. Principles related to marketing nursing services, risk management and career development are operationalized.

Letter grade only (A-F). (Discussion)

678L. Advanced Administrative Nursing Clinical III (3)

Prerequisites: NRS 677, 677L, HCA 537 or consent of instructor. Corequisites: NRS 678.

The application of management principles of staff development, competency-based education, program evaluation, marketing, risk management and career development to administration of nursing services in any health care setting.

Letter grade only (A-F). (Technical activities/laboratory 9 hours)

680A, B, C. Theories for Extended Nursing Practice (3,3,3)

Prerequisites: Admission to graduate nursing program, a physical assessment course and upper division pathophysiology course, or consent of instructor. Corequisites: NRS 680L.

Normal and pathological conditions and management theory base applicable for advanced nurse in clinical areas of concentration.

May be repeated to a maximum of 6 units in each suffix. Letter grade only (A-F).

680L. Clinical Studies in Nursing (3)

Prerequisites: Admission to graduate nursing program, a physical assessment course and upper division pathophysiology course, or consent of instructor. Corequisites: NRS 680A, B, or C.

A laboratory course offering clinical experience in selected settings to prepare for advanced nursing practice.

May be repeated to a maximum of 9 units with different topics.

692. Nursing Directed Project (1-4)

Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRS 596 and consent of school graduate advisor.

Planning, preparation and completion of a directed project appropriate to advanced practice nursing.

May be repeated to a maximum of 4 units in different semesters.

Letter grade only (A-F).

695. Professional Literature (3)

Prerequisites: NRS 510, 520, 530, 530L, 540, 550, 560, 596, 680 class series and NRS 680L or 680 A/B class series, and advancement to candidacy, or consent of instructor and graduate advisor.

Critical analysis and synthesis by comparative review of professional literature in nursing practice, theory, and research.

Not open for credit to students taking NRS 698. Letter grade only (A-F).

698. Thesis (1-4)

Prerequisites: Admission to graduate nursing program, advancement to candidacy, NRS 596, consent of school graduate advisor.

Planning, preparation and completion of a thesis in clinical nursing.

Letter grade only (A-F).

701. Biostatistics for Advanced Nursing Practice (3)

Prerequisite/Corequisites: Admission to the DNP program.

Provides DNP students with the necessary skills and knowledge to interpret research that employ multivariate statistical techniques. Topics include choosing correct statistical methods; descriptive, univariate and multivariate statistics; probability; estimation and hypothesis testing; and use of a statistical software package.

Letter grade only (A-F).

702. Leadership, Management and Economics in Advanced Nursing Practice (3)

Prerequisite/Corequisites: Admission to the DNP program.

Emphasis on analyzing leadership theories and organizational models within healthcare delivery systems. Principles of change theory, financial management, strategic planning, program development and implementation are evaluated. Application focuses on fiscally sound leadership management in providing healthcare for individuals and populations.

Letter grade only (A-F).

703. Epidemiology and Clinical Prevention (3)

Prerequisite/Corequisites: Admission to the DNP program.

Emphasis on application of epidemiological principles and approaches related to health and illness in at-risk populations. Epidemiological models and inquiry are used to determine population needs and promote interventions to enhance health-related quality of life and prevent illness.

Letter grade only (A-F).

704. Informatics in Healthcare (3)

Prerequisite/Corequisites: Admission to the DNP program.

Use of information systems/technology resources to implement quality improvement initiatives and support practice and administrative decision-making. Topics include standards and principles for selecting and evaluating information systems and patient care technology, and related ethical, regulatory, and legal issues.

Letter grade only (A-F).

705. Advanced Evidence-Based Practice in Nursing (3)

Prerequisite/Corequisites: Admission to the DNP program.

Advanced research course focused on reading, interpreting, and evaluating studies using quantitative and qualitative methods in nursing and other health care disciplines; develop initial literature review for integrative scholarship proposal.

Letter grade only (A-F)

706. Healthcare Policy, Ethics, and Advocacy for Nurses (3)

Prerequisite/Corequisites: Admission to the DNP program

Critical appraisal of how national and international health policies, advocacy efforts, ethics, and economics impact health care delivery and its outcomes and influence advanced practice nursing. Development of health care policy, delivery models, reimbursement mechanisms, and economic perspectives are investigated.

Letter grade only (A-F).

707. DNP Clinical Practicum: Professional Role Development (3)

Prerequisite/Corequisites: Admission to the DNP program.

Supervised clinical opportunities in selected clinical settings to enhance professional role development in advanced nursing practice. Synthesis of prior graduate learning experience; focus on evidence-based best practices to enhance safety, quality and efficiency in the student's nursing specialty area.

Letter grade only (A-F). May be repeated to a maximum of 12 units in different semesters. (Seminar 1 hour, Clinical 6 hours)

797A. Integrative Clinical Scholarship I: Evidence-Based Practice (3)

Prerequisite/Corequisites: Advanced Evidence-Based Practice in Nursing

Advanced research/laboratory course focused on analysis of history/role of DNP, role transition, interprofessional collaboration and leadership, clinical microsystems thinking, project development and management within healthcare systems. Includes principles of grant writing and development of DNP project proposal.

Letter grade only (A-F). (Seminar 1 hour, Clinical 6 hours)

797B. Integrative Clinical Scholarship II: Evidence-Based Practice (3)

Prerequisite/Corequisites: NRS 797A.

Implementation of DNP project, within a clinical setting, using integration of theory and evidence-based change from nursing science and other disciplines. Emphasizes incorporation of principles of practice inquiry, evidence-based practice, and/or practice inquiry. Integration of core DNP concepts and competencies.

Letter grade only (A-F).

797C. Integrative Clinical Scholarship III: Evidence-Based Practice (3)

Prerequisite: NRS 797B.

Evaluation and completion of DNP project. Emphasizes incorporation of principles of practice inquiry, evidence-based practice, and/or practice inquiry. Integration of core DNP concepts and competencies.

Letter grade only (A-F). (Seminar 1 hour, Clinical 6 hours)

NUTRITION AND DIETETICS

College of Health and Human Services
Department of Family and Consumer Sciences

Department Chair: Wendy Reiboldt

Department Office: Family and Consumer Sciences (FCS) - 001
Telephone / Fax: (562) 985-4484 / 985-4414
Website: www.csulb.edu/colleges/chhs/departments/fcs

Faculty: Mariné Aghekyan, Judith Anglin, Lee Blecher, Maria Claver, Gail C. Frank, Avery E. Goldstein, Libby Gustin, Dong-Eun Kim, James E. Koval, Peter Kreysa, Jacqueline D. Lee, Margaret Lichty, Suzanne Marshall, Nilufer Medora, Wendy Reiboldt, Lydia Sondhi (emerita), M. Sue Stanley, Richard V. Tuveson, Jung-Mao (Ronnie) Yeh

Baccalaureate Program Coordinator: Richard V. Tuveson

Graduate Coordinator: Jacqueline D. Lee

Single Subject Credential Advisor: Margaret Lichty

Administrative Support Coordinators:

Mikal Lok, Marina Bendersky

Instructional Support Technician: Bonnie Rice

Career Possibilities

Clinical Dietitian • Private Practice Dietitian • Research Dietitian • School Foodservice Director • Food Products Sales Representative • Food Technologist • Food Service Supervisor • Restaurant Manager • Public Health Nutritionist • Food and Drug Inspector • Public Health and Wellness Educator • Community Nutrition Programs • Health Clubs • Private Consulting • Health and Welfare Agencies • Program Administration • Health Promotion. (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Undergraduate Degrees

Bachelor of Arts in Family and Consumer Sciences

This degree offers six options:

- Child Development and Family Studies
- Consumer Affairs
- Family and Consumer Sciences Education
- Family Life Education
- Fashion Merchandising
- Textiles and Clothing

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Hospitality, Foodservice and Hotel Management

Degree and certificate information and requirements are listed under each option alphabetically in this catalog.

Bachelor of Science in Dietetics and Food Administration

The Department of Family and Consumer Sciences offers students a Bachelor of Science degree in Dietetics and Food Administration with two option areas of study:

- Nutrition and Dietetics
- Food Science

Degree and certificate information and requirements are listed under each option alphabetically in this *Catalog*.

Requirements for the major include a minimum of 128 units for Nutrition and Dietetics. In addition to general education requirements (48 units), a minimum of 40 units in Family and Consumer Sciences is required, 24 of which must be upper division. Students transferring from another college or university will receive transfer credit in required courses if the course is equivalent to the course at this University and it is accepted by the University.

Nutrition and Dietetics

Individuals choosing this option will concentrate their studies in the areas of nutritional science, medical nutrition therapy, community nutrition, food production and management of foodservice operations, chemistry, physiology, plus a variety of supporting course work in related disciplines. The Nutrition and Dietetics option with appropriate elective selection fulfills the Academy of Nutrition and Dietetics (AND) academic requirements for eligibility to apply for qualifying experiences required to become a Registered Dietitian.

Becoming a Registered Dietitian

Registered Dietitians (RDs) are considered food and nutrition experts. They have met the following criteria to earn the RD credential:

- Completion of a minimum of a bachelor's degree at a U.S. regionally accredited university or college and course work accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the credentialing agency of the Academic of Nutrition and Dietetics (AND).
- Completion of a supervised practice program accredited by ACEND and the AND.
- Passed a national examination administered by the Commission on Dietetic Registration (CDR).

In order to maintain registration, the RD must provide evidence of fulfilling continuing professional educational requirements to maintain registration. Some RDs hold additional certifications in the specialized areas of practice, such as pediatric or renal nutrition, nutrition support, and diabetes education. These certifications are awarded through CDR and/or other medical and nutrition organizations and are recognized within the profession, but are not required.

In addition to RD credentialing, many states have regulatory laws for dietitians and nutrition practitioners. Frequently these state requirements are met through the same education and training required to become an RD.

Option in Nutrition and Dietetics (128 units)

Take all of the following courses:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. Credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering.)

- CHEM 449 Nutritional Biochemistry Laboratory (3)
Prerequisites: CHEM 448 with a grade of "C" or better.
- COMM 110 Interpersonal Communication (3)
Corequisites: Concurrent enrollment in COMM 110 Workshop.
- ED P 373I Nonverbal Communication: Interaction of Mind and Body (3)
Prerequisites: GE Foundation, one or more Exploration course(s), and upper-division standing.
- ENGL 100 Composition (3)
Prerequisites: A recorded total score of 151 or above on the English Placement test, credit in ENGL 1 (or its equivalent), or consent of the instructor.
- MICR 200 General Microbiology (4)
Prerequisites: CHEM 111A or 140 with a grade of "C" or better and GE Foundation requirements.
- PSY 100 General Psychology (3)
Prerequisites/Corequisites: GE A1 requirement.
- SOC 100 Principles of Sociology (3)
Prerequisites/Corequisites: A GE Foundation course.
- CAFF 321I Family and Consumer Resource Management (3)
Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.
- CDFS 312I Family and Personal Development (3)
Prerequisites: GE Foundation requirements; PSY 100 or SOC 100 or ANTH 120; upper division standing; or consent of instructor.
- FCSE 299 Introduction to Family and Consumer Sciences (1)
Prerequisites: None.
- FCSE 486 Instructional Strategies for Family & Consumer (3)
Prerequisites: Senior standing.
- FCSE 499 Professionalism and Leadership in Family and Consumer Sciences Professionals (2)
Prerequisites: FCSE 299, CAFF 321I, 12 units of upper division course working Family and Consumer Sciences. Must be taken in one of the last two semester prior to graduation.
- FSCI 332 Food Science (3)
Prerequisites: CHEM 327; HFHM 235; MICR 200 or equivalent.
- HFHM 173 Applied Foodservice Sanitation (1)
Prerequisites: None.
- HFHM 235 Principles of Food Preparation (3)
Prerequisites: None.
- HFHM 275 Food Production Systems I (3)
Prerequisites: NUTR 132 and HFHM 235.
- NUTR 132 Introductory Nutrition (3)
Prerequisites/Corequisites: One Foundation course.
- NUTR 234 Orientation to Dietetics & Food Administration (2)
Prerequisites: None.
- NUTR 331A Fundamentals of Human Nutrition (3)
Prerequisites: NUTR 132, BIOL 207, CHEM 302 or 327 or equivalent.
- NUTR 331B Fundamentals of Human Nutrition (3)
Prerequisites: NUTR 331A.
- NUTR 336 Cultural Aspects of Food and Nutrition (3)
Prerequisites: PSY 100 or SOC 100 or ANTH 120 or equivalent; NUTR 132.
- NUTR 436 Advanced Nutrition (3)
Prerequisites: NUTR 331B, CHEM 448, 449 (may be taken concurrently).
- NUTR 436L Nutritional Status Assessment Techniques (3)
Prerequisites/Corequisites: NUTR 436 and CHEM 449.
- NUTR 438 Medical Nutrition Therapy (3)
Prerequisites: NUTR 436, 436L (may be taken concurrently)
- NUTR 461 Community Nutrition (3)
Prerequisites: Upper-division standing, NUTR 331B.
- Take one of the following courses:
- ANTH 412I Culture and Communication (3)
Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.
- HCA 422I Global Issues in Health Services (3)
Prerequisites: GE Foundation, one or more Exploration courses and upper division standing.
- H SC 420I International Health (3)
Prerequisites: GE Foundation, one or more Exploration courses, and upper-division standing.
- Take one of the following choices:
- BIOL 207 Human Physiology (4)
Prerequisites: GE Foundation requirements.
- or both
- BIOL 342 Human/Mammalian Physiology (3)
Prerequisites: BIOL 211, 212, 213 all with a grade of "C" or better. Recommended: PHYS 100A, B.
- BIOL 342L Lab in Human/Mammalian Physiology (1)
Prerequisites/Corequisites: BIOL 342 with a grade of "C" or better.
- Take one of the following courses:
- BIOL 260 Biostatistics (3)
Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.
- ED P 419 Educational Statistics (3)
Prerequisites: Satisfactory completion of an undergraduate mathematics course suitable for general education math credit and, if required by the major, a lower-division statistics course.
- H SC 403 Community Health Statistics (3)
Prerequisites: GE math and SOC 250 or PSY 210 or equivalent.
- IS 310 Business Statistics (3)
Prerequisites: MATH 114.
- Take one of the following courses:
- ENGL 101 Composition (3)
Prerequisites: ENGL 100.
- ENGL 317 Technical Communication (3)
Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.
- Take one of the following courses:
- HRM 361 The Human Resource Function (3)
Prerequisites: None.
- PSY 381 Intro to Industrial Organizational Psy (3)
Prerequisites: PSY 100, GE Foundation requirement and upper division standing.
- Take one of the following courses:
- IS 233 Introduction to Computer Systems and Applications (3)
Prerequisites: None.
- IS 300 Management Information Systems (3)
Prerequisites: IS 233 or equivalent.
- Take one of the following courses:
- FCSE 497 Directed Studies (3)
Prerequisites: Upper division standing, consent of instructor.

NUTR 492K Internship in Nutrition and Dietetics (3)
Prerequisites: Student must be a Family and Consumer Sciences: Nutrition and Dietetics major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Nutrition and Dietetics; and HFHM 275, NUTR 331B and FSCI 332. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Take one of the following choices:

CHEM 327 Fundamentals of Organic Chemistry (3)
Prerequisites: CHEM 111A with a grade of "C" or better; CHEM 111B is recommended.

or both

CHEM 320A Organic Chemistry (3)
Prerequisites: CHEM 111B with a grade of "C" or better. CHEM 251 is recommended.

CHEM 320B Organic Chemistry (5)
Prerequisites: CHEM 320A with a grade of "C" or better.

Select one of the following choices:

CHEM 448 Fundamentals of Biological Chemistry (3)
Prerequisites: CHEM 327 or 322B either with a grade of "C" or better.

or both

CHEM 441A Biological Chemistry (3)
Prerequisites: Either CHEM 320B or both CHEM 322B and 323B with a grade of "C" or better; a biology or microbiology course is recommended.

CHEM 441B Biological Chemistry (3)
Prerequisites: CHEM 441A with a grade of "C" or better.

Take a minimum of 6 units of electives in consultation with a Nutrition and Dietetics faculty advisor.

Recommended electives include:

HFHM 375, 477; FCSE 497; NUTR 439, 492K.

If a stronger foundation in Chemistry is desired, CHEM 320A and 320B may be selected instead of CHEM 327. If a stronger foundation in Biochemistry is desired, CHEM 441A and CHEM 441B may be selected instead of CHEM 448.

Students who wish to take the Nutrition and Dietetics Option as a Pre-professional degree (e.g., medical, etc.) should check with the appropriate programs to verify specific requirements.

The Academy of Nutrition and Dietetics (AND) Didactic Program in Dietetics accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND)

The ACEND, the accrediting agency for the AND Didactic (Academic) Program in Dietetics (DPD), is designed to provide students with a foundation of knowledge and skills in dietetics that will enable them to perform successfully in a dietetic internship. The DPD is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the AND, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, phone: 312-899-0040, ext. 5400. This Council is a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education. It is the responsibility of the student to consult with the AND DPD Director to verify

current ACEND requirements to become a Registered Dietitian.

Students who choose to meet DPD requirements must select the following as electives:

- HFHM 375 Food Production Systems II (3)
Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 173 and 275.
- HFHM 477 Foodservice Administration (3)
Prerequisites: For Hospitality Foodservice and Hotel Management majors: HFHM 276; Nutrition and Dietetics majors: HFHM 375.

Student must receive a grade of "C" or better in DPD courses to receive verification of completion of the DPD program. Approval of a student's academic program by the CSULB DPD Director requires that the student complete HFHM 477, NUTR 436L, and NUTR 438 at CSULB.

Students can view details of the DPD program at www.csulb.edu/dpd.

Courses (NUTR)

LOWER DIVISION

132. Introductory Nutrition (3)

Prerequisite/Corequisite: One Foundation course.

Essential nutrients, their physiological functions and human needs during the life cycle; food sources as applied to selection of an adequate diet; problems encountered providing food to meet nutritional needs; food additives and consumer protection.

Not open for credit to students with credit in FCS 232. (Lecture-discussion 3 hours)

234. Orientation to Dietetics and Food Administration (2)

Role of the professional in dietetics and food administration; orientation to career opportunities in Food, Nutrition and Foodservice Systems Management; personnel and physical facilities, including equipment in health care and mass feeding programs.

(Lecture-discussion 1 hour, activity 2 hours)

UPPER DIVISION

331A. Fundamentals of Human Nutrition (3)

Prerequisites: NUTR 132, BIOL 207, CHEM 302 or 327 or equivalent.

Nutritional needs with emphasis on the physiological and chemical foundation for these needs; factors influencing nutrient needs.

(Lecture-Discussion 3 hours)

331B. Fundamentals of Human Nutrition (3)

Prerequisite: NUTR 331A.

Nutritional needs with emphasis on changes through the life cycle. Introduction to dietary modifications in various pathological conditions. Introduction to nutrition assessment and nutrition education techniques.

(Lecture-discussion 3 hours)

333. Latino Nutrition, Health and Chronic Disease Prevention (3)

Prerequisites: GE Foundation requirement, one or more Exploration courses and upper division standing.

Explores nutrition-related and contextual factors associated with the high rates of chronic disease among diverse Latino-specific subpopulations and provide culturally-relevant strategies for prevention.

Letter grade only (A-F). Same course as HSC 333. Not open for credit to students with credit in HSC 333.

336. Cultural Aspects of Food and Nutrition (3)

Prerequisites: PSY 100 or SOC 100 or ANTH 120 or equivalent; NUTR 132.

Cross-cultural study of food and nutrition. Factors such as religion, food supply and socioeconomic status are considered as they influence nutritional status and food intake in various populations throughout the world.

(Lecture 3 hours)

339. Metabolic Functions of Nutrients (1)

Prerequisites: CHEM 140; BIOL 207, and consent of instructor.

Metabolic role of nutrients in the human body; practical application of nutrition to patient care.

Open to Nursing Majors only. (Activity 2 hours) Letter grade only (A-F).

436. Advanced Nutrition (3)

Prerequisites: NUTR 331B, CHEM 448, 449 (may be taken concurrently).

Metabolism of proteins, fats, carbohydrates, minerals and vitamins; interrelationship of nutrients; principles of determining nutritional requirements of individuals.

(Lecture-discussion 3 hours)

436L. Nutritional Status Assessment Techniques (3)

Prerequisites/Corequisites: NUTR 436 and CHEM 449.

Designed to provide training in nutrition assessment and nutrition counseling. Use of procedures for interviewing, counseling, and instructing patients/clients in various settings comparable to those encountered in dietetic practice. Includes laboratory methods for collection and interpretation of demographic, dietary, anthropometrics, biochemical, and clinical data.

Letter grade only (A-F). (Discussion 1 hour, Laboratory 3 hours, Clinical Practice 3 hours)

438. Medical Nutrition Therapy (3)

Prerequisites: NUTR 436, 436L (may be taken concurrently). Therapeutic nutrition. Metabolic changes in specific pathological conditions; dietary modifications used for treatment.

(Lecture-discussion 3 hours)

439. Nutrition and Aging (3)

Prerequisites: NUTR 132 or BIOL 207 or BIOL 301 or GERN 4001 or consent of instructor.

Nutritional needs as related to physiological changes that occur during aging. Factors that influence food intake and nutritional status of the elderly. Diet adaptation for chronic diseases commonly found in older adults.

Letter grade only (A-F). Same course as GERN 439. Not open for credit to students with credit in GERN 439. (Lecture-discussion 3 hours)

461. Community Nutrition (3)

Prerequisites: Upper-division standing, NUTR 331B.

Survey of nutrition programs in the community. Techniques of program planning, implementation, management and evaluation.

Letter grade only (A-F). (Lecture-activity 3 hours)

468. Nutrition for Exercise and Performance (3)

Prerequisites: NUTR 132, KIN 301 for the KIN Fitness option and the KIN Exercise Science option or BIOL 207 for the Nutrition and Dietetics option.

Explores the role nutrients play in exercise and performance enhancement. Topics include evaluation of energy needs during physical activity, examination of weight management practices, assessment of nutritional status, and investigation of contemporary dietary issues related to exercise.

Letter grade only (A-F). Same course as KIN 468. Not open for credit to students with credit in KIN 468. Open to Kinesiology undergraduate students in the Fitness and Exercise Science options and to the Nutrition and Dietetics option in Family and Consumer Sciences.

492K. Internship in Nutrition and Dietetics (3)

Prerequisites: Student must be a Family and Consumer Sciences: Nutrition and Dietetics major; have senior standing; have a 2.5 overall GPA or a 3.0 major GPA; approval of a faculty advisor in Nutrition and Dietetics; and HFHM 275, NUTR 331B and FSCI 332. Each prerequisite course must be completed with a grade of "C" or better. A course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in any course for which it is a prerequisite. A student receiving a grade lower than a "C" may proceed with other courses with approval of the Area Coordinator.

Field experience in which student assumes a preprofessional role in a professional setting. Objectives developed by student with supervisor must be approved by major advisor and form the basis for evaluation.

May be repeated for 6 units maximum. (Seminar 3 hours)

OCEAN STUDIES INSTITUTE

College of Natural Sciences and Mathematics

Director: Larry Allen

Location: Fish Harbor

820 S. Seaside Ave., Terminal Island, CA 90731

Telephone / FAX: (310) 519-3172 / (310) 519-1054

Website: <http://www.scmi.ur>

Introduction

The Ocean Studies Institute was created in 1972 to coordinate teaching, research and community service in ocean studies on member campuses. Members include Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona, San Bernardino, and San Marcos. The Institute does not offer degrees, but it serves as an administrative liaison to facilitate degree programs offered on member campuses.

The Institute operates a 76-foot research vessel for teaching and research purposes, obtains research grants and contracts, performs research, and is responsible for curriculum planning and facilities acquisition. Presently the Institute serves over 35 departments across eight campuses.

The courses and research in which the Institute is actively engaged reflect the broad applied approach of interdisciplinary, mission-oriented projects in harbors and the coastal zone.

Courses (OSI)

UPPER DIVISION

345. Physiology of Marine Animals (4)

Prerequisite: BIOL 211, 212, 213.

Comparison of the fundamental physiological processes of the major marine phyla, both invertebrate and vertebrate. Laboratory and field investigations will be directed toward marine animals living in the local waters.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

353. Marine Biological Processes (4)

Prerequisite: BIOL 211, 212, 213.

Study of pelagic and benthic marine ecosystems, including human influences.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

417./517. Marine Benthic Invertebrates of Santa Catalina Island (4)

Prerequisite: OSI 353 and consent of instructor. (Undergraduates enroll in OSI 417; graduates enroll in OSI 517)

Topics include benthic community structure and function, benthic-pelagic coupling, animal-sediment relationships, animal interactions, and marine pollution ecology. Laboratory emphasis will be on identification of local forms.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

419./519. Marine Ichthyology (4)

Prerequisite: OSI 353 and consent of instructor. (Undergraduates enroll in OSI 419; graduates enroll in OSI 519)

Taxonomy, morphology, physiology, and ecology of fishes. Emphasis on local marine fishes.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

420./520. Ecology of Marine Fishes (4)

Prerequisite: OSI 419/519 and consent of instructor. (Undergraduates enroll in OSI 420; graduates enroll in OSI 520)

Fish species assemblages, general ecology, adaptations, and behavioral ecology of marine fishes. Emphasis on local marine fishes.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

425./525. Marine Phycology (4)

Prerequisite: BIOL 211, 212, 213. (Undergraduates enroll in OSI 425; graduates enroll in OSI 525)

Taxonomy, phylogeny, ecology, and physiology of marine algae; emphasis on local marine forms.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

455./555. Marine Ecological Processes (4)

Prerequisite: OSI 353 or BIOL 350 and consent of instructor; statistics recommended. (Undergraduates enroll in OSI 455; graduates enroll in OSI 555)

Discussion of field studies on ecological principles related to marine communities. Includes an individual field research project and class projects.

Letter grade only (A-F). (Lecture 2 hrs., field 6 hrs.)

490./590. Selected Topics in Ocean Studies (1-3)

Prerequisite: Consent of instructor. (Undergraduates enroll in OSI 490; graduates enroll in OSI 590)

Topics from selected areas of Ocean Studies. Topic content will vary from section to section.

Letter grade only (A-F). May be repeated to a maximum of 6 units with the consent of instructor. Maximum credit for OSI 490/590 and/or 490L/590L limited to 6 units. Topics announced in the *Schedule of Classes*. (Lecture 1-3 hrs.)

490L./590L. Selected Topics in Ocean Studies Laboratory (1-3)

Prerequisite: Consent of instructor. (Undergraduates enroll in OSI 490L; graduates enroll in OSI 590L)

Topics from selected areas of Ocean Studies.

Letter grade only (A-F). May be repeated to a maximum of 6 units with the consent of instructor. Maximum credit for OSI 490/590 and/or 490L/590L limited to 6 units. Topics announced in the *Schedule of Classes*. (Laboratory 3-9 hrs.)

496. Undergraduate Directed Research (1-3)

Prerequisite: Consent of instructor. Not available to graduate students.

Independent research to be conducted under the supervision of a Catalina Semester instructor. Students develop their ideas during the first 12 weeks of the semester, prepare a research proposal, complete their studies, and present their findings in a mini-symposium and a report.

Letter grade only (A-F).

GRADUATE LEVEL

517./417. Marine Benthic Invertebrates of Santa Catalina Island (4)

Prerequisite: OSI 353 and consent of instructor. (Undergraduates enroll in OSI 417; graduates enroll in OSI 517)

Topics include benthic community structure and function, benthic-pelagic coupling, animal-sediment relationships, animal interactions, and marine pollution ecology. Laboratory emphasis will be on identification of local forms.

Letter grade only (A-F). (Lecture 2 hrs, laboratory and field 6 hrs.)

519./419. Marine Ichthyology (4)

Prerequisite: OSI 353 and consent of instructor. (Undergraduates enroll in OSI 419; graduates enroll in OSI 519)

Taxonomy, morphology, physiology, and ecology of fishes. Emphasis on local marine fishes.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

520./420. Ecology of Marine Fishes (4)

Prerequisite: OSI 519/419 and consent of instructor. (Undergraduates enroll in OSI 420; graduates enroll in OSI 520)

Fish species assemblages, general ecology, adaptations, and behavioral ecology of marine fishes. Emphasis on local marine fishes.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

525./425. Marine Phycology (4)

Prerequisite: BIOL 211, 212, 213. (Undergraduates enroll in OSI 425; graduates enroll in OSI 525)

Taxonomy, phylogeny, ecology, and physiology of marine algae; emphasis on local marine forms.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

555./455. Marine Ecological Processes (4)

Prerequisite: OSI 353 or BIOL 350 and consent of instructor; statistics recommended. (Undergraduates enroll in OSI 455; graduates enroll in OSI 555)

Discussion of field studies on ecological principles related to marine communities. Includes an individual field research project and class projects.

Letter grade only (A-F). (Lecture 2 hrs., laboratory and field 6 hrs.)

590./490. Selected Topics in Ocean Studies (1-3)

Prerequisite: Consent of instructor. (Undergraduates enroll in OSI 490; graduates enroll in OSI 590)

Topics from selected areas of Ocean Studies. Course content will vary from section to section.

Letter grade only (A-F). May be repeated to a maximum of 6 units with consent of instructor. Maximum credit for OSI 490/590 and/or 490L/590L limited to 6 units. Topics announced in the *Schedule of Classes*. (Lecture 1-3 hrs.)

590L./490L. Selected Topics in Ocean Studies Laboratory (1-3)

Prerequisite: Consent of instructor. (Undergraduates enroll in OSI 490L; graduates enroll in OSI 590L)

Topics from selected areas of Ocean Studies. Course content will vary from section to section.

Letter grade only (A-F). May be repeated to a maximum of 6 units with consent of instructor. Maximum credit for OSI 490/590 and/or 490L/590L limited to 6 units. Topics announced in the *Schedule of Classes*. (Laboratory 3-9 hrs.)

697. Directed Research (1-3)

Prerequisite: Consent of instructor and graduate standing.

Independent research to be conducted under the supervision of a Catalina Semester instructor. Students develop their ideas during the first 12 weeks of the semester, prepare a research proposal, complete their studies, and present their findings in a mini-symposium and a report.

Letter grade only (A-F).

PEACE STUDIES

College of Liberal Arts

Director: Judith Stevenson (Human Development)

Telephone: (562) 985-5914

E-mail: jstevan4@csulb.edu

Faculty: Ted Azarmi (Finance), Amy Bippus (Communication Studies), Aaron Cargile (Communication Studies), Betsy Decyk (Philosophy), Larry George (International Studies), Mimi Hotchkiss (English), Ray LaCoste (Comparative World Literature and Classics), Unna Lasiter (Geography), Sandra McMillan (Film & Electronic Arts), Charles Noble (Political Science), Jyotsna Pattnaik (Teacher Education), Pamela Roberts (Human Development), Carol Shaw-Sutten (Art), Larry Smith, American Indian Studies, Barry Steiner (Political Science), Teri Yamada (Asian and Asian American Studies)

Certificate in Peace and Social Justice Studies

This certificate is designed for students who are concerned about issues of peace and social justice in contemporary society. It is founded on the principle that peace requires not only the absence of violence but also the presence of justice.

This certificate can be earned in conjunction with any baccalaureate or graduate degree, can be earned through the General Education Pathway in Conflict & Peace Studies while simultaneously meeting all general education requirements.

Requirements

Twenty-four (24) units in a program approved by the Director of Peace Studies, to include the following:

1. Core Theory Course (3 units):

Take one of the following:

I/ST 317I, POSC 371

2. Core Skills Course (3 units):

Take one of the following:

COMM 411, SW 491

3. Elective Courses (15 units):

Take at least one course from each of the following groups, and one additional course from any group.

Group A: Perspectives on Peace, Conflict, Violence, and War (3 units minimum):

ANTH 305I; COMM 490; CRJU 101; HIST 304, 377, 495; I/ST 318, 355; POSC 220, 371, 455; PHIL 351I; PSY 350I

Group B: Laws, Rights, Responsibilities in Peace and Conflict (3 units minimum):

COMM 441I; PHIL 352, 376; POSC 412

Group C: Culture, Race, Gender Influences on Peace and Conflict (3 units minimum):

ANTH 315, 311I; AFRS 325; COMM 330, 412; HIST 309I; LING 470; SOC 346; HIST 490F; WGSS 401, 430

Group D: Empowerment and Peace-Building (3 units minimum):

COMM 410, 421; CAFF 309I or FIN 309I; EDP 434B; FEA 486I; H SC 429; NRSRG 481I; PSY 336; SOC 427; SW 423

4. Peace Project (3 units, optional):

Students in the Certificate program only should complete three units of an independent study project during their senior year with any Peace Studies faculty. Students who are simultaneously completing the General Education pathway in Conflict & Peace Studies need to take an additional 300- or 400-level GE course from groups A, B, C, or D above to complete the 24 required units in this Certificate.

Exceptions or substitutions may be made only with the approval of the Director of the Peace Studies Program.

PHILOSOPHY

College of Liberal Arts

Department Chair: Wayne Wright

Department Office: McIntosh Humanities Building (MHB), Rm 917

Telephone: (562) 985-4331

Website: www.csulb.edu/colleges/cla/departments/philosophy

FAX: (562) 985-7135

Email: philos@csulb.edu

Faculty: Patrick Dieveney, Alex Klein, Marcy Lascano, Lawrence Nolan, Jason Raibley, Max Rosenkrantz, Charles Wallis, Nellie Wieland, Cory Wright, Wayne Wright

Advisors:

Undergraduate: Alex Klein

Graduate: Cory Wright

Administrative Support Coordinator: Kaz Mogi

Undergraduate Programs

Bachelor of Arts in Philosophy (120 units)

Requirements

A minimum of 36 units in philosophy divided as follows:

Lower Division:

Take all the following courses:

PHIL 203 History of Early Philosophy (3)

Prerequisite: GE Foundation requirements.

PHIL 204 History of Modern Philosophy (3)

Prerequisite: GE Foundation requirements.

PHIL 270 Symbolic Logic I (3)

Prerequisite: None

A maximum of 12 lower-division units may be counted toward the major, including either of the following:

PHIL 100 Introduction to Philosophy (3)

Prerequisites/Corequisites: Any course from GE Foundation categories A.1 (Written English), A.2. (Oral Communication) or A.3. (Critical Thinking).

PHIL 160 Introduction to Ethics (3)

Prerequisites/Corequisites: Any course from GE Foundation categories A.1 (Written English), A.2. (Oral Communication) or A.3. (Critical Thinking).

Upper Division:

A minimum of 24 units in philosophy, including at least two courses (6 units) from each of the following groups:

History of Philosophy:

PHIL 306, 307, 413, 414, 416, 418, 419, 421, 422, 423, 425, 490, 491, 492

Logic, Metaphysics, Epistemology:

PHIL 330, 342, 381I, 382, 482I, 483, 484, 493

Values and Evaluation:

PHIL 351I, 352I, 361I, 363, 401, 403I, 405I, 451I, 489, 496

The required 6 upper-division units remaining are to be selected from philosophy courses with the advice and consent of the student's departmental advisor, and may include PHIL 497H and 498H.

Pre-Law Emphasis

The pre-law emphasis requires the same minimum 36 units required for the major. Prelaw students should include at least four of the following in their course of study:

PHIL 351I, 352I, 363, 451I, 489.

Honors in Philosophy

The Honors in Philosophy program provides qualified undergraduate philosophy majors with an opportunity to do independent research with a faculty member on a topic of interest to the student and to present the results of that study to other students in a seminar format. The Program has two curricular components:

1. a year-long, two-semester directed studies course (PHIL 498H: Undergraduate Honors Thesis) in which the student learns about advanced research techniques and writes an undergraduate thesis under the close supervision of a faculty member, and
2. a seminar (PHIL 497H: Undergraduate Honors Seminar) in which honors students meet weekly to discuss work in progress and present a final thesis. The Seminar is designed each year with readings, discussions, and critiques of student work around the themes of the honors student theses projects that year.

To be eligible for the program, students must:

- A. have a 3.5 GPA in the philosophy major and a 3.0 GPA overall;
- B. successfully complete all lower-division courses for the major (PHIL 203, 204, and 270);
- C. successfully complete at least nine (9) units of upper-division philosophy courses (at least six [6] units at CSULB);
- D. obtain written agreement from a philosophy faculty member to serve as the Honors Thesis Advisor.

Students enroll in PHIL 498H (Undergraduate Honors Thesis) in Fall and Spring (3 units each semester), and in PHIL 497H (Undergraduate Honors Seminar) in Spring (3 units), for a total of 9 units in the program. Students who have been admitted to the honors program and have successfully completed these requirements, along with the regular requirements for the Major in Philosophy, will graduate with Honors in Philosophy.

Minor in Philosophy

The minor in philosophy provides a structured yet flexible program for the student majoring in a different discipline, but who is interested in philosophy.

The Minor in Philosophy is available to any non-Philosophy major.

Requirements

A minimum of 18 units in philosophy, divided as follows:

Lower Division:

Take all of the following courses:

PHIL 203 History of Early Western Philosophy (3)

Prerequisite: GE Foundation requirements.

PHIL 204 History of Modern Western Philosophy (3)

Prerequisite: GE Foundation requirements.

PHIL 270 Symbolic Logic I (3)

Prerequisite: None

Upper Division:

A minimum of 9 units in philosophy, including at least one course (3 units) from each of the following groups:

History of Philosophy:

PHIL 306, 307, 413, 414, 416, 418, 419, 421, 422, 423, 425, 490, 491, 492

Logic, Metaphysics, Epistemology:

PHIL 303, 342, 381I, 382, 482I, 483, 484, 493

Values and Evaluation:

PHIL 351I, 352I, 361I, 363, 400I, 401, 403I, 405I, 451I, 455, 489, 496

Graduate Programs

Master of Arts in Philosophy

The candidate must satisfy the general requirements stated in this catalog as well as the specific departmental requirements described here and more fully in the Philosophy Graduate Student Handbook (available upon request). Applicants must submit to the University's Office of Admissions and Records a graduate application (available at that office or on-line). Applicants must also submit a transcript from all colleges and universities attended to the Office of Enrollment Services. Prospective students should see the Graduate Advisor for assessment and to plan a program of study. Departmental reader positions are sometimes available for qualified persons, as are Graduate Assistantships. Application for these positions can be made to the Chair of the Philosophy Department.

Admission with Classified Status

An applicant may be admitted to the MA program in Philosophy in classified status (see the relevant sections in the Catalog under "Graduate and Post-baccalaureate Applicants") only after satisfying University requirements for admission and the following prerequisites to this degree:

1. A bachelor's degree with a minimum of 24 units of upper division philosophy courses. These courses must be comparable to those required for the BA in philosophy at this University, and must indicate proficiency in the general areas of epistemology, metaphysics, ethics, and symbolic logic. Deficiencies to be rectified will be determined by the Graduate Advisor after consultation with the student and after study of transcript records.
2. Satisfactory performance on the Department's Basic Qualifying Exam (BQE).

Admission with Conditionally Classified Status

Until students have met the requirements for classified status, they may be admitted and attend the university with conditionally classified status. Conditionally classified students who at entry to the philosophy program as a graduate student have been determined to have no deficiencies in prerequisite preparation must attempt the Basic Qualifying Exam (BQE) by the end of their second (academic year) semester in the program and pass it by

the end of their third (academic year) semester in order to achieve classified status. Conditionally classified students who must rectify a deficiency must attempt the BQE by the end of their third (academic year) semester in the program and pass it by the end of their fourth (academic year) semester in order to achieve classified status. (Winter Term and Summer Session do not count as academic year semesters.)

Basic Qualifying Exam

The BQE comprises two sections (analytic, text) that assess the graduate student's philosophical foundation and knowledge. The analytic section of the BQE assesses the student's ability to extract, explain, and evaluate arguments from short passages. In reconstructing and evaluating these arguments, the student must demonstrate an understanding of basic logical concepts, such as validity, soundness, and cogency. The text section of the BQE assesses the student's ability to read, interpret, and critically evaluate a more lengthy philosophical text. Successfully passing the text section also requires general philosophical and historical knowledge, insofar as these are relevant to the contextual understanding of the text.

Students may attempt one or both sections of the BQE on those occasions when it is administered. Normally, students must pass both parts of the BQE by their second attempt. The BQE must be passed in order for students to achieve classified status in the graduate program.

Advancement to Candidacy

Advancement to Candidacy is the next step after acquiring classified status (and cannot take place until then) and confers catalog rights to graduate students. Advancement to Candidacy also signifies approval of a plan of study by the student's department and college. The requirements for advancement, which must be achieved at least one semester prior to graduation and can only occur in a semester in which the student is enrolled, are:

1. Fulfillment of the CSULB Graduate Writing Assessment Requirement (GWAR).
2. Maintenance of a minimum 3.0 overall grade point average in all units undertaken in the philosophy program.
3. Approval of a program of study by the Graduate Advisor, which must include satisfactory performance in the proseminar, and approval by the department faculty of either a thesis proposal or a proposed set of three comprehensive examinations (see the Graduate Student Handbook for details).
4. Although there is no formal language requirement, the philosophy department may require the student to demonstrate a foreign language proficiency if a language proficiency is appropriate to the area of study.

Requirements for the Degree

1. The student's graduate program must consist of not less than 30 units of acceptable upper division and graduate courses, of which at least 24 units must be in philosophy. The remaining 6 units must be chosen in conference with the student's Faculty Advisor and Graduate Advisor and may be taken either in Philosophy or in another field of study closely related to the candidate's educational objectives. The program must include a minimum of 18

units of philosophy graduate courses, with a minimum of 9 units from the 600 series. Students must enroll in PHIL 610 in the first semester in which the course is offered after they are conditionally classified. PHIL 697 and 698 may not count toward fulfillment of the 600 series minimum requirement.

2. A thesis and oral defense thereof, or a set of three comprehensive examinations.

The Center for Medieval and Renaissance Studies

Undergraduate students can pursue a Certificate or a minor in Medieval and Renaissance Studies. Graduate students can pursue a Certificate in Medieval and Renaissance Studies. Interested students should turn to the catalog section entitled "Medieval and Renaissance Studies" and/or contact the program directors in MHB 512.

Courses (PHIL)

LOWER DIVISION

100. Introduction to Philosophy (3)

Prerequisites/Corequisites: Any course from GE Foundation categories A.1 (Written English), A.2. (Oral Communication) or A.3. (Critical Thinking).

Critical analysis of the history, methods, and major problems of philosophy.

160. Introduction to Ethics (3)

Prerequisites/Corequisites: Any course from GE Foundation categories A.1 (Written English), A.2. (Oral Communication) or A.3. (Critical Thinking).

Concepts of right and wrong, good and bad, and the application of moral principles to problems of everyday life.

Not open for credit to students with credit in PHIL 160W.

170. Critical Reasoning (3)

Prerequisite/Corequisite: GE Foundation requirements Category A.1 (Written English).

Elements of clear, straight, orderly and valid thought, including deductive and inductive reasoning and the accurate use of language. Explores practical applications of logic.

203. History of Early Western Philosophy (3)

Prerequisite: GE Foundation requirements.

From Thales to the Renaissance including the systems of Socrates, Plato and Aristotle, and their influence on European philosophy through the medieval period.

204. History of Modern Western Philosophy (3)

Prerequisite: GE Foundation requirements.

Western philosophy from Descartes to Kant, including the development of modern scientific processes, and the philosophical systems of empiricism, rationalism, transcendental idealism, etc.

270. Symbolic Logic I (3)

Introduction to the formal techniques of evaluating arguments.

Early Philosophy

- 306. Philosophies of China and Japan
- 307. Philosophies of India
- 421./521. Plato
- 422./522. Aristotle
- 490./590. Select Topics – Early Philosophy

Modern Tradition

- 413./513. Continental Rationalism
- 414./514. British Empiricism
- 423./523. Kant
- 424./524. Hegel
- 425./525. Wittgenstein
- 491./591. Selected Topics – The Modern Tradition

Twentieth Century Philosophy

- 416./516. Pragmatism
- 417./517. Phenomenology
- 418./518. Existentialism
- 419./519. Analytic Philosophy
- 492./592. Selected Topics – Twentieth Century Philosophy

Metaphysical Studies

- 330. Philosophy of Religion
- 342. Metaphysics
- 483./583. Philosophical Psychology
- 493./593. Selected Topics - Metaphysical Studies

Epistemological Studies

- 381I. Philosophy of Science
- 382. Theory of Knowledge
- 482I. Introduction to Cognitive Science

Studies in Logic and Semantics

- 484. Philosophy of Language

Studies in Value and Evaluation

- 351I. Political Philosophy
- 352I. Philosophy of Law
- 361I. Philosophy of Art and Beauty
- 363. Ethical Theory
- 400I. Business Ethics
- 401. Philosophy in Education
- 403I. Medical Ethics
- 405I. Philosophy in Literature
- 451I. Liberty and Justice: Race, Ethnicity, and Gender in American Law
- 455. Philosophical Perspectives on Sex and Love
- 461I. Diversity in Criticism and Analysis of the Arts
- 489. Philosophy Internship/Pre-Law
- 496./596. Selected Topics – Value and Evaluation

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

306. Philosophies of China and Japan (3)

Prerequisite: GE Foundation requirements.

Historical and critical study of the philosophical thought of China and Japan.

307. Philosophies of India (3)

Prerequisite: GE Foundation requirements.

Historical and critical survey with emphasis on basic ideas and traditions.

330. Philosophy of Religion (3)

Prerequisite: GE Foundation requirements.

Nature and function of religion and of fundamental religious concepts and ideals.

342. Metaphysics (3)

Prerequisite: Three units of philosophy or consent of instructor.

Problems of ontology and cosmology including such concepts as matter and energy, time and space, evolution and causality.

351I. Political Philosophy (3)

Prerequisites: GE Foundation requirements, and upper division standing.

Analysis of fundamental political concepts such as the legitimacy of government, the relation of justice to coercive power, the morality of war, political obligation, and sovereignty; and/or a study of political ideologies such as socialism, classical liberalism, and conservatism.

352I. Philosophy of Law (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Study of the historical development of the philosophy of law and examination of the problems in the field ranging from general theories to analysis of fundamental legal concepts and normative issues.

361I. Philosophy of Art (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Discussion of central problems in aesthetics, such as possibility of objectivity in criticism, modern and traditional definitions of a work of art, truth and meaning in the fine arts, natural beauty and its relationship to excellence in music, architecture, etc.

363. Ethical Theory (3)

Prerequisite: GE Foundation requirements; 3 units of philosophy.

In-depth discussion of such issues as obligation, responsibility, social justice, and personal ideals.

381I. Philosophy of Science (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Problems, methods and fundamental concepts of the sciences, including the relationships of the sciences to each other, to mathematics and to philosophy.

382. Theory of Knowledge (3)

Prerequisite: Three units of philosophy.

Investigation of such concepts as knowledge, belief, certainty. Critical study of theories concerning such issues as our knowledge of the external world, the past, other minds.

400I. Business Ethics (3)

Prerequisites: GE Foundation requirements, at least one Explorations course.

Study of types of ethical dilemmas that take place in business organizations. Acquire concepts and tools needed to manage these complex value conflicts for the well being of individuals, organizations, and society.

Letter grade only (A-F). Same course as CBA 400I. Not open for credit to students with credit in CBA 400I.

401. Philosophy in Education (3)

Prerequisites: GE Foundation; at least a 3.0 GPA across all units attempted; at least 15 units of philosophy at the 200-level or higher with a 3.0 GPA across all units attempted in philosophy; and consent of instructor.

Examine philosophical works on education, analyze common exclusion of philosophy from K-12 curriculum, explore integration of philosophy into K-12 curriculum. Student is placed in local school district to lead weekly philosophy sessions. Service Learning.

May be repeated to a maximum of 6 units in different semesters.

403I. Medical Ethics (3)

Prerequisites: GE Foundation requirements; at least one Explorations course.

Covers main areas of bioethics: reproductive rights and liberties, definitions of health, disease, and disability, end of life care, distribution of health care, goals of health care. Philosophical texts, journal articles from medical humanities, ethics, medicine, and case studies used.

405I. Philosophy in Literature (3)

Prerequisites: GE Foundation requirements; at least one Exploration course in philosophy, literature, theater arts; upper-division standing required.

Intensive exploration of philosophical ideas in selected literature with special attention to both philosophical and literary ways of reading and appreciating a text.

Not open for credit to students with credit in PHIL 305.

413./513. Continental Rationalism (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Close study of such major figures as Descartes, Spinoza and Leibniz.

414./514. British Empiricism (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Close study of such major figures as Locke, Berkeley, and Hume.

416./516. Pragmatism (3)

Prerequisite: Three units of philosophy or consent of instructor.

Development of pragmatism as exemplified in the philosophies of Peirce, James, Dewey and Mead.

417./517. Phenomenology (3)

Prerequisites: Six units of philosophy or consent of instructor.

Study of one of the major movements of contemporary philosophy. Themes treated may include knowledge, meaning, emotionality, embodiment, language, sociality, freedom and religion. Philosophers treated may include Husserl, Scheler, Heidegger, Merleau-Ponty and Ricoeur.

418./518. Existentialism (3)

Prerequisites: Three units of philosophy or consent of instructor.

Intensive study of such issues as self-as-existence, freedom and responsibility in their ethical, religious, political and aesthetic dimensions. Philosophers treated may include Kierkegaard, Nietzsche, Marcel, Jaspers, Sartre and Camus.

419./519. Analytic Philosophy (3)

Prerequisites: Six units of philosophy to include PHIL 270, or consent of instructor.

Analysis of major movements in development of Anglo-American philosophy in the twentieth century, such as logical atomism, logical positivism and ordinary language philosophy. Study of contributions of such philosophers as Moore, Russell, Wittgenstein, Ayer, Ryle, Austin, Strawson, and Quine.

Letter grade only (A-F).

421./521. Plato (3)

Prerequisites: Six units of philosophy to include PHIL 203, or consent of instructor.

Close study of Plato's thought, based primarily on readings from his works.

422./522. Aristotle (3)

Prerequisites: Six units of philosophy to include PHIL 203, or consent of instructor.

Close study of Aristotle's thought, based primarily on readings from his works.

423./523. Kant (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Intensive study of Kant's Critique of Pure Reason.

424./524. Hegel (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Study of Hegel's Philosophy of Mind and Logic, and selected writings by Hegel and other topics.

425./525. Wittgenstein (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Close study of the later philosophy of Wittgenstein, centering on Philosophical Investigations.

451I. Liberty and Justice: Race, Ethnicity, and Gender in American Law (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing; and 6 units of philosophy, or consent of instructor. Junior standing required; Senior standing recommended.

Philosophical and legal analysis of how liberty and justice for different races, ethnic groups and genders have been treated in American law.

455./555. Philosophical Perspectives on Sex and Love (3)

Prerequisite: Six units of philosophy or consent of instructor.

Philosophical perspectives on sex and love explores philosophical issues concerning sex, gender and love through readings and discussion of classical and contemporary philosophical sources. Topics such as sexual perversion, romantic love and gender discrimination.

Same course as WGSS 455. Not open for credit to students with credit in W/ST 455 or WGSS 455.

461I. Diversity in Criticism and Analysis of the Arts (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing (junior standing required; senior standing recommended).

Philosophical and critical consideration of the arts by different races, ethnic groups, and genders in the United States.

482I. Introduction to Cognitive Science (3)

Prerequisites: GE Foundation requirements; at least one Explorations course; upper-division standing; at least six units in two areas chosen from Computer Science, Linguistics, Philosophy, and Psychology.

Introduction to cognitive science including historical development, foundational philosophical presuppositions, core topics, underlying theoretical framework, explanatory goals, different methodologies and theoretical contributions of its constitutive disciplines.

Same course as PSY 382I. Not open for credit to students with credit in PSY 382I.

483./583. Philosophical Psychology (3)

Prerequisites: Six units of philosophy or consent of instructor.

Nature of the mind. Psychological concepts such as intention, consciousness, action, motive, imagination, belief and purpose.

484./584. Philosophy of Language (3)

Prerequisites: Six units of philosophy or consent of instructor.

Philosophical thought about language and meaning.

489. Philosophy Internship/Pre-Law (3-6)

Prerequisites: Consent of Philosophy Department Chair; completion of a minimum of 15 upper-division units required for the Philosophy major.

Internship with private organizations and governmental agencies. Work done under the joint supervision of the program sponsor and CSULB Philosophy Pre-Law Advisor. Mid-term, final report and internship conferences are required. (Activity 9 hours)

490./590. Selected Topics - Early Philosophy (3)

Prerequisites: Six units of philosophy or consent of instructor.

Detailed and intensive study of figures, periods or issues in ancient or medieval philosophy.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

491./591. Selected Topics - Modern Tradition (3)

Prerequisites: Six units of philosophy or consent of instructor.

Detailed and intensive study of a significant philosopher or of some issue or theme of the modern (1600-1900) philosophical era.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

492./592. Selected Topics - Twentieth Century Philosophy (3)

Prerequisites: Six units of philosophy or consent of instructor.

Detailed and intensive study of a significant philosopher or of a school or movement of the twentieth century.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

493./593. Selected Topics - Metaphysical Studies (3)

Prerequisites: Six units of philosophy or consent of instructor.

Seminar study of a selected metaphysical topic. Sample topics: Time, Personal Identity, Philosophical Theology, Philosophy of Action, Process Philosophy.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

496./596. Selected Topics - Value and Evaluation (3)

Prerequisites: Six units of philosophy or consent of instructor.

Seminar study of a selected topic in value or evaluation. Sample topics: Theories of Value, Freedom and Determinism.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

497H. Undergraduate Honors Seminar (3)

Prerequisites: 1) Admission to the undergraduate Honors Program in Philosophy. 2) Undergraduate Honors Thesis (PHIL 498) or (with consent of instructor) taken concurrently.

A capstone seminar designed to prepare exceptional undergraduate majors for graduate studies in philosophy and other disciplines. Complements Undergraduate Honors Thesis (PHIL 498).

Letter grade only (A-F).

498H. Undergraduate Honors Thesis (3)

Prerequisites: Admission to the undergraduate Honors Program in Philosophy.

Directed Studies course on a topic chosen by students in consultation with their Honors Thesis Director. Students register for thesis credits both fall and spring terms. Students are also required to register for Phil 497H during the spring term.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study of special topics under supervision of a faculty member.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL

513./413. Continental Rationalism (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Close study of such major figures as Descartes, Spinoza and Leibniz.

Letter grade only (A-F).

514./414. British Empiricism (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Close study of such major figures as Locke, Berkeley, and Hume.

Letter grade only (A-F).

516./416. Pragmatism (3)

Prerequisite: Three units of philosophy or consent of instructor.

Development of pragmatism as exemplified in the philosophies of Peirce, James, Dewey and Mead.

Letter grade only (A-F).

517./417. Phenomenology (3)

Prerequisites: Six units of philosophy or consent of instructor.

Study of one of the major movements of contemporary philosophy. Themes treated may include knowledge, meaning, emotionality, embodiment, language, sociality, freedom and religion. Philosophers treated may include Husserl, Scheler, Heidegger, Merleau-Ponty and Ricoeur.

Letter grade only (A-F).

518./418. Existentialism (3)

Prerequisites: Three units of philosophy or consent of instructor.

Intensive study of such issues as self-as-existence, freedom and responsibility in their ethical, religious, political and aesthetic dimensions. Philosophers treated may include Kierkegaard, Nietzsche, Marcel, Jaspers, Sartre and Camus.

Letter grade only (A-F).

519./419. Analytic Philosophy (3)

Prerequisites: Six units of philosophy to include PHIL 270, or consent of instructor.

Analysis of major movements in development of Anglo-American philosophy in the twentieth century, such as logical atomism, logical positivism and ordinary language philosophy. Study of contributions of such philosophers as Moore, Russell, Wittgenstein, Ayer, Ryle, Austin, Strawson, and Quine.

Letter grade only (A-F).

521./421. Plato (3)

Prerequisites: Six units of philosophy to include PHIL 203, or consent of instructor.

Close study of Plato's thought, based primarily on readings from his works.

Letter grade only (A-F).

522./422. Aristotle (3)

Prerequisites: Six units of philosophy to include PHIL 203, or consent of instructor.

Close study of Aristotle's thought, based primarily on readings from his works.

Letter grade only (A-F).

523./423. Kant (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Intensive study of Kant's Critique of Pure Reason.

Letter grade only (A-F).

524./424. Hegel (3)

Prerequisites: Six units of philosophy to include 204, or consent of instructor.

Study of Hegel's Philosophy of Mind and Logic, and selected writings by Hegel and other topics.

Letter grade only (A-F).

525./425. Wittgenstein (3)

Prerequisites: Six units of philosophy to include PHIL 204, or consent of instructor.

Close study of the later philosophy of Wittgenstein, centering on Philosophical Investigations.

555./455. Philosophical Perspectives on Sex and Love (3)

Prerequisites: Six units of philosophy or consent of instructor.

Philosophical perspectives on sex and love explores philosophical issues concerning sex, gender and love through readings and discussion of classical and contemporary philosophical sources. Topics such as sexual perversion, romantic love and gender discrimination are examined.

583./483. Philosophical Psychology (3)

Prerequisite: Six units of philosophy or consent of instructor.

Nature of the mind. Psychological concepts such as intention, consciousness, action, motive, imagination, belief and purpose.

Letter grade only (A-F).

584./484. Philosophy of Language (3)

Prerequisites: Six units of philosophy or consent of instructor.

Philosophical thought about language and meaning.

Letter grade only (A-F).

590./490. Selected Topics - Early Philosophy (3)

Prerequisites: Six units of philosophy or consent of instructor.

Study of figures, periods or issues in ancient or medieval philosophy.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

591./491. Selected Topics - Modern Tradition (3)

Prerequisites: Six units of philosophy or consent of instructor.

Study of a significant philosopher, or of some issue or theme of the modern (1600-1900) philosophical era.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

592./492. Selected Topics - Twentieth Century Philosophy (3)

Prerequisites: Six units of philosophy or consent of instructor.

Study of a significant philosopher or of a school or movement of twentieth century.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

593./493. Selected Topics - Metaphysical Studies (3)

Prerequisites: Six units of philosophy or consent of instructor.

Seminar study of a selected metaphysical topic.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

596./496. Selected Topics - Value and Evaluation (3)

Prerequisites: Six units of philosophy or consent of instructor.

Seminar of selected topic in value or evaluation. Sample topics: Theories of Value, Freedom and Determinism.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

597. Teaching Philosophy (3)

Prerequisites: Six units of philosophy or consent of instructor.

A practical and theoretical introduction to the aims, methods, responsibilities, and ethics of teaching in the college classroom, with an emphasis on the specific issues involved in teaching philosophy.

Letter grade only (A-F).

599. Graduate Tutorial (1-3)

Prerequisite: Six units of Philosophy or consent of instructor.

Supervised independent study.

Seniors with a GPA of 3.0 or better may enroll with consent of department. May be repeated to a maximum of 6 units. Letter grade only (A-F).

610. Proseminar (3)

Prerequisite: Classified or Conditionally Classified Status in Philosophy

Introduction to graduate-level philosophy, with emphasis on basic level skills in analysis, research, and composition. Content varies.

Letter grade only (A-F).

620. Selected Topics - History of Philosophy (3)

Prerequisite: Consent of instructor.

Close study of selected subjects in the history of philosophy. The original language may be required.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

630. Selected Topics - Philosophy of Religion (3)

Prerequisite: PHIL 330 or consent of instructor.

Critical examination of selected issues, figures and movements.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

640. Seminar in Metaphysics (3)

Prerequisites: Graduate standing; any conditions or deficiencies levied on admission must be rectified.

Supervised research and discussion on recurrent metaphysical problems and systems on the basis of selected works.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics.

663. Selected Topics - Ethics (3)

Prerequisite: PHIL 363 or consent of the instructor.

Systematic examination of topics (such as human rights, pleasure) and theories (such as utilitarianism, contract theory) which are central to moral reasoning.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

680. Selected Topics - Epistemology (3)

Prerequisite: PHIL 382 or consent of instructor.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

681. Selected Topics - Philosophy of Science (3)

Current issues in the philosophy of science.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

690. Selected Topics - Current Interest in Philosophy (3)

Presentation, discussion and critical evaluation of advanced work (which may include original research of faculty and graduate students) in selected topics of current interest to professional philosophers.

Letter grade only (A-F). May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*.

697. Directed Research (1-3)

Prerequisites: Classified Status and consent of student's advisor or Graduate Advisor.

Intended for preparation of the prospectus for the thesis option or preparation and completion of comprehensive exams in Philosophy.

Letter grade only (A-F).

698. Thesis (1-6)

Prerequisites: Consent of student's advisor or graduate advisor, and advancement to candidacy.

Preparation and completion of a thesis in philosophy and oral defense thereof.

PHYSICAL THERAPY

College of Health and Human Services

Department Chair: Kay Cerny

Department Office: Engineering Technology Building, Room 130
Telephone: (562) 985-4072

Faculty: George Beneck, Joyce Campbell, Kay Cerny, Jody Cormack, Olfat Mohamed, Albert C. Russo

Department Coordinator: Gloria Dacanay

Graduate Programs

Master of Physical Therapy

This program consists of 60-units preceded by a year of upper division prerequisites offered at the University. Applicants must have a bachelor's degree and have completed specific lower division prerequisites. Following didactic course work, students complete a 24-week internship required for state licensure.

The MPT degree at California State University, Long Beach is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (APTA).

Requirements

Complete all prerequisites with a minimum of "C" and earn a minimum grade-point average of 3.0 in upper-division prerequisites with a minimum of "B" in HHS 401 and BIOL 341.

Prerequisites

Natural Sciences:

Take all of the following:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. Credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering.)

CHEM 111B General Chemistry (5)

Prerequisites: CHEM 111A with a grade of "C" or better.

PHYS 100A General Physics (4)

Prerequisites: MATH 109 or 113 or 117 or 119A or 120 or 122.

PHYS 100B General Physics (4)

Prerequisites: PHYS 100A.

Biological Sciences:

Take all the following courses:

BIOL 208 Human Anatomy (4)

Prerequisites: GE Foundation requirements.

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisites: Open only to students who have successfully completed the equivalent of the lecture component of BIOL 211 at another accredited institution and have consent of the Department of Biological Sciences.

BIOL 212 Intro to Cell and Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grade of "C" or better.

BIOL 341 Physiology for Therapists I (4)

Prerequisites: BIOL 211, 212, 213 all with grade of "C" or better. Recommended: PHYS 100A, B.

BIOL 441 Physiology for Therapists II (3)

Prerequisites: BIOL 341 with a grade of "C" or better.

HHS 401 Applied Anatomy I (3)

Prerequisites: BIOL 208, or equivalent.

HHS 402 Applied Anatomy II (3)

Prerequisites: BIOL 208, or equivalent; "B" or better in HHS 401.

HHS 403 Tissue Mechanics and Aging (3)

Prerequisites: "B" or better in HHS 401 and BIOL 341 and consent of instructor.

HHS 460 Neuroanatomy (4)

Prerequisite: BIOL 341.

HHS 471 Pathology (3)

Prerequisites: BIOL 208; Corequisites: BIOL 341.

Take either the following course:

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation Requirements.

or

BIOL 213 Intro to Ecology and Physiology (4)

Prerequisites: BIOL 211, 212, CHEM 111B with a grade of "C" or better.

Biostatistics:

Take the following:

BIOL 260 Biostatistics (3) (preferred)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

Behavioral Sciences:

Take both of the following:

PSY 100 General Psychology (3)

Prerequisites/Corequisites: GE A1 requirement.

HHS 374 Professional Practice I: Interactions (3)

Prerequisites: Consent of instructor.

Core

Take all of the following courses:

PT 501 Musculoskeletal & Biomechanical Principles (4)

Prerequisites: HHS 401, 402, 403.

PT 502 Pathological Gait (1)

Prerequisites: PT 501.

PT 503 Management of Individuals with Musculoskeletal Disorders I (3)

Prerequisites: PT 501.

PT 504 Management of Individuals with Musculoskeletal Disorders II (4)

Prerequisites: PT 501, 503.

PT 505 Management of Human Growth and Dev (2)

Prerequisites: HHS 401, 460.

PT 506 Exercise Physiology for Physical Therapy (2)

Prerequisites: BIOL 341, 441; HHS 401, 460, 471.

PT 507 Examination of Individuals with Neuromuscular Disorders (2)

Prerequisites: HHS 460.

PT 508 Management of the Pediatric Population (2)

Prerequisites: PT 505, 507.

PT 509 Management of the Cardiopulmonary System (3)

Prerequisites: BIOL 341, 441; PT 505, 506.

PT 510 Patient Management & Functional Training (2)
Prerequisites: HHS 401, 402 and admittance to MPT program.

PT 511 Management of the Geriatric Population (3)
Prerequisites: PT 503, 504, 505, 507.

PT 512 Clinical Electrophysiology I (3)
Prerequisites: BIOL 341; HHS 402, 460.

PT 513 Clinical Electrophysiology II (2)
Prerequisites: PT 512.

PT 515 Management of Individuals with Neuromuscular Disorders (2)
Prerequisites: PT 507; Corequisites: PT 523.

PT 522 Clinical Practice I (1)
Prerequisites: PT 503, 507, 509, 510.

PT 523 Clinical Practice II (1)
Prerequisites: PT 522; Corequisites: PT 515.

PT 524 Clinical Practice III (1)
Prerequisites: PT 507, 515, 523; Corequisites: PT 608.

PT 574 Professional Practice Issues (2)
Prerequisites: HHS 374.

PT 604 Health Care Issues I (2)
Prerequisites: Admittance to MPT program.

PT 605 Health Care Issues II (2)
Prerequisites: Admittance to MPT program.

PT 607 Seminar in Cardiopulmonary Clinical Decision Making (1)
Prerequisites: PT 509.

PT 608 Neurologic Clinical Decision Making (1)
Prerequisites: PT 507.

PT 620 Management of Patients with Orthotic and Prosthetic Needs (2)
Prerequisites: PT 502, 503.

PT 622 Clinical Pathophysiology (3)
Prerequisites: PT 504, 505, 507, 509, 510, 513.

PT 674 Clinical Problem Solving (1)
Prerequisites: PT 574.

PT 696 Research Methods (2)
Prerequisites: Admittance to MPT Program.

Take a total of 4 units of one of the following in semesters 2, 3, and 4:

PT 697 Directed Research Studies (1-4)
Prerequisites: PT 574, 696, advancement to candidacy and consent of instructor.

PT 698 Research Thesis/Project (1-4)
Prerequisites: PT 574, 696, advancement to candidacy and consent of instructor.

Take at least one of the following electives:

PT 590, 611, 619

Admission

The physical therapy masters program is open to all college graduates who have met prerequisite requirements and demonstrate academic promise and ability to perform at a satisfactory level during their graduate studies. Application deadline is January 14 for fall admission.

To be considered for acceptance into the graduate program, the applicant must:

1. Complete all prerequisite courses with a minimum of "C" and a minimum grade point average of 3.0 in all upper-division prerequisites with a minimum of "B" in HHS 401 and BIOL 341;

2. Hold, or be eligible to hold, an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed equivalent academic preparation as determined by an appropriate campus authority;
3. Have attained a grade point average of at least 2.5 (A=4.0) in the last 60 semester (90 quarter) units attempted;
4. Submit results of the General Aptitude Section of the Graduate Record Examination (quantitative, verbal, and analytical), taken within the past 5 years;
5. Provide academic and personal references as required;
6. Provide documentation of personal experience in a variety of physical therapy settings; and
7. Be recommended by the physical therapy faculty.
8. All candidates whose preparatory education was principally in a language other than English must demonstrate competency in English. Refer to the CSULB Bulletin for requirements for completing the Test of English as a Foreign Language (TOEFL).

The master's degree program is a 60-unit, four semester plus one summer session, full-time course of study followed by an internship of 12 units. The course of study is most appropriate for graduates with degrees in related fields but does not exclude the person holding a baccalaureate degree in physical therapy. Course work is designed for entry-level professional study.

Advancement to Candidacy

1. Classified graduate student status.
2. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).
3. A minimum 3.0 grade-point average in all program graduate work as well as a minimum overall 3.0 in all graduate work attempted.
4. Be recommended by a faculty sponsor.
5. Enrollment in regular session.
6. Satisfactory completion of at least one semester of the program.

Admittance to Clinical Practice

1. Complete all requirements for the master's at the time of application to clinical practice.
2. Successfully complete one of the following:
 - A. Research Thesis or Project (PT 698)
 - B. Directed Studies (PT 697) with faculty advisor guidance.
3. If choice B (above) is selected, student must also successfully complete a comprehensive examination.

Internship Requirements

Take 12 units of the following which must be completed to be eligible to take the state examination for licensure:

PT 525 Clinical Internship I (3)
Prerequisites: Completion of all requirements for the MPT degree.

PT 526 Clinical Internship II (3)
Prerequisites: Completion of all requirements for the MPT degree.

PT 527 Clinical Internship III (3)
Prerequisites: Completion of all requirements for the MPT degree.

Doctoral Programs

Doctor of Physical Therapy

The program is designed to prepare the student for entry-level doctoral practice as a physical therapist. Graduates are employed in a variety of settings, including hospitals, rehabilitation centers and private physical therapy clinics. The Doctor of Physical Therapy program is open to all college graduates who have met prerequisite requirements and demonstrate sufficient preparation, potential for professional education and ability to perform the essential functions needed to practice as a physical therapist as determined by physical therapy faculty review of admission documents. Admission shall be granted on a competitive basis; meeting the admission requirements qualifies an individual for, but does not guarantee admission to the program.

Admission Requirements

1. Complete the university application to be admitted with graduate standing by the deadline of December 30 and complete the PTCAS application by the application deadline November 1 for summer admission the following year.
2. Submit to the university and PTCAS results of the General Aptitude Section of the Graduate Record Examination (quantitative, verbal, and analytical), taken within the past 5 years, and have earned at least a 4.0 on the Analytical Writing Component Score of the examination.
3. Provide PTCAS with three letters of recommendation attesting to the potential for success as a physical therapist and/or the scholarly potential of the applicant;
 - At least one letter must be from a physical therapist with whom the applicant had a professional association, and
 - One from a professor for a prerequisite course which the applicant completed.
 - If the applicant previously has been employed, the third letter should be from an employer.
 - If the applicant previously has not been employed, the third letter should be from a physical therapist with whom the applicant had a professional association.
4. Provide documentation of knowledge of physical therapy through a minimum of 100 documented hours of paid or volunteer experience under the direct supervision of a licensed physical therapist; and
5. Provide a written statement of purpose reflecting the applicant's commitment to physical therapy.
6. Meet prerequisite requirements.

Prerequisites

1. Hold, or be eligible to hold, an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed equivalent academic preparation as determined by an appropriate campus authority, by the end of the spring semester prior to admission to the program.

2. Have attained a grade point average of at least 3.0 (A=4.0) with at least 2.5 in the last 60 semester (90 quarter) units attempted,
3. Have been in good academic, professional, and clinical standing at the last institution and if applicable in the last entry-level physical therapist educational program attended,
4. Successfully have completed the following courses with a minimum of "C" and a minimum grade point average of 3.0 by the end of the fall semester prior to the year of admission to the program. No course may be repeated more than once and no more than 3 prerequisite courses may be repeated. CR/NC grades, correspondence courses, or independent study courses cannot be used for prerequisite requirements. Only 2 classes may be in progress during the fall semester of application.

Natural Sciences:

Take all of the following courses:

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in CHEM 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

PHYS 100A General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122. PHYS 100A is a prerequisite for PHYS 100B.

PHYS 100B General Physics (4)

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122. PHYS 100A is a prerequisite for PHYS 100B.

Biological Sciences:

Take all of the following courses:

BIOL 208 Human anatomy (4)

Prerequisites: GE Foundation requirements.

BIOL 211 Introduction to Evolution and Diversity (4)

Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

BIOL 212 Introduction to Cell & Molecular Biology (4)

Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.

Take either the following courses:

BIOL 207 Human Physiology (4)

Prerequisites: GE Foundation requirements.

or

BIOL 213 Introduction to Ecology and Physiology (4)

Prerequisites: BIOL 211, 212, CHEM 111B, each with a grade of "C" or better.

Biostatistics:

Take the following:

BIOL 260 Biostatistics (3) (preferred)

Prerequisites: BIOL 211 or BIOL 207 or MICR 200; MATH 111 or 113 or 119A or 122 all with a grade of "C" or better.

Behavioral Sciences:

Take the following:

PSY 100 General Psychology (3)

Prerequisite/Corequisite: GE A1 requirement.

Admission shall be granted on a competitive basis; meeting the admission requirements qualifies an individual for, but does not guarantee admission to the program.

Retention

1. Maintain a 3.0 or better grade point average in all graduate work completed.
2. Make continuous satisfactory progress toward the degree objective.

Advancement to Candidacy

1. Satisfy the general University requirements for advancement to candidacy.
2. Obtain classified status.
3. Have earned a minimum 3.0 grade-point average in all program graduate work as well as a minimum overall 3.0 in all graduate work attempted.
4. Fulfill the Graduation Writing Assessment Requirement (GWAR) by earning a 4.0 on the Analytical Writing Component Score of the GRE.
5. Complete a minimum of one semester (fall session) of graduate level coursework in the program.
6. Be enrolled during the term in which advancement to candidacy takes place.
7. Obtain approval for one's individual program plan from a faculty Doctoral Project sponsor, the Graduate Advisor and the Associate Dean of the College of Health and Human Services.

Qualifying Assessment

1. Successfully complete the Doctoral Project Proposal Paper and Oral Presentation.
2. Advance to candidacy.
3. Earn good standing in the clinical education program (beginner status on clinical Performance Instrument [CPI] for D.P.T. 781).
4. Demonstrate adherence to the essential physical, emotional and professional practice expectations of a physical therapist in the classroom and clinic (entry level on CPI skills 1 and 2 for D.P. T 781, acceptable practice in D.P.T. 731, 733 and 741).

Degree Requirements

The Doctor of Physical Therapy degree program is a 113-unit, three year, full-time cohort program including summer sessions that includes an internship of 12 units.

Core Coursework

Take all of the following courses:

- DPT 701 Anatomy for Physical Therapy I (3)
Prerequisites: BIOL 208 and admission to DPT program.
- DPT 702 Anatomy for Physical Therapy II (3)
Prerequisite: DPT 701.
- DPT 703 Neuroanatomy (3)
Prerequisite: DPT 701. Corequisite: DPT 702.
- DPT 704 Tissue Mechanics (2)
Corequisite: DPT 701.
- DPT 705 Biomechanical Principles (3)
Prerequisites: DPT 701, 702, 704.
- DPT 706 Physiology for Therapists (6)
Prerequisite: Admission to the DPT program.
- DPT 707 Physical Therapy across the Life Span (2)
Prerequisites: DPT 701, 702 and 703.
- DPT 708 Motor learning and Motor Control (2)
Prerequisite: Admission to DPT program.
- DPT 709 Exercise Science for Physical Therapy (3)
Prerequisites: DPT 701, 704, 706.

DPT 710 Pathology for Physical Therapy (3)
Prerequisite: Admission to DPT program.

DPT 720 Professional Interactions (3)
Prerequisite: Admission to DPT program.

DPT 721 Professional Practice Issues (2)
Prerequisite: DPT 720.

DPT 722 Critical Thinking for Physical Therapy (1)
Prerequisites: DPT 720, 721.

DPT 731 Physical Therapy Principles of Acute Care (2)
Prerequisites: DPT 701, 702, 703.

DPT 732 Examination of Individuals with Musculoskeletal Disorders (3)
Prerequisite: DPT 705.

DPT 733 Interventions for Individuals with Musculoskeletal Disorders (4)
Prerequisites: DPT 705, 732.

DPT 734 Advanced Management of Individuals with Musculoskeletal Disorders (2)
Prerequisites: DPT 705, 732, 733.

DPT 735 Normal and Pathological Gait (2)
Prerequisite: DPT 705.

DPT 736 Management of Individuals with Orthotic and Prosthetic Needs (2)
Prerequisites: DPT 732, 735.

DPT 740 Evaluation of Individuals with Neuromuscular Disorders (2)
Prerequisite: HHS 460.

DPT 741 Intervention for the Individual with Neuromuscular Disorders I (2)
Prerequisites: DPT 740; Corequisite: DPT 782.

DPT 742 Intervention for the Individual with Neuromuscular Disorders II (1)
Prerequisites: DPT 740, DPT 741. Corequisite: DPT 783.

DPT 743 Electroneuromyographic Management I (2)
Prerequisites: DPT 702, 703.

DPT 744 Electroneuromyographic Management II (2)
Prerequisite: DPT 743.

DPT 745 Management of the Pediatric Population (2)
Prerequisites: DPT 707, 740.

DPT 746 Advanced Management of Individuals with Neuromuscular Disorders (1)
Prerequisites: DPT 740, 741, 742.

DPT 750 Imaging for Physical Therapists (2)
Prerequisites: PT 710, 732.

DPT 751 Pharmacology for Physical Therapists (2)
Prerequisite: Admission to DPT program.

DPT 752 Differential Diagnosis for Physical Therapists (2)
Prerequisites: DPT 743, 750, 751.

DPT 760 Management of Individuals with Cardiopulmonary Disorders (3)
Prerequisites: DPT 706, 709.

DPT 765 Management of Individuals with Integumentary Disorders (2)
Prerequisite: DPT 710.

DPT 766 Prevention and Wellness (2)
Prerequisites: DPT 733, 745, 760.

DPT 767 Management of the Geriatric Population (3)
Prerequisites: DPT 733, 734, 745, 760.

DPT 768 Clinical Pathophysiology (3)
Prerequisites: DPT 707, 710, 731, 750, 751, 752.

DPT 769 Advanced Management of Individuals with Cardiopulmonary Disorders (1)
Prerequisite: DPT 760.

DPT 770 Health Care Delivery I (2)

Prerequisites: DPT 721, 722.

DPT 771 Health Care Delivery II (2)

Prerequisite: DPT 770.

DPT 781 Clinical Practice I (3)

Prerequisites: DPT 731, 732, 735, 740.

DPT 782 Neuromusculoskeletal Practice I (1)

Prerequisite: DPT 740. Corequisite: DPT 741.

DPT 783 Neuromusculoskeletal Practice II (1)

Prerequisite: DPT 782. Corequisites: DPT 742, 744.

DPT 784 Clinical Practice II (3)

Prerequisites: DPT 733, 734, 741, 742, 760, 781.

DPT 796 Research Methods (2)

Prerequisite: Admission to DPT program.

Take a total of 6 units of each of the following:

DPT 785 Clinical Internship I (3)

Prerequisites: DPT 752, 781, 784.

DPT 786 Clinical Internship II (3)

Prerequisites: DPT 781, 784, 785.

Take a total of 4 units of the following:

DPT 797 Doctoral Project (1-4)

Prerequisite: DPT 796.

Requirements for Clinical Coursework

Criminal background check, health insurance, titers and immunizations, medical clearance, malpractice insurance, CPR certification (lifesaving course with lab), and adhering to the department essential functions are required for clinical coursework.

Admittance to Clinical Internship

1. Successfully complete the comprehensive examination.
2. Successfully complete 4 units of a Doctoral Project (DPT 797)

Physical Therapy Courses (P T)

501. Musculoskeletal and Biomechanical Principles (4)

Prerequisites: HHS 401, 402, 403.

Advanced study of joint mechanics and pathomechanics with application to therapeutic procedures, posture and movement of the limbs, temporomandibular joint, neck and trunk. Includes normal gait.

Letter grade only (A-F). (Lecture/discussion 3 hours, laboratory 3 hours)

502. Pathological Gait (1)

Prerequisite: PT 501

Kinetics and kinematics of pathological gait with application to persons with gait disability. Emphasis is on gait analysis and problem solving causes of deviations.

Letter grade only (A-F). (Laboratory 3 hours)

503. Management of Individuals with Musculoskeletal Disorders I (3)

Prerequisite: PT 501.

Physical therapy evaluative process for patient/clients with musculoskeletal disorders including examination, evaluation, diagnosis, prognosis, including anticipated goals, expected outcomes, criteria for discharge and reexamination.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

504. Management of Individuals with Musculoskeletal Disorders II (4)

Prerequisites: PT 501, 503.

The interventions for individuals with disorders of the musculoskeletal system including exercise prescription, strengthening regimens, effects of disuse, life sequence, wellness and prevention, theories of pain and pain management and selected preferred practice patterns provided by physical therapists.

Letter grade only (A-F). (Lecture/discussion 3 hours, laboratory 3 hours)

505. Management of Human Growth and Development (2)

Prerequisites: HHS 401, 460.

Investigation and analysis of human development across the lifespan with emphasis on body systems contributing to the development of movement. Also addresses health risks, preventive strategies and wellness, including gender issues.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

506. Exercise Physiology for Physical Therapy (2)

Prerequisites: BIOL 341, 441; HHS 401, 460, 471.

Study of systems critical for patient management that are challenged and altered by exercise in health and pathology. Includes exercise measurement, test design, equipment, and pharmacology of exercise.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

507. Examination of Individuals with Neuromuscular Disorders (2)

Prerequisite: HHS 460.

Physical therapist evaluative process for patient/clients with neuromuscular disorders. Includes examination (task and movement analysis, tests and measures for body structure and function, activity, and participation), evaluation, diagnosis, prognosis, anticipated goals, expected outcomes, re-examination, and criteria for discharge.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

508. Management of the Pediatric Population (2)

Prerequisites: PT 505, 507.

Physical therapy management of the pediatric patient/client with neuromusculoskeletal disorders. Includes examination, evaluation, diagnosis, prognosis and intervention (with anticipated goals) including reexamination, outcomes and criteria for discharge. Includes pathophysiology, clinical decision making, and prevention/risk factor reduction.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

509. Management of the Cardiopulmonary System (3)

Prerequisites: BIOL 341, 441; PT 505, 506.

Physical therapy management of patient/clients with cardiopulmonary disorders including: examination, evaluation, diagnosis, prognosis and intervention (with anticipated goals) including reexamination, outcomes and criteria for discharge. Includes prevention/risk factor reduction.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours) Course fee may be required.

510. Patient Management and Functional Training (2)

Prerequisites: HHS 401, 402 and admittance to MPT program.

Patient/client management with emphasis on assistive and adaptive devices and physical agents, self care and home management (including activities of daily living and instrumental activities of daily living) and wound management. May include lectures from medical and physical therapy practitioners.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

Physical Therapy Courses (P T)

511. Management of the Geriatric Population (3)

Prerequisites: PT 503, 504, 505, 507.

Physical therapy management of the geriatric patient/client including examination, evaluation, diagnosis, prognosis and intervention (with anticipated goals), including reexamination, outcomes and criteria for discharge. Includes prevention/risk factor reduction.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours) Course fee may be required.

512. Clinical Electrophysiology I (3)

Prerequisites: BIOL 341; HHS 402, 460.

The investigation of the physiological and neurological basis for the selection of electromyographic assessment tools and for the selection of electrotherapeutic intervention in the management of the patient/client with pain, deformity, muscle weakness and disorders of the peripheral nervous system.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours) Course fee may be required.

513. Clinical Electrophysiology II (2)

Prerequisites: PT 512.

The investigation of the physiological and neurological basis for the selection of electromyographic assessment tools and electrotherapeutic intervention in the management of the patient/client with disorders of the central nervous system and mixed peripheral and central nervous systems.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours) Course fee may be required.

515. Management of Individuals with Neuromuscular Disorders (2)

Prerequisite: PT 507; Corequisite: PT 523.

Evidence-based physical therapist interventions for patients/clients with disorders of the neuromuscular system including movement facilitation, education, and prevention/risk factor reduction.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

522. Clinical Practice I (1)

Prerequisite(s): PT 503, 507, 509, 510

Six weeks of supervised full-time clinical practice in the acute care or outpatient orthopedic setting. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education.

Credit/No Credit grading only. May be repeated to a maximum of 2 units in different semesters. (Clinical Practice 6 weeks)

523. Clinical Practice II (1)

Prerequisite: PT 522; Corequisite: PT 515

Supervised pro bono clinical practice for management of the client with disorders of the neuromuscular system. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education.

Credit/No Credit grading only. (Clinic 1 hour)

524. Clinical Practice III (1)

Prerequisites: PT 507, 515, 523; Corequisite: PT 608

Supervised advanced pro-bono clinical practice for management of the client with disorders of the neuromuscular system. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education. Focus on problem solving and decision making.

Credit/No Credit grading only. (Clinic 1 hour)

525. Clinical Internship I (3)

Prerequisites: Completion of all requirements for the MPT degree.

Six weeks of supervised full-time inpatient or outpatient clinical practice in a hospital system. Satisfactory completion of the internship is required for licensure to practice in the state of California.

Credit/No Credit grading only. (Clinical internship 6 weeks) May be repeated to a maximum of 6 units in the same semester. The combination of PT 525, 526, and 527 must equal a minimum of 12 units.

526. Clinical Internship II (3)

Prerequisites: Completion of all requirements for the MPT degree.

Six weeks of supervised full-time inpatient or outpatient rehabilitation with pediatric, geriatric, or adult neurology patients. Satisfactory completion of the internship is required for licensure to practice in the state of California.

Credit/No Credit grading only. (Clinical internship 6 weeks) May be repeated to a maximum of 6 units in the same semester. The combination of PT 525, 526, and 527 must equal a minimum of 12 units.

527. Clinical Internship III (3)

Prerequisites: Completion of all requirements for the MPT degree.

Six weeks of supervised full-time patient management in an outpatient orthopedic setting. Satisfactory completion of the internship is required for licensure to practice in the state of California.

Credit/No Credit grading only. (Clinical internship 6 weeks) May be repeated to a maximum of 6 units in the same semester. The combination of PT 525, 526, and 527 must equal a minimum of 12 units.

574. Professional Practice Issues (2)

Prerequisites: HHS 374

Professional practice issues including evidence-based practice, the critical analysis of evidence, and cultural competence. Also the role of the physical therapist in facilitation of health care behavior change and educating patients and community.

Letter grade only (A-F). (Lecture/Discussion 2 hours)

590. Selected Topics in Physical Therapy (1-3)

Prerequisite: Consent of instructor.

Topics of current interest in physical therapy selected for special presentation.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in the same or different semesters. Topics announced in the *Schedule of Classes*.

597. Independent Studies (1-3)

Prerequisites: Consent of instructor, and for human dissection, one general introductory anatomy course, HHS 401 and 402.

Independent studies in any area of physical therapy. Human dissection is available as a special study.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (Independent studies)

604. Health Care Issues I (2)

Prerequisite: Admittance to MPT program.

Investigation of the health care delivery system including the regulatory, political, ethical, legal and promotional aspects of health care.

Letter grade only (A-F). (Lecture/discussion 2 hours)

605. Health Care Issues II (2)

Prerequisite: Admittance to MPT program.

Investigation and discussion of the process of planned direction, organization, management, and economics of physical therapy and physical therapy delivery. Includes theories of disease prevention and health promotion.

Letter grade only (A-F). (Lecture/discussion 2 hours)

607. Seminar in Cardiopulmonary Clinical Decision Making (1)

Prerequisites: PT 509.

Continuing management of patient/client with disorders of cardiopulmonary system. Integrates disorders of cardiopulmonary system with other disorders that may impact cardiopulmonary health. Includes examination, evaluation, intervention, advocacy, and caregiver education.

Letter grade only (A-F). (Seminar 1 hour)

608. Neurologic Clinical Decision Making (1)

Prerequisite: PT 507.

Continuing management of the client with disorders of the neuromuscular system. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education.

Credit/No Credit grading only. (Clinic 1 hour)

611. Advances in Orthopaedic Physical Therapy (2)

Prerequisites: PT 503, 504; MPT major or physical therapist.

Exploration of advanced clinical orthopedic management strategies.

Letter grade only (A-F). (Lecture 1 hour, laboratory 3 hours)

619. Contemporary Issues in Physical Therapy (2)

Prerequisite: PT 604 and consent of instructor.

Exploration of contemporary and emerging trends in physical therapy practice.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. (Lecture 1 hr, laboratory 3 hrs)

620. Management of Patients with Orthotic and Prosthetic Needs (2)

Prerequisites: PT 502, 503.

The prescription, application, and fabrication of devices and equipment (orthotic, prosthetic, supportive splinting, and taping).

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours) Course fee may be required.

622. Clinical Pathophysiology (3)

Prerequisites: PT 504, 505, 507, 509, 510, 513.

Pathophysiology of connective tissue in musculoskeletal, neuromuscular, cardiopulmonary and integumentary disorders as a basis for physical therapy evaluation, diagnosis, goal setting and conservative as well as pre and post-operative intervention in patients with multiple systemic disorders.

Letter grade only (A-F). (Lecture/discussion 3 hours)

674. Clinical Problem Solving (1)

Prerequisite: PT 574.

Critical thinking models and activities to promote problem solving and decision making in the physical therapy setting.

Letter grade only (A-F). (Lecture/discussion)

696. Research Methods (2)

Prerequisite: Admittance to MPT program.

Scientific inquiry with emphasis on information searching, research design (qualitative and quantitative), and applied statistics. Also includes critical inquiry and clinical decision-making guidelines, research ethics, and the development of a proposal on the validation of physical therapy practice.

Letter grade only (A-F). (Lecture/discussion 2 hours)

697. Directed Research Studies (1-4)

Prerequisites: PT 574, 696, advancement to candidacy and consent of instructor.

Research in an area of specialization in physical therapy under the direction of a faculty sponsor.

Letter grade only (A-F). Must be completed for a total of 4 units. Course fee may be required.

698. Research Thesis/Project (1-4)

Prerequisites: PT 574, 696, advancement to candidacy and consent of instructor.

Planning, preparation, and completion of thesis or project in physical therapy.

Letter grade only (A-F). Must be completed for a total of 4 units.

Doctor of Physical Therapy Courses (DPT)

701. Anatomy for Physical Therapy I (3)

Prerequisites: BIOL 208 and admission to DPT program.

Advanced study of the structure and function of the neuromusculoskeletal systems with emphasis on surface contour, myology, joint structure, and neurovascular supply. Regional emphasis includes upper extremity, head, neck and thorax.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

702. Anatomy for Physical Therapy II (3)

Prerequisite: DPT 701.

Continuation of DPT 701, with an emphasis on the normal anatomy of the lower extremities, pelvis, and abdominal region.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

703. Neuroanatomy (3)

Prerequisite: DPT 701. Corequisite: DPT 702.

Human neuroanatomy with emphasis on the structure and function of the central nervous system, and connecting peripheral pathways for human function and movement. Neuroanatomical and vascular lesions discussed with emphasis on differential diagnosis and neuropathology.

Letter grade only (A-F). Lecture/discussion 2 hours, laboratory 3 hours)

704. Tissue Mechanics (2)

Corequisite: DPT 701.

Advanced study of tissue (bone, muscle, dense fibrous connective tissue, cartilage, nerve) mechanics and pathomechanics including use, disuse and aging with application to joint mechanics.

Letter grade only (A-F). (Lecture/discussion 2 hours)

705. Biomechanical Principles (3)

Prerequisites: DPT 701, 702, 704.

Advanced study of joint mechanics and pathomechanics with application to therapeutic procedures, posture and movement of the limbs, temporomandibular joint, neck and trunk.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

706. Physiology for Therapists (6)

Prerequisite: Admission to the DPT program.

Advanced study of the mechanisms of function of the organ systems of the human body and the contribution of these systems to organismal homeostasis. Systems studied include the nervous, endocrine, musculoskeletal, sensory, cardiovascular, respiratory and renal.

Letter grade only (A-F). (Lecture/discussion 6 hours)

707. Physical Therapy Across the Life Span (2)

Prerequisites: DPT 701, 702 and 703.

Investigation and analysis of human development across the lifespan with emphasis on body systems contributing to the development of movement. Also addresses health risks, preventive strategies and wellness, including gender issues.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

Doctor of Physical Therapy Courses (DPT)

708. Motor Learning and Motor Control (2)

Theories and models of motor control and mechanisms underlying plasticity related to functional movement across the lifespan. Theories and models of normal and impaired motor learning (implicit and explicit), including application of concepts to feedback and practice in physical therapy.

Letter grade only (A-F). (Lecture/discussion 2 hours)

709. Exercise Science for Physical Therapy (3)

Prerequisites: DPT 701, 704, 706.

Study of systems challenged and altered by exercise in health and pathology. Includes exercise measurement, exercise prescription and intervention and strength and conditioning preparation.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

710. Pathology for Physical Therapy (3)

Advanced study of abnormal function as a result of disease. Includes general pathology and selected systems pathology, encompassing cardiovascular, pulmonary, musculoskeletal, peripheral and central nervous systems, and integumentary systems.

Letter grade only (A-F). (Lecture/discussion 3 hours)

720. Professional Interactions (3)

Self-awareness of how personality, learning preferences, and personal values affect professional interactions. Includes effective communication, conflict resolution, and eliciting patient values and goals. Also, communicating with patients who have experienced disability, sexual dysfunction, or issues with coping or dying.

Letter grade only (A-F). (Lecture/discussion 3 hours)

721. Professional Practice Issues (2)

Prerequisite: DPT 720.

Focus on professionalism and professional values including evidence-based practice, the critical analysis of evidence, and cultural competence. Also the role of the physical therapist in facilitation of health care behavior change and educating patients and the community.

Letter grade only (A-F). (Lecture/discussion 2 hours)

722. Critical Thinking for Physical Therapy (1)

Prerequisites: DPT 720, 721.

Critical thinking models and activities to promote problem solving and decision making in the physical therapy setting.

Letter grade only (A-F). (Lecture/discussion 2 hours)

731. Physical Therapy Principles of Acute Care (2)

Prerequisites: DPT 701, 702, 703.

Patient management in the acute care setting with emphasis on interpretation of laboratory values and physiological monitoring as the basis for functional training and use of assistive devices. Includes physical agents and introduction to wheelchair seating and positioning.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

732. Examination of Individuals with Musculoskeletal Disorders (3)

Prerequisite: DPT 705.

Physical therapist examination and evaluation for individuals with musculoskeletal disorders. Includes examination (history, screening, tests and measures), evaluation, diagnosis, prognosis, anticipated goals, expected outcomes, re-examination, and criteria for discharge.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

733. Interventions for Individuals with Musculoskeletal Disorders (4)

Prerequisites: DPT 705, 732.

Plan of care for the individual with musculoskeletal system disorders that is safe, effective and patient centered. Includes monitoring and adjusting plan of care, patient education, documentation, and use of supportive personnel.

Letter grade only (A-F). (Lecture/discussion 3 hours, laboratory 3 hours)

734. Advanced Management of Individuals with Musculoskeletal Disorders (2)

Prerequisites: DPT 705, 732, 733.

Physical therapist management of individuals with musculoskeletal disorders. Includes examination, evaluation, diagnosis, prognosis, expected outcomes, re-examination, and criteria for discharge. Includes safe, patient-centered plan of care, patient education, documentation, and use of supportive personnel.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

735. Normal and Pathological Gait (2)

Prerequisite: DPT 705.

Kinematics and kinetics of normal and pathological gait with emphasis on critical analysis of gait deviations and their causes in preparation for intervention.

Letter grade only (A-F). (Lecture 1 hour, laboratory 3 hours)

736. Management of Individuals with Orthotic and Prosthetic needs (2)

Prerequisites: DPT 732, 735.

The prescription, application, and fabrication of devices and equipment (orthotic, prosthetic, supportive splinting, and taping).

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

740. Evaluation of Individuals with Neuromuscular Disorders (2)

Prerequisite: HHS 460.

Physical therapist examination and evaluation for individuals with neuromuscular disorders. Includes examination (task and movement analysis, tests and measures for body structure and function, activity, and participation) evaluation, diagnosis, prognosis, anticipated goals, expected outcomes, re-examination, and criteria for discharge.

Letter grade only (A-F). (Lecture 1 hour, laboratory 3 hours)

741. Intervention for the Individual with Neuromuscular Disorders I (2)

Prerequisites: DPT 740; Corequisite: DPT 782.

Intervention for the individual with disorders of the central neuromuscular system. Planning and implementation of plan of care that is safe, effective and patient centered; monitoring and adjusting plan of care; patient education; documentation; use of supportive personnel.

Letter grade only (A-F). (Lecture 1 hour, laboratory 3 hours)

742. Intervention for the Individual with Neuromuscular Disorders II (1)

Prerequisites: DPT 740, DPT 741. Corequisite: DPT 783.

Intervention for the individual with disorders of the spinal cord and peripheral nerves. Planning and implementation of plan of care that is safe, effective and patient centered; monitoring and adjusting plan of care; patient education; documentation; use of supportive personnel.

Letter grade only (A-F). (Laboratory 3 hours)

743. Electroneuromyographic Management I (2)

Prerequisites: DPT 702, 703.

Physiologic and neurological basis for the selection of

electroneuromyographic [ENMG] assessment and intervention in the management of neuromusculoskeletal and peripheral nerve disorders.

Letter grade only (A-F). (Lecture/laboratory 1 hour, laboratory 3 hours)

744. Electroneuromyographic Management II (2)

Prerequisite: DPT 743.

Physiologic and neurological basis for the selection of electroneuromyographic [ENMG] assessment and intervention in the management of central nervous system and mixed central and peripheral nervous system disorders.

Letter grade only (A-F). (Lecture/laboratory 1 hour, laboratory 3 hours)

745. Management of the Pediatric Population (2)

Prerequisites: DPT 707, 740.

Physical therapist management of the pediatric individual with neuromusculoskeletal disorders. Includes examination, evaluation, diagnosis, prognosis, expected outcomes, re-examination, and criteria for discharge. Includes safe, patient-centered plan of care, patient education, documentation, and use of supportive personnel.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

746. Advanced Management of Individuals with Neuromuscular Disorders (1)

Prerequisites: DPT 740, 741, 742.

Physical therapist advanced management of individuals with complex neurologic disorders. Integrates and advances knowledge and skills related to evaluation and intervention. Includes community re-integration, home assessment, and management of the complex patient.

Letter grade only (A-F). (Lecture/Discussion 1 hour)

750. Imaging for Physical Therapists (2)

Prerequisites: PT 710, 732.

Knowledge and skills of radiology and imaging necessary for a comprehensive evaluation to design a rehabilitation program. Includes roentgenograms, dynamic and static MRI, CT, scintigraphy, PET, ultrasound, bone densitometry, and radioisotopes.

Letter grade only (A-F). (Lecture/discussion 2 hours)

751. Pharmacology for Physical Therapists (2)

Prerequisite: Admission to DPT program.

Study of the method of action, indications, contraindications and side effects of drugs commonly used by patients seen in physical therapy. Includes knowledge and skills necessary to perform a comprehensive evaluation necessary to design a rehabilitation program.

Letter grade only (A-F). (Lecture/Discussion 2 hours)

752. Differential Diagnosis for Physical Therapists (2)

Prerequisites: DPT 743, 750, 751.

Anatomical and physiological basis for patient screening to determine if referral to a medical doctor is required in the event that a medical condition supersedes or mimics a condition requiring physical therapy intervention.

Letter grade only (A-F). (Lecture/discussion 2 hours)

760. Management of Individuals with Cardiopulmonary Disorders (3)

Prerequisites: DPT 706, 709.

Physical therapist management of individuals with cardiovascular and pulmonary disorders. Includes examination, evaluation, diagnosis, prognosis, expected outcomes, and criteria for re-examination and discharge. Includes safe, patient-centered plan of care, patient education, documentation and use of supportive personnel.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

765. Management of Individuals with Integumentary Disorders (2)

Prerequisite: DPT 710.

Physical Therapy management of individuals with integumentary (skin) disorders including examination, evaluation, diagnosis, prognosis, intervention, re-examination and criteria for discharge.

Letter grade only (A-F). (Lecture/discussion 1 hour, laboratory 3 hours)

766. Prevention and Wellness (2)

Prerequisites: DPT 733, 745, 760.

Examination of the role of physical therapy in health promotion, wellness, and prevention of disease and disability across the lifespan.

Letter grade only (A-F). (Lecture/discussion 2 hours)

767. Management of the Geriatric Population (3)

Prerequisites: DPT 733, 734, 745, 760.

Physical therapy management of the geriatric patient/client including examination, evaluation, diagnosis, prognosis and intervention with anticipated goals, expected outcomes, criteria for discharge and reexamination.

Letter grade only (A-F). (Lecture/discussion 2 hours, laboratory 3 hours)

768. Clinical Pathophysiology (3)

Prerequisites: DPT 707, 710, 731,750, 751, 752.

Pathophysiology of connective tissue in musculoskeletal, neuromuscular, cardiopulmonary and integumentary disorders as a basis for physical therapy evaluation, diagnosis, goal setting and conservative as well as pre and post-operative intervention in patients with multiple systemic disorders.

Letter grade only (A-F). (Lecture/discussion 3 hours)

769. Advanced Management of Individuals with Cardiopulmonary Disorders (1)

Prerequisite: DPT 760.

Advanced management of individuals with cardiovascular and pulmonary disorders. Includes integration of cardiovascular and pulmonary disorders with other disorders commonly treated by physical therapists.

Letter grade only (A-F). (Lecture/discussion 1 hour)

770. Health Care Delivery I (2)

Prerequisites: DPT 721, 722.

Investigation of the health care delivery system including the legal, regulatory, political, ethical and professional duties of Physical Therapists. Includes laws and regulations governing compliant human management and environmental safety.

Letter grade only (A-F). (Lecture/discussion 2 hours)

771. Health Care Delivery II (2)

Prerequisite: DPT 770.

Investigation of the process of planned direction, organizational theory and management, and economics and fiscal management of physical therapy delivery including marketing and promotion.

Letter grade only (A-F). (Lecture/discussion 2 hours)

781. Clinical Practice I (3)

Prerequisites: DPT 731, 732, 735, 740.

Six weeks of supervised full-time clinical practice in the acute care or outpatient physical therapy setting. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters. (Clinical Practice 6 weeks)

Doctor of Physical Therapy Courses (DPT)

782. Neuromusculoskeletal Practice I (1)

Prerequisite: DPT 740. Corequisite: DPT 741.

Supervised pro bono clinical practice for management of the client with disorders of the neuromusculoskeletal systems. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education.

Credit/No Credit grading only. (Clinic 1 hour)

783. Neuromusculoskeletal Practice II (1)

Prerequisite: DPT 782. Corequisites: DPT 742, 744.

Supervised advanced pro bono clinical practice for management of the client with disorders of the neuromuscular system. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education. Focus on problem solving and decision making.

Credit/No Credit grading only. (Clinic 1 hour)

784. Clinical Practice II (3)

Prerequisites: DPT 733, 734, 741, 742, 760, 781.

Six weeks of supervised full-time clinical practice in the acute care or outpatient physical therapy setting. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education.

Credit/No Credit Grading only. May be repeated to a maximum of 6 units in different semesters. (Clinical Practice 6 weeks)

785. Clinical Internship I (3)

Prerequisites: DPT 752, 781, 784.

Six weeks of supervised full-time clinical practice in an inpatient or outpatient physical therapy setting. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education.

Credit/No Credit Grading only. May be repeated to a maximum of 6 units in different semesters. (Clinical Practice 6 weeks)

786. Clinical Internship II (3)

Prerequisites: DPT 781, 784, 785.

Six weeks of supervised full-time clinical practice in an inpatient or outpatient physical therapy setting. Includes examination, evaluation, intervention, advocacy, and client/family caregiver education. Setting will be different from DPT 785 internship.

Credit/No Credit Grading only. May be repeated to a maximum of 6 units in different semesters. (Clinical Practice 6 weeks)

790. Selected Topics in Physical Therapy (1-3)

Prerequisite: Admission to DPT program or consent of instructor.

Topics of current interest in physical therapy selected for special presentation.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

791. Current Trends in Physical Therapy (2)

Prerequisite: Admission to DPT program or consent of instructor.

Current trends in physical therapy selected for special presentation.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Practice trend announced in the *Schedule of Classes*.

796. Research Methods (2)

Prerequisite: Admission to DPT program.

Scientific inquiry with emphasis on information searching. Includes epidemiology, research design, measurement theory, applied statistics, critical inquiry and clinical decision-making guidelines, research ethics, and the examination of research intended to validate physical therapy practice.

Letter grade only (A-F). (Lecture/discussion 2 hours)

797. Doctoral Project (1-4)

Prerequisite: DPT 796.

Research in an area of specialization in physical therapy under the direction of a faculty sponsor.

Letter grade only (A-F). A total of 4 units must be completed.

May be repeated to a maximum of 4 units in different semesters.

PHYSICS AND ASTRONOMY

College of Natural Sciences and Mathematics

Department Chair: Chuhee Kwon

Department Office: Hall of Science (HSCI) 220
Telephone/FAX: (562) 985-4924/(562) 985-7924
Website: www.csulb.edu/depts/physics/

Faculty: Yohannes Abate, M. Zahur Anwar (emeritus), Andreas Bill, Thomas Gredig, Jiyeong Gu, Paul Hintzen, Zvonimir Hlousek, Prashanth Jaikumar, Patrick F. Kenealy (emeritus), Chuhee Kwon, Alfred F. Leung (emeritus), Zoltan Papp, Galen T. Pickett, Subhash Rajpoot

Advisors:

Undergraduate: Galen T. Pickett
Credential: James Kisiel, Tim Williamson
Graduate: Andreas Bill

Administrative Support Coordinator: Irene Howard

Students desiring information should contact the Department Office for referral to one of the faculty advisors.

Career Possibilities

Physicist • Teacher • Medical Physicist • Astrophysicist • Computer Scientist • Electro-Optical Engineer • Computer Engineer • Meteorologist • Metallurgist • Industrial Health Engineer • Aerospace Engineer • Geophysicist • Financial Analyst • Technical Writer • Astronomer • Teacher • Oceanographer • Systems Analyst • Mathematician • Materials Researcher • Quality Control Specialist • Food and Drug Inspector • Scientific Apparatus Salesperson • Nuclear Engineer • Physicist Technician (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu and www.aps.org/careers.) Various entry-level trainee positions in business and industry are available for graduates regardless of academic discipline.

Degree Programs

The Bachelor of Science degree is designed for students interested in immediate employment in industry or wishing to continue on to a Master's or Ph.D. degree in physics or a related field. The Bachelor of Arts degree is appropriate for those preparing for teaching careers in the physical sciences at the secondary level as well as those whose goal is a liberal art education with an emphasis on physics.

The Department also offers graduate study leading to the Master of Science degree. This degree is available in both a general option and an option in applied physics. A limited number of teaching associateships and graduate assistantships are available to students working on the master's degree. Work as a teaching associate is a valuable part of any degree program. Application should be made to the graduate advisor of the Department.

Academic Advising and Facilitated Enrollment into Classes

All entering students who declare a major in a degree program offered by this department need to contact the College of Natural Sciences and Mathematics' Academic Advising Center (HSCI 164) and participate in the College's Science Safari to Success (for first time freshmen) or EONS (Enrollment and Orientation in the Natural Sciences and

Mathematics for transfer students) Program. These programs are held in July for those starting in the Fall Semester and in January for those starting in the Spring Semester. Department advisors will be available to provide an overview of the students' chosen baccalaureate degree program, to assist with academic advisement, to provide information on the many career opportunities available, and to aid students in enrolling in classes. Contact the Jensen Student Access to Sciences and Mathematics Center (HSCI 164) or department office for additional information.

Concurrent and/or Summer Enrollment at Another College

Students who wish to take course work at a community college or another college or university to meet curricular requirements while enrolled as undergraduates in the College of Natural Sciences and Mathematics must petition the appropriate Department for prior approval to earn credit for specific courses. This policy applies to concurrent enrollment or summer enrollment. Please see "Concurrent Enrollment" and "Transfer of Undergraduate Credit" in this catalog. Courses not receiving prior approval will not be accepted for credit by the Department.

Undergraduate Programs

Bachelor of Science in Physics (120 units)

Requirements

Lower Division:

Take all of the following courses:

PHYS 151 Mechanics and Heat (4)

Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

PHYS 254 Modern Physics and Light (3)

Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

PHYS 255 Laboratory on Light & Modern Physics (1)

Prerequisite/Corequisite: PHYS 254.

CHEM 111A General Chemistry (5)

Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)

Prerequisite: CHEM 111A with a grade of "C" or better.

MATH 122 Calculus I (4)

Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)

Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)

Prerequisite: A grade of "C" or better in MATH 123 or 222.

MATH 247 Introduction to Linear Algebra (3)
Prerequisite: MATH 123 or 222.

Select one from the following:

BIOL 200 General Biology (4)
Prerequisite: GE Foundation requirements.

BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L are required if courses were taken prior to catalog year 2010-11.

Upper Division:

Take the following courses:

ENGL 317 Technical Writing (3)
Prerequisites: GE Foundation requirements, upper-division standing, and a previous composition course, i.e., ENGL 100, 101, 102, 300, or equivalents.

MATH 364A Ordinary Differential Equations I (3)
Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.

Take one other upper-division mathematics course

Take all of the following:

PHYS 310 Analytic Mechanics (3)
Prerequisite: PHYS 151. Corequisite: MATH 364A or 370A.

PHYS 320 Thermodynamics (3)
Prerequisite: PHYS 152. Prerequisite/Corequisite, PHYS 254.

PHYS 340A Electricity and Magnetism I (3)
Prerequisites: PHYS 152, 310. Prerequisite/Corequisite: MATH 370A or 364A.

PHYS 340B Electricity and Magnetism II (3)
Prerequisite: PHYS 340A.

PHYS 350 Modern Physics (3)
Prerequisites: PHYS 310; MATH 370A or 364A.

PHYS 360 Physics with Symbolic Algebra Software (3)
Prerequisite: PHYS 254. Prerequisite/Corerequisite: MATH 247.

PHYS 380 Electronics (4)
Prerequisite: PHYS 152.

PHYS 450 Quantum Physics I (3)
Prerequisites: PHYS 310, 340A, 350.

Take one laboratory course chosen from:

PHYS 445, 446, 476 and 480

The remaining (up to 8) units are to be chosen from any upper-division physics courses.

Grade Requirements

Physics majors must have a "C" average in the major. Physics students must achieve a grade of "C" or better in each required course in the major. The following schedule is typical for a major who is a full-time student.

Sophomore Year

Fall: PHYS 254, 255; MATH 224.

Spring: PHYS 360, 380; MATH 247.

Junior Year

Fall: PHYS 310, 320; MATH 364A.

Spring: PHYS 340A, 350; Upper division MATH elective.

Senior Year

Fall: PHYS 340B, 450.

Spring: Three upper division physics electives (one of which is a laboratory).

Bachelor of Arts in Physics (120 units)

Requirements

Lower Division:

Take all of the following courses:

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

PHYS 254 Modern Physics and Light (3)
Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

PHYS 255 Laboratory on Light & Modern Physics (1)
Prerequisite/Corequisite: PHYS 254.

CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).

CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.

MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.

MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.

MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.

Select one from the following:

BIOL 200 General Biology (4)
Prerequisite: GE Foundation requirements.

BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.

NOTE: BIOL 111, 111L are required if courses were taken prior to catalog year 2010-11.

Upper Division:

Take the following:

A minimum of 24 units selected in consultation with Physics Department Undergraduate Advisor, at least 18 units of which must be in physics

ENGL 317 Technical Writing (or approved equivalent) (3)
(may be waived for students who achieved a standard score of 24 on the ACT English sub-test or who received an "A" or "B" grade in ENGL 100).

Physics Concentration

The Physics Concentration meets the subject matter competence requirement for the Single Subject Teaching Credential in Physics. Prospective students should consult the Single Subject Science Education Advisor in the Department of Science Education early to plan their program.

Requirements

Lower Division:

Take all of the following:

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151;
Prerequisite/Corequisite: MATH 123.

- PHYS 254 Modern Physics and Light (3)
Prerequisite: PHYS 152 or EE 210; Prerequisite/
Corequisite: MATH 224.
- PHYS 255 Laboratory on Light & Modern Physics (1)
Prerequisite/Corequisite: PHYS 254.
- MATH 122 Calculus I (4)
Prerequisite: Appropriate MDPT placement or a grade of "C" or better in MATH 111 and 113, or a grade of "C" or better in MATH 117.
- MATH 123 Calculus II (4)
Prerequisite: A grade of "C" or better in MATH 122.
- MATH 224 Calculus III (4)
Prerequisite: A grade of "C" or better in MATH 123 or 222.
- ASTR 100 Astronomy (3)
Corequisites: One course from General Education Category B.2 and ASTR 100L.
- CHEM 111A General Chemistry (5)
Prerequisites: A passing score on the Chemistry Placement Examination. (Credit in Chem 101 does not substitute for a passing score on the Chemistry Placement Examination) and a "C" or better in MATH 113 or 117 or 119A or 122. One year of high school chemistry is strongly recommended. (Recommended for students who intend to pursue careers in science or engineering).
- CHEM 111B General Chemistry (5)
Prerequisite: CHEM 111A with a grade of "C" or better.
- GEOL 102 General Geology (3)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.
- GEOL 104 Geology Laboratory (1)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent, and concurrent or prior enrollment in GEOL 102.
- GEOL 160 Introduction to Oceanography (3)
Prerequisites/Corequisites: A course that fulfills the A.1 GE requirement and three years of high school mathematics including algebra, geometry, and intermediate algebra or the equivalent.
- BIOL 211 Introduction to Evolution and Diversity (4)
Prerequisite/Corequisite: CHEM 111A with a grade of "C" or better.
- BIOL 212 Introduction to Cell and Molecular Biology (4)
Prerequisites: Completion of BIOL 211 and CHEM 111A with grades of "C" or better.
- BIOL 213 Introduction to Ecology and Physiology (4)
Prerequisites: BIOL 212, CHEM 111B with a grade of "C" or better.

NOTE: BIOL 111, 111L, 212, 212L, 213, 213L are required if courses were taken prior to catalog year 2010-11.

Upper Division:

Take all of the following:

- PHYS 310 Analytic Mechanics (3)
Prerequisite: PHYS 151. Corequisite: MATH 364A or 370A.
- PHYS 340A Electricity and Magnetism I (3)
Prerequisites: PHYS 152, 310. Prerequisite/Corequisite: MATH 370A or 364A.
- PHYS 476 Modern Optics Laboratory (1)
Prerequisite: PHYS 340A.
- SCED 403 Integrated Science (3)
Prerequisites: Completion of all credential breadth requirements for the Single Subject Teaching Credential Program in Science, three-fourths of the credential specializations courses, and consent of instructor.

- SCED 404 Nature of Science Scientific Reasoning for Teachers (3)
Prerequisites: Completion of at least three-fourths of the credential specialization courses for Single Subject Teaching Credential in science and consent of instructor. Enrollment limited to students who intend to pursue a Single Subject Credential in Science.
- EDSS 300C Introduction to Teaching - Science (3)
Prerequisite: Advanced sophomore or junior standing.
- EDSS 450C Curriculum and Methods in Teaching Science (3)
Prerequisite: EDSS 300C; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.
- EDSE 435 U.S. Secondary Schools: Interculture Educ (3)
Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or permission of University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.
- EDSE 436 Curriculum, Instruction, Assessment and Classroom Management (3)
Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or permission of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.
- EDSE 457 Reading and Writing in Secondary School (3)
Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or permission of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.
- Select one course from each of the following pairs:
- MATH 364A Ordinary Differential Equations I (3)
Prerequisites: MATH 222 or 224, and prerequisite or corequisite MATH 247.
 - MATH 370A Applied Mathematics I (3)
Prerequisites: MATH 123. Not open to Freshmen.
 - PHYS 320 Thermodynamics (3)
Prerequisite: PHYS 152. Prerequisite/Corequisite, PHYS 254.
 - PHYS 422 Statistical Physics (3)
Prerequisites: PHYS 310, 320, 350.
 - PHYS 380 Electronics (3)
Prerequisite: PHYS 152.
 - PHYS 496 Special Problems in Physics (3)
Prerequisites: Consent of instructor and senior standing.

Single Subject Teaching Credential in Physics

In addition to meeting the subject matter competence requirement for the Teaching Credential, prospective Physics teachers are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete many of the credential program courses, except for student teaching, as an undergraduate. Courses may also be started as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the Single Subject Credential Program website (www.ced.csulb.edu/single-subject) for a description of the professional preparation requirements, courses, and application procedures.

The Physics Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

Minor in Physics

Requirements

The Minor in Physics is available to any non-Physics major. A minimum of 20 units which must include the following.

Lower Division:

Take all of the following:

PHYS 151 Mechanics and Heat (4)
Prerequisite/Corequisite: MATH 122.

PHYS 152 Electricity and Magnetism (4)
Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

PHYS 254 Modern Physics and Light (3)
Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

Upper Division:

A minimum of 9 units in physics.

Graduate Programs

Master of Science in Physics

Prerequisites

1. A bachelor's degree with a major in physics; or
2. A bachelor's degree with at least 24 units of upper division physics. (Students deficient in undergraduate preparation must take courses to remove these deficiencies without credit toward the degree at the discretion of graduate advisor.

Requirements

Take all of the following:

PHYS 510 Graduate Mechanics (3)
Prerequisite: PHYS 310.

PHYS 522 Statistical Physics (3)
Prerequisites: PHYS 310, 320, 350. (Undergraduates enroll in PHYS 422; graduates enroll in PHYS 522.)

PHYS 540A Graduate Electrodynamics I (3)
Prerequisite: PHYS 340B.

PHYS 550A Quantum Mechanics I (3)
Prerequisite: PHYS 450.

PHYS 560A Mathematical Methods of Physics (3)
Prerequisites: MATH 370A,B or equivalent.

PHYS 695 Colloquium (1)
Prerequisite: Graduate standing.

Take one of the following:

PHYS 545 Experimental Methods in Physics I (3)
Prerequisites: PHYS 254; PHYS 450 or consent of instructor. (Undergraduates enroll in PHYS 445; graduates enroll in PHYS 545.)

PHYS 546 Experimental Methods in Physics II (3)
Prerequisites: PHYS 254; PHYS 450 or consent of instructor. (Undergraduates enroll in PHYS 446; graduates enroll in PHYS 546.)

In addition, students may opt for one of two plans:

General Physics Plan

Take the following course:

PHYS 550B Quantum Mechanics II (3)
Prerequisite: PHYS 550A.

Take one of the following two choices:

1. Completion of at least 2 additional units of graduate-level PHYS courses, 6 units of PHYS 698, a written

thesis approved by the student's thesis committee consisting of a thesis chair (a Physics/Astronomy faculty member) and at least two more members, one of which must be a member of the Department, and an oral presentation of the thesis research. Note: Students must be advanced to candidacy before enrolling in PHYS 698. As early as possible, in consultation with the thesis chair, choose a thesis committee.

2. With the permission of the Graduate committee, an additional 8 units of 500-level PHYS courses, and satisfactorily complete a comprehensive examination.

Computational Physics Plan

Take the following courses:

PHYS 550B Quantum Mechanics II (3)
Prerequisite: PHYS 550A.

PHYS 562 Computational Methods in Theoretical Physics (3)
Prerequisite: PHYS 450, 462.

Take 6 units of the following:

PHYS 698 Thesis (6)
Prerequisite: Advancement to candidacy for the M.S. in Physics.

A written thesis approved by the student's thesis committee consisting of a thesis chair (a Physics/Astronomy faculty member) and at least two more members, one of which must be a member of the Department, and an oral presentation of the thesis research.

Note: Students must be advanced to candidacy before enrolling in PHYS 698. As early as possible, a graduate student in consultation with the thesis chair should choose a thesis committee.

Advancement to Candidacy

1. The regulations governing the master's degree are those in effect at the time of advancement to candidacy. Students must fulfill the University requirements for advancement to candidacy.
2. A student must have a "B" average or better in six units of physics applicable toward the master's degree, of which at least three units are at the graduate level.
3. Recognizing that effective organization and verbal communication of physics are a necessary part of a successful graduate program, the Department of Physics and Astronomy normally requires that a graduate student serve at least one semester as a teaching associate or a graduate assistant as part of the M.S. program. Exceptions may be granted by the Graduate Advisor.
4. Approval of the degree program by the graduate advisor, the Department Chair, Associate Dean in the College of Natural Sciences and Mathematics.

Option in Applied Physics

The Option in Applied Physics provides a master's degree program that emphasizes concepts and techniques particularly appropriate for applied physics. It is intended for students having a background in physics, engineering, or a related field.

Prerequisites

1. A bachelor's degree with a major in physics, or

2. A bachelor's degree with a major in engineering with upper division physics substantially equivalent to PHYS 310, 340A,B, and 450, as determined by the graduate advisor, or
3. A bachelor's degree with upper division physics and mathematics courses essentially equivalent to PHYS 310, 340B, 450; and MATH 370A,B; as determined by the graduate advisor.

Students deficient in undergraduate preparation must take courses to remove deficiencies as determined by the graduate advisor.

Requirements

Take all of the following:

PHYS 510 Graduate Mechanics (3)
Prerequisite: PHYS 310.

PHYS 522 Statistical Physics (3)
Prerequisites: PHYS 310, 320, 350.

PHYS 540A Graduate Electrodynamics I (3)
Prerequisite: PHYS 340B.

PHYS 550A Quantum Mechanics I (3)
Prerequisite: PHYS 450.

PHYS 560A Mathematical Methods of Physics (3)
Prerequisites: MATH 370A,B or equivalent.

PHYS 695 Colloquium (1)
Prerequisite: Graduate standing.

Take two courses of the following (one must be 545 or 546):

PHYS 545 Experimental Methods in Physics I (3)
Prerequisites: PHYS 254; PHYS 450 or consent of instructor.

PHYS 546 Experimental Methods in Physics II (3)
Prerequisites: PHYS 254; PHYS 450 or consent of instructor.

PHYS 576 Modern Optics with Laboratory (3)
Prerequisite: PHYS 340A.

PHYS 580 Computer Interfacing in Experimental Physics (3)
Prerequisite: PHYS 380 or consent of instructor.

Completion of the following:

Take 2 additional units of graduate-level PHYS course;

Take 6 units of the following:

PHYS 698 Thesis (6)
Prerequisite: Advancement to candidacy for the M.S. in Physics.

Completion of a written thesis, and an oral presentation of the thesis research. The members of the candidate's thesis committee must approve the thesis before the student may schedule the oral presentation.

Note: Students must be advanced to candidacy before enrolling in PHYS 698. As early as possible, a graduate student should choose a thesis chair who will help in selecting the student's thesis committee consisting of at least three members (including the thesis chair and at least one other faculty member of the Department).

Advancement to Candidacy

1. The regulations governing the master's degree are those in effect at the time of advancement to candidacy. Students must fulfill the University requirements for

advancement to candidacy.

2. A student must have a "B" average or better in six units of physics applicable toward the master's degree, of which at least three units are at the graduate level.
3. Recognizing that effective organization and verbal communication of physics are a necessary part of a successful graduate program, the Department of Physics and Astronomy normally requires that a graduate student serve at least one semester as a teaching associate or a graduate assistant as part of the M.S. program. Exceptions may be granted by the Graduate Advisor.
4. Approval of the degree program by the graduate advisor, the Department Chair and Associate Dean in the College of Natural Sciences and Mathematics.

Single Subject Teaching Credential in Physics

For information, refer to the undergraduate section in this department.

Physics Courses (PHYS)

LOWER DIVISION

100A,B. General Physics (4,4) F,S

Prerequisite: MATH 109 or 113 or 117 or 119A or 120 or 122. PHYS 100A is a prerequisite for PHYS 100B.

Year course in introductory physics. First semester considers properties of matter, mechanics, wave motion, and heat. Second semester considers electricity, light, and atomic and nuclear physics.

Letter grade only (A-F). (Lecture 3 hrs, laboratory 3 hrs.)

102. Introduction to Physics (3) F,S

Prerequisite: MATH 117 (which may be taken concurrently) or three-and-one-half years of high school mathematics including two years of algebra, one year of geometry and one-half year of trigonometry.

Assists students needing additional preparation before enrolling in PHYS 100A or 151. Basic problems and concepts in physics, particularly in mechanics.

Credit/No Credit grading only. Begins in the fourth week of the semester. (Lectures, problem sessions 4 hrs.)

151. Mechanics and Heat (4) F,S

Prerequisite/Corequisite: MATH 122.

Kinematics, Newton's Laws, rotational motion, fluid statics, laws of thermodynamics.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

152. Electricity and Magnetism (4) F,S

Prerequisite: PHYS 151; Prerequisite/Corequisite: MATH 123.

Mechanical waves, Coulomb's law, electrostatics, electric circuits, introductory electronics, magnetic fields, induction and Maxwell's equations.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

254. Applied Modern Physics (3) F,S

Prerequisite: PHYS 152 or EE 210; Prerequisite/Corequisite: MATH 224.

Geometrical and physical optics, models of atomic and condensed matter systems.

Not open for credit to students with a "C" or better in PHYS 153 or PHYS 154. Letter grade only (A-F). (Lecture 3 hrs.)

Physics Courses (PHYS)

255. Laboratory on Modern Physics (1)

Prerequisite/Corequisite: PHYS 254.

Experimental work in optics and modern physics.

Not open for credit to students with a "C" or better in PHYS 153 or PHYS 155. PHYS 255 is equivalent to PHYS 155. Letter grade only (A-F). (Laboratory 3 hrs.)

UPPER DIVISION

310. Analytic Mechanics (3) F

Prerequisite: PHYS 151. Corequisite: MATH 364A or 370A.

Kinematics and dynamics of mass points and systems of particles. Conservation laws. Harmonic motion. Central force problem. Noninertial frames of reference. Lagrangian and Hamiltonian formulation of laws of mechanics.

Letter grade only (A-F). (Lecture 3 hrs.)

320. Thermodynamics (3) F

Prerequisite: PHYS 152. Prerequisite/Corequisite, PHYS 254.

Laws of thermodynamics, thermodynamic potentials, kinetic theory methods, phase transitions, equilibrium ensembles and related formalism with applications to classical and quantum systems.

Letter grade only (A-F). (Lecture 3 hrs.)

330. Experimental Optics and Spectroscopy (3)

Prerequisites: PHYS 254, 255.

Interference, diffraction, polarization and elementary spectroscopy. (Lecture 2 hrs., laboratory 3 hrs.)

340A. Electricity and Magnetism I (3) S

Prerequisites: PHYS 152, 310. Prerequisite/Corequisite: MATH 370A or 364A.

Vector calculus, electrostatics, and magnetostatics. Formulation of Maxwell's equations in vector analytic form.

Letter grade only (A-F). (Lecture-discussion 3 hrs.)

340B. Electricity and Magnetism II (3) F

Prerequisite: PHYS 340A.

Special relativity. Applications of Maxwell's equations: Plane electromagnetic waves, guided waves, radiation, interaction of electromagnetic waves and matter.

(Lecture-discussion 3 hrs.)

350. Modern Physics (3) S

Prerequisites: PHYS 310; MATH 370A or 364A.

Physical phenomena and models leading to development of quantum mechanics. Schroedinger equation, one-dimensional quantum mechanical problems, uncertainty principle, one-electron atoms, elementary applications of quantum mechanics.

(Lecture-discussion 3 hrs.)

360. Physics With Symbolic Algebra Software (3)

Prerequisite: PHYS 254. Prerequisite/Corerequisite: MATH 247.

Learning symbolic algebra programming (e.g. Mathematica) to enhance the problem-solving abilities of students in physics, engineering and mathematics. Interpolation and fitting of experimental data. Sophisticated graphics, animations, analytic calculations, and numerical solutions for a variety of physics problems.

Letter grade only (A-F). (Lecture-discussion 3 hrs.)

380. Electronics (4) S

Prerequisite: PHYS 152.

Network analysis and complex impedance, transistor circuits, operational amplifiers, active filters and oscillators, digital

electronics, analog-digital interfacing, microprocessors.

Letter grade only (A-F). (Lecture 3 hrs., laboratory 3 hrs.)

390. Exploring Physics Teaching (3)

Prerequisite: PHYS 151 and consent of instructor.

Exploration of teaching physics as a learning assistant in secondary physics classrooms and in the lower-level laboratories and tutorials of the college physics curriculum. An exploration of the profession of teaching physics at many levels.

(Lecture, 3 hrs)

410./515. Relativity (3)

Prerequisite: PHYS 340A. Prerequisite/Corequisite: MATH 370A or 364A. (Undergraduates enroll in PHYS 410; graduates enroll in PHYS 515.)

Lorentz transformation, relativistic kinematics and dynamics, 4-vectors and tensors, transformation of electric and magnetic fields, covariant form of Maxwell's equations, introduction to general relativity.

Letter grade only (A-F). (Lecture-discussion 3 hrs.)

422./522. Statistical Physics (3) S

Prerequisites: PHYS 310, 320, 350. (Undergraduates enroll in PHYS 422; graduates enroll in PHYS 522.)

Entropy and temperature, Boltzmann distribution and Helmholtz free energy, thermal radiation, chemical potential, Gibbs distribution, ideal gas, Fermi and Bose gases, heat and work, Gibbs free energy and chemical reactions, phase transformations and kinetic theory.

Letter grade only (A-F). (Lec-discussion 3 hrs)

434./534. Astrophysics (3)

Prerequisites: PHYS 310, 320, and 340A or consent of the instructor. (Undergraduates enroll in PHYS 434; graduates enroll in PHYS 534.)

Topics in astrophysics. A particular semester schedule might include one or two topics from: Stellar interiors and evolution, radiative transfer and stellar atmospheres, relativistic cosmology, galaxy formation, accretion disk physics and quasars.

Letter grade only (A-F). (Lecture 3 hrs)

445./545. Experimental Methods in Physics I (3)

Prerequisites: PHYS 254; PHYS 450 or consent of instructor. (Undergraduates enroll in PHYS 445; graduates enroll in PHYS 545.)

Modern physical measurement techniques including scanning probe microscopy and pulsed nuclear magnetic resonance. Noise and fluctuations in physical measurements. Low noise measurement techniques including lock-in amplifier, gated integrator and boxcar averager, bridge circuits, convolution, auto- and cross-correlation and FFT.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

446./546. Experimental Methods in Physics II (3)

Prerequisites: PHYS 254; PHYS 450 or consent of instructor. (Undergraduates enroll in PHYS 446; graduates enroll in PHYS 546.)

Modern physical measurement techniques in condensed matter physics in high magnetic fields and low temperatures. Examples are temperature and magnetic field effects in magnetic materials, Meissner effect and superconducting transition temperature in superconductors, and mobility and Hall effect in semiconductors.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

450. Quantum Physics I (3) F

Prerequisites: PHYS 310, 340A, 350.

Schroedinger equation, atomic physics, harmonic oscillator, scattering, perturbation theory, Heisenberg and Dirac representations, spin, symmetries (angular momentum, time reversal, and parity), applications.

(Lec-discussion 3 hrs.)

451. Quantum Physics II (3)

Prerequisite: PHYS 450.

Measurement processes, atomic physics, identical particles, quantum statistics, numerical methods, many-body systems, density matrix, applications.

Letter grade only (A-F). (Lecture-discussion 3 hrs.)

462. Computational Methods in the Sciences (3)

Prerequisite: PHYS 310, 360.

Numerical programming and essentials of operating systems to tackle a problem in sciences, engineering and mathematics. Differential equations, integrals, roots, optimization, etc. Problems chosen from topics in upper-division science and mathematics courses.

Letter grade only (A-F). (Lecture 3 hrs)

470./569. Introduction to Solid State Physics (3)

Prerequisite: PHYS 450. (Undergraduates enroll in PHYS 470; graduates enroll in PHYS 569.)

Study of properties of solids from quantum theoretical viewpoint. Includes lattice vibrations, elastic constants, and thermal, electric, and magnetic properties.

Letter grade only (A-F). (Lecture 3 hrs.)

475./575. Modern Optics (3)

Prerequisite: PHYS 340A. (Undergraduates enroll in PHYS 475; graduates enroll in PHYS 575.)

Propagation of electromagnetic waves, optical resonators, laser spectroscopy and operation, optical phase conjugation, nonlinear optics and selected application.

Letter grade only (A-F). (Lecture 3 hrs.)

476./576. Modern Optics with Laboratory (3)

Prerequisite: PHYS 340A. (Undergraduates enroll in PHYS 476; graduates enroll in PHYS 576.)

Propagation of electromagnetic waves, optical resonators, laser spectroscopy and operation, optical phase conjugation, nonlinear optics and selected application. Experiments illustrating principles and techniques of electro-optics and laser physics. Applications include optical methods in communications, atomic spectroscopy, and nonlinear optics.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

480./580. Computer Interfacing in Experimental Physics (3)

Prerequisite: PHYS 380 or consent of instructor. (Undergraduates enroll in PHYS 480; graduates enroll in PHYS 580.)

Modern data acquisition and analysis methods using computer-based equipment and high level software. Physics experiments performed with standard personal computers, research-quality data acquisition hardware, and programmable instruments.

Computer use as tool in execution and interpretation of experiments.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

490./590. Selected Topics in Physics (3)

Prerequisite: Consent of instructor. (Undergraduates enroll in PHYS 490; graduates enroll in PHYS 590.)

Physics topics selected from such areas as atomic and nuclear physics, astrophysics, physics of materials, low temperature physics, acoustics, and theoretical physics.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*. (Lecture 3 hrs.)

496. Special Problems in Physics (1-3)

Prerequisites: Consent of instructor and senior standing.

Physics problems selected by instructor for considered and mature analysis. Written and 10-minute oral reports required.

GRADUATE LEVEL

500. Research Methods (1)

Prerequisite: Consent of instructor.

Study of literature about research methods in physics.

May be repeated to a maximum of 2 units; only 1 unit may be applied to the Master of Science in Physics. Letter grade only (A-F).

510. Graduate Mechanics (3) F

Prerequisite: PHYS 310.

Variational principles, Lagrange's equations, Hamilton's equations, canonical transformations, Hamilton-Jacobi theory, relativistic mechanics and small oscillation theory.

Letter grade only (A-F). (Lecture 4 hrs.)

515./410. Relativity (3)

Prerequisite: PHYS 340A. Prerequisite/Corequisite: MATH 370A or MATH 364A. (Undergraduates enroll in PHYS 410; graduates enroll in PHYS 515.)

Lorentz transformation, relativistic kinematics and dynamics, 4-vectors and tensors, transformation of electric and magnetic fields, covariant form of Maxwell's equations, introduction to general relativity.

Letter grade only (A-F). (Lecture-discussion 3 hrs.)

522./422. Statistical Physics (3) S

Prerequisites: PHYS 310, 320, 350. (Undergraduates enroll in PHYS 422; graduates enroll in PHYS 522.)

Entropy and temperature, Boltzmann distribution and Helmholtz free energy, thermal radiation, chemical potential, Gibbs distribution, ideal gas, Fermi and Bose gases, heat and work, Gibbs free energy and chemical reactions, phase transformations and kinetic theory.

Letter grade only (A-F). (Lecture-discussion 3 hrs.)

534./434. Astrophysics (3)

Prerequisites: PHYS 310, 320, and 340A or consent of the instructor. (Undergraduates enroll in PHYS 434; graduates enroll in PHYS 534.)

Topics in astrophysics. A particular semester schedule might include one or two topics from: Stellar interiors and evolution, radiative transfer and stellar atmospheres, relativistic cosmology, galaxy formation, accretion disk physics and quasars.

Letter grade only (A-F). (Lecture 3 hrs)

540A. Graduate Electrodynamics (3) S

Prerequisite: PHYS 340B.

Boundary-value problems, applications of special functions to electro/magnetostatics, Green's function techniques, multipole expansion of electrostatic field, dielectric media, Maxwell's equations, electromagnetic waves.

Letter grade only (A-F). (Lecture 3 hrs.)

540B. Graduate Electricity and Magnetism and Electrodynamics II (3)

Prerequisite: PHYS 540A.

Covariant formalism, simple radiating systems, radiation by moving charges, and topics in electrodynamics chosen from the following: wave guides, magnetohydrodynamics, thermodynamics and electrodynamics of continuous media, and radiation reaction.

Letter grade only (A-F). (Lecture 3 hrs.)

545./445. Experimental Methods in Physics I (3)

Prerequisites: PHYS 254; PHYS 450 or consent of instructor. (Undergraduates enroll in PHYS 445; graduates enroll in PHYS 545.)

Modern physical measurement techniques including scanning probe microscopy and pulsed nuclear magnetic resonance. Noise and fluctuations in physical measurements. Low noise measurement techniques including lock-in amplifier, gated integrator and boxcar averager, bridge circuits, convolution, auto- and cross-correlation and FFT.

Letter grade only (A-F). (Lecture 2 hrs, laboratory 3 hrs)

Physics Courses (PHYS)

546./446. Experimental Methods in Physics II (3)

Prerequisites: PHYS 254; PHYS 450 or consent of instructor. (Undergraduates enroll in PHYS 446; graduates enroll in PHYS 546.)

Modern physical measurement techniques in condensed matter physics in high magnetic fields and low temperatures. Examples are temperature and magnetic field effects in magnetic materials, Meissner effect and superconducting transition temperature in superconductors, and mobility and Hall effect in semiconductors.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

550A. Quantum Mechanics I (3) F

Prerequisite: PHYS 450.

Mathematical and postulational basis of quantum mechanics, one-dimensional problems, two-level systems, angular momentum, central potentials, time independent and time dependent perturbation theory.

Letter grade only (A-F). (Lecture 3 hrs.)

550B. Quantum Mechanics II (3) S

Prerequisite: PHYS 550A.

Scattering, rotation group and irreducible tensor operations, identical particles, semi-classical radiation theory, atoms, path integral formalism, and other selected topics.

Letter grade only (A-F). (Lecture 3 hrs.)

554. Nuclear Physics (3)

Prerequisite: PHYS 550A.

Deuteron problem, nucleon-nucleon potential, shell model, nuclear models, nuclear reactions, elementary particles, weak interactions, strong interactions.

Letter grade only (A-F). (Lecture 3 hrs.)

555. Elementary Particle Physics (3)

Prerequisites: PHYS 310, 340B, 450.

Feynman diagram language of scattering and decay, space-time symmetries, relativistic kinematics, hadron quantum numbers and quark models, QED, QCD and gluons, weak interactions.

Letter grade only (A-F). (Lecture 3 hrs.)

560A,B. Mathematical Methods of Physics (3,3)

Prerequisites: MATH 370A,B or equivalent.

Linear vector spaces, eigenvalue problem, functions of complex variable, special functions, properties and methods of solving partial differential equations of physics, integral equations, tensor analysis, and group theory.

Letter grade only (A-F). (Lecture 4,3 hrs.)

562. Advanced Computational Methods in Physics (3)

Prerequisite: PHYS 450, 642.

Computational methods applied to study advanced physics problems such as symbolic and numerical programming, and their applications in various fields (e.g. quantum mechanics, electrodynamics, statistical physics, condensed matter physics, astrophysics, atomic and subatomic physics, etc.)

Letter grade only (A-F). (Lecture 3 hrs.)

569./470. Introduction to Solid State Physics (3)

Prerequisite: PHYS 450. (Undergraduates enroll in PHYS 470; graduates enroll in PHYS 569.)

Study of the properties of solids from a quantum theoretical viewpoint. Topics include lattice vibrations, elastic constants, and thermal, electric and magnetic properties.

Letter grade only (A-F). (Lecture 3 hrs.)

575./475. Modern Optics (3)

Prerequisite: PHYS 340A. (Undergraduates enroll in PHYS 475; graduates enroll in PHYS 575.)

Propagation of electromagnetic waves, optical resonators, laser spectroscopy and operation, optical phase conjugation, nonlinear optics and selected applications.

Letter grade only (A-F). (Lecture 3 hrs.)

576./476. Modern Optics with Laboratory (3)

Prerequisite: PHYS 340A. (Undergraduates enroll in PHYS 476; graduates enroll in PHYS 576.)

Propagation of electromagnetic waves, optical resonators, laser spectroscopy and operation, optical phase conjugation, nonlinear optics and selected application. Experiments illustrating principles and techniques of electro-optics and laser physics. Applications include optical methods in communications, atomic spectroscopy, and nonlinear optics.

Letter grade only (A-F). (Lecture 2 hrs laboratory 3 hrs)

580./480. Computer Interfacing in Experimental Physics (3)

Prerequisite: PHYS 380 or consent of instructor. (Undergraduates enroll in PHYS 480; graduates enroll in PHYS 580.)

Modern data acquisition and analysis methods using computer-based equipment and high level software. Physics experiments performed with standard personal computers, research-quality data acquisition hardware, and programmable instruments. Computer use as tool in execution and interpretation of experiments.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.)

590./490. Selected Topics in Physics (3)

Prerequisite: Consent of instructor. (Undergraduates enroll in PHYS 490; graduates enroll in PHYS 590.)

Physics topics selected from such areas as atomic and nuclear physics, astrophysics, physics of materials, low temperature physics, acoustics, and theoretical physics.

May be repeated to a maximum of 6 units. Topics announced in the *Schedule of Classes*. (Lecture 3 hrs.)

691. Directed Study (1)

Intensive study of advanced topics in physics.

May be repeated to a maximum of 2 units. Letter grade only (A-F).

694. Seminar in Special Topics (1)

Prerequisite: Graduate standing.

Study of research papers and research methods in selected topics. If demand for more than one subject exists, multiple sections may be given in any one semester.

May be repeated to a maximum of 2 units; only 1 unit may be applied to the master's degree. Letter grade only (A-F). (Seminar 1 hr.)

695. Colloquium (1)

Prerequisite: Graduate standing.

Weekly meetings for presentation and discussion of current research in physics. Even though only 1 unit is for M.S. degree, graduate students are expected to attend each semester they are enrolled in University.

Credit/No Credit grading only. (Seminar 1 hr.)

697. Directed Research (1-3)

Theoretical and experimental problems in physics requiring intensive analysis.

Letter grade only (A-F).

698. Thesis (1-6)

Prerequisite: Advancement to candidacy for the M.S. in Physics.

Planning, preparation, and completion of acceptable thesis in partial fulfillment of requirements for master's degree. A half-hour seminar presenting and defending results of the thesis required. Credit obtained upon formal acceptance of thesis.

Astronomy Courses (ASTR)

LOWER DIVISION

100. Astronomy (3) F,S

Corequisites: One course from General Education Category B.2 and ASTR 100L.

Introductory course in astronomy. The earth moon system and the planets, the stars and their constitution. Survey of the methods of astronomical observation.

(Lecture 3 hrs.)

100L. Introductory Astronomy Laboratory (1) F,S

Prerequisites/Corequisites: One course from Category B.2 of GE requirements; ASTR 100.

Astronomical coordinates, star maps, magnitude, spectral classification, ages of stars, distance to star clusters.

Not open for credit to students with credit in ASTR 101.

(Laboratory 3 hrs.)

UPPER DIVISION

370I. Planetary Environments (3)

Prerequisites: GE Foundation requirements and GE B.1.b category; upper division standing.

Planets and moons analyzed as to surface geology, interiors, atmospheres, etc. Methodologies and scientific reasoning about nature and origins of features. Origin of terrestrial life, including role of extinction events, and probable requirements for life elsewhere in universe.

(Lecture 3 hrs.)

Physical Science Courses (PHSC)

LOWER DIVISION

112. Introduction to the Physical Sciences (3) F,S

Prerequisite/Corequisite: One course from Category B.2 of GE Foundation.

Selected processes which illustrate some basic principles used by scientists to interpret modern ideas of matter and energy in physical universe.

Not open for credit to majors in any of the physical sciences.

(Lecture 2 hrs., laboratory 3 hrs.)

POLITICAL SCIENCE

College of Liberal Arts

Department Chair: Teresa Wright

Department Office: Social Science Public Affairs (SS/PA) Rm 257

Telephone: (562) 985-4704

FAX: (562) 985-4979

Email: posc@csulb.edu

Website: <http://www.csulb.edu/colleges/CLA/departments/polisci/>

Faculty: Mary Caputi, Christopher Dennis, Larry George, Cora Sol Goldstein, Liesl Haas, Richard Haesly, William M. Leiter, Larry F. Martinez, Charles Noble, Amy Cabrera Rasmussen, Gerry Riposa, Barry H. Steiner, Kevin Wallsten, Jason E. Whitehead, Amy Widestrom, Teresa Wright

Administrative Coordinator: Amelia Marquez

Students desiring information should contact the department office for referral to one of the faculty advisors:

Advisors:

Credential: Ilene Luhr (History)

Undergraduate: Amy Rasmussen

Graduate: Cora Sol Goldstein

Pre-Law: Jason Whitehead

Career Possibilities

Political Scientist • Journalist • Foreign Service Officer • Urban Planner • Para Legal • Labor Relations Specialist • Administrator • Researcher • Lobbyist • Archivist • Probation/Parole Officer • Intelligence Analyst • Teacher • Lawyer • Social Service Worker • Market Research Analyst • Public Survey Worker • Community Organizer • Politician • Legislative Aide • City Manager (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The political science major provides systematic knowledge of the nature and scope of political science. In addition, a political science major is preparation for general education, good citizenship and participation in political life.

Pre-Law Program and Preparation

This program combines opportunities to intern in legal settings with study in liberal arts, government, and public law. Interested students should consult with the Pre-law advisor to plan a course of study and prepare for law school admission.

General Education Requirements in Government

The Education Code requires each college graduate to meet (1) a federal government requirement and (2) a California state and local government requirement. Both of these requirements can be met by POSC 100 (for lower division students) or POSC 391 (for upper division students). If the student has completed the federal government requirement, but not the California state and local government requirement, the student should take POSC 199, 326, or 399. Students who have taken American federal, state or local government at another institution should check with a political science advisor before enrolling.

Undergraduate Programs

Bachelor of Arts in Political Science (120 units)

Requirements

Required Courses (6 units):

POSC 100 Introduction to American Government (3)
Prerequisite/Corequisite: GE A1 requirement.

POSC 300 Scope/Methods Political Science (3)
Prerequisite: POSC 100.

Concentration Requirement (18 units):

Take 18 units in one of the three areas of concentration:

1. Law, Politics, Policy
2. Political Theory
3. Global Politics

Take 3 lower-division units and 15 upper-division units in the chosen area of concentration, including the senior seminar in that area.

Breadth Requirement, 15 units of which:

1. no more than six units may be from the student's area of concentration;
2. no more than three may be lower division;
3. a minimum of three units must be from each of the student's two non-concentration areas, for a total of six units

Note: This program must include at least three units of a practicum.

Note: POSC 100, the 200-level concentration requirement, and POSC 300 must be completed by the end of the junior year.

Total Units: 39

Honors in Political Science

Students with a major in Political Science may be admitted to the Political Science Department's honors program (option of the University Honor's Program).

Requirements

Minimum requirements for eligibility are:

1. Junior standing, completion of POSC 300, and at least two additional upper-division courses in Political Science;
2. A minimum of two semesters remaining before graduation following the spring semester in which the application is submitted;
3. A minimum cumulative GPA of 3.3, and 3.5 in Political Science courses

Applications for fall admission are due April 15, and must include:

1. A completed application form
2. One letter of recommendation from the faculty sponsor that has agreed to oversee the applicant's honors thesis.
3. One letter of recommendation from a second faculty member (preferably in Political Science)
4. A 5-10 page research or analytical paper written for a previously taken course in Political Science

In order to graduate with Honors in Political Science a student must:

1. Complete all regular requirements for the major in Political Science;
2. Complete 3 units of POSC 490H: Honors Seminar (offered in the fall semester only);
3. Complete 3 units of POSC 491H: Honors Research (offered in the fall semester only);
4. Complete 3 units of POSC 492H: Honors Thesis (offered in the spring semester only);
5. Have at the time of graduation a minimum cumulative GPA of 3.3 and 3.5 in Political Science courses.

Minor in Political Science

The Minor in Political Science is available to any non-Political Science major.

Requirements

A minimum of 21 units which must include:

Take one of the following courses:

POSC 100 Introduction to American Government (3)
Prerequisite/Corequisite: GE A1 requirement.

POSC 391 American Government (3)
Prerequisites: GE Foundation requirement.

Take the following course:

POSC 300 Scope and Methods of Political Science (3)
Prerequisite: POSC 100.

Fifteen Elective units in POSC:

No more than three units may be lower division.

May include one approved political science internship from the following: POSC 418, 447, 448, 496, or 498.

Minor in Public Administration in Political Science

The Minor in Public Administration in Political Science is available to any non-Political Science major.

Requirements

A minimum of 21 units which must include:

1. A minimum of 15 units selected from the following: POSC 300, 326, 327, 328, 329, 430, 431, 432, 447, 448, 498;
2. 6 additional upper division POSC units selected in consultation with a POSC Undergraduate Advisor.

Interdisciplinary Minor in Public Policy

The minor consists of 21 units including a core curriculum of 12 units and 9 units of electives. A maximum of 6 units may be taken in the student's major department, but no units may be counted in both the major and minor.

Requirements

1. Core Curriculum (12 units required):

Twelve units chosen from among the following courses:
ECON 450, POSC 328, PSY 375I, U/ST 301I

Note: It is strongly recommended that students take core courses in sequence, the first two courses during the Junior year; the second two during the Senior year.

2. Electives: (9 units required):

At least 6 units of the 9 elective units must be taken in one of the policy area concentrations outlined below. The remaining 3 units may be taken from among any of the elective courses approved for the minor.

Policy Area Concentrations:

Community Relations and Social Services, Health Care, Housing and Recreation, Education, Economic Regulation, Justice and Law, Land Use and Ecology, Computational Skills for Public Policy, Foreign Policy and International Relations, Values and Public Policy, Government Processes and Policy, Law, Politics and Policy

Graduate Programs

Master of Arts in Political Science

Student can view the general requirements of the University and the specific requirements of the department in this *Catalog*. Important supplementary information about the master's degree in political science is available on the department website. Before entering the program, students will normally consult with the graduate advisor.

After beginning graduate study, the student is responsible for obtaining the consent of fulltime members of the department's graduate faculty to serve on her/his graduate committee. The student should seek to have established her/his committee prior to completion of the first year or the first 18 units of work as a graduate student in political science unless the Department Graduate Committee grants an exception.

Prerequisites

1. A bachelor's degree with a major in political science or a bachelor's degree with 24 upper division units in political science comparable to those required for a major in political science at this university.
2. Completion of a minimum of one upper-division political theory course equivalent to POSC 301 or POSC 303 at CSULB, with a grade of "B" or better.
3. Students whose undergraduate work is deficient in political science will be required to make up certain courses. Deficiencies will be determined by the Department's Graduate Committee after taking into account each student's background and goals. These courses will not count toward credit in the M.A.
4. A 3.0 ("B") GPA in political science courses taken as an undergraduate. (A student whose GPA is less than 3.0 may appeal to the Department's Graduate Committee for a possible waiver of this requirement.)
5. Three letters of recommendation (preferably from academic sources).

Advancement to Candidacy

1. Satisfy the general requirements of the University for advancement to candidacy;
2. In order to be recommended for advancement to candidacy, students must obtain the written approval of their master's degree program of course work by their committee chair and graduate advisor.

Requirements

A student's program is formulated in consultation with the department's Graduate Coordinator.

The following courses are required, for a total of 30 units:

POSC 500 Foundations & Scope of Political Science (3)
Prerequisite: Graduate standing in Political Science or consent of instructor.

POSC 525 Seminar in Political Theory (3)
Prerequisite: Graduate standing in political science or consent of instructor.

POSC 550 Research Methods in Political Science (3)
Prerequisite: Graduate standing in Political Science or consent of instructor; POSC 500.

Three of the following:

POSC 640, 642, 600, 610 (9)

Two of the following:

POSC 605, 615, 644, 646 (6)

One elective graduate course

(selected in consultation with Graduate Coordinator) (3)

One of the following:

POSC 697 (3) consists of a comprehensive examination in the student's major and minor subfields

POSC 698 (3) consists of a thesis

Law, Politics and Policy

POSC 212 How Democratic is the United States?

POSC 311 Constitutional Law: Power

POSC 312 Constitutional Law: Rights

POSC 321 The Media and American Politics

POSC 322 Parties, Campaigns, and Elections

POSC 323 Racial and Ethnic Politics – U.S.

POSC 326 California Government in Comparative Perspective

POSC 327 Urban Politics

POSC 328 Public Policy

POSC 329 Cases in Public Policy Making

POSC 412 Law and Social Change

POSC 414 Jurisprudence

POSC 417 Legal Practices: Moot Court

POSC 418 Legal/Judicial Apprenticeship

POSC 422 Public Opinion and Political Behavior

POSC 423 The American Presidency

POSC 424 The United States Congress

POSC 430 Fundamentals of Public Administration

POSC 431 Public Policy Analysis

POSC 432 Public Values and Public Policy

POSC 439 Senior Seminar in Law, Politics, and Policy

POSC 447 Public Service Internship I

POSC 448 Public Service Internship II

Political Theory

POSC 225 Issues in Political Theory

POSC 301 Classical Political Theory

POSC 303 Modern Political Theory

POSC 304 Recent Political Theory

POSC 306 Contemporary Political Ideologies

POSC 308 American Political Theory

POSC 401 Women in Political Theory

POSC 409 Senior Seminar in Political Theory

Global Politics

POSC 218 Global Politics

POSC 353 Governments and Politics of Western Europe

POSC 358 Contemporary Latin American Politics

POSC 362 Society and National Politics of China

POSC 367 Governments and Politics of the Middle East

POSC 371 Introduction to International Politics

POSC 376 International Law

POSC 378 Politics and Practice of the UN

POSC 450 Comparative Political Movements

POSC 455 Comparative Revolutionary Change

POSC 461I The Politics of Development

POSC 463 Nationalism and National Identities

POSC 479 Senior Seminar in Global Politics

POSC 481 U.S. – Latin American Relations

POSC 482 American Foreign Policy

POSC 485 International Political Economy

POSC 486 National Security Policies

General

POSC 199 Introduction to California Government

POSC 300 Scope/Methods Political Science

POSC 388I Cyberspace Citizenship

POSC 391 American Government

POSC 395I Politics Through Culture

POSC 399 Introduction to California Government

POSC 490H Honors Seminar

POSC 491H Honors Research

POSC 492H Honors Thesis

POSC 493 Special Topics

POSC 494I Politics of the Future

POSC 496 Washington Center Internship

POSC 497 Special Topics

POSC 498 Practicum in Politics

POSC 499 Readings and Conference in Political Science

Political Science Courses (POSC)

LOWER DIVISION

100. Introduction to American Government (3)

Prerequisite/Corequisite: GE A1 requirement.

Introductory survey of American Political Institutions, politics, and policy, including government and politics in California. Constitutional foundations and current controversies. Satisfies the general education requirement and the California teaching credential requirement.

105. Introduction to Critical Thinking (3)

Prerequisites/Corequisite: ENGL 100 or equivalent.

Introduction to critical thinking through study of philosophical writing, political rhetoric, and political propaganda. Emphasis on distinguishing facts from values, inductive from deductive reasoning, emotional responses from reasoned judgments; relationship between language and logic; the role of inference; intellectual honesty.

199. Introduction to California Government (1)

Prerequisite: POSC 100.

Introductory survey of California political institutions, politics and policy. Satisfies the general education California state and local government requirement for students who have taken American government without a California component or who have received Advanced Placement credit for American Government. Not open for credit to students with credit in POSC 326.

210. Issues of American Politics (3)

Prerequisite: GE Foundation requirement; POSC 100.

Intensive study of issues associated with the concepts of democracy, limited government, federalism, separation of powers, judicial review, and preservation of individual rights.

212. How Democratic is the United States? (3)

Prerequisites: GE Foundation requirement; POSC 100.

Examination of persistent challenges to citizen control of government in the U.S., including growth of executive power; economic inequality; racial inequality; rise of infotainment; decline of political participation and civic engagement.

215. Issues of Comparative Politics (3)

Prerequisite: GE Foundation requirement; POSC 100.

Intensive study of issues associated with selected foreign governments, modernization, revolution, political change and world ideological conflict.

218. Global Politics (3)

Prerequisites: GE Foundation requirement; POSC 100.

Study issues central to politics in a global context, such as democracy, communism, fascism, democratization, revolution, liberalism, and anti-liberalism. Examine questions of national sovereignty, as well as the relation between nation states and the rise of non-state and trans-state actors.

220. Issues in Global Politics (3)

Prerequisite: GE Foundation requirement; POSC 100.

Divergences between nations as they affect political differences between states. The political significance of the encounter of individuals with those of different nationalities.

225. Issues in Political Theory (3)

Prerequisites: GE Foundation requirement; POSC 100.

Study and discussion of issues including revolution, power, justice, alienation, the nature of democracy, and other important political concepts. Views of theorists such as Plato, Hobbes, Rousseau, Mill, and Marx will be examined.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course.

300. Scope and Methods of Political Science (3)

Prerequisite: POSC 100.

Examines what political scientists do. Focus on quantitative and qualitative techniques employed by political scientists to understand political phenomena. Examples draw on all subfields from political science: American politics, comparative politics, international relations, political theory, public law and public policy.

Letter grade only (A-F).

301. Classical Political Theory (3)

Prerequisites: GE Foundation requirement; POSC 100.

Ancient Greek and Roman roots of political theory. Socrates and the Sophists; Plato; Aristotle; Cicero; Polybius; and the Stoics. Examines relationship between the individual citizen and the Polis, justice and equality, democracy and dictatorship; the political culture of Mediterranean world.

303. Modern Political Theory (3)

Emergence of modern political thought in Western Europe from the 17th through the 19th century. Examines views of state and society in John Locke, Thomas Hobbes, Jean Jacques Rousseau, John Stuart Mill, Edmund Burke, George Hegel, and Karl Marx.

304. Recent Political Theory (3)

Critical examination of major themes in political thought in industrial and post-industrial society, from the late 19th century until today.

306. Contemporary Political Ideologies (3)

Critical examination of the nature and role of ideologies in contemporary politics. Conservatism, liberalism, socialism, communism and fascism in theory and practice.

308. American Political Theory (3)

Critical examination of theorists, concepts and forces which have shaped American political consciousness from Puritans to present.

311. Constitutional Law: Power (3)

Prerequisite: POSC 100 or 391 or equivalent.

Judicial interpretation of the U.S. Constitution. Judicial review; the power of the Presidency and the Congress; state governmental authority; nature of the American federalism.

312. Constitutional Law: Rights (3)

Prerequisite: POSC 100 or 391 or equivalent.

Analysis of the rights and guarantees contained in the Bill of Rights and other constitutional and statutory provisions. Examination of leading cases.

321. The Media and American Politics (3)

Prerequisites: GE Foundation requirement; POSC 100 or consent of instructor.

Role of print and electronic media in American politics and their relationship to politicians and the public. Media's impact on government, policy making, election campaigning. Prospects for democratic deliberation. Portrayal of political issues and political themes in popular culture.

322. Parties, Campaigns, and Elections (3)

Prerequisites: GE Foundation requirement.

The nature and impact of the American two-party system; why people vote as they do; how candidates seek electoral support. Comparison of American party politics to party politics in other democratic countries.

323. Racial and Ethnic Politics - U.S. (3)

Prerequisites: GE Foundation requirement; POSC 100.

Examination of the political activities of racial and ethnic minority groups in the United States, including American Indians, African Americans, Latino Americans and Asian/Pacific Americans. Political debates over competing approaches, strategies and public policies promoting equality in the U.S.

326. California Government in Comparative Perspective (3)

Prerequisites: GE Foundation requirement.

The government and politics of American States including intergovernmental relations. Special focus on political institutions, current issues, and public policies in California. May not be taken to fulfill G.E. credit except under category D.1.b.

327. Urban Politics (3)

Social conflicts, political processes and governmental Institutions in American urban areas. Emphasis on urban political culture, power structures, interest groups, social movements, urban governance and policy-making. Evaluation of urban political problems and proposed solutions.

328. Public Policy (3)

Prerequisites: GE Foundation requirement; POSC 100.

Analysis of the American policy process with special attention to the social, economic, cultural, and political factors that influence policy choices.

329. Cases in Public Policy Making (3)

Prerequisites: GE Foundation requirement, POSC 100, and POSC 328. Intensive examination of the policy process through the in-depth analysis of selected public policies.

May be repeated to a maximum of 6 units with different topics in different semesters with department approval.

353. Government and Politics of Western Europe (3)

Prerequisites: GE Foundation requirement; POSC 100.

Examination of selected European democracies, with emphasis on governmental structure, functions and political processes and their relationship to current problems.

358. Contemporary Latin American Politics (3)

Study of government and politics with emphasis on similarities and differences among Latin American states. Focus on principal groups and major issues in the political process. Conflicting explanations of the obstacles to development and other problems will be examined.

362. Society and National Politics of China (3)

Study of the People's Republic of China, including its origin, ideology, and organization. Contemporary social, economic, and political developments.

367. Governments and Politics of the Middle East (3)

Emergence and development of the contemporary political systems of the Middle East; the Arab-Israeli dispute; the role and importance of the region in international politics.

371. Introduction to International Politics (3)

Prerequisites: GE Foundation requirement; POSC 100.

Relations among nation-states. Why countries sometimes cooperate and sometimes go to war. Roles of intergovernmental organizations like the UN, the WTO, and NATO, and non-governmental actors like Amnesty International and Al-Qaeda; international trade and finance; war, peace, terrorism and diplomacy.

376. International Law (3)

Nature and historical development of international law; determination of rules of international law; International community under law; recognition of states and governments; jurisdiction; settlement of international disputes; war aggression and neutrality.

378. Politics and Practice of the UN (3)

Examination of historical development of international organization from the Concert of Europe to the United Nations. Analysis of contemporary international organization, its functions, problems and prospects in the context of the world situation.

May be repeated to a maximum of 9 units in different semesters.

No more than 3 units may be applied toward the major or minor in political science.

388. Cyberspace Citizenship (3)

Prerequisites: GE Foundation requirement; one Explorations course, and upper-division standing.

Role of internet in politics, society, and economy. Development of cyberspace, virtual communities, online commerce, Web free speech fora. Evolving governmental institutions for managing property rights, Internet expansion and resolving cyberspace conflicts. Multiple dimensions of participatory citizenship in cyberspace.

391. American Government (3)

Prerequisites: GE Foundation requirement.

Survey of American government and politics, including attention to California government. Constitutional foundations and current controversies. Satisfies the general education requirement and the

California teaching credential requirement.

Not open for credit to students with credit in POSC 100.

395I. Politics Through Culture (3)

Prerequisites: GE Foundation requirement, one Explorations course, and upper division standing.

Study of politics through cultural analysis. Alternative theoretical perspectives on contemporary cultural artifacts such as art, film, music, and the media.

399. Introduction to California Government (1)

Prerequisite: POSC 100

Introductory survey of California political institutions, politics and policy. Satisfies the general education California state and local government requirement for students who have taken American government without a California component or who have received Advanced Placement credit for American Government.

Not open for credit to students with credit in POSC 199 or POSC 326.

401. Women in Political Theory (3)

Prerequisite: Students must have completed one course in either political science or women's studies.

Differential treatment of women and men in western political theories, including femininity, power, rationality and the role of the women in the family. Classic and contemporary texts.

Same course as WGSS 402. Not open for credit to students with credit in W/ST 402 or WGSS 402.

409. Senior Seminar in Political Theory (3)

Prerequisites: Six units in political theory courses or consent of instructor.

Intensive study of selected conceptual and theoretical problems in political theory.

Letter grade only (A-F).

412. Law and Social Change (3)

Prerequisites: GE Foundation requirement; POSC 100.

Legal strategies pursued by social movements to remedy discrimination in the U.S. Legislative, administrative, and judicial responses. Gender equity, sexual harassment, voting rights, racial discrimination, fair housing, labor standards, sexual orientation, environmental justice, and American Indian rights.

414. Jurisprudence (3)

Fundamental legal philosophies, sources and classifications of law. Relationship of law to other disciplines and societal institutions.

417. Legal Practices: Moot Court (3)

Prerequisites: POSC 311 or 312, and either POSC 412 or 414; and upper division standing.

Study and acquisition of the skills of lawyering, including legal research, reasoning, writing, and trial advocacy. Substantive study of civil liberties.

May be repeated to a maximum of 9 units in different semesters. No more than three units of this course may be applied toward the major or minor in political science.

418. Legal/Judicial Apprenticeship (3)

Prerequisite: Consent of instructor.

Courtroom, law office, public legal agency, and/or non-profit legal agency experience in conjunction with reading and research directed by a faculty member. May be repeated for a maximum of 6 units in different semesters.

No more than three units of this internship course may apply toward the major in political science. A maximum of 6 units may be earned in 418, 447, 448, and 498 combined.

422. Public Opinion and Political Behavior (3)

What Americans think and feel about politics and why they act as they do. Topics include the formation and development of public opinion; how public opinion is measured; political socialization; political culture; and political participation.

423. The American Presidency (3)

The roles and powers of the American presidency with emphasis on major public policies of recent presidents.

424. The United States Congress (3)

Analysis of the origin, development, and behavior of U.S. legislative bodies. Leadership, organization and procedures, problems and principles of law-making. Legislative relations with the executive and other governmental agencies.

430. Fundamentals of Public Administration (3)

Principles and practices of federal, state and local administration. Not open for credit to students with credit in POSC 331.

431. Public Policy Analysis (3)

Examination of the meaning and use of concepts and methods employed in public policy decision analysis, including an overview of the decision process, sources and methods of handling policy-relevant data, and methods and techniques of program evaluation and policy analysis.

432. Public Values and Public Policy (3)

Critical examination of selected value choices involving how and by whom public policy is to be made, and choices involving what should be the content and goals of public policy.

439. Senior Seminar in Law, Politics, and Policy (3)

Prerequisite: Nine units in Law, Politics, and Policy courses or consent of instructor

Intensive study of selected concepts, issues, and approaches to the study of American government and politics, with special attention to the intersection of law, politics, and policy.

Letter grade only (A-F).

447. Public Service Internship I (3)

Prerequisite: GE Foundation requirement; POSC 100; consent of instructor.

Internships in one of the various federal, state, or local governmental units in the immediate area.

A maximum of six units may be earned in POSC 418, 447, 448, and 498 combined.

448. Public Service Internship II (3)

Prerequisite: GE Foundation requirement; POSC 100; consent of instructor.

Internships in one of the various federal, state, or local governmental units in the immediate area.

A maximum of six units may be earned in POSC 418, 447, 448, and 498 combined.

450. Comparative Political Movements (3)

Prerequisites: GE Foundation requirement, one Explorations course, and upper division standing.

Comparative study of the causes, progression, and consequences of political movements.

455. Comparative Revolutionary Change (3)

Roots of revolution. Emphasis on the historical setting, ideology, socio-economic factors, political leadership, organization and nationalism. Analysis of revolutionary conditions, courses and tactics past and present.

461I. The Politics of Development (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Problems of political development in the emergent nations of Asia, Africa and Latin America.

463. Nationalism and National Identities (3)

Prerequisites: GE Foundation requirement; POSC 100.

Consideration of the impact of nationalism on contemporary world politics with special attention to the role of national identities in the

rise of political violence, national liberation movements, and the struggle for democracy. Close investigation of multiple historical and contemporary cases.

Same course as I/ST 463. Not open for credit to students with credit in I/ST 463.

469. Senior Seminar in Comparative Politics (3)

Prerequisites: Six units in comparative politics courses or consent of instructor.

Intensive study of selected conceptual and theoretical problems in comparative politics.

Letter grade only (A-F).

479. Senior Seminar in Global Politics (3)

Prerequisite: Nine units in global politics courses or consent of instructor

Intensive study of selected conceptual and theoretical problems in global politics.

Letter grade only (A-F).

481. U.S. - Latin American Relations (3)

Prerequisites: GE Foundation requirement, one Explorations course, and upper division standing.

U.S. policies toward Latin America and the Caribbean. Recent debates about these policies as well as their historical and global contexts. Survey of major issues, including U.S.-Cuba policy, transnational crime/drug-trafficking, international finance, trade integration, and migration.

482. American Foreign Policy (3)

Prerequisites: GE Foundation requirement; POSC 100.

Concepts, strategies, and the shaping of American relations with other states, with special emphasis on the post-World War II period. National security, economic, and political-diplomatic concerns as they present new challenges to the United States.

485. International Political Economy (3)

Prerequisites: GE Foundation requirement; POSC 100.

Politics of global relations, including monetary and trade regimes, markets and multinational corporations. Emphasis on issues of confrontation and collaboration between countries regarding development strategies, trade, and technology transfer.

Prospective students are strongly recommended to take POSC 371.

486. National Security Policies (3)

Analysis of strategic posture with emphasis on military, political and economic inter-relationships as they influence national security and international politics.

489. Senior Seminar in International Relations (3)

Prerequisites: Six units in international relations courses or consent of instructor.

Intensive study of selected conceptual and theoretical problems in international relations.

Letter grade only (A-F).

490H. Honors Seminar (3)

Prerequisites: Admission to the Honors Program in Political Science.

The nature and development of political science and its relationship to other disciplines in the Social Sciences. Recent developments in conceptual analysis and theory are emphasized. (Seminar.) Course meets with POSC 500, 525, or 550.

491H. Honors Research (3)

Prerequisite: Admission to the Honors Program in Political Science.

Research for writing an Honors thesis under the direction of a faculty member. (Independent Study.)

492H. Honors Thesis (3)

Prerequisites: POSC 491H.

Research and writing of an Honors thesis under the direction of a department faculty advisor.

(Independent Study.)

493. Selected Topics in Political Science (3)

Prerequisite: Consent of instructor.

Analysis of selected contemporary issues and problems.

Topics announced in the *Schedule of Classes*.

494I. Politics of the Future (3)

Prerequisites: GE Foundation requirement, one or more Explorations courses, and upper-division standing.

Study of present-day global problems: overpopulation, depletion of resources, environmental decay and their future political implications. Examination of alternative policies, future politics and institutional change. The technological revolutions and the totalitarian temptation.

496. Washington Center Internship (3)

Prerequisites: Upper division standing and consent of instructor.

Students undertake a 30-35 hr. per week career-related internship in a federal, corporate or independent sector agency located in Washington D.C. A final written report is required. Concurrent enrollment in an independent studies course required.

Credit/No Credit grading only. May be repeated to a maximum of 9 units.

497. Selected Topics in Political Science (3)

Prerequisite: Consent of instructor.

Analysis of selected contemporary issues and problems.

May be repeated to a maximum of 6 units with different topics.

Topics announced in the *Schedule of Classes*.

498. Practicum in Politics (1-3)

Prerequisite: Consent of instructor and department chair.

Political or governmental experience supplemented by reading and research under the direction of a faculty member.

May be repeated for a maximum of 6 units in the same semester. No more than three units may apply toward the major in political science. A maximum of six units may be earned in POSC 418, 447, 448, and 498 combined.

499. Readings and Conference in Political Science (1-3)

Prerequisite: Consent of instructor.

Directed reading to permit independent pursuit by advanced students on topics of special interest.

Hours to be arranged. Graduate students who have had this course as an undergraduate may repeat it.

GRADUATE LEVEL**500. Foundations and Scope of Political Science (3)**

Prerequisite: Graduate standing in Political Science or consent of instructor.

Competing approaches to the analysis of political phenomena. Substantive models of social and political order and change as well as methodological arguments about the nature of explanation in political science.

Letter grade only (A-F).

525. Seminar in Political Theory (3)

Prerequisite: Graduate standing in political science or consent of instructor.

Analysis of key topics in the canon of Western political theory, including ancient political thought, modernity (including feminism and identity politics), and postmodernity (eg., postcolonial theory, deconstruction).

Letter grade only (A-F).

550. Research Methods in Political Science (3)

Prerequisite: Graduate standing in political science or consent of instructor; POSC 500.

Methods of empirical political science research; the formulation of hypotheses, problems and standards of measurement and observation; methods of data collection; research design and logic of data analysis. No prior knowledge of statistics is assumed.

Letter grade only (A-F).

590. Advanced Study (3)

Prerequisite: Consent of Graduate Coordinator and Instructor.

Study under the supervision of a faculty member. Student must fulfill requirements of a selected upper division course plus additional work appropriate to graduate study as determined by the Instructor of the course.

May be repeated to a maximum of 6 units with different topics.

599. Graduate Studies (3)

Prerequisites: Consent of Graduate Coordinator and instructor.

Individual graduate level study and research of special topics under the supervision of a faculty member.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

600. Seminar in International Politics (3)

Prerequisites: Graduate standing in Political Science or consent of instructor; POSC 371 or equivalent.

Examination of the role of power, multiple dimensions of national interest, collective security, world peace, nationalism, and imperialism.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

605. Selected Topics in International Politics (3)

Graduate standing in political science or consent of instructor

Analysis of historical and contemporary international events, processes, trends, and system dynamics. Emphasis on the application of both critical and practical, problem-solving theories and methods to the assessment and evaluation of foreign policy options and choices. Case study approach.

Letter grade only (A-F).

610. Seminar in Comparative Government (3)

Prerequisite: Three upper division units in comparative government.

Comparative study of government and politics in selected foreign countries. Intensive study of the political institutions and policies of selected foreign governments. Emphasis on political parties and contemporary governmental policy.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

615. Selected Topics in Comparative Politics (3)

Graduate standing in political science or consent of instructor

Application of comparative politics concepts and theories to contemporary issues, with particular emphasis on the policy implications for various countries and regions of the world.

Letter grade only (A-F).

640. Seminar in American Political Behavior (3)

Prerequisites: Graduate standing in political science or consent of instructor

Examination of contemporary literature on mass political behavior in the United States, including overt forms of political behavior such as voting, and long-standing questions about the origins and consequences of the American public's political attitudes.

Letter grade only (A-F).

642. Seminar in American Political Institutions (3)

Graduate standing in political science or consent of instructor

Examination of U.S. political institutions, including why the U.S. has the institutions it has, how scholars understand them, the nature of these institutions, and the linkage institutions that connect citizens to government, including political parties and interest groups.

Letter grade only (A-F).

644. Selected Topics in Policy and Politics (3)

Graduate standing in political science or consent of instructor

Approaches to the study of American policy and politics. Analysis of historical and contemporary policymaking, and the impact of public policy upon institutions and political behavior.

Letter grade only (A-F).

646. Selected Topics in Law and Politics (3)

Graduate standing in political science or consent of instructor

Examination of the role, processes, and dynamics of law, courts, and judges in the American political system, including law and American society; political controversies over judges, courts and cases; features of courts; judicial selection and decision-making; legal interpretation; and judicial effectiveness.

Letter grade only (A-F).

695. College Teaching Practicum (3)

Prerequisite: Consent of Graduate Coordinator.

Internship provides teaching experience in community college. No more than three units of this practicum may be applied to the Masters requirements in Political Science.

Credit/No Credit grading only.

697. Directed Research (3)

Prerequisite: Consent of Department Chair.

Intensive study under the guidance of a faculty member. Three units required of non-thesis students who have been advanced to candidacy for the master's degree in political science.

A maximum of 3 units may be earned by students with credit in POSC 698. Letter grade only (A-F).

698. Thesis (1-4)

Planning, preparation and completion of thesis for the master's degree.

PSYCHOLOGY

College of Liberal Arts

Department Chair: Kenneth F. Green

Department Office: Psychology Building (PSY), Room 100
Telephone / FAX: (562) 985-5001 / (562) 985-8004
Website: <http://www.csulb.edu/psychology>

Faculty: Courtney Ahrens, James H. Amirkhan, Dan Chiappe, Young-Hee Cho, Chi-Ah Chun, David A. Dowell, Martin S. Fiebert, Dennis G. Fisher, Kenneth F. Green, Dale O. Jorgenson, William L. Kelemen, Diane W. Lee, Kevin MacDonald, Lisa Maxfield, James D. Miles, Hannah-Hanh Nguyen, William Pedersen, Patricia Rozee, Sherry A. Span, Thomas Z. Strybel, Robert E. Thayer, Dustin B. Thoman, Guido G. Urizar, Jr., Kim-Phuong L. Vu, Christopher R. Warren, David J. Whitney, Bianca D.M. Wilson, Arturo Zavala

Department Administrator: Sheri Hale

Advisors:

Undergraduate: Amy Jennings / (562) 985-5011
Graduate: Diane Roe / (562) 985-5000

Peer Advising Office: PSY 206 / (562) 985-5680

Career Possibilities

Professor • Research Scientist • Research Analyst • Clinical Psychologist • Research Technician • Safety Officer • Laboratory Manager • Market Research • Statistician • Nursing • Human Factors • Counselor • Community Organization Worker • Personnel Officer • Employment Interviewer • School Psychologist • Sports Psychologist • Career Counselor • Marriage and Family Therapist • Lawyer • Parole and Probation Officer • Teacher • Public Relations Worker • Researcher • Claim Adjuster • Sales Representative • Industrial Psychologist • Vocational Rehabilitation Counselor • Manager Trainee (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.) Various entry-level positions in business and industry are available for graduates regardless of academic discipline.

Introduction

Please visit our website www.csulb.edu/psychology. For the Bachelor's degree, select "Undergraduate Program." For the Master of Arts in Research, Master of Science in Human Factors, and Master of Science in Industrial-Organization Psychology degrees, select "Graduate Programs." For all programs, advising is available year round.

The Master's Programs provide specialized training in three areas: Master of Arts – Psychological Research Program, Master of Science in Human Factors, and the Master of Science in Industrial-Organizational Psychology.

Undergraduate Programs

Bachelor of Arts in Psychology (120 units)

Admission Under Impaction

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

Learning Goals and Technical Skills

Students who graduate with a major in psychology should have current knowledge of: the major theories in psychology; the methodologies of psychological research and statistical concepts; the biological processes underlying behavior; sensation, perception, information processing and retention; how behaviors develop and change; how internal, environmental, and social factors influence behavior; individual differences in behavior, including those related to gender, ethnicity, and culture; different perspectives on the origin and treatment of abnormal behavior; ethical issues in teaching, research, and the practice of professional psychology.

Requirements

The psychology curriculum is designed to provide undergraduate students with a broad background in the principles of Psychology.

Lower Division (14 units):

Take all of the following courses:

PSY 100 General Psychology (3)

Prerequisite/Corequisite: GE A1 requirement.

PSY 210 Introductory Statistics (4)

Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.

PSY 220 Research Methods (4)

Prerequisites: PSY 100, 210, GE A1 requirement.

PSY 241 Psychobiology (3)

Prerequisites: PSY 100, GE A1 requirement.

Upper Division:

Take the following course:

PSY 301 Intro to Psychology as Discipline & Profession (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

Take two courses (6 units) from the following:

PSY 331, 332, 333; 336 or 337; 340 or 341 or 342; 343;

Take two courses (6 units) from the following:

PSY 351, 356; 361 or 365;

Take two courses (6 units) from different groups:

1. PSY 354, 362, 363, 368, 370, 383;

2. PSY 310, 314, 315, 359;

3. PSY 327I, 346I, 373, 375, 378, 381;

Take 6 units of 400-level PSY courses. No more than 3 units from 405, 406A or 406B may be counted in this category.

PSY 499 cannot be counted to satisfy this requirement.

Take 6 units of any upper division psychology courses not used to satisfy the requirements above;

Take 6 units of upper division units in American Indian Studies, American Studies, Asian and Asian American Studies, Anthropology, Africana Studies, Chicano and Latino Studies, Economics, Educational Psychology, Geography, History, Human Development, Political Science, Social Work, Sociology, Women, Gender and Sexuality Studies. At least 3 units must have an emphasis in contemporary U.S. ethnic studies. A list of acceptable ethnic studies courses may be obtained from the Psychology Advising Office in PSY 206.

Students are advised to consult with the Psychology Advising Office (in PSY 206) for course choices most relevant to their individual goals.

Honors in Psychology

Admission Requirements

1. Admission to the major.
2. At least a 3.5 GPA in all Psychology courses.
3. At least a 3.25 overall GPA.
4. Letter of support from a psychology faculty member agreeing to serve as Honors Thesis Chair.
5. Submission of honors application to the Psychology Honors Advisory Committee.
6. Commitment to three semesters in the Honors program

Requirements

Complete all requirements for the psychology major.

Complete all of the following courses:

- PSY 310 Intermediate Statistics (4)
- PSY 490H Special Topics – Honors (3)
- PSY 496H Research Preparation – Honors (3)
- PSY 498H Senior Thesis – Honors (3)

Complete 3 units in any other 400-level psychology course exclusive of the following:

- PSY 405, 406, or 499.

Minor in Psychology

The Minor in Psychology is available to any non-Psychology major. Due to the impacted status of the Psychology Department, students wishing to earn a minor must earn a "C" or better in PSY 100, 210 and 220, prior to taking any other PSY courses that will count toward the minor.

A minimum of 23 units will be required; 9 of which must be upper division.

Take all the following courses:

- PSY 100 General Psychology (3)
Prerequisite/Corequisite: GE A1 requirement.
- PSY 210 Introductory Statistics (4)
Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.
- PSY 220 Research Methods (4)
Prerequisites: PSY 100, 210, GE A1 requirement.
- PSY 241 Psychobiology (3)
Prerequisites: PSY 100, GE A1 requirement.

Take 9 upper-division psychology units including at least one course from the following courses: PSY 331, 332, 333; 336 or 337; 340 or 341 or 342; 343; and at least one course from PSY 351, 356; 361 or 365; and one upper division Psychology elective.

Graduate Programs

For information about graduate programs go to www.csulb.edu/psychology, select "Graduate Programs."

The Department offers the following graduate programs: Master of Arts degree in Psychological Research; Master of Science degree, option in Human Factors and option in Industrial/Organizational Psychology. In each option a basic core of courses, including a thesis, is required; however, there is the opportunity for additional work in areas of special interest.

Admission to Graduate Programs

An application for admission may be obtained on the Psychology Department web site (go to www.csulb.edu/psychology, select "Graduate Programs"). Acceptance by the department is contingent upon (a) GPA based on last 60 semester units available at time of application; (b) Graduate Record Examination (GRE) scores on the verbal and quantitative sections; and (c) three letters of recommendation. For entry in the fall semester, all application materials, including complete transcripts, GRE scores and letters of recommendation, must be received by the department Graduate Advisor by February 8 for the Master of Science – Industrial/Organizational option, February 21 for the Master of Arts – Psychological Research option, and March 1 for the Master of Science – Human Factors option.

Financial Support

Students accepted into the graduate programs may apply for graduate assistantships (which provide monthly stipends) in Psychology or related departments on campus. Federal Work Study assignments are available in the Department, but must be applied for through the University Financial Aid Office one or two semesters prior to obtaining the assignment; other aid available includes the Graduate Research Fellowship (GRF). One student from the Master of Arts – Psychological Research and the Master of Science – Industrial/Organizational Psychology programs' entering class may be awarded a J. Robert Newman Scholarship. Boeing University Relations Human Factors Graduate Scholarship and NASA University Research Centers Scholarships are offered through the Master of Science – Human Factors program.

Master of Arts in Psychology

Option in Psychological Research

This is a 30-unit degree program.

Prerequisites

All students fulfill the requirements in Item #1 and choose either Item #2 or Item #3.

1. Take 6 units of college level work in chemistry, physics, biology or mathematics as approved by the graduate advisor. No more than 3 of the 6 units may be in approved mathematics courses.
2. A bachelor's degree with a major in psychology that includes:
 - A. Take two courses from different groups:
 1. PSY 331, 332, 333
 2. PSY 336
 3. PSY 340, 341, 342
 - B. Take one course from the following:
PSY 351, 356, 361, 365
 - C. Take the following course:
PSY 310 Intermediate Statistics (4)
Prerequisites: PSY 100, 210, GE Foundation requirement and upper division standing.
3. A bachelor's degree with a major other than psychology and 24 units of upper division psychology substantially equivalent to those required for the baccalaureate degree at this university, including:

- A. Take two courses from different groups:
 1. PSY 331, 332, 333
 2. PSY 336, 378
 3. PSY 340, 341, 342
- B. Take one of the following courses:
PSY 351, 356, 361, 365
- C. Take the following course:
PSY 310 Intermediate Statistics (4)
Prerequisites: PSY 100, 210, GE Foundation requirement and upper division standing.

Advancement to Candidacy

Advancement to Candidacy is the next step after achieving classified status and confers catalog rights to graduate students. It also signifies approval of a plan of study by the graduate student's major, department, and college.

Advancement requirements are:

1. Application for Advancement to Candidacy must be completed prior to or concurrent with enrollment in PSY 698 (Thesis).
2. Classified status.
3. An approved program of studies for the Master of Arts, Psychological Research option degree.
4. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).
5. A minimum 3.0 overall GPA and a 3.0 GPA in all units undertaken for the program (at least 6 graduate units).
6. Enrollment in regular session.

Requirements

1. The student must complete, as a graduate student, 30 units of graduate coursework (501-698), 24 of which must be in Psychology (not including PSY 697) including:
 - A. Take one of the following:
PSY 511, 512 if 411 or 412 or equivalent not taken as undergraduate;
 - B. Take one course chosen from the following:
PSY 518, 527, 533, 541, 551, or 556, if corresponding 400-level course or equivalent not taken as an undergraduate;
 - C. Take the following course (comprehensive exam required):
PSY 696 Research Methods (3)
Prerequisites: PSY 411/511 or 412/512, and consent of graduate advisor.
 - D. Take three courses chosen from the following:
PSY 631, 632, 633, 634, 635, 637, 651, 656, 661 or 678 (with comprehensive exams in two of the three courses);
 - E. Take the following course:
PSY 698 Thesis (6)
Prerequisites: Advancement to candidacy, consent of graduate advisor. MSIO students: PSY 681 as prerequisite or corequisite.
2. With graduate advisor's approval a maximum of 6 units from related areas may be used for 6 of the 30 units.
3. Attendance at six Department Colloquia, four of which must be completed prior to preliminary oral examination, all six must be completed prior to final oral examination.
4. Completion of all requirements as established by the MA Psychological Research Committee.
5. Comprehensive examinations taken in three of the four required graduate seminars, as outlined in 1C and 1D above.
6. A preliminary oral examination on the thesis proposal and a final oral examination in defense of the completed thesis.

Master of Science in Psychology

Option in Human Factors

Prerequisites

1. An undergraduate major in Psychology or in another field with 24 units of upper division psychology. A minimum grade point average of approximately 3.0 for the last 60 semester units (90 quarter units) and for all PSY units.
2. Take all the following courses or their equivalents:
 - PSY 310 Intermediate Statistics (4)
Prerequisites: PSY 100, 210, GE Foundation requirement and upper division standing.
 - PSY 331 Sensation and Perception (3)
Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing.
 - PSY 332 Human Cognition (3)
Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing.

Students lacking only PSY 310 may be admitted to the program but must complete the course their first semester in attendance.

Advancement to Candidacy

Satisfy the general requirements of the university for advancement to candidacy.

Requirements

1. A minimum of 36 units of upper division and graduate work including the following:
 - PSY 511 Statistical Design & Analysis of Experiments (3)
Prerequisite: PSY 310 or consent of instructor.
 - PSY 518 Computer Applications in Psychology (3)
Prerequisites: PSY 310 or equivalent or consent of instructor.
 - PSY 527 Human Factors (3)
Prerequisites: PSY 310 and two of the following: PSY 331, 332 or 333.
 - PSY 627 Human Factors' Methods (3)
Prerequisite: PSY 527 or consent of instructor.
 - PSY 633 Seminar in Perception and Attention (3)
Prerequisites: PSY 331 or 332 or consent of instructor; consent of graduate advisor.
 - PSY 635 Seminar on Situation Awareness (3)
Prerequisites: PSY 331 or 332 or consent of instructor or/and consent of graduate advisor.
 - PSY 698 Thesis (1-6)
Prerequisites: Advancement to candidacy, consent of graduate advisor. MSIO students: PSY 681 as prerequisite or corequisite.
 - MAE 508 Systems Engineering and Integration (3)
Prerequisite: Senior standing or consent of instructor.
 - CECS 448 User Interface Design (3)
Prerequisite: CECS 343 or consent of instructor.
- Take one of the following:
 - PSY 533 Research in Cognition and Learning (3)
Prerequisites: PSY 220, 310, and 331 or 332 or 333.
 - PSY 634 Seminar in Cognition (3)
Prerequisites: PSY 332 or 333 or consent of instructor; consent of graduate advisor.
- Take one course from the following:
PSY 512, 544, 696, 697; ENGL 419 or otherwise approved by the program committee.
2. A preliminary oral examination on the thesis proposal and a final oral examination in defense of the completed thesis.

Option in Industrial and Organizational Psychology

This is a 36-unit program.

Prerequisites

1. A bachelor's degree with a major in psychology or 24 upper division units of psychology.
2. Take both of the following courses:
 - PSY 220 Research Methods (4)
Prerequisites: PSY 100, 210, GE A1 requirement.
 - PSY 310 Intermediate Statistics (4)
Prerequisites: PSY 100, 210, GE Foundation requirement and upper division standing.

Take one of the following courses:

PSY 314, 315

Take one of the following courses:

PSY 332, 333

Take one of the following courses:

PSY 351, 381, 453/553

Students may be admitted to the MSIO program if they lack only one required course. The missing course must be completed within the first year of graduate study. However, PSY 314 or 315 AND 351 or 381 or 453/553 must be completed prior to MSIO program entry, as they are prerequisites for the first semester MSIO program coursework. Students missing more than one prerequisite course at the time of application may be offered provisional admission if they submit an approved plan to take the missing courses prior to admission to the program.

Advancement to Candidacy

Advancement to Candidacy is the next step after achieving classified status and confers catalog rights to graduate students and signifies approval of a plan of study by the graduate student's major, department, and college. The prerequisite to advancement are:

1. Application for Advancement to Candidacy must be completed prior to or concurrent with enrollment in PSY 698 (Thesis).
2. Classified status.
3. An approved program of studies for the Master of Science, Industrial and Organizational option degree.
4. Fulfillment of the Graduation Writing Assessment Requirement (GWAR).
5. A minimum 3.0 overall GPA and a 3.0 GPA in all units undertaken for the program (at least 6 graduate units).
6. Be enrolled in regular session.

Requirements

1. The student must complete a minimum of 36 units of graduate course work.

Take all of the following:

PSY 515 Test Construction Theory and Practice (3)
Prerequisites: PSY 310 and either PSY 314 or 315.

PSY 581 Organizational Psychology (3)
Prerequisites: PSY 351 or 453/553.

PSY 582 Research in Industrial and Organizational Psychology (3)
Prerequisites: PSY 220 and 310.

PSY 585 Proseminar in Personnel Psychology (3)
Prerequisites: PSY 314 or 315.

PSY 681 Seminar in Applications of Psychology to Industry (3)

Prerequisites: At least 12 units of graduate-level work within the MSIO program including 511 or 512 and 582.

PSY 683 Issues Organizational Development (3)

Prerequisites: PSY 581.

PSY 686 Issues in Training (3)

Prerequisites: PSY 332 or 333, and 585.

PSY 688 Practicum in Industrial and Organizational Psychology (2)

Prerequisites: At least 12 units of graduate-level coursework within the MSIO program.

PSY 698 Thesis (1-6)

Prerequisites: Advancement to candidacy, consent of graduate advisor. MSIO students. Prerequisite/Corequisite: PSY 681.

Take two courses chosen from the following:

PSY 511, 512, or an approved substitute

Take one course from the following:

PSY 518, 527, 553, 575, 634, 637, 651, 656; HRM 445

2. A preliminary oral examination on the thesis proposal and final oral examination in defense of the completed thesis.
3. Students with credit in 411 or 412 as undergraduates may petition the MSIO Program Committee to substitute a maximum of 3 units from related areas toward the 36-unit program.

Courses (PSY)

LOWER DIVISION

100. General Psychology (3)

Prerequisite/Corequisite: GE A1 requirement.

Introduction to the scientific study of human behavior. Provides a basis for further study and for application to everyday life. Topics include biological foundations of behavior, motivation, emotion, learning, memory, thinking, personality, development, social behavior, abnormal behavior, methods of therapy.

130. Critical Thinking (3)

Prerequisite: GE A1 requirement.

The nature of critical thinking; models and strategies; common fallacies of reasoning; self-regulation in the thinking process; application of critical thinking to specific areas.

150. Personality and Social Behavior (3)

Prerequisite/Corequisite: One GE Foundation course.

Psychological principles pertinent to the understanding of personality and interpersonal dynamics. Discussion of research and theories of social motivation, conflict and anxiety, adjustment mechanisms and personality change.

210. Introductory Statistics (4)

Prerequisites: PSY 100, GE A1 requirement, and eligible to take a General Education Mathematics course.

Calculation and meaning of statistical measures. Descriptive and inferential statistics.

Not open for credit to students with credit in PSY 110. (Lecture 3 hours, laboratory 2 hours)

220. Research Methods (4)

Prerequisites: PSY 100, 210, GE A1 requirement.

Introduction to basic research methods in Psychology. Principles of experimentation, naturalistic observation, correlational studies.

Not open for credit to students with credit in PSY 200. (Lecture 3 hours, laboratory and field 3 hours)

241. Psychobiology (3)

Prerequisites: PSY 100, GE A1 requirement.

Introduction to the study of behavior from a biological point of view. Biological systems and processes underlying behavior, with emphasis on brain mechanisms, presented in the context of fundamental concepts and issues in psychology.

Not open for credit to students with credit in PSY 141.

278. Prevention and Treatment of Domestic Violence (3)

Prerequisite: PSY 100

In-depth look at domestic violence. Students learn about types of violence, prevalence rates and the etiology of domestic violence. Students also learn about legal, medical and therapeutic responses to domestic violence, as well as prevention and public policy interventions.

UPPER DIVISION

300I. Mind Control or Freedom (3)

Prerequisites: PSY 100, GE Foundation requirement, one or more explorations courses and upper division standing.

Theories of persuasion and how people control others using informational, manipulative and coercive approaches; sources of power in society; and the psychological and ethical implications of freedom and responsibility in coping with control attempts by friends, government, advertisers, cults.

301. Introduction to Psychology as a Discipline and Profession (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing.

Covers scope and value of psychology major including preparation for graduate work, careers available at varying degree levels, ethical considerations, key historical concepts, and essential skills like library search techniques, using APA format, and study skills.

(6 hrs activity)

310. Intermediate Statistics (4)

Prerequisites: PSY 100, 210, GE Foundation requirement and upper division standing.

Basic theoretical concepts of statistics and use of these concepts in selection and development of model testing, hypothesis testing and parameter estimation procedures. Both single measure (univariate) and correlation (bivariate) concepts are included.

(Lecture 3 hours, laboratory 2 hours)

314. Psychological Assessment (3)

Prerequisites: PSY 100, 210, 220, GE Foundation requirement and upper division standing

Principles of assessment applied to the measurement of individual behavior and to programs intended to affect behavior. Includes interviews, tests and other methods.

315. Principles of Psychological Testing (3)

Prerequisites: PSY 100, 210, 220, GE Foundation requirement and upper division standing

Principles and practices of group and individual testing in the fields of intelligence, aptitude, achievement, personality and interest. Emphasis on the evaluation of tests as measuring devices, their applicability and limitations.

327I. Introduction to Human Factors (3)

Prerequisites: GE Foundation requirement, one Explorations course, and upper division standing

Introduction to the field of human factors, a discipline concerned with designing products and systems for human use.

329A. Advanced Research Methods in Mental Health (3)

Prerequisites: PSY 100, 210, 220, Admission to COR program and consent of instructor.

Introduction to fundamental and advanced methods relevant to mental health research as well as current directions and cutting

edge research in the field of mental health. Development and execution of an independent research project on topics related to mental health.

329B. Advanced Research Methods in Mental Health (3)

Prerequisites: PSY 329A, Admission to COR program and consent of instructor.

Introduction to fundamental and advanced methods relevant to mental health research as well as current directions and cutting edge research in the field of mental health. Development and execution of an independent research project on related topics.

331. Sensation and Perception (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing.

Introduction to the scientific study of sensory processes and perceptual principles from a psychophysical and physiological perspective, and the methods used to investigate them. Topics may include vision, audition, psychophysics, and object and space perception.

332. Human Cognition (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing.

Study of higher-order processes basic to the acquisition of knowledge. Includes thinking, problem solving, creativity, information processing, decision making, judgment, concepts and imagination.

333. Psychology of Learning (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing

Learning is a relatively permanent change in behavior resulting from experience. Emphasizes interaction of biological and environmental variables in the processes of instinct, habituation, sensitization, Pavlovian conditioning, instrumental learning, and cognition; examination of methods, theory and applications.

336. Psychology of Emotion (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing

Discussion of research and theories of emotions. Includes the evolution of emotions, neurophysiological mechanisms of emotion, development of emotions, expressions of emotions, and emotions in social relationships, with an emphasis on the emotions of anger, grief, happiness, jealousy, and love.

337. Psychology of Happiness (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing

Examines research in human happiness. Topics include: Assessing happiness, the adaptive function of positive emotions, the relation between wealth and happiness, personality characteristics of happy individuals, international differences in happiness, and strategies for enhancing the happiness of individuals.

339I. Psychology of Sport Behavior and Athletic Performance (3)

Prerequisites: GE Foundation requirement, PSY 100 and upper division standing.

Psychological dimensions of attitudes, behaviors, and performance in sport and exercise environments.

Same course as KIN 339I. Not open for credit to students with credit in KIN 339I.

340. Physiology of Behavior (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing

An in-depth examination of central nervous system (CNS) components that create our behavioral capabilities. Topics include major structural and functional features of the neuron and of selected systems representative of the sensory, integrative, and motor capabilities of the CNS.

341. Neuropsychology (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing

Localization of brain regions responsible for human capabilities as studied in patients with brain damage, normal people, and nonhumans. How brain damage is assessed and treated. Relation of findings to function of normal brains.

342. Psychopharmacology (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing

Introduction to the effects of major classes of psychoactive drugs on the central nervous system. Topics include anatomical and functional characteristics of neurotransmitter systems; pharmacology of drug administration; and physiological and psychological actions of selected classes of psychoactive drugs.

343. Animal Cognition (3)

Prerequisites: PSY 100, 220, 241, GE Foundation requirement and upper division standing

Examines the cognitive lives of animals. Discussion includes: instincts, basic learning abilities, insightful problem-solving, categorization and analogical reasoning, short-term and long-term memory, time perception, counting and numerical abilities, perception and navigation, social learning, and communication.

346I. Evolutionary Psychology (3)

Prerequisites: GE Foundation requirement and one or more Explorations courses, PSY 100 and upper division standing.

Human social behavior as seen in context of evolutionary biology. Topics include the importance of kinship in human societies, altruism and reciprocity, human sexuality, parent-offspring relations, ethical and legal systems and religion.

350I. Psychology and Contemporary Social Issues (3)

Prerequisites: PSY 100, GE Foundation requirement, one or more explorations courses and upper division standing.

Application of social psychological principles toward understanding major contemporary social issues. Each issue covered is presented in its historical context, and the economic, political, social and cultural aspects are examined.

351. Social Psychology (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Study of individuals and groups as they are affected by social interactions. Topics may include social cognition, attitudes and persuasion, social influence, interpersonal perception and attraction, aggression, altruism, and group dynamics.

Not open for credit to students in SOC 335I.

354. Psychology of Women (3)

Prerequisites: PSY 100, GE Foundation requirements and upper division standing

Examination of women's roles throughout the lifespan including gender differences, body image, pregnancy, sexuality, communication, relationships, motherhood, work, physical and mental health. Attitudes toward women, including violence against women, may be explored.

This course is for both men and women.

356. Personality (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Survey of classical theories and methods in Personality psychology, with a sampling of current research. Examines how and why people differ in personality, and the ways these differences are reflected in thoughts, feelings, motivations, and behaviors.

359. Self-Observation and Self-Development (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Examination of personal traits and behavior patterns as reflected by objective measures, group interactional procedures and video feedback. Development of self through systematic self-observation.

361. Psychology of Child and Adolescent Development (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Developmental change processes from prenatal development through adolescence. Emphasis on ethnic, gender, and social class differences in development combined with emphasis on the universal features of human development. Topic coverage includes physical-motor, social, physiological, and cognitive aspects of development.

362. Autism Spectrum Disorders (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Introduction to autism spectrum disorders (ASDs), including consideration of behavioral and cognitive issues, comorbid disorders, prevalence, possible etiology and psychological impacts on families. Examination of treatment approaches such as behavioral, speech, physical, occupational, educational, dietary and biomedical therapies.

363. Developmental Psychopathology (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Research on psychiatric disorders of children and adolescents from a developmental perspective. The symptoms, causes, course and prevention of the most important childhood disorders are discussed, including conduct disorder, attention deficit hyperactivity, depression, anxiety disorder, autism and mental retardation.

365. Psychology of Adult Development and Aging (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Methodological and theoretical problems and issues in the study of developmental change processes from young adulthood through old age. Topical coverage includes physical-motor, social, physiological and intellectual aspects of behavioral functioning.

368. Asian American Personality and Mental Health (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Survey of psychological issues facing Asian Americans, including the historical, sociopolitical, and cultural influences that shape personality and mental health of individuals in the diverse population group.

370. Abnormal Psychology (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Overview of abnormal behavior as a portion of continuum of human behavior. Covers field's historical approaches, range of psychological disorders, as well as causes, consequences, and treatment of these disorders.

373. Introduction to Clinical Psychology (3)

Prerequisites: PSY 100, 370, Completion of GE Foundation and upper division standing.

Survey of field of clinical psychology including an introduction to its history, diagnostic procedures, therapeutic process, clinical training, research approaches, and ethical issues.

375. Community Psychology (3)

Prerequisites: GE Foundation requirement, PSY 100, and upper division standing.

Examination, prevention, and interventions for contemporary social problems. First-hand experience with community assessment, intervention, evaluation, and social policy through community

service learning. Emphasis on contextual analyses, community strengths, and culturally-appropriate solutions.

377. Serial Killers and Psychopaths: The Psychology of the Criminal Mind (3)

Prerequisites: Criminal Justice majors: CRJU 304. Psychology majors: PSY 220, 370, GE Foundation, and upper-division standing. All other majors: Consent of instructor.

Integrative examination of the intersection of criminal behavior and severe psychopathology using psychodynamic, behavioral, psychosocial, and neurobiological models. Particular attention is paid to understanding homicide and sex offenses committed by those diagnosed with psychopathy, schizophrenia, and antisocial personality disorder.

Same course as CRJU 408. Not open for credit to students with credit in CRJU 408.

378. Health Psychology (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Research and theory regarding attitudes, beliefs, and behaviors related to health and illness. Individual difference variables will be examined. Analysis of applications of psychology to prevention, counseling, and treatment of major health problems.

379. Psychology of Stress (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Introduction to the scientific study of stress and its relationship to health. Course content will focus on understanding the nature of psychological stress, its physiological correlates, and specific strategies used to help in understanding and managing our own experience of stress.

381. Introduction to Industrial-Organizational Psychology (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Introduction to theories, methods, findings, and applications of industrial-organizational (I-O) psychology. Topics covered include job analysis, employee recruitment and selection, performance appraisal, employee training and development, work stress, teams, satisfaction, motivation, and leadership.

382I. Introduction to Cognitive Science (3)

Prerequisites: GE Foundation requirement; at least one Explorations course; upper-division standing; at least 6 units in two areas chosen from computer Science, Linguistics, Philosophy, and Psychology.

Introduction to cognitive science including historical development, foundational philosophical presuppositions, core topics, underlying theoretical framework, explanatory goals, different methodologies and theoretical contributions of its constitutive disciplines.

Same course as PHIL 482I. Not open for credit to students with credit in PHIL 482I.

383. Women, Family, and Work Issues (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Opportunities and challenges women in U.S. face with family and work issues explored. Specifically, cultural influences, complex family compositions, work demands, and the collective influence of these factors on women's life choices examined.

384. Workplace Diversity: Barriers and Strategies (3)

Prerequisites: PSY 100, GE Foundation requirement and upper division standing

Current U.S. workforce is diverse along gender, multiracial, and multicultural factors, such as men, women, European Americans, African Americans, Latinos, Asian Americans and others. Understanding psychological barriers and developing strategies at the individual, group, and organizational levels to create a positive multicultural workplace will be explored.

390. Selected Topics in Psychology (3)

Prerequisite: Consent of instructor.

Topics of current interest in psychology selected for intensive development.

May be repeated to a maximum of 9 units with different topics; no more than 6 units may be used for the major. Topics announced in the *Schedule of Classes*.

401./501. History of Psychology (3)

Prerequisites: Psychology major, PSY 301; 6 upper division units in psychology.

Historical background and development of psychology as a science. Contributions of major individuals and systems.

Letter grade only (A-F)

405. Field Work in Psychology (3)

Prerequisites: Psychology major (3.0 GPA), 12 units upper division in PSY, PSY 301, consent of instructor, letter of recommendation.

Supervised internship in a Psychology-related position in the surrounding community. Placements include schools, hospitals, clinics, and community mental health agencies.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters.

406A,B. Applications of Psychology (3)

Prerequisite: Psychology major, PSY 301; consent of instructor.

Theoretical and laboratory training in the topic areas are followed by applied work with clients, schools, businesses, etc., as appropriate. Students are supervised by the course instructor.

Students apply for 406A-B during the semester before the courses are taken. Letter grade only (A-F)

407./507. Introduction to Family Therapy (3)

Prerequisites: Psychology major, PSY 301; 373 or 475.

Survey of the field of family therapy including origins of differences in family structure, historical development of family therapy theory and practice.

Letter grade only (A-F).

411./511. Statistical Design and Analysis of Experiments (3)

Prerequisites: Psychology major, PSY 301; 310.

Focuses on logic, application, and interpretation of analysis of variance (ANOVA) models in addition to other statistical procedures. Various issues of research design and experimentation are also covered.

Letter grade only (A-F).

412./512. Multivariate Statistical Analysis (3)

Prerequisites: Psychology major, PSY 301; 310.

Covers logic, application, and limitations of multivariate (multiple independent and dependent variables) statistics. Topics may include multivariate analysis of variance, single and multiple correlation/regression, logistic regression, factor analysis, and path analysis.

Letter grade only (A-F).

418./518. Computer Applications in Psychology (3)

Prerequisites: Psychology major, PSY 301; 310.

Foundations of computer technology and its application to psychology. Emphasis on real-time control by digital computers in psychological research and applications.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

423./523. Qualitative Methods and Analysis. (3)

Prerequisites: Psychology Major, PSY 301.

Overview of qualitative research methods and analysis. Students learn to conduct observations, focus groups and qualitative interviews. Inductive analysis techniques such as content analysis and narrative analysis. Application of these skills in a qualitative evaluation of a real-world program.

Letter grade only (A-F).

427./527. Human Factors (3)

Prerequisites: Psychology major, PSY 301; 310 and two of the following: PSY 331, 332 or 333.

Systematic application of psychological principles to the design of person-machine systems. Emphasis in the laboratory on the development of skills required of human factors psychologists. These skills will include systems and analysis, cognitive task analysis, rapid prototyping and usability testing.

(Lecture 2 hrs, laboratory 3 hours) Letter grade only (A-F).

433./533. Research in Cognition and Learning (3)

Prerequisites: Psychology major, PSY301; 310 and one of the following: PSY 331, 332 or 333.

Research methods in cognition, learning, and perception. Laboratory includes experiments on selected topics.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

434. Human Memory: Exploring Brain, Mind and The Past (3)

Prerequisites: Psychology major; PSY 301; and one of the following: PSY 332, 333, 337, 340 or 341.

Memory is essential for successfully navigating our world. Examines classic and modern research and real-world applications in human memory. Students completing this course will practice designing, critiquing and conducting psychological research.

Letter grade only (A-F). (Seminar)

436./536. Psychology of Mood (3)

Prerequisites: Psychology major, PSY 301; PSY 310.

Analyses of normal mood states, including survey of existing literature. Topics may include the relationship of mood to important antecedents and consequences such as sleep-wake cycles, exercise, nutrition, physical health, stress, and cognition.

Letter grade only (A-F).

441./541. Research in Physiological Psychology (3)

Prerequisites: Psychology major, PSY301; 310 and one of the following: 340, 341 or 342.

Research methods in psychobiology. Includes fundamentals of neuroanatomy, surgical procedures for stimulation, lesioning and recording, and pharmacological procedures used in neuropsychological research.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

444./544. Cognitive Neuroscience (3)

Prerequisites: Psychology major, PSY 301; PSY 310, 332 and one of the following: PSY 340, 341 or 342.

Explores brain systems responsible for cognitive processes in normal humans, integrating theory from texts and current research from original sources.

Letter grade only (A-F).

451./551. Research in Social Psychology (3)

Prerequisites: Psychology major, PSY 301, 310, 351.

Research methods and problems in social psychology.

(Lecture 2 hrs, laboratory 3 hrs.) Letter grade only (A-F).

453./553. Principles of Group Dynamics (3)

Prerequisites: Psychology major, PSY 301; and PSY 351.

Behavior in groups with attention to such factors as leadership, followership, interaction and influence including organization, management, morale, and efficiency. Problems, techniques and methods of investigation.

Letter grade only (A-F).

456./556. Research in Personality (3)

Prerequisites: Psychology major, PSY 301, 310, 356.

Examination of common research methods, especially as they apply to particular theoretical personality paradigms.

Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

457. Psychology of Sexuality (3)

Prerequisites: Psychology major, PSY 301; and one of the following: PSY 351, 356 or 370.

Survey of topics in human sexuality with emphasis on developmental psychology of sexuality, attitudes and feelings related to sexuality, sexual variations and deviations, and sexual dysfunction and sex therapy.

Letter grade only (A-F).

463. Social and Personality Development (3)

Prerequisites: Psychology major, PSY 301; PSY 361.

Development of social behavior and personality in children and adults. Coverage will include theoretical approaches and processes, as well as content areas including development of emotions, personality systems, aggression, morality, prosocial behavior, peer relations, and sex differences.

Letter grade only (A-F).

475./575. Clinical Interviewing (3)

Prerequisites: Psychology major, PSY 301; PSY 373.

Study and development of clinical techniques of observation and interview. Coverage includes detailed exposure to Client-Centered and Gestalt counseling methods. Emphasis on understanding theory and acquisition of basic skills.

Letter grade only (A-F).

477. Psychology of Addiction (3)

Prerequisites: Psychology major, PSY 301; 6 upper division units in Psychology.

Investigation of theory and research on psychological causes and effects of addiction, including analyses of individual differences on major demographic variables of gender, age, and ethnicity. Considerations of major approaches and methods to recovery from addictive behavior.

Letter grade only (A-F).

490. Selected Topics in Psychology (3)

Prerequisites: Psychology major, PSY 301; one 300-level course in the subject matter of the course.

Advanced study of selected topics in one basic area of psychology, e.g., cognition and learning, emotion and motivation, physiological, social, personality or developmental.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

A. Applied Social Psychology

490H. Selected Topics – Honors (3)

Prerequisites: Psychology major, PSY 301; consent of the Psychology Honors Program Advisory Committee.

Advanced study of selected topics in psychology.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

495. Psychology and the Law (3)

Prerequisites: Psychology major, PSY 301; PSY 370.

Examines relationship between fields of psychology and law, including laws pertaining to psychologists and rights and ethical responsibilities of mental health providers. Topics include forensic psychology, trial consulting, and issues relating to the legal system.

Letter grade only (A-F).

496H. Research Preparation – Honors (3)

Prerequisites: Psychology major, PSY 301; consent of the Psychology Honors Program Advisory Committee.

Development of a senior honors thesis proposal.

Letter grade only (A-F).

498H. Senior Thesis – Honors (3)

Prerequisites: Psychology major, PSY 301; PSY 490H, 496H and consent of the supervising faculty member.

Final completion of an original research project with the product being both an oral and written presentation of the research.

Letter grade only (A-F).

499. Independent Study (1-3)

Prerequisites: Psychology major, PSY 301; and consent of department.

Student will conduct independent laboratory or library research and write a report of the research.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

GRADUATE LEVEL

501./401. History of Psychology (3)

Prerequisite: Six upper division units in psychology.

Historical background and development of psychology as a science. Contributions of major individuals and systems.

Letter grade only (A-F).

507./407. Introduction to Family Therapy (3)

Prerequisites: PSY 220, 373, 475 or consent of instructor.

Survey of the field of family therapy including origins of differences in family structure, historical development of family therapy theory and practice.

(Lecture/Discussion) Letter grade only (A-F).

511./411. Statistical Design and Analysis of Experiments (3)

Prerequisite: PSY 310 or consent of instructor.

Focuses on the logic, application, and interpretation of analysis of variance (ANOVA) models in addition to other statistical procedures. Various issues of research design and experimentation are also covered.

(Lecture 3 hours) Letter grade only (A-F)

512./412. Multivariate Statistical Analysis (3)

Prerequisite: PSY 310 or consent of instructor.

Covers logic, application, and limitations of multivariate (multiple independent and dependent variables) statistics. Topics may include multivariate analysis of variance, single and multiple correlation/regression, logistic regression, factor analysis, and path analysis.

(Lecture 3 hours) Letter grade only (A-F)

515. Test Construction Theory and Practice (3)

Prerequisites: PSY 310 and either PSY 314 or 315.

Consideration of problems in the construction of tests for personnel selection, educational screening, personality assessment, aptitude estimating, and measurement of academic achievement. practice in the development of tests.

(Lecture 2 hrs, laboratory 2 hrs) Letter grade only (A-F).

518./418. Computer Applications in Psychology (3)

Prerequisites: PSY 310 or equivalent or consent of instructor.

Foundations of computer technology and its application to psychology. Emphasis on real-time control by digital computers in psychological research and applications.

(Lecture 2 hrs, laboratory 3 hrs) Letter grade only (A-F).

523./423. Qualitative Methods and Analysis (3)

Prerequisite: Graduate standing.

Overview of qualitative research methods and analysis. Students learn to conduct observations, focus groups and qualitative interviews. Inductive analysis techniques such as content analysis and narrative analysis. Application of these skills in a qualitative evaluation of a real-world program.

Letter grade only (A-F).

527./427. Human Factors (3)

Prerequisites: PSY 310 and two of the following: PSY 331, 332 or 333.

Systematic application of psychological principles to the design of person-machine systems. Emphasis in the laboratory on the development of skills required of human factors psychologists. These skills will include systems analysis, cognitive task analysis, rapid prototyping and usability testing.

(Lecture 2 hrs, laboratory 3 hours) Letter grade only (A-F).

533./433. Research in Cognition and Learning (3)

Prerequisites: PSY 220, 310, and 331 or 332 or 333.

Research methods in cognition, learning, and perception. Laboratory includes experiments on selected topics.

(Lecture 2 hrs, lab 3 hrs) Letter grade only (A-F).

536./436. Psychology of Mood (3)

Prerequisites: PSY 100, 220, 310, or consent of instructor.

Analyses of normal mood states, including survey of existing literature. Topics may include the relationship of mood to important antecedents and consequences such as sleep-wake cycles, exercise, nutrition, physical health, stress, and cognition.

541./441. Research in Physiological Psychology (3)

Prerequisites: PSY 220, 310, and 341.

Research methods in psychobiology. Includes fundamentals of neuroanatomy, surgical procedures for stimulation, lesioning and recording, pharmacological procedures used in neuropsychological research.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

544./444. Cognitive Neuroscience (3)

Prerequisites: PSY 332 and one of the following: PSY 340, 341, or 342.

Explores brain systems responsible for cognitive processes in normal humans, integrating theory from texts and current research from original sources.

Letter grade only (A-F).

551./451. Research in Social Psychology (3)

Prerequisites: PSY 220, 310, 351, or consent of instructor.

Research methods and problems in social psychology.

(Lecture 2 hrs, laboratory 3 hrs.) Letter grade only (A-F).

553./453. Principles of Group Dynamics (3)

Prerequisites: PSY 210, 220, 351, or consent of instructor.

Behavior in groups with attention to such factors as leadership, followership, interaction and influence including organization, management, morale, and efficiency. Problems, techniques and methods of investigation.

(Lecture/Discussion) Letter grade only (A-F).

556./456. Research in Personality (3)

Prerequisites: PSY 100, 220, 310, 356, or consent of instructor.

Examination of common research methods, especially as they apply to particular theoretical personality paradigms.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

575./475. Clinical Interviewing (3)

Prerequisites: PSY 100, 220, 373.

Study and development of clinical techniques of observation and the interview. Coverage will include a detailed exposure to Client-Centered and Gestalt counseling methods. Emphasis will be on understanding theory and acquisition of basic skills.

Letter grade only (A-F).

581. Organizational Psychology (3)

Prerequisites: PSY 351 or 453/553.

Analysis of organizational behavior and practices from a systems point of view. Consideration of employee motivation, power, leadership, communication, decision-making, and organizational change. Research methods for studying organizations.

Letter grade only (A-F).

582. Research in Industrial and Organizational Psychology (3)

Prerequisites: PSY 220 and 310.

Research methods and problems in industrial psychology. Includes direct observational, psychophysical, regression, survey, experimental, and quasi-experimental methods.

(Lecture 2 hours, laboratory 3 hours) Letter grade only (A-F).

585. Proseminar in Personnel Psychology (3)

Prerequisites: PSY 314 or 315.

Advanced consideration of problems and procedures in personnel psychology. Includes both differentiation and synthesis of major areas within this field.

Not open for credit to students with credit in PSY 586. Letter grade only (A-F).

589. Selected Topics in Industrial and Organizational Psychology (1)

Prerequisite: Acceptance in to the Master of Science – Industrial and Organizational Psychology or consent of instructor.

Exploration of selected advanced topics in Industrial/Organizational psychology.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in the same semester. Topics announced in the *Schedule of Classes*. Not open for credit to students with credit in same topic in 590.

A. Large Group Intervention

590. Selected Topics in Psychology (1-3)

Prerequisites: Consent of instructor. Topics of current interest in psychology selected for intensive development.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

596. Proseminar on Graduate Research (3)

Prerequisites: Admission to MAPR program, consent of instructor; consent of graduate advisor.

Introduces first semester graduate students to their new graduate level environment and culture. Skills expected of all MAPR master's students will be developed including technical writing, researching topics, public speaking and effectively participating in Psychology seminars.

Letter grade only (A-F).

599. Independent Study (1-3)

Prerequisite: Consent of department.

Unclassified graduate student will conduct independent laboratory or library research and write a report of the research.

May be repeated for a maximum of 6 units. Letter grade only (A-F).

627. Human Factors' Methods (3)

Prerequisite: PSY 527 or consent of instructor.

An advanced graduate level course on methods commonly used in the field of human factors. These methods include analytic techniques used during the design of human-machine systems (e.g., task analysis, simulation), techniques used to evaluate functioning systems (usability testing, critical incident surveys) and techniques used to measure human performance (e.g., workload, situation awareness).

Letter grade only (A-F).

631. Seminar in Perception and Physiological Psychology (3)

Prerequisite: PSY 331 or 340 or 341 or 342 or consent of instructor; consent of graduate advisor.

Critical examination of selected topics in perception, information processing and neurophysiological correlates of behavior. Student emphasis on either perception or physiological psychology.

Letter grade only (A-F).

632. Seminar in Learning (3)

Prerequisites: PSY 333 or consent of instructor; consent of graduate advisor.

Advanced consideration of selected topics in learning.

Letter grade only (A-F).

633. Seminar in Perception and Attention (3)

Prerequisites: PSY 331 or 332 or consent of instructor; consent of graduate advisor.

Examination of methods, theories, and experimental evidence in selected topics from the areas of sensation, perception, and attention.

Letter grade only (A-F).

634. Seminar in Cognition (3)

Prerequisites: PSY 332 or 333 or consent of instructor; consent of graduate advisor.

Examination of method, theory and experimental evidence in selected topics from the area of cognition.

Letter grade only (A-F).

635. Seminar on Situation Awareness (3)

Prerequisites: PSY 331 or 332 or consent of instructor or/and consent of graduate advisor.

Examines research on situation awareness. Topics include: Theoretical perspectives on situation awareness, its importance in systems design and its application in areas such as driving and aviation. Also examines measurement tools designed to assess situation awareness.

Letter grade only (A-F).

637. Seminar in Emotion and Motivation (3)

Prerequisites: PSY 336 or consent of instructor; consent of graduate advisor.

Advanced consideration of selected topics in animal and human motivation and emotion.

Letter grade only (A-F).

651. Seminar in Social Psychology (3)

Prerequisites: PSY 351 or consent of instructor; consent of graduate advisor.

Critical examination of interpersonal relations, social influence, group membership and influence, and intergroup relations.

Letter grade only (A-F).

656. Seminar in Personality (3)

Prerequisites: PSY 356 or consent of instructor; consent of graduate advisor.

Theories of personality structure, dynamics, and development. Critical examination of research deriving from different theoretical approaches.

Letter grade only (A-F).

661. Seminar in Developmental Psychology (3)

Prerequisites: PSY 361 or consent of instructor; consent of graduate advisor.

Consideration of theoretical and methodological issues in life span developmental psychology. Critical examination of research on selected topics, including development of physiological function, intelligence, language, learning processes, sensory processes, perception, personality and social behavior.

Letter grade only (A-F).

678. Seminar in Health and Behavior and Intervention (3)

Prerequisites: PSY 310 or consent of instructor; consent of graduate advisor.

Overview of health psychology and health promotion field. Students learn background of psychology's role in health professions, health behavior theory and health intervention design and evaluation. analysis of individual, contextual, structural and cultural factors impacting health and health intervention.

Letter grade only (A-F).

681. Seminar in Applications of Psychology to Industry (3)

Prerequisites: At least 12 units of graduate-level work within the MSIO program including 511 or 512 and 582.

Psychological applications to current problems of industry. Development of thesis proposal and pretest of thesis research techniques required.

Letter grade only (A-F).

683. Issues Organizational Development (3)

Prerequisites: PSY 581.

Examination of theory, research, techniques, and practices in field of organizational development, professional practice of managing change in organizations. Techniques, such as team building, systems analysis, process consultation, large-group interventions and survey feedback will be examined.

Letter grade only (A-F).

686. Issues in Training (3)

Prerequisites: PSY 332 or 333, and 585.

Discusses theoretical and applied issues with the development of employee training programs. Topics include needs assessment, adult learning theory, training methods, training evaluation, and learning organizations. Experiential assignments reinforce course concepts.

Letter grade only (A-F).

688. Practicum in Industrial and Organizational Psychology (2)

Prerequisites: At least 12 units of graduate-level coursework within the MSIO program.

Practice of industrial psychology or human factors in various industrial settings. Individual research and consultation with industrial or governmental organizations.

Letter grade only (A-F).

696. Research Methods (3)

Prerequisites: PSY 411/511 or 412/512, and consent of graduate advisor.

Preparation and completion of thesis proposal for preliminary oral examination. Power calculations, research methods, and statistical concepts and procedures. Ethics, human subjects protection and responsible conduct of research. Includes the required comprehensive examination for MA Research students.

Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisites: Consent of graduate advisor and department.

Theoretical and experimental problems in psychology requiring intensive analysis.

Letter grade only (A-F).

698. Thesis (1-6)

Prerequisites: Advancement to candidacy, consent of graduate advisor. MSIO students. Prerequisite/Corequisite: PSY 681.

Planning, preparation, and completion of a thesis in psychology.

Must be repeated for a total of 6 units of credit. Letter grade only (A-F).

GRADUATE CENTER FOR PUBLIC POLICY AND ADMINISTRATION

College of Health and Human Services

Director: Walter F. Baber

Center Office: Social Science Public Affairs Bldg. (SS/PA),
Room 228

Telephone: (562) 985-4178

Faculty: Walter F. Baber, Edward Martin, William Moore, John W. Ostrowski, David C. Powell, Michelle A. Saint-Germain, Linda-Marie Sundstrom

Department Coordinator: Kathy Allan

Distance Learning: Sheryl Caito
Telephone: (562) 985-4179

Career Possibilities

Management Analyst • City Manager • Financial Analyst • Project Manager • Presidential Management Intern (PMI) • Non-Profit Management (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Center offers the Master of Public Administration degree; options in the degree program include Public Works Administration and Urban Affairs; and graduate certificate programs in Urban Executive Management, the Public Management Analyst, Employer-Employee Relations and Personnel Management, Public Sector Financial Management, and Transportation Policy and Planning.

Admission applications are encouraged from persons with successful government service who wish to pursue, part-time or full-time. A detailed summary of requirements, current course offerings and procedures are contained in student handbooks available from the Graduate Center for Public Policy and Administration and on its website at <http://www.csulb.edu/~beachmpa>.

The Center is accredited by the National Association of Schools of Public Affairs and Administration, Commission on Peer Review and Accreditation (NASPAA, 1120 G Street, NW, Suite 730, Washington, DC 20005, phone: 202-628-8965).

Admission Requirements

1. Minimum 3.0 Undergraduate GPA
2. Demonstrated competence in professional writing. A listing of ways you can demonstrate writing competence is available in the Center office (SSPA 228) or on the Center website: <http://www.csulb.edu/colleges/chhs/departments/ppa/>
3. Quality of professional experience as evaluated by Center faculty. This evaluation will be based on the applicant's current job description, resume, any other materials submitted by the applicant, and the length of professional service.
4. Other evidence of applicant's potential to undertake and successfully complete the MPA course of study: faculty may consider other evidence submitted by the

applicant; for example, scores on optional standardized examinations such as the GRE, GMAT, LSAT, or other recognized standardized examinations.

Following admission to the University and acceptance to the Center, each student should meet with a faculty advisor. The faculty advisor will provide advice to the student on program course requirements and elective opportunities, and counsel the student in the chosen elective area.

A student whose overall grade point average is less than 3.0, but who presents acceptable evidence of professional potential shown through recent academic performance and experiential background, may be admitted by special action of the Center.

Advancement to Candidacy

1. Fulfillment of the Graduate Writing Assessment Requirement (GWAR)
2. Minimum GPA of 3.0 in all graduate work completed at this University, or transferred from other sources, to meet degree or program requirements.
3. Successful completion (grade of "B" or better) of six units in the MPA program.
4. Completion of the orientation requirement.

Transfer of Credit

Students who have completed a graduate certificate program in the Public Management Analyst, Employer-Employee Relations and Personnel Management, Public Sector Financial Management, or Transportation Policy and Planning, may transfer up to 15 units of credit earned in the certificate program to be applied to the Center's Master of Public Administration degree program. The student must apply to the Center for admission as a degree candidate.

Students who have completed the academic requirements for the Master of Public Administration degree, prior to applying for admission to a graduate certificate program in the Center, may apply up to 6 units of credit earned in the MPA program for the required or elective courses in a certificate program.

Master of Public Administration

This is a 39-unit program. A common grounding in the core areas of public policy and administration is required; beyond this, considerable freedom of choice enables students to select subjects which fit their particular backgrounds or career objectives.

Admission Requirements

1. Minimum 3.0 Undergraduate GPA
2. Demonstrated competence in professional writing. A listing of ways you can demonstrate writing competence is available in the Center office (SSPA 228) or on the Center website: www.csulb.edu/colleges/chhs/departments/ppa/

3. Quality of professional experience as evaluated by Center faculty. This evaluation will be based on the applicant's current job description, resume, any other materials submitted by the applicant, and the length of professional service.
4. Other evidence of applicant's potential to undertake and successfully complete the MPA course of study: faculty may consider other evidence submitted by the applicant; for example, scores on optional standardized examinations such as the GRE, GMAT, LSAT, or other recognized standardized examinations.

Following admission to the University and acceptance to the Center, each student should meet with a faculty advisor.

A student whose overall grade point average is less than 3.0, but who presents acceptable evidence of professional potential shown through recent academic performance and experiential background, may be admitted by special action of the Center.

Orientation Requirement

All students must attend a mandatory Center orientation within the first two semesters of acceptance into the MPA Program.

Requirements

1. A minimum of 39 course units in graduate course work, with a minimum of 24 units of 500/600 level courses in public policy and administration;
 2. Satisfactory completion of the following:
 - PPA 500 Foundations of Public Policy and Administration (3)
Prerequisites: None.
 - PPA 555 Government Budgeting and Finance (3)
Prerequisites: PPA 518 or ECON 101 or ECON 300 or equivalent with a grade of "C" or better.
 - PPA 577 Public Sector Human Resources Management (3)
Prerequisites: None.
 - PPA 660 Seminar in Organization Theory and Behavior (3)
Prerequisites: None.
 - PPA 670 Policy Issue Analysis (3)
Prerequisites: None.
 - PPA 696 Research Methods in Public Administration (3)
Prerequisite: PPA 517 or STAT 108 or equivalent with a grade of "C" or better.
 3. Completion of approved internship program (PPA 585) as required course work beyond the 39-unit minimum, or waiver of the internship requirement based on professional experience;
 4. Additional elective course work in elective fields to meet the 39-unit minimum;
 5. Successful completion of the following:
 - PPA 697 Directed Research (3,3)
Prerequisites: Advancement to candidacy, completion of required MPA courses, consent of instructor.
- An approved Student Learning Portfolio

University Courses Acceptable for the Master of Public Administration

A wide variety of graduate courses in other departments also are acceptable. Graduate course descriptions are found in the department listings in which they are offered. Consult with Center Faculty for more information.

Option in Urban Affairs

Admission

The general standards for admission are identical to those for the Master of Public Administration degree program. An applicant must demonstrate a background of related undergraduate course work of twelve units, or significant management and/or staff experience in public administration.

Requirements

1. A minimum of 39 course units in graduate course work, with a minimum of 27 units of 500/600 level courses in public policy and administration;
 2. Satisfactory completion of the following:
 - PPA 500 Foundations of Public Policy & Administration (3)
Prerequisites: None.
 - PPA 555 Government Budgeting and Finance (3)
Prerequisites: PPA 518 or ECON 101 or ECON 300 or equivalent with a grade of "C" or better.
 - PPA 577 Public Sector Human Resources Management (3)
Prerequisites: None.
 - PPA 610 Seminar in Urban Affairs (3)
Prerequisites: None.
 - PPA 660 Seminar in Organization Theory and Behavior (3)
Prerequisites: None.
 - PPA 670 Policy Issue Analysis (3)
Prerequisites: None.
 - PPA 696 Research Methods in Public Administration (3)
Prerequisite: PPA 517 or STAT 108 or equivalent with a grade of "C" or better.
 3. Completion of an approved internship program (PPA 585) as required course work beyond the 39-unit minimum, or waiver of the internship requirement based on professional experience;
 4. Completion of 12 units of elective course work from: PPA 512, 517, 522, 523, 525, 533, 535, 540, 546, 547, 548, 550, 567, 571, 575, 581, 590; CRJU 530, 504, 621; EDAD 541, 544; EDP 520, 536; GEOG 650, 666; HIST 673; POSC 640; REC 521, 571.
 5. Successful completion of the following:
 - PPA 697 Directed Research (3,3)
Prerequisites: Advancement to candidacy, completion of required MPA courses, consent of instructor.
- An approved Student Learning Portfolio.

Option in Public Works Administration

Admission

The general standards for admission are identical to those for the Master of Public Administration degree program. An applicant must demonstrate a background of related undergraduate course work of twelve units, or significant management and/or staff experience in public administration. For this degree option, the experiential background would be targeted to the public works and infrastructure sector.

Requirements

1. A minimum of 39 course units in graduate course work, with a minimum of 27 units of 500/600 level courses in public policy and administration;
2. Satisfactory completion of the following:
 - PPA 500 Foundations of Public Policy and Administration (3)
Prerequisites: None.
 - PPA 554 Public Works Facilities and Urban Policy (3)
Prerequisites: None.
 - PPA 555 Government Budgeting and Finance (3)
Prerequisites: PPA 518 or ECON 101 or ECON 300 or equivalent with a grade of "C" or better.
 - PPA 577 Public Sector Human Resources Management (3)
Prerequisites: None.
 - PPA 660 Seminar in Organization Theory and Behavior (3)
Prerequisites: None.
 - PPA 670 Policy Issue Analysis (3)
Prerequisites: None.
 - PPA 696 Research Methods in Public Administration (3)
Prerequisite: PPA 517 or STAT 108 or equivalent with a grade of "C" or better.
3. Completion of an approved internship program (PPA 585) as required course work beyond the 39-unit minimum, or waiver of the internship requirement based on professional experience;
4. Completion of 12 units of elective course work selected from the following:
 - PPA 515, 522, 535, 540, 547, 550, 552, 560, 575, 590; CE 520
5. Successful completion of an approved Student Learning Portfolio and 6 units of one of the following courses:
 - PPA 697 Directed Research (3,3)
Prerequisites: Advancement to candidacy, completion of required MPA courses, consent of instructor.
 - CE 697 Directed Studies (1-3)
Prerequisites: Graduate standing. Corequisites: CE 696 or written consent of directed studies advisor.

Graduate Certificate in Urban Executive Management

This program is designed to serve the post-graduate executive development needs of men and women aspiring to top level positions in city and county governments. The goal of this program is to provide urban executives with a comprehensive knowledge of strategic planning processes; dynamics of human relations; strategies for implementing policies; consensus building techniques; and economic and financial forces impacting on local governments.

Students may only pursue the certificate program in combination with a CSULB degree program.

Prerequisite

In addition to the general admission requirements, applicants for the graduate certificate in Urban Executive Management should have significant upper level management experience in Public Administration, and a minimum of 10 years of progressively responsible management experience in government.

Requirements

1. A minimum of 18 course units in graduate course work, including 3 required and 3 elective courses.
2. Satisfactory completion of the following
 - PPA 542 Emergency Planning and Management (3)
Prerequisites: None.
 - PPA 547 Local Government Economic Development Processes (3)
Prerequisites: None.
 - PPA 571 Leadership Skills and Strategies in the Public Sector (3)
Prerequisites: None.
3. Satisfactory completion of 3 elective courses selected from the following:
 - PPA 512, 525, 533, 535, 550, 555, 560, 575, 577, 610

Graduate Certificate in Public Management Analysis

This program is designed for men and women who work or desire to work in budgeting, policy formulation, financial management, or program evaluation offices of government agencies. The program prepares candidates with such skills as defining a problem; conducting cost benefit analysis; utilizing basic statistical techniques; conducting behavioral/political analysis; preparing and presenting reports; learning to blend qualitative, behavioral, and political skills necessary for success as an analyst in government.

Students may only pursue the certificate program in combination with a CSULB degree program.

Prerequisite

In addition to general admission requirements, students should be employed in public service or related activities, or have a goal of public service-related activities.

Requirements

1. A minimum of 18 course units in graduate course work, including 4 required and 2 elective courses.
2. Satisfactory completion of the following:
 - PPA 515 Administrative Report Writing (3)
Prerequisites: None.
 - PPA 517 Analytical Skills Development (3)
Prerequisites: None.
 - PPA 521 Microcomputer Management for Public Administrators (3)
Prerequisites: None.
 - PPA 555 Government Budgeting and Finance (3)
Prerequisites: PPA 518 or ECON 101 or ECON 300 or equivalent with a grade of "C" or better.
3. Satisfactory completion of 2 elective courses from:
 - PPA 522, 523, 540, and 560

Graduate Certificate in Public Sector Employer-Employee Relations and Personnel Management

This program is designed for public sector managers and those aspiring to enter public service who need the knowledge, skills, and abilities required to deal effectively with the critical area of public sector employee relations and personnel management. The primary goal is to provide the necessary training for public managers to effectively utilize human resources to their greatest potential in conjunction with the needs of the public organization.

Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

1. A minimum of 18 course units in graduate course work, including 3 required and 3 elective courses.
2. Satisfactory completion of the following:
 - PPA 555 Government Budgeting and Finance (3)
Prerequisites: PPA 518 or ECON 101 or ECON 300 or equivalent with a grade of "C" or better.
 - PPA 575 Public Sector Employer-Employee Relations (3)
Prerequisites: None.
 - PPA 577 Public Sector Human Resources Management (3)
Prerequisites: None.
3. Satisfactory completion of 3 elective courses from:
PPA 533, 570, 571 and 581

Graduate Certificate in Public Sector Financial Management

This Certificate Program is designed for public managers and others interested in obtaining an understanding of governmental financial management concepts, functions, techniques, and issues. The program is designed to familiarize students with financial management problems and the techniques available for solving them. An emphasis is placed on how to recognize, evaluate, and utilize financial information in decision-making.

Those most interested in pursuing the Certificate would likely fall into one of three categories. First, current private sector finance professionals who wish to develop an understanding of financial management functions and practices within the public sector. Second, current public sector financial managers who wish to further develop expertise in public sector financial management. Finally, in-service public sector employees who wish to start a career in government finance and who may use the courses for the Certificate as a guide for their course work towards the Master of Public Administration degree.

Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

Take all of the following (18 units):

- PPA 555 Government Budgeting and Finance (3)
Prerequisites: PPA 518 or ECON 101 or ECON 300 or equivalent with a grade of "C" or better.
- PPA 590T Selected Topics in PPA - Public Finance (3)
Prerequisites: None.
- PPA 560 Public Financial Management (3)
Prerequisite: PPA 555.
- PPA 567 Basic Governmental (Fund) Accounting (3)
Prerequisite: PPA 555.
- ACCT 610 Advanced Cost Accounting, Budgeting and Control (3)
Prerequisites: ACCT 500 or equivalent with a grade of "C" or better.
- IS 601 Quantitative Methods for Managerial Decision Making (3)
Prerequisites: MBA standing required.

Note: Appropriate substitutes for the required courses may be allowed subject to permission of the Public Finance Specialization

Faculty Advisor. Also, ACCT 610 and IS 601 have substantial prerequisites. Prospective students should refer to the *University Catalog* for details.

Graduate Certificate in Transportation Policy and Planning

The purpose of this certificate program is to provide instruction in the skills and knowledge appropriate to professional activity in transportation policy and planning for urban transportation. Key support areas include urban planning, policy analysis, environmental policy, intergovernmental policy, personnel policy, and grants administration.

Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

1. A minimum of 18 course units in graduate course work, including 2 required and 4 elective courses.
2. Satisfactory completion of the following:
 - PPA 522 Automating Government Administration (3)
Prerequisites: None.
 - PPA 550 Urban Transportation Policy and Planning (3)
Prerequisites: None.
3. Satisfactory completion of 4 elective courses from:
PPA 535, 540, 575, 670; CE 520; ECON 690

Courses (PPA)

500. Foundations of Public Policy and Administration (3)

Concepts of the discipline; fundamentals of public organization theory, policy formulation and analysis, and administrative and management processes; management in the public interest; and ethics in government.

Letter grade only (A-F).

509. Seminar in Strategic Planning for Public Managers (3)

Prerequisite: Consent of instructor

Introduction to the theories and practice of strategic planning in public organizations. The course is designed to promote an understanding of the theories and approaches to strategic planning and help the student to acquire practical skills involved in strategic planning.

Letter grade only (A-F).

512. Urban Executive Management (3)

Examines problems confronting today's urban administrator and offers techniques for solving a variety of pressing problems. Subjects include managing in a local government setting issues such as public policy, planning, financial resources, personnel, and labor relations.

Letter grade only (A-F).

514. Municipal Law for Administrators (3)

Examination of major laws and legal issues affecting local government. Basic powers of cities including regulatory (police) powers, corporate (service) powers, taxation and eminent domain.

Letter grade only (A-F). Not open for credit to students with credit in PROF 514.

515. Administrative Report Writing (3)

Preparation of written documents required of public administrators.

Letter grade only (A-F).

517. Analytical Skills Development (3)

Designed to develop or improve the skills needed to perform analytical work in the public sector. Emphasis is on the methods of analysis and evaluation used in public service organizations. Communication of results will also be covered.

Letter grade only (A-F).

518. Microeconomics and Public Policy (3)

Covers key principles of microeconomics such as supply, demand, and market processes. Provides extensive coverage of topics that concern public sector decisions, such as public goods, externalities, welfare analysis, and cost-benefit analysis.

Letter grade only (A-F).

521. Microcomputer Management for Public Administrators (3)

Focuses on the design, development, and management of microcomputer systems and applications in public organizations. Course elements: analysis of critical concepts and issues relating to management of computer systems, and hands-on computer laboratory experience for design, and use of applications.

Letter grade only (A-F).

522. Automating Government Administration (3)

The use of computers to assist government management. Special emphasis on automation of services. Provides an introductory background in computers and their applications to government systems and files for non-computer specialists.

Letter grade only (A-F).

523. Urban Information Systems for Public Management (3)

Overview of significant information technologies impacting government management: World-Wide Web and G.I.S. (Geographic Information Systems.) Introduces students to the construction and use of Web pages. Includes an introduction to GIS in public organizations. Extensive use of computers.

524. GIS Management and Applications for Public Managers (3)

Introduces students to the management and applications of Geographic Information Systems (GIS) in the Public Sector. Covers the requirements for designing and managing GIS applications for solving public sector problems. Hands-on use of GIS and analysis of GIS cases.

Letter grade only (A-F).

525. Non-Profit Management (3)

Examination of principal characteristics, scope, and functional management areas (i.e., governance, fund development, board development, volunteer and staff management, intersectoral relations; budgeting) in American nonprofit organizations, with particular attention to the important roles of nonprofits in the delivery of health and human services.

Letter grade only (A-F).

533. Race, Inequality and Public Policy (3)

Examines the multiple sources of ethnic, racial, gender, and class inequalities in the United States and how public policies have attempted to address these issues.

Letter grade only (A-F).

535. Intergovernmental Relations (3)

Presents concepts and issues of U.S. intergovernmental relations. Topics include history of the field, intergovernmental finances, state and federal legislative processes, legislative advocacy, interorganizational management, and current issues.

Letter grade only (A-F). Not open for credit to students with credit in PROF 535.

540. Grants Administration and Management (3)

Study of the various types of financial and technical assistance to local public and quasi-public agencies; the strategies for locating

and obtaining grant programs support; and the development of effective project systems for externally funded projects.

Letter grade only (A-F).

542. Emergency Planning and Management (3)

Planning and management processes and issues involved in large-scale emergencies; the nature of natural and technological risk and emergency, with attention to public sector roles in contingency planning and response.

Letter grade only (A-F). Same course as EMER 506. Not open for credit to students with credit in EMER 542 or 506.

546. The Urban Crisis and the Public Administrator (3)

Survey of the history of urbanization, the literature of urban power relations and decision-making, and the dynamics of race relations in the urban environment. Major focus on extensive interface with urban agency representatives.

Letter grade only (A-F).

547. Local Government Economic Development Processes (3)

Discussion of the nature, goals and processes of locally based economic development programs. Definition of governmental incentives designed to maximize private investment. Explanation of property-related revenues from public and private perspectives.

Letter grade only (A-F).

548. Housing Problems and the Urban Administrator (3)

Overview of housing problems in contemporary urban society. Increases public administrator's awareness of the interrelationships between local government administration and housing problems, facilitate public administrator's ability to deal with these problems.

Letter grade only (A-F).

550. Urban Transportation Policy and Planning (3)

Examines urban transportation activities and options for future. Analyzes local, state, federal policy; Los Angeles urban transportation development, transit proposals, new policies and activities.

Letter grade only (A-F).

554. Public Works Facilities and Urban Policy (3)

Provides a study of public infrastructure essential to urban communities. Focus given to water, wastewater, transportation, solid waste, public facilities, and schools.

Letter grade only (A-F).

555. Government Budgeting and Finance (3)

Prerequisites: PPA 518 or ECON 101 or ECON 300 or equivalent with a grade of "C" or better.

Presents the major concepts and skills associated with budget preparation for all levels of government. Topics include: budget processes and formats, basic principles of government accounting, revenue, and capital budgeting.

Letter grade only (A-F). Not open for credit to students with credit in PROF 555.

560. Public Financial Management (3)

Prerequisite: PPA 555.

Focuses on financial planning, implementation and management control, financial reporting, and financial analysis used in public service organizations.

Letter grade only (A-F).

567. Basic Governmental (Fund) Accounting (3)

Prerequisite: PPA 555.

Provides an introduction to unique characteristics of governmental accounting. Aspects of recording and reporting of financial transactions in public service organizations. Governmental auditing and financial condition analysis.

Letter grade only (A-F).

570. Negotiating Dynamics: Strategies and Skills (3)

Examination of negotiating strategies and skills based on tested use of power and psychological principles in negotiations. Different strategies and skills examined for negotiating under varying levels of cooperation and conflict.

Letter grade only (A-F).

571. Leadership Skills and Strategies in the Public Sector (3)

Leaders in urban governments, community based and non-profit organizations are challenged to move their bureaucracies toward solutions to complex problems. Examines administrative leadership, current approaches to organizational excellence and their applicability in a variety of administrative settings.

575. Public Sector Employer-Employee Relations (3)

Analysis of prevailing practice and techniques of collective bargaining and its continuing impact on the economic, political, and organization structure in the public sector.

Letter grade only (A-F).

577. Public Sector Human Resources Management (3)

Historical development of civil service/merit system; laws which affect operations of personnel system; analysis of the various components of a personnel system; impact of labor negotiations; role of personnel system as a change agent.

Letter grade only (A-F). Not open for credit to students with credit in PROF 577.

581. Government/Community Relations (3)

Investigation of relationship between governments and community based organizations, with particular attention to strategies for diagnosing problems and opportunities and prescribing courses of action in public policy where governments and nonprofits converge.

Letter grade only (A-F).

585. Public Policy and Administration Internship (3-12)

Prerequisite: Consent of the instructor.

Provides exposure to and understanding of the governmental environment. Students seeking the MPA degree who do not have managerial experience in government are required to participate in the internship program.

May be repeated to a maximum of 12 units. Academic credit earned for the internship program is beyond the 39 units required for the MPA degree. Letter grade only (A-F).

590. Selected Topics in Public Policy and Administration (3)

Investigation of a special problem as defined by the instructor that is of current interest to the field of public policy and administration.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

S. Small-Scale Survey Research for Public Administrators

T. Public Finance

Prerequisite: PPA 555.

597. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study in public policy and administration.

Letter grade only (A-F).

610. Seminar in Urban Affairs (3)

An interdisciplinary course gives students opportunity to develop expanded awareness of the interrelationships between various urban problems in the urban systemic environment.

Letter grade only (A-F).

660. Seminar in Organization Theory and Behavior (3)

Examination of theories of organizations and behavior of members therein. Among the subtopics: generalist management, bureaucracy, organization structure and design, systems theory, motivation, leadership, decision-making, group and team dynamics, power and conflict, culture, organization change and development.

Letter grade only (A-F).

670. Policy Issue Analysis (3)

Introduces theories and approaches to policy analysis. The core of the course follows the policy analysis cycle and includes: problem recognition, problem definition, development of alternative solutions, analysis of alternatives, selection of policy options, policy implementation and evaluation.

Letter grade only (A-F)

696. Research Methods in Public Administration (3)

Prerequisite: PPA 517 or STAT 108 or equivalent with a grade of "C" or better.

Covers the techniques of public sector research. Topics include research design, survey research, and statistical analysis. Note: Suggested: take PPA 696 early in MPA program. Letter grade only (A-F).

697. Directed Research (3)

rerequisites: Advancement to candidacy, completion of required MPA courses, consent of instructor.

Required capstone project. Individual research of a public issue. Supervision of a full-time faculty member required.

May be repeated to a maximum of 6 units in the same semester. Letter grade only (A-F).

RECREATION AND LEISURE STUDIES

College of Health and Human Services

Department Chair: Maridith Janssen

Department Office: Health and Human Services (HHS) 2 - 118
Telephone: (562) 985-4071

Faculty: Michael A. Blazey, Melissa H. D'Eloia, Katherine James, Maridith Janssen, Marilyn A. Jensen (Emerita), Kenneth Silverberg

Department Coordinator: Pamela Ford

Graduate Advisor: Katherine James

Career Possibilities

Recreation Leader • Recreation Therapist • Senior Center Director • Recreation Supervisor • Camp Director • Recreation Facility or Club Manager • Park Ranger • Travel Agent • Sporting Goods Sales Representative • Hotel or Resort Manager • Municipal Supervisor • Employee Services Specialist • Social Director • Travel Guide • Volunteer Services Manager • Park Naturalist • Intramural Director • City Manager • Community Services Director (For more information, see www.careers.csulb.edu.)

Introduction

The Department exists to promote a broader and deeper understanding of the role of leisure and recreation in the lives of all people and to enhance the quality of experiences available to each person.

The department is accredited by the Accreditation Council of the National Recreation and Park Association (National Recreation and Park Association, Council on Accreditation for Parks, Recreation, Tourism and Related Professions, 22377 Belmont Ridge Road, Ashburn, VA 20148, phone: 703-858-0784).

Undergraduate Programs

Bachelor of Arts in Recreation (120 units)

Student must maintain a cumulative 2.0 GPA on all units attempted and achieve a "C" or better in each course of the Recreation major to progress in the sequence of study. Students earning less than a "C" grade in a course required in the major must repeat that course.

Students wishing to substitute courses or deviate in any way from department requirements must submit a letter of request to the Department faculty. No more than six units of Recreation-prefix courses may be taken by contract. The Internship is "Letter grade only (A-F)." The Internship is taken the last semester before graduation. No other courses may be taken concurrently with the Internship.

Requirements

Lower Division:

Take all of the following courses:

REC 141 Introduction to Leisure Services (3)
Prerequisite/Corequisite: One GE Foundation course.

REC 225 Programming Recreation Activities (3)
Prerequisite: None

Upper Division:

Take all of the following courses:

REC 325 Advanced Program & Event Management (3)
Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

REC 341 Eval and Research in Leisure Services (3)
Prerequisites: REC 100 or 300; REC 141, 225, or consent of instructor.

REC 351 Foundations of Therapeutic Recreation (3)
Prerequisites: REC 100 or 300; REC 141, 225, or consent of instructor.

REC 421 Supervisory & Administrative Practices (3)
Prerequisite: REC 100 or 300; 141, 225, or consent of instructor.

REC 423 Facility Design and Operations (3)
Prerequisites: REC 325 or consent of instructor.

REC 425 Financing Leisure Services (3)
Prerequisites: REC 325 or consent of instructor.

REC 427 Legal Aspects of Leisure Services (3)
Prerequisites: Upper division standing.

REC 431 Recreation Resource Management (3)
Prerequisites: REC 100 or 300; 141, or consent of instructor.

REC 480 Philosophy of Recreation and Leisure (3)
Prerequisites: REC 325, 341, one of the following: REC 421, 425, 427.

REC 498 Internship in Leisure Services (6-9)
Prerequisites: Completion of all major requirements; 1000 hours of verified paid or volunteer leadership experience approved by faculty advisor; or 500 hours of experience and fluency in both English and a second language consistent with CSULB Language Proficiency Requirements; and consent of internship coordinator.

Additional Courses:

Take one the following courses:

REC 100, 300

Take one of the following courses:

HDEV 307I, 357I, or PSY 370I

Take 15 units from the following courses:

REC 321, 322, 324, 337, 340I, 371, 428, 430, 433, 451, 452, 453, 454, 457, 458, 462, 465, 468, 469, 473, 490, 499

Minor In Recreation

A minimum of 21 units approved by the departmental minor advisor which must include:

Take all of the following:

REC 141 Introduction to Leisure Services (3)
Prerequisite/Corequisite: One GE Foundation course.

REC 225 Programming Recreation Activities (3)
Prerequisites: None

REC 321 Leadership in Recreation & Leisure Studies (3)
Prerequisites: None

REC 340I Leisure in Contemporary Society (3)
Prerequisites: GE Foundations requirements; one or more Exploration courses; upper division standing.

REC 351 Foundations of Therapeutic Recreation (3)
Prerequisites: REC 100 or 300; REC 141, 225, or consent of instructor.

Take two of the following:

REC 220, 322, 324, 337, 371, 428, 430, 431, 433, 462, 473, or 490 with consent of advisor.

Minor In Event Planning and Management

The Event Planning and Management minor provides students with expertise for careers in event planning and management. Curriculum covers skills and knowledge including negotiation, event planning, programming, promotion, budget and legal issues.

Requirements

Core (18 units):

HFHM 270 Introduction to Hospitality Foodservice and Hotel Management (3)
Prerequisites: None

HFHM 274 Global Issues in Hotel and Restaurant Management (3)
Prerequisites: ENGL 100 or equivalent.

HFHM 374 Meeting Planning in Hotels and Restaurants (3)
Prerequisites: HFHM 170.

REC 325 Advanced Program and Event Management (3)
Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

REC 462 Travel, Tourism, and Resort Recreation Management (3)
Prerequisites: REC 325 or consent of instructor.

REC 465 Convention and Conference Planning (3)
Prerequisites: REC 325 or consent of instructor.

Take 6 units of electives from the following courses:
ACCT 201; CECS 110, 200; COMM 334; HFHM 372, 376; HFHM 378 or REC 427; HFHM 476 or REC 425; REC 468, 490.

Certificate Programs

The certificate programs are available undergraduate and graduate students, and students who already possess a baccalaureate degree and are enrolling in a certificate program, unless otherwise noted. Students pursuing a degree may complete the certificate concurrently with or subsequent to their degree by enrolling as a certificate student. Courses taken for certificate requirements may be used, where appropriate, to meet the General Education or degree requirements of cooperating departments. Extension and/or transfer credit may comprise no more than one-fourth of the course work used to meet baccalaureate certificate requirements. Students should contact the department to schedule a meeting with the certificate advisor.

Certificate in Therapeutic Recreation

This certificate prepares students for the California Board of Recreation and Park Certification exam and for the National Council for Therapeutic Recreation Certification exam. A baccalaureate degree, which may be awarded concurrently, is required for completion of this certificate program.

This certificate program is eligible for Financial Aid. Please see the department web site for required Federal disclosure information.

Core Requirements

Take all of the following:

REC 351 Foundations of Therapeutic Recreation (3)
Prerequisites: REC 100 or 300; REC 141, 225, or consent of instructor.

REC 451 Management of Therapeutic Recreation Services (3)
Prerequisites: REC 351, 452 or consent of instructor.

REC 452 Therapeutic Recreation Treatment/Program Planning (3)
Prerequisites: REC 351 or consent of instructor.

REC 453 Comprehensive Programming and Evaluation in Therapeutic Recreation (3)
Prerequisites: REC 100 or 300, 141, 225, 351 or consent of instructor.

REC 458. Clinical Techniques in Therapeutic Recreation (3)
Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

REC 498 Internship in Leisure Services (6-9)
Prerequisites: Completion of all major requirements; 1000 hours of verified paid or volunteer leadership experience approved by faculty advisor, or 500 hours of experience and fluency in both English and a second language consistent with CSULB Language Proficiency Requirements; and consent of internship coordinator.

Take six units of advisor-approved Recreation courses.
Additional Courses:

Take 18 to 19 units taken with approval from certificate advisor. Includes anatomy/physiology course (3 - 4 units); abnormal psychology (3 units); human growth and development across the lifespan course (3 units); upper division support courses (9 units) from any of the following areas: sociology, psychology, educational psychology, health science, adapted physical education, anthropology, biology, communication studies, family and consumer sciences, gerontology, human development, kinesiology/physical education, social work, and special education.

Certificate in Administration of Campus Recreation and Student Service Programs

This certificate is for those looking to be Certified Recreation Sports Specialist through NIRSA. It will prepare them for the certification examination.

Students may only pursue the certificate program in combination with a CSULB degree program.

Requirements

Twenty-four (24) units of core requirements including:

Take all of the following courses:

REC 321 Leadership in Rec and Leisure Studies (3)
Prerequisites: None

REC 322 Recreational Sports Supervision (3)
Prerequisites: None

REC 324 Campus Recreation Services (3)
Prerequisites: Junior standing.

REC 325 Adv Program and Event Management (3)
Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

REC 421 Supervisory and Administrative Practices (3)
Prerequisite: REC 100 or 300; 141, 225, or consent of instructor.

REC 427 Legal Aspects of Leisure Services (3)
Prerequisites: Upper division standing.

REC 485 Field Work (3)
Prerequisites: Consent of instructor.

Take one (3 unit) evaluation course from the following:
REC 341 Eval and Research in Leisure Services (or equivalent) (3)
Prerequisites: REC 100 or 300; REC 141, 225, or consent of instructor.

The remaining 6 units are electives which must be taken with approval of certificate advisor. These may include REC, KIN, HDEV, or HRM courses.

Certificate in Management of Nonprofit and Volunteer Services

Students may only pursue the certificate program in combination with a CSULB degree program.

Core Requirements

Take off of the following:

REC 325 Adv Program and Event Management (3)
Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

REC 421 Supervisory & Administrative Practices (3)
Prerequisite: REC 100 or 300; 141, 225, or consent of instructor.

REC 425 Financing Leisure Services (3)
Prerequisites: REC 325 or consent of instructor.

REC 427 Legal Aspects of Leisure Services (3)
Prerequisites: Upper division standing.

REC 428 Principles of Nonprofit and Volunteer Management (3)
Prerequisites: None

REC 498 Internship in Leisure Services (6-9)
Prerequisites: Completion of all major requirements; 1000 hours of verified paid or volunteer leadership experience approved by faculty advisor, or 500 hours of experience and fluency in both English and a second language consistent with CSULB Language Proficiency Requirements; and consent of internship coordinator.

Additional courses:

Take 6 units of elective courses addressing youth development, communication skills, marketing, evaluation, or working with diverse populations which must be taken with approval of certificate advisor.

Certificate in Administration of Outdoor Recreation Resources

Students may only pursue the certificate program in combination with a CSULB degree program.

Core Requirements

Take all of the following:

REC 427 Legal Aspects of Leisure Services (3)
Prerequisites: Upper division standing.

REC 430 Recreation in the Ocean Environment (3)
Prerequisites: None

REC 431 Recreation Resource Management (3)
Prerequisites: REC 100 or 300; 141, or consent of instructor.

Take six units of the following:

REC 337 Environmental & Cultural Interpretation (3)
Prerequisites: None

REC 490 or 590 approved by certificate advisor (3-6):
490 Selected Topics in Recreation (1-3)
Prerequisite: None

590 Selected Topics in Recreation (1-3)
Prerequisite: Consent of instructor.

REC 499 Independent Study (3)
Prerequisites: Consent of department and department chair.

Additional courses:

Take 6 units of elective courses from biology, geology, geography or environmental science and policy which must be taken with approval of certificate advisor.

Certificate in Administration of Travel and Tourism

Students may only pursue the certificate program in combination with a CSULB degree program.

Core Requirements

Take all of the following:

REC 462 Travel, Tourism, and Resort Recreation Management (3)
Prerequisites: REC 325 or consent of instructor.

REC 468 Tourism Planning and Development (3)
Prerequisites: REC 462 or consent of instructor.

GEOG 352 Geography of Travel and Tourism (3)
Prerequisites: None

HFHM 270 Introduction to Hospitality Foodservice and Hotel Management (3)
Prerequisites: None

Take one of the following:

REC 485 Field Work (3)
Prerequisites: Consent of instructor.

REC 498 Internship in Leisure Services (6-9)
Prerequisites: Completion of all major requirements; 1000 hours of verified paid or volunteer leadership experience approved by faculty advisor, or 500 hours of experience and fluency in both English and a second language consistent with CSULB Language Proficiency Requirements; and consent of internship coordinator.

Additional courses:

Take 6 units of upper division courses listed in the catalog under the Regional category in the Department of Geography or 6 units of a foreign language; plus 3 additional upper division units selected in consultation with certificate advisor.

Graduate Programs

Master of Science in Recreation Administration

This program helps prepare professional personnel who are managers leading private and public agencies and programs, and who can conduct research and evaluation of recreation services.

Admission

Students seeking admission to the Department of Recreation and Leisure Studies Graduate Program should have an undergraduate degree and a desire for graduate study. Applicants must apply for admission to the Recreation and Leisure Studies Department in addition to being admitted by Enrollment Services/Admissions. Admission requires:

1. Applicants must meet the criteria for acceptance by the University as a graduate student as outlined in this catalog;
2. Every applicant (new or continuing) must apply by submitting a Graduate/Post-Baccalaureate Admission Application to the Office of Admissions and Records,

to obtain admission to the University with graduate standing. Applications are available on line (at the CSU Mentor website);

3. Every applicant must also apply to the Department of Recreation and Leisure Studies, by sending the following to the Graduate Coordinator in the Department of Recreation and Leisure Studies:
 - A. A copy of the CSULB Graduate/Post-Baccalaureate Admissions Application (The original must be sent to Enrollment Services/Admissions on line via CSUMentor).
 - B. Official transcripts of all undergraduate course work, including work done at all community colleges attended. Each applicant must request that official transcripts be sent to both the Graduate Advisor in the Department of Recreation and Leisure Studies and Enrollment Services.
 - C. A current resume and a letter of intent that includes a summary of the applicant's reasons for wanting to pursue a master's degree in Recreation Administration. Both documents must be sent to the Department of Recreation and Leisure Studies Graduate Advisor.
 - D. Three letters of recommendation from persons able to testify to the applicant's academic ability, preferably from former professors. These letters must be sent to the Department of Recreation and Leisure Studies Graduate Advisor.
 - E. Official test scores on the Graduate Record Exam (GRE) General test. While no specific cut off scores are required on either the verbal or the quantitative section, applicants must score a "4" or higher on the analytic writing section of the GRE.

Admitted graduate students must contact the Department of Recreation and Leisure Studies Graduate Coordinator for advisement early in their first semester of enrollment in order to develop an approved program of study.

Prerequisites

Graduate students must complete the following prerequisites:

1. A bachelor's degree with a major in recreation; or
2. A bachelor's degree with a minimum of 24 units of upper division courses comparable to those required in the undergraduate recreation major at this University. (Students deficient in undergraduate preparation must take courses approved by the department Graduate Coordinator to remove these deficiencies.)

Advancement to Candidacy

The following are required for student to advance to candidacy:

1. Enrollment in the semester or summer session in which advancement takes place;
2. Completion of the general University requirements for advancement to candidacy, as specified in this bulletin.
3. Fulfillment of the Graduation Writing Assessment Requirement (GWAR);
4. Satisfactory completion of REC 571 and 696 with a minimum grade of "B" in each of the courses.
5. After consultation with the student's graduate advisor, determination of whether the student will complete the thesis option or project option.

6. Approval of the student's graduate program by the Department Graduate Advisor and Associate Dean for the College of Health and Human Services.

Requirements

The core requirements for a master of science in recreation administration are REC 521, 571, 591, 595, and 696. In addition to the core classes, students are required to complete elective units and thesis or project units. The thesis option requires four units of REC 698 plus 11 units of electives. The project option requires three units of REC 698 plus 18 units of electives. Elective courses are to be selected after consultation with the graduate advisor. A maximum of 6 units may be taken from 400-level courses in Recreation. Up to six units of graduate work may be transferred from another accredited university or another department in CSULB. Transfer credit must be a "B" or better. All students must earn a grade of "A" or "B" for each required course. Advancement to candidacy is necessary before REC 698 can be taken.

Thesis or Project

The thesis or project is a supervised experience in the application of theory and analytical tools to an issue in recreation and leisure services.

The thesis should prepare students for further graduate work or research in the field. The project should provide an experience that is directly applicable to an occupation in recreation and leisure services. The thesis is a written product of the systematic study of a significant problem. It clearly identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data, and offers a conclusion or recommendation. The finished product evidences originality, critical and independent thinking, appropriate organization and format, and thorough documentation. The thesis is supervised by a committee of three, including the Thesis Chair, who must be a full-time tenure-track or tenured faculty member in the Recreation and Leisure Studies Department, and two other faculty members.

The project is a significant undertaking appropriate to the professional field. It evidences originality and independent thinking, appropriate form and organization, and a rationale. It is described and summarized in a written report that includes the project's significance, a review of the literature, objectives, methodology, and a conclusion or recommendation. The finished product evidences originality, critical and independent thinking, appropriate organization and format, and thorough documentation. The coursework is supervised by a committee of three, including the Project Chair, who must be a full-time tenure-track or tenured faculty member in the Recreation and Leisure Studies Department, and two other faculty members.

Graduate Certificate in Leisure Counseling

Students may only pursue the certificate program in combination with a CSULB degree program.

Admission/Prerequisite:

Persons holding a bachelor's or master's degree in Recreation or Therapeutic Recreation or a related allied health field (e.g. Occupational Therapy, Music Therapy, Gerontology, Psychology, Adapted Physical Education, Counseling); two years verified experience in counseling approved by certificate advisor.

Core Requirements

Take all of the following courses:

REC 454 Counseling Techniques in Therapeutic Recreation (3)

Prerequisites: REC 351, 452 or consent of instructor.

REC 590 Selected Topics in Recreation (1-3)

Prerequisite: Consent of instructor.

COUN 638 Group Counseling (3)

Prerequisites: Admission to the MS in Counseling, and/or PPS School Counseling Credential, or School Psychology Program, COUN 510, 513, 515 or equivalent upon approval of instructor.

Additional courses:

Take 3 units which must be taken with approval of certificate advisor .

Courses (REC)

LOWER DIVISION

100./300. Orientation to the Recreation Major (3)

Orientation to the professional roles in the field of leisure services; the philosophy, academic requirements, standards, documentation, procedures of followed in the Department of Recreation and Leisure Studies; and computer applications required of all majors.

Letter grade only (A-F). (Discussion, 3 hours) Not open to students with credit in REC 300.

141. Introduction to Leisure Services (3)

Prerequisite/Corequisite: One GE Foundation course.

Survey of public, private and non-profit agencies engaged in leisure services. Examination of populations served. Organizing principles of the recreation and leisure services profession.

Not open to students who have completed REC 241.

220. Universality of Play (3)

Prerequisites: GE Foundation requirements.

Exploration of ethnic origins of play from international perspective. Influence of play on creativity, drive and self image of society.

(Theory and practicum)

225. Programming Recreation Activities (3)

Methods and materials used in planning and leading organized recreation programs in public and private agencies. Analysis of interpersonal and group skills necessary for effective leadership of recreation activities. Special emphasis on supervised programming field experiences.

Letter grade only (A-F).

UPPER DIVISION

300./100. Orientation to the Recreation Major (3)

Orientation to the professional roles in the field of leisure services; the philosophy, academic requirements, standards, documentation, procedures of followed in the Department of Recreation and Leisure Studies; and computer applications required of all majors.

Letter grade only (A-F). (Discussion, 3 hours) Not open to students with credit in REC 100.

321. Leadership in Recreation and Leisure Studies (3)

Theory and application of leadership as it pertains to leisure service agencies. In depth analysis of interaction between leadership styles and group dynamics. Facilitation techniques necessary for effective group leadership.

322. Recreational Sports Supervision (3)

Organization and supervision of recreational sports for community-wide participation.

(Lecture 2 hours, Activity 2 hours.)

324. Campus Recreation Services (3)

Prerequisites: Junior standing.

Principles and practices in provision of recreation services on college, secondary, and elementary school campuses

325. Advanced Program and Event Management (3)

Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

Advanced management of recreation and leisure service programs with special emphasis on event planning and promotion. Includes interpretations of needs assessments and market analysis; analysis and selection of prospective client bases; program design, marketing, promotion, implementation and evaluation.

Letter grade only (A-F).

337. Environmental and Cultural Interpretation (3)

Principles and practices of environmental and cultural interpretation of outdoor recreation resources, including tours, brochures, slide shows and exhibits.

(Discussion, 3 hours)

340. Leisure in Contemporary Society (3)

Prerequisites: GE Foundations requirements; one or more Exploration courses; upper division standing.

Enhancing the understanding of leisure in contemporary society by examining beliefs, values, and social structures of one's own leisure and comparing and contrasting them with individual and social influences such as race/ethnicity, gender, sexuality, age, economic status, ability and religion.

341. Evaluation and Research in Leisure Services (3)

Prerequisites: REC 100 or 300; REC 141, 225, or consent of instructor.

Foundations of current methods and practices of evaluation and research about leisure and in leisure services. Includes the critical need for evaluation and research in leisure services; research and evaluation concepts, types, and designs; sampling; and information/data collection, analysis, interpretation, and presentation.

Letter grade only (A-F).

351. Foundations of Therapeutic Recreation (3)

Prerequisites: REC 100 or 300; REC 141, 225, or consent of instructor.

Philosophical and historical foundations of therapeutic recreation and principles of planning, implementing and evaluating leisure services for individuals with disabilities.

(Lecture/Activity 3 hours.)

371. Human Services Programming in Urban Areas (3)

Prerequisites: GE Foundation requirements.

Exploration of the community diversity, social issues, and community resources of urban areas in relationship to the concerns of recreation and human service needs. Examination of planning, development, and agency collaborations required to insure recreation services development meets community needs.

421. Supervisory and Administrative Practices (3)

Prerequisite: REC 100 or 300; 141, 225, or consent of instructor.

Concepts and techniques of supervision and administration in recreation agencies; emphasis on recruitment, assignment, evaluation and in-service training of recreation personnel.

423. Facility Design and Operations (3)

Prerequisites: REC 325 or consent of instructor.

Theories and practical experience in the design, development, operation, maintenance and administration of various recreational facilities.

Letter grade only (A-F).

425. Financing Leisure Services (3)

Prerequisites: REC 325 or consent of instructor.

Financing and budgeting in public and private sector leisure service agencies; management by objectives as related to fiscal elements.

427./527. Legal Aspects of Leisure Services (3)

Prerequisites: Upper division standing.

Political, policy making, and legal aspects underlying the establishment, operation, and termination of public and private leisure services.

Letter grade only (A-F). (Discussion, 3 hours.)

428./528. Principles of Nonprofit/Volunteer Management (3)

Survey of the principles of nonprofit and volunteer services management. The philosophical, historical and social context of the volunteer movement; funding, governance, organization and management of nonprofit organizations and volunteer services; trends and issues; professional development and employment.

430. Recreation in the Ocean Environment (3)

Study of the skills and techniques of administration of an ocean-oriented recreational resource, including management and trip planning. Will be supplemented with a week long field trip to Santa Barbara Island.

Course fee may be required.

431. Recreation Resource Management (3)

Prerequisites: REC 100 or 300; 141, or consent of instructor.

Review of the techniques of recreation resource management; the role of citizens, government and private agencies in acquisition and development of these resources; development of resource management policies.

433. Management of Organized Camps (3)

Management of organized camps, with particular emphasis on the role and responsibility of the on-site director; practical experience in all phases of camping. Topics include camp philosophies, job responsibilities, staff dynamics, campers' characteristics and needs, program development and facility management.

451. Assessment and Documentation in Therapeutic Recreation (3)

Prerequisites: REC 351, 452 or consent of instructor.

Identification and understanding of assessment and documentation in therapeutic recreation. Includes assessment of leisure and social functioning, problem identification, development of goals and objectives, and methods of documentation regarding client progress.

Letter grade only (A-F).

452. Therapeutic Recreation Treatment/Program Planning (3)

Prerequisites: REC 351 or consent of instructor.

Development of individual treatment/program plans in therapeutic recreation. Includes assessment of leisure and social functioning, problem identification, development of measurable objectives, determination of program content and methods, documentation, and evaluation of the client's progress.

(Lecture 2 hours, Activity 1 hour.)

453. Comprehensive Programming and Evaluation in Therapeutic Recreation (3)

Prerequisites: REC 100 or 300, 141, 225, 351 or consent of instructor.

Examination of treatment programs for a variety of populations and settings in Therapeutic Recreation. Students learn to develop comprehensive treatment plans based on client objectives, select appropriate program content, modify activities to meet client needs, and evaluate program effectiveness.

Letter grade only (A-F).

454./554. Counseling Techniques in Therapeutic Recreation (3)

Prerequisites: REC 351, 452 or consent of instructor.

Current practices and procedures in therapeutic recreation using counseling techniques. Includes techniques of leisure needs

assessments, leisure counseling and leisure education methods. Covers therapeutic recreation practice perspectives using counseling/leisure education as a treatment.

Letter grade only (A-F).

457./557. Legislative Action in Therapeutic Recreation (3)

Prerequisites: REC 351 or consent of instructor.

Overview of Therapeutic Recreation as related to national healthcare issues. Includes examination of various legislative issues/bills introduced in congress with a direct effect on the profession. This non-required course includes travel to a midyear conference in Washington D.C.

Letter grade only (A-F).

458./558. Clinical Techniques in Therapeutic Recreation (3)

Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

Examination of clinical techniques and practices in therapeutic recreation. Includes theoretical background to clinical treatment, facilitation techniques, and treatment modalities for individuals with disabilities.

Letter grade only (A-F). (2 hours lecture, 1 hour lab)

462. Travel, Tourism, and Resort Recreation Management (3)

Prerequisites: REC 325 or consent of instructor.

Current procedures and processes in managing travel, tourism and resort recreation organizations. Discussion includes the organization and management of human resources in the marketing of travel, tourism and resort recreation enterprises.

465. Convention and Conference Planning (3)

Prerequisites: REC 325 or consent of instructor.

Organizing, planning and managing conferences and conventions. Analysis of site and facility selection, scheduling, theme development, programming, affiliated events, exhibit management, registration and overall services.

Letter grade only (A-F).

467./567. Principles of Ecotourism Development (3)

Prerequisite: REC 325 or instructor consent.

Principles and practices of ecotourism development from a socio-cultural, environmental, economic, and political perspective. Implementation of tourism development including certification issues, management of resources, and community choices. Ecotourism planning that benefits locals and travelers.

Letter grade only (A-F).

468. Tourism Planning and Development (3)

Prerequisites: REC 462 or consent of instructor.

Analysis of elements which are included in a community development plans. Assessment of the touristic potential of a region or site, enabling legislation, organization, and administration of a tourism development plans, identification of sources of resistance and support.

469./569. Disability, Culture and Society: Issues and Intervention (3)

Prerequisite: Senior or graduate standing.

Disability as a social construct. Examines policies and practices to understand the experience of disability. Includes historical and contemporary perspectives as well as future issues. Emphasis on social and clinical intervention methods as well as programs and resources.

Letter grade only (A-F). Same course as GERN 469. Not open for credit to students with credit in GERN 469 or SW 469.

473./573. Aging and Leisure (3)

Prerequisites: REC 325 or consent of instructor.

Theories, concepts and influences on satisfaction with retirement focusing on leisure-related issues. Overview of the continuum of services, emphasizing leisure services available to older people.

480. Philosophy of Recreation and Leisure (3)

Prerequisites: REC 325, 341, one of the following: REC 421, 425, 427. Open to recreation majors only.

Exploration of the philosophical and ethical basis for current practices in recreation and leisure service organizations.

(Discussion, 3 hours.)

485. Field Work (3)

Prerequisites: Consent of instructor.

Supervised experience in recreation leadership, supervision or administration approved by faculty advisor or consent of instructor.

Credit/No credit grading only. May be repeated to a maximum of 6 units in different semesters.

490. Selected Topics in Recreation (1-3)

Identification and critical analysis of current problems in selected areas of recreation.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the *Schedule of Classes*.

498. Internship in Leisure Services (6-9)

Prerequisites: Completion of all major requirements; 1000 hours of verified paid or volunteer leadership experience approved by faculty advisor, or 500 hours of experience and fluency in both English and a second language consistent with CSULB Language Proficiency Requirements; and consent of internship coordinator.

This internship will involve 400 hours of supervised experience in an approved leisure service agency jointly supervised by university and agency personnel.

Letter grade only (A-F). (Field work)

499. Independent Study (1-3)

Prerequisites: Consent of department and department chair.

Individual projects in areas of special interest areas. Independent study under the direct supervision of a faculty member.

May be repeated to a maximum of 6 units in different semesters with consent of instructor.

GRADUATE LEVEL

521. Recreation Administration (3)

Organizational theory; planning, staffing and budgeting of recreation programs in governmental and voluntary agencies.

Letter grade only (A-F).

527./427. Legal Aspects of Leisure Services (3)

Prerequisites: Upper division standing.

Political, policy making, and legal aspects underlying the establishment, operation, and termination of public and private leisure services.

Letter grade only (A-F). (Discussion, 3 hours.)

528./428. Principles of Nonprofit/Volunteer Management (3)

Survey of the principles of nonprofit and volunteer services management. The philosophical, historical and social context of the volunteer movement; funding, governance, organization and management of nonprofit organizations and volunteer services; trends and issues; professional development and employment.

554./454. Counseling Techniques in Therapeutic Recreation (3)

Prerequisites: REC 351, 452 or consent of instructor.

Current practices and procedures in therapeutic recreation using counseling techniques. Includes techniques of leisure needs assessments, leisure counseling and leisure education methods. Covers therapeutic recreation practice perspectives using counseling/leisure education as a treatment.

Letter grade only (A-F).

557./457. Legislative Action in Therapeutic Recreation (3)

Prerequisites: REC 351 or consent of instructor.

Overview of Therapeutic Recreation as related to national healthcare issues. Includes examination of various legislative issues/bills introduced in congress with a direct effect on the profession. This non-required course includes travel to a midyear conference in Washington D.C.

Letter grade only (A-F).

558./458 Clinical Techniques in Therapeutic Recreation (3)

Prerequisites: REC 100 or 300; 141, 225, or consent of instructor.

Examination of clinical techniques and practices in therapeutic recreation. Includes theoretical background to clinical treatment, facilitation techniques, treatment modalities and individual and group interventions for individuals with disabilities.

Letter grade only (A-F). (2 hours lecture and 1 hour lab)

567./467. Principles of Ecotourism Development (3)

Prerequisite: REC 325 or graduate student standing.

Principles and practices of ecotourism development from a socio-cultural, environmental, economic, and political perspective. Implementation of tourism development including certification issues, management of resources, and community choices. Ecotourism planning that benefits locals and travelers.

Letter grade only (A-F).

569./469. Disability, Culture and Society: Issues and Intervention (3)

Prerequisite: Senior or graduate standing.

Disability as a social construct. Examines policies and practices to understand the experience of disability. Includes historical and contemporary perspectives as well as future issues. Emphasis on social and clinical intervention methods as well as programs and resources.

Letter grade only (A-F). Same course as GERN 569 and SW 569. Not open for credit to students with credit in GERN 569.

571. Philosophy, Issues and Trends (3)

Exploration of the current philosophy, trends and issues in the field of recreation.

Letter grade only (A-F).

573./473. Aging and Leisure (3)

Prerequisites: REC 325 or consent of instructor.

Theories, concepts and influences on satisfaction with retirement focusing on leisure-related issues. Overview of the continuum of services, emphasizing leisure services available to older people.

590. Selected Topics in Recreation (1-3)

Prerequisite: Consent of instructor.

In-depth investigation of topics of current interest and concern to students experienced in recreation.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

591. Research Proposal Writing (3)

Prerequisite: REC 571, 595, and 696.

Addresses variations in research design and methodology. Completion of a thesis or project proposal is a requirement.

Letter grade only (A-F).

595. Data Analysis in Recreation Administration (3)

Prerequisites: REC 571 and 696.

Analysis of administrative studies and surveys; procedures for conducting and analyzing appraisals of recreation programs and facilities.

Letter grade only (A-F).

599. Independent Study (1-3)

Prerequisites: Consent of graduate advisor and department chair.

Independent research under the supervision of a Recreation and Leisure Faculty member.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

696. Research Methodology (3)

Research methodology in recreation. To be completed within the first 12 units of the 500/600 series of courses.

Letter grade only (A-F).

697. Directed Studies (1-3)

Prerequisites: REC 698, advancement to candidacy.

Independent investigation of field research problems in recreation.

Letter grade only (A-F). May be repeated to a maximum of 3 units in different semesters

698. Thesis (1-4)

Prerequisites: REC 591, 696, advancement to candidacy.

Planning, preparation and completion of an approved thesis.

May be repeated to a maximum of 4 units in different semesters.

RELIGIOUS STUDIES

College of Liberal Arts

Department Chair: Peter M. Lowentroun

Department Office: McIntosh Humanities Building (MHB) 619

Telephone: (562) 985-5341

FAX: (562) 985-5540

Email: religious-studies@csulb.edu

Website: www.csulb.edu/depts/relstud

Faculty: Jeffrey L. Broughton, Edward J. Hughes, F. Stanley Jones, Peter M. Lowentroun, Sophia Pandya, Carlos R. Piar, David Tabb Stewart, Jon R. Stone

Undergraduate Programs

Bachelor of Arts in Religious Studies (120 units)

Students interested in this program should apply to the department chair.

Requirements

A minimum of 36 units is required as follows:

Core Courses:

Take 6 units from the following:

R/ST 100, 102, 103

Take the following course:

R/ST 401 Methods of Theories in Study of Religion (3)

Prerequisite: Consent of instructor.

Area Courses:

21 units from at least two of the following categories.

Western Religions:

R/ST 210, 230, 311, 312I, 314, 315, 317, 322, 331I, 337I, 338I, 375, 376I, 383I, 460, 467I, 471I, 472I, 490*, 499*

Eastern Religions:

R/ST 341I, 344, 351, 352, 353I, 490*, 499*

Religion in the Contemporary World:

R/ST 202, 240, 301, 302I, 308, 362I, 383I, 391I, 425, 472I, 402I, 485, 490*, 499*

*When the subject matter of a special topics or directed studies course is applicable, the course may be used.

Electives: 6 units selected from religious studies courses, including language courses (Aramaic, Hebrew, or Sanskrit), or AIS 335, CWL 342, PHIL 306, 307, 330

Minor in Religious Studies

The Minor in Religious Studies is available to any non-Religious Studies major.

A minimum of 18 units in religious studies courses or courses from other departments approved by the Religious Studies Department.

Lower Division:

A minimum of six units selected from the following:

R/ST 100, 102, 103, 202, 210, or the equivalent.

Upper Division:

A minimum of 12 units including three units from each of the following categories:

Western Religious Thought:

R/ST 311, 312I, 314, 315, 322, 331I, 375, 376I, 425, 471I, 472I

Asian Religious Thought:

R/ST 341I, 344, 351, 353I

Remaining units are to be selected from R/ST courses and the following electives:

AIS 335, AFRS 353I, CWL 342, HIST 333, PHIL 330

Certificate in Religious Studies

Please be aware that this program is not eligible for Financial Aid unless pursued concurrently with a degree program.

Requirements

A bachelor's degree with a major in a traditional discipline.

*A minimum of 30 units in religious studies or courses offered in other departments approved by the Religious Studies Department.

Lower Division:

A minimum of nine units selected from the following:

R/ST 100, 102, 103, 202, 210

Upper Division:

A minimum of 21 units including one course from each of the following groups:

Biblical Studies:

R/ST 311, 312I, 322, 375, 376I

Western Religious Thought:

R/ST 314, 315, 331I, 471I, 472I, 485

Asian Religious Thought:

R/ST 341I, 344, 351, 353I

A minimum of 12 upper division units from the preceding courses and the following electives:

R/ST 302I, 353I, 362I, 383I, 402I, 490, 499; AIS 335; ASAM 380; AFRS 353I; CWL 342; HIST 333; PHIL 330.

Graduate Programs

Master of Arts in Religious Studies

Admission

The primary criteria for admission are the same as those for University graduate admission. In addition, the applicant must have a Bachelor's degree in Religious Studies, or its equivalent, and have achieved a 3.0 GPA in the last 60 semester units attempted. Three letters of recommendation two of which should be from the instructors in the undergraduate major.

Program Requirements

1. Minimum total units: 30 units of upper division or graduate study, at least 24 of which must be in Religious Studies. The remaining six may be in Religious Studies

or another field of study related to Religious Studies and/or the candidate's educational interests. Each student's program must include a minimum of 24 units of graduate courses (which can include six units of Biblical Aramaic or Biblical Hebrew), at least six of which must be in the 600 series (not including R/ST 697 and 698). All students must satisfactorily complete R/ST 501.

2. A thesis or comprehensive examination.
3. Proficiency in a modern research language (German or French) demonstrated by passing either the ETS examination with a score of 400 or better or two years of course work with an average grade of "B" or better. Proficiency in an appropriate ancient research language (Sanskrit, Biblical Aramaic, Hebrew, Chinese, etc.) replaces this requirement for students concentrating in Ancient Mediterranean and Near Eastern Religions or in Buddhist Studies. Exceptions to this requirement are rare, but may be made at the discretion of the Graduate Studies Committee.
4. Advancement to Candidacy is a statement of how the student plans to complete all courses and requirements for the degree, including establishing a date and a committee for the thesis or comprehensive examination. It is best done as early as possible. Students taking a comprehensive examination must be advanced to candidacy no later than the semester preceding the examination. Students writing a thesis are advanced to candidacy at the time they begin their thesis work.

Courses (R/ST)

LOWER DIVISION

100. Introduction to Religion (3)

Prerequisite/Corequisite: One GE Foundation course.

Origin, nature, and function of religion in the individual and culture with emphasis upon and reference to outstanding personalities, sacred writings, and basic features of the world's leading religions.

102. Introduction to Early and Western Religions (3)

Prerequisite/Corequisite: One GE Foundation course.

A survey of representative figures, themes, the schools in Western religious thought, including Judaism, Christianity and Islam.

103. Introduction to Asian Religions (3)

Prerequisite/Corequisite: One GE Foundation course.

Survey of Indian, Chinese and Japanese religious thought. Emphasis will be on original texts in translations.

202. Religion and Society (3)

Prerequisite: GE Foundation requirements.

Religious and secular views of the relation of persons and society with emphasis upon contemporary problems of personal and social ethics, political responsibility and social structure.

210. Introduction to the Bible (3)

Prerequisite: GE Foundation requirements.

Overview of Sacred texts of Jews and Christians. Inspiration, Creation, Salvation, and other Biblical themes will be discussed, as well as key persons and events, such as Moses, Jesus, etc.

Not available to students with credit in R/ST 101A.

230. Heaven, Hell and Other Afterlives (3)

Explores the history and development of notions of the afterlife in Judaism. Jewish ideas about the experience of death and the fate of the dead will be studied in the context of broader reflection on ancient Mesopotamian, Egyptian, and Greek views of the afterlife, as well as brief considerations of Christian and Muslim views of the afterlife.

240. Love, Life, and the World (3)

Prerequisite: GE Foundation requirements.

Examines love in life and the world. Students will explore the philosophical, religious-mystical, psychological, social, and natural historical dimensions of love and complete both practical and research projects that will lead them to a fuller understanding of a loving life.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

301. Approaching Religion (3)

Prerequisite: GE Foundation requirements.

Study of methods of religious studies, including the comparative and phenomenological study of religions, textual criticism, exegesis, research methods and techniques.

302I. American Religious Diversity (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines the diverse religious landscape of American society with a focus on the experiences of some of its major ethnic and racial communities, to include Native American, African American, Latino, and/or Asian American traditions.

308. Comparative Religious Ethics (3)

Prerequisite: GE Foundation requirements.

Introduction to study of ethics within global perspective while introducing world religions. Major ethical questions and modes of moral reasoning in different religious traditions will be considered while focusing on why ordinary people do good and evil actions.

311. Religion and Literature of the Hebrew Bible/Old Testament (3)

Prerequisites: GE Foundation requirement, completion of one or more Exploration courses, and upper division standing.

The Hebrew Bible, or Old Testament, read in translation as a religious, historical and literary document with emphasis on the religion and culture of the ancient Israelites in their ancient Near Eastern context. Selected books from its three divisions – Torah, Prophets, and Writings—are read each term.

312I. Intertestament Literature, Palestine History, and Early Christianity (Dead Sea Scrolls) (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Historical development of Jewish religion and culture in the Second Temple period from the rise of the Maccabees to the beginnings of Christianity with emphasis on the rise of the Jewish State, the coming of the Romans and the beginnings of primitive Christianity (Essenism, Phariseism and Sadduceism).

314. Jewish Religion (3)

From the end of the Second Temple period to the close of the Middle Ages. Development from Hellenistic Judaism to Rabbinic Judaism to philosophical theology will be gone into in some detail. Readings from Saadya, Halevi and Maimonides, etc.

315. Modern Jewish Thought/Zionism (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Development of Jewish thought from enlightenment and

emancipation from ghettos, through attempts at assimilation, the Holocaust and birth of the Jewish State. Development of conservative, reform and orthodox Judaism.

317. Jewish Mysticism (3)

Prerequisite: GE Foundation requirements.

Explores some major trends and themes of the Jewish mystical and esoteric tradition. Included are various forms of Kabbalah and Hasidism, meditation and mysticism; explanations of and responses to evil; the nature of God and the relationship between human beings and the divine being; gender dynamics, and the power of ritual.

318. Biblical Hebrew I (3)

Biblical Hebrew I imparts the basic grammatical inflections, conjugations, and structures of elementary biblical Hebrew and starts the student on the path of mastering the specific vocabulary of biblical Hebrew. Introduces history and particularity of this language as well as standard reference tools employed in reading biblical Hebrew.

319. Biblical Hebrew II (3)

Prerequisite: R/ST 318.

Biblical Hebrew II completes instruction in grammar of biblical Hebrew and introduces major syntactical constructions of this language. Increases student's biblical Hebrew vocabulary, hones skills in use of reference books for biblical Hebrew, and allows initial confrontation with selections from Hebrew Old Testament itself.

320A. Biblical Aramaic I (3)

Prerequisite: GE Foundation requirements.

Alphabets and grammar of Aramaic, the language of Jesus, will be taught. Cultural excursions survey the history of the ancient international language Aramaic and its role in understanding Jesus and the Judaism of his time.

Not open for credit to students with credit in R/ST 220A.

320B. Biblical Aramaic II (3)

Prerequisite: GE Foundation requirements.

Advanced grammar and readings in Aramaic, the language of Jesus and the international language of the Near East prior to the importation of Greek. Select cultural excursions into the historical impact of Aramaic and special study of unpublished manuscripts.

Not open for credit to students with credit in R/ST 220B.

322. New Testament and Earliest Christian Literature (3)

Prerequisite: GE Foundation requirements.

The emergent Christian community, seen through the missionary and pastoral letters, the synoptic gospels, the radical theologies of Paul and John and the dramatic visions of the Apocalypse.

331I. Islamic Religion and Culture (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

The Koran, Muhammad and the rise of Islam as a cosmopolitan faith. The development of Muslim civilization, including literature, theology, philosophy and Sufism (mysticism).

337I. Sufism (3)

Prerequisite: GE Foundation requirement, one or more Explorations courses and upper-division standing.

Covers mainly Sufism and Shi'ism and their intimate relationship. Examines contribution of some great Sūfis and Shi'ite thinkers to development of inner dimensions of Islam i.e. mysticism, esoterism, and spirituality.

Letter grade only (A-F).

338I. Medieval Thought in Judaism, Christianity, and Islam (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses and upper-division standing.

Human thought and history of ideas. Survey of history of medieval

Jewish, Christian, and Islamic thought. Examines contribution of some great philosophers to development of medieval thought. Highly intellectual dealing mainly with abstract concepts of metaphysics: God, creation, and theory of knowledge.

341I. Buddhism (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

The Buddha; early Buddhism; the great vehicle; and the vehicle of incantations. Transmission of Buddhism to China, Korea, Japan, Southeast Asia and Tibet. Emphasis on original texts in translations.

344. Religions of Japan (3)

Prerequisite: GE Foundation requirements.

Transmission of continental civilization to Japan; shinto, Buddhism and Tokugawa Neo-Confucianism; Genroku culture; and New Religions. Emphasis on original texts in translations.

351. Hinduism (3)

Prerequisite: GE Foundation requirements.

Introduction to the religious traditions of Hinduism. Emphasis on the historical and textual study of Hinduism through its various literatures (sacred, narrative, poetic, liturgical, and philosophical). Explores Vedic traditions of sacrifice, the speculative philosophy of the Upanishads, the religious epic and mythological literature, the main gods and goddesses, and the devotional poetry of the medieval poet-saints.

352. Religions of India (3)

Prerequisite: GE Foundation requirements.

A survey of Indian religions to the present. Emphasis will be on the ways that religions of historic India have developed and interacted.

353I. Religions of Southeast Asia (3)

Prerequisites: GE Foundation requirement, completion of one or more Exploration courses, and upper division standing.

Introduction to the religions of Southeast Asia. Ancient religion, historical transmission and adaption of Hindu and Buddhist traditions, and recent developments in modern Southeast Asia will be discussed. Emphasis on the religious culture of mainland Southeast Asia.

362I. Religion and Psychology (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines the religious and psychological interpretation of both individual and community religious activity and experience.

(Lecture 3 hours)

358. Women and Islam in Global Perspective (3)

Prerequisite: GE Foundation requirements

Introduces a wide range of issues regarding women and Islam, and examines some of the diverse religious, social, political, and economic roles that Muslim women have played from the early days of Islam to the present period.

Letter grade only (A-F).

375. The Historical Jesus (3)

Prerequisite: GE Foundation requirements.

Historical reconstruction of the life and thought of the "Founder" of Christianity in his contemporary cultural and political environment. Standard historical and religious-historical methods are introduced and applied to the preserved sources.

376I. Christian Origins (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Consideration of two factions in the early Church in Palestine in the First Century, one following the 'Apostle to the Gentiles' and the other following the family line of Jesus. Readings from primary sources, Paul's Letters, Eusebius, and apocryphal literature.

383I. Christianity and Global Ethics (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines interaction of Christianity with secular socio-economic ideologies related to globalization and response of Christianity to such ethical issues as poverty, population growth, consumerism, environmental degradation, war, and genocide.

391I. Religion and Science (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines the occasionally harmonious, often acrimonious, relationship between religion and science. Examines the fundamental insights and claims of both religion and science, moving beyond the frequently sharp prejudices they initially bring to their study to a more reasoned understanding of each alone and in relation to each other.

401. Senior Seminar: Theories and Methods in the Study of Religion (3)

Prerequisite: Consent of instructor.

Examines and compares theories and research methods used in the discipline of Religious Studies, both classical and contemporary. Serves as a capstone course for Religious Studies majors, to include assignments that provide departmental assessment of the major.

Letter grade only (A-F).

402I. Religion in America (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Survey of major themes in the unique American religious experience. Topics include the adaptation of European Christianity to novel American circumstances, the proliferation of denominations and the varied religious response to a dynamic American society.

Not open for credit to students with credit in R/ST 482I.

410. Women, Religion and Spirituality (3)

Prerequisites: ENGL 100 and upper division standing, or consent of instructor.

Study of women as spiritual and religious beings responding to and coping with largely patriarchal religious doctrine. Examines socio-religious construction of women and women's religious experience from prehistory to present day. Focus on feminist transformations of religious traditions.

Same course as WGSS 410. Not open for credit to students with credit in WGSS 410.

425. Religion and Modern Literature (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

The role of literature and associated narrative art forms as vehicles of reflection upon sacred possibilities in the modern world. Alienation, absurdity and despair, evil, secularization, mystic vision, hope, salvation and love among the topics treated.

458./558. Women, Religion, and the Developing World (3)

Prerequisites: Upper division or graduate standing.

Causes and implications of globalization, the impact of globalization on women in the developing world, and the multi-faceted role that religion and religious constructions of gender play in this picture.

460./560. Jewish Christianity (3)

Prerequisite: Consent of instructor.

History and literature of ancient Jewish Christianity in its relationship to Gentile Christianity and Judaism, from the relatives of Jesus through the fourth century.

Letter grade only (A-F).

467I. Religion in Latin America and the Caribbean (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Exploration of role of religion in the history, politics, and culture of Latin America. Surveys pre-Columbian religion, the impact of the Encounter, the growth of Protestantism, Liberation Theology, and the coming of age of Afro-Cuban and Afro-Brazilian religions.

Letter grade only (A-F).

471I. Early Christianity and Society (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Development of Christianity from the New Testament period to Medieval times with emphases on the growth of doctrine and church institutions in ancient and medieval society.

472I. Formation of Modern Christianity (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Restructuring and renewal of Christianity, from the Reformation through the dawn of modern consciousness to the challenge of 20th century secular life.

485. Contemporary Religious Thought (3)

Prerequisite: GE Foundation requirements.

Critical examination of current trends in religious understanding against a background of rapid social change. New movements and issues on the religious scene considered and a variety of authors representing both East and West will be studied in order to reveal the emerging patterns of religious thought.

490. Selected Topics in Religious Studies (1-3)

Topics of current interest in religious studies selected for intensive development.

May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Directed studies to permit individual students to pursue topics of special research interest.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL

501. Theories and Methods in the Study of Religion (3)

Prerequisite: Consent of instructor.

Examines classical and contemporary theories of religion. Analyzes and compares research methods current in the discipline of Religious Studies.

Letter grade only (A-F).

550. Islam in the Contemporary World (3)

Examines key thinkers, movements and issues arising in the global Muslim community in the modern period. It covers early reform movements, the Iranian Revolution, Islamic revivalism, religious violence, Progressive Islam, gender justice, Islam and sexuality, and Muslims in America.

Letter grade only (A-F).

558./458. Women, Religion, and the Developing World (3)

Prerequisites: Upper division or graduate standing.

Looks at causes and implications of globalization, impact of globalization on women in the developing world, and the multi-faceted role that religion and religious constructions of gender play in this picture.

560./460. Jewish Christianity (3)

Prerequisite: Consent of instructor.

History and literature of ancient Jewish Christianity in its relationship to Gentile Christianity and Judaism, from the relatives of Jesus through the fourth century.

Letter grade only (A-F).

590. Selected Topics in Religious Studies (3)

Prerequisite: Consent of instructor.

Topics of current interest in Religious Studies selected for intensive development.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

595. Advanced Study (3)

Prerequisite: Consent of instructor.

Study under the supervision of a faculty member. Student must fulfill requirements of a selected upper division course plus additional work appropriate to graduate study as determined by the instructor of the course.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics in the same semester.

599. Graduate Tutorial (1-3)

Prerequisite: Consent of instructor.

Supervised and independent study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in the same semester.

604. Seminar in Religion in the Contemporary World (3)

Prerequisite: Consent of instructor.

Advanced inquiry into aspects of religion in the contemporary World, including its ethical, cultural, historical or theoretical dimensions.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics.

624. Seminar in Ancient Mediterranean Religion (3)

Prerequisite: Consent of instructor.

Advanced inquiry into the religions of the Ancient Mediterranean.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics.

646. Seminar in Buddhist Studies (3)

Prerequisite: Consent of instructor.

Advanced inquiry into topics in Buddhist Studies.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics.

651. Religion in an Age of Science (3)

Prerequisite: Graduate standing or permission of instructor

This graduate seminar examines modern opinion ranging from skeptical to hopeful on the possibilities for religious belief in our scientific age.

Letter grade only (A-F).

659. Violence, Religion, Gender and Sexuality (3)

Prerequisite: Graduate Standing or consent of instructor

Explores the connections between religion, sexuality, and forms of violence against women in the contemporary world. Examines this issue from within a wide range of global contexts, including the US, and from a variety of world traditions

Letter grade (A-F) only.

690. Selected Topics in Religious Studies (3)

Prerequisite: Consent of instructor.

Topics of current interest in religious studies selected by the faculty for intensive development.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in the *Schedule of Classes*.

697. Directed Research (1-3)

Prerequisite: Consent of instructor.

Directed Studies to permit individual students to pursue topics of special research interest.

Letter grade only (A-F). May be repeated to a maximum of 9 units in the same semester.

698. Thesis (1-6)

Prerequisites: Advancement to candidacy, consent of advisor.

Planning, preparation and completion of thesis for the master's degree.

May be repeated to a maximum of 6 units.

ROMANCE, GERMAN, RUSSIAN LANGUAGES AND LITERATURES

College of Liberal Arts

Department Chair: Lisa Vollendorf

Office: Academic Services, Room 309

Telephone: (562) 985-4318

Program Directors

Jean-Jacques Jura (French)

Clorinda Donato (Italian)

Jeffrey High (German)

Harold K. Schefski (Russian)

Bonnie Gasior, Claire E. Martin (Spanish)

RGRLL Language Coordinator: Markus Muller

Single Subject Coordinator for L.O.T.E.: Jean-Jacques Jura

French Faculty: Laura Ceia-Minjares, Clorinda Donato, Stephen Fleck, Aparna Nayak-Guercio, Najib Redouane

German Faculty: Jeffrey High, Nele Hempel-Lamer

Italian Faculty: Clorinda Donato, Enrico Vettore

Russian Faculty: Harold K. Schefski

Spanish Faculty: Maria Carreira, Alicia del Campo, Bonnie Gasior, Claire E. Martin, Leslie Nord, Rita Palacios, Alexander Rainof, Lisa Vollendorf

Administrative Support Coordinator: Cerise Dragicevich

Students desiring information should contact the department office for referral to one of the faculty advisors. Credential advisors, Undergraduate Advisor, Graduate Advisor.

Teaching Assistantships in French, German, and Spanish

Teaching Assistantships and Research Assistantships are available for qualified students in the French, German and Spanish M.A. Program. New applicants for Teaching Assistantships must have been accepted into the M.A. Program and must present a letter of application, a resume, a complete set of transcripts, and arrange for three confidential letters of recommendation to be sent to the Language Coordinator. Teaching Assistants are required to enroll in RGR 524 (Second Language Acquisition) and RGR 601 (Teaching Methodology). Students are also encouraged to apply for financial assistance under the Federal Work-Study Program.

Scholarships Available in the Romance, German, Russian Languages and Literatures Department

The Department awards over \$20,000 of scholarships annually. Please contact the department office for application deadlines or visit our website at csulb.edu/colleges/cla/departments/RGRLL.

Department Courses (RGR)

UPPER DIVISION

314I. Introduction to Contemporary Europe (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary introduction to contemporary European cultures and related issues through a combination of travel and study. Introduced to some principles and methods useful for analyzing cultures and their own interactions with them.

Not open for credit to students with credit in C/LA 314I.

315I. Contemporary European Society (3)

Prerequisite: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Interdisciplinary approach to understanding cultural and political developments in contemporary European societies. Although study of history serves as foundation of course, perspectives and methodologies of several other social science disciplines are important component.

Not open for credit to students with credit in C/LA 315I.

346I. The European Cinema of Communism, Fascism and Resistance (3)

Prerequisites: GE Foundation requirements, one or more exploration courses, and upper division standing.

Focuses on European cinema of twentieth century as manifestation of totalitarian and ideological movements preceding, in-between, and following the two world wars. Ensuing and ongoing resistance movements also examined.

Same course as HIST 346I and FEA 346I. Not open for credit to students with credit in HIST 346I and FEA 346I. (2 hrs sem, 2 hrs activity)

400I. Crime and Punishment (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses and upper-division standing.

Explores literary representations and cultural manifestations of issues related to crime, punishment, justice, and violence in Europe, Africa, Asia, and the Americas.

424./524. Second Language Acquisition (3)

Study of history of second language learning/teaching. Overview of current research in second language acquisition, with emphasis on implications for teaching foreign languages. Evaluation and development of methods, materials, and tests.

Letter grade only (A-F). Not open for credit to students with credit in SPAN 424/524. (Undergraduates register in RGR 424; graduates register in RGR 524) (Seminar)

425./525. Romance Linguistics (3)

Prerequisites: FREN 424 or SPAN 423 or ITAL 414 or consent of program instructor

Comparative description of the constitution and development of Romance languages in all their aspects: phonetical, lexical and morphosyntactical. Taught in English.

Department Courses (RGR)

450I. 1492 and Beyond (3)

Prerequisites: GE Foundation requirements, completion of one or more Exploration courses and upper-division standing.

Explores cultural changes that resulted from contact among peoples of Europe, Africa, Asia, and the Americas from 1492 to the present. Incorporates art, literature, social sciences, history, architecture, and related fields.

Same course as CHLS 450I. Not open for credit to students with credit in CHLS 450I.

470./570. New Technologies in the Learning of Languages Other Than English (3)

Prerequisites: Advanced communication skills in the target language; basic knowledge of computer use (LI 110 or ISTE competencies for K-12 students); EDSS 300F, or concurrent enrollment, or consent of instructor.

Introduction to computer-based technology in the teaching of Languages Other Than English (LOTE). Production of basic multimedia presentations and web-pages using authoring software. Legal, ethical, privacy and security issues. Meets the Single Subject Credential Program Level I computer proficiency requirement for LOTE students.

Letter grade only (A-F).

GRADUATE LEVEL

524./424. Second Language Acquisition (3)

Study of the history of second language learning/teaching. Overview of current research in second language acquisition, with emphasis on its implications for teaching foreign languages. Evaluation and development of methods, materials, and tests.

Letter grade only (A-F). (Undergraduates register in RGR 424; graduates register in RGR 524) (Seminar)

525./425. Romance Linguistics (3)

Prerequisites: FREN 424 or SPAN 423 or ITAL 414 or consent of instructor.

Comparative description of the constitution and development of Romance languages in all their aspects: phonetical, lexical and morphosyntactical. Taught in English.

570./470. New Technologies in the Learning of Languages Other Than English (3)

Prerequisites: (A) Advanced communication skills in the target language. (B) Basic knowledge of computer use (ETEC 110 or ISTE competencies for K-12 students). (C) EDSS 300F, or concurrent enrollment, or consent of instructor.

Introduction to computer-based technology in the teaching of Languages Other Than English (LOTE). Production of basic multimedia presentations and web-pages using authoring software. Legal, ethical, privacy and security issues. Meets the Single Subject Credential Program Level I computer proficiency requirement for LOTE students.

Letter grade only (A-F).

601. Teaching Methodology (3)

Prerequisite: Graduate level or consent of instructor in French, German, or Spanish and instructor.

Should be taken prior to teaching in RGRLL Department. With consent of program director and language coordinator, course can be taken either concurrently with teaching assignment or at upper division level.

Arabic Courses (ARAB)

101A. Fundamentals of Arabic (4)

Prerequisite/Corequisite: Any Foundation course.

Introduction to fundamental skills of speaking, oral comprehension, reading, and writing. For those who are beginning the study of Arabic or who have had one year of high school Arabic.

For non-native speakers only. Not open to heritage speakers or native speakers of Arabic.

101B. Fundamentals of Arabic (4)

Prerequisite/Corequisite: ARAB 101A or two years of high school Arabic or equivalent. Any Foundation course.

Fundamental skills of speaking, oral comprehension, reading and writing.

For non-native speakers only. Not open to heritage speakers or native speakers of Arabic.

201A. Intermediate Arabic (4)

Prerequisite: ARAB 101B or three years of high school Arabic or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills.

For non-native speakers only. Not open to heritage speakers or native speakers of Arabic.

201B. Intermediate Arabic (4)

Prerequisite: ARAB 201A or four years of high school Arabic or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills.

For non-native speakers only. Not open to heritage speakers or native speakers of Arabic.

250. Arabic for Arabic Speakers (6)

Designed for heritage speakers of Arabic able to function in informal settings. Builds upon knowledge and skills speakers of Arabic bring to the classroom. Provides language-use experiences that move students beyond the informal situations in which they normally operate.

For heritage speakers of Arabic. If students are non-heritage speakers of Arabic who already completed four semesters of Arabic, they are urged to consult with the chair, the language coordinator or the instructor.

Portuguese Courses (PORT)

100. Fundamentals of Portuguese (6)

Prerequisite/Corequisite: Any Foundation course.

Two semesters of fundamental Portuguese are covered in one semester in this intensive hybrid (blended) course. Not open to heritage or native speakers of Portuguese. Not open to speakers who have completed Portuguese 101A or Portuguese 101B.

(4 hrs. in class, 2 hrs. online)

101A. Fundamentals of Portuguese (4)

Prerequisite/Corequisite: Any Foundation course.

Introduction to fundamental skills of speaking, oral comprehension, reading, and writing. For those who are beginning the study of Portuguese or who have had one year of high school Portuguese.

For non-native speakers only. Not open to heritage speakers or native speakers of Portuguese.

101B. Fundamentals of Portuguese (4)

Prerequisite/Corequisite: PORT 101A or two years of high school Portuguese or equivalent. Any Foundation course.

Fundamental skills of speaking, oral comprehension, reading and writing.

For non-native speakers only. Not open to heritage speakers or native speakers of Portuguese.

201A. Intermediate Portuguese (4)

Prerequisite: PORT 101B or three years of high school Portuguese or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development of speaking, oral comprehension, reading, and writing skills.

For non-native speakers only. Not open to heritage speakers or native speakers of Portuguese.

201B. Intermediate Portuguese (4)

Prerequisite: PORT 201A or four years of high school PORT or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills.

For non-native speakers only. Not open to heritage speakers or native speakers of Portuguese.

RUSSIAN

College of Liberal Arts

Department of Romance, German, Russian Languages and Literatures

Department Chair: Lisa Vollendorf

Program Director: Harold K. Schefski

RGRLL Language Coordinator: Markus Muller

Single Subject Coordinator for L.O.T.E.: Jean-Jacques Jura

Department Office: Academic Services, Room 309

Telephone: (562) 985-4318

Faculty: Harold K. Schefski

Administrative Support Coordinator: Cerise Dragicevich

Students desiring information should contact the department office for referral to one of the faculty advisors.

Career Possibilities

Customs Inspector • Immigration Officer • Importer/Exporter • Foreign Service Officer • International Marketing Representative • Travel Guide • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Translator • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Minor in Russian

The Minor in Russian is available to any non-Russian major.

Take all the following prerequisites:

RUSS 101A Fundamentals of Russian (4)

Prerequisite/Corequisite: Any Foundation course.

RUSS 101B Fundamentals of Russian (4)

Prerequisite/Corequisite: RUSS 101A or two years of high school Russian or equivalent. Any Foundation course.

Take twenty additional units, of which 12 units must be taken in upper-division course work:

RUSS 201A Intermediate Russian (4)

Prerequisite: RUSS101B or three years of high school Russian or equivalent. Prerequisite/Corequisite: Any Foundation course.

RUSS 201B Intermediate Russian (4)

Prerequisite: RUSS 201A or four years of high school Russian or equivalent. Prerequisite/Corequisite: Any Foundation course.

RUSS 310 Russian Literature in English (3)

Prerequisites: GE Foundation requirements, and any course in literature or European history.

RUSS 312 Advanced Russian (3)

Prerequisites: None

RUSS 314 Russian Conversation (3)

Prerequisite: Upper-division standing in Russian or consent of instructor.

RUSS 410I Introduction to Russian Civilization (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

RUSS 428 Russian Cinema (3)

Prerequisite: Upper division standing.

Certificate in Russian and East European Studies

Courses used to meet certificate requirements may be counted also, where applicable, toward the General Education requirement and the major and teaching minor requirements of the cooperating departments.

Interested students should apply to the Director, Russian and East European Studies, Dr. Harold Schefski, Department of Romance, German and Russian.

Requirements

1. A bachelor's degree with an approved major. Certificate can also be earned concurrently with the bachelor's degree.
2. A minimum of two semesters of a Slavic language;
3. Take 18 units from four of the disciplines listed below chosen in consultation with advisor. No more than six units of any one discipline applies to the certificate:
ANTH 490*; CWL 349, 449; ECON 490*; GEOG 318; HIST 341A, 341B, 490*; 495*; PHIL 490*; POSC 306, 497; RUSS 101A-B, 201A, 201B, 310, 312, 314, 410, 428; RGR 346I, 400I.
4. Cumulative GPA of 2.75 in all courses in the student's approved certificate program.

*May be taken only when course work is applicable to Russian and East European Studies. Consultation with director of the center is required.

Courses (RUSS)

LOWER DIVISION

101A. Fundamentals of Russian (4)

Prerequisite/Corequisite: Any Foundation course.

Introduction to fundamental skills of speaking, oral comprehension, reading, and writing. For those who are beginning the study of Russian or who have had one year of high school Russian or equivalent.

For non-native speakers only. Not open to heritage speakers or native speakers of Russian.

101B. Fundamentals of Russian (4)

Prerequisite/Corequisite: RUSS 101A or two years of high school Russian or equivalent. Any Foundation course.

Fundamental skills of speaking, oral comprehension, reading and writing.

For non-native speakers only. Not open to heritage speakers or native speakers of Russian.

201A. Intermediate Russian (4)

Prerequisite: RUSS101B or three years of high school Russian or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills.

For non-native speakers only. Not open to heritage speakers or native speakers of Russian.

201B. Intermediate Russian (4)

Prerequisite: RUSS 201A or four years of high school Russian or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading, and writing skills. For non-native speakers only. Not open to heritage speakers or native speakers of Russian.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

310. Russian Literature in English (3)

Prerequisites: GE Foundation requirements, and any course in literature or European history.

Taught in English, this course examines the major themes of Russian life as seen through the literature of the nineteenth and twentieth centuries

312. Advanced Russian (3)

Required background or experience. Ability to read general material in Russian and to translate non-technical material into the language. Extensive reading of Russian writings, review of grammatical principles, and a general consolidation of the four language skills: reading, oral comprehension, composition, and conversation

314. Russian Conversation (3)

Prerequisite: Upper-division standing in Russian or consent of instructor.

Intended to meet specific, everyday situations and to provide help to those who intend to use Russian for travel, work, or classroom instruction

399. Directed Studies in Russian Language (1-3)

Prerequisites: Consent of instructor.

Independent study undertaken under the supervision of a faculty member. A Directed Studies course designed to meet the individual needs of students.

Letter grade only (A-F).

410I. Introduction to Russian Civilization (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examination of the characteristic features of Russian culture with special attention to the study of art, architecture, folklore, music, poetry and religion.

428. Russian Cinema (3)

Prerequisite: Upper division standing.

Focuses on the Socio-political and aesthetic aspects of Russian Cinema, delineating the following periods: Soviet Silent Cinema, Stalinist Cinema, Cinema under the Thaw, Cinema under Brezhnev, and Contemporary Cinema.

Letter grade only (A-F). Same course as FEA 458. Not open for credit to students with credit in FEA 458. (2 hrs sem, 2 hrs activity)

499. Directed Studies in Russian (1-3)

Prerequisites: Senior standing, consent of instructor.

Readings in areas of mutual interest to student and instructor that are not a part of any regular course. Written report or project may be required.

SCIENCE EDUCATION

College of Natural Sciences and Mathematics

Department Chair: Laura Henriques

Department Office: Hall of Science (HSCI) 205

Telephone/FAX: (562) 985-4801/985-7164

Website: www.cnsm.csulb.edu/depts/scied

Faculty: Alan Colburn, Susan Gomez-Zwiep, Laura Henriques, Thomas Kely, Patrick F. Kenealy, James Kisiel, William Straits

Advisors:

Single Subject Science Credential: Tim Williamson

Graduate Advisor: Alan Colburn

Administrative Support Coordinator: Hellen Carcamo

Introduction

The department maintains close ties with teachers, schools and informal science institutions in the greater Long Beach area. It undertakes projects aimed at pre-college through university students. The "Head Start on Science" project is developing a "sense of wonder" science component for 4-year old "Head Start" youngsters, their teachers and parents. The early childhood science education outreach has expanded with two CPEC grants for K-2 teachers and a Toyota USA summer science program for grades 2-5 teachers. Other projects include: Robert C. Noyce Scholarship Program, and Young Scientists' Camp. The department also sponsors a monthly research seminar series and the Association of Future Science Educators (AFSE) which is a student chapter of the National Science Teachers Association and California Science Teachers Association.

Graduate Programs

Master of Science in Science Education

The M.S. in Science Education is designed primarily for credentialed K-12 teachers and experienced informal educators.

Application

Prospective graduate students in M.S. in Science Education, including CSULB graduates, must formally apply for admission to CSULB as described previously in this catalog and must also apply directly to the Department of Science Education. All applicants must submit the following documents directly to the department office:

1. Completed departmental application form, including personal statement. The application form is available in the Department of Science Education office and on the internet [<http://www.scienceteaching.org>, click on "Masters Info"].
2. Two confidential recommendation letters, sent under separate cover, including one from an administrator or supervisor at a school/institution where the applicant is (or was) employed.

Prospective graduate students must also receive a positive recommendation following an interview with graduate faculty.

Review by the Graduate Studies Committee

The Graduate Studies Committee will review all completed applications and recommend either accepting the applicant as a Classified or Conditionally Classified graduate student, or denying admission. All accepted students should contact the departmental graduate advisor before their first semester for advisement and orientation.

Classified Graduate Student

The Department of Science Education will recommend for admission as a Classified graduate student any applicant who has met all prerequisites and been accepted by the Graduate Studies Committee.

Conditionally Classified Graduate Student

An applicant who fails to meet the criteria for Classified admission to the department may be considered by the Graduate Studies Committee for admission as a Conditionally Classified graduate student. The Graduate Studies Committee will determine what deficiencies each applicant has and specify what the individual must do to make up those deficiencies. The applicant must make up all such deficiencies before attaining Classified status.

Admission to the Department Prerequisites

In addition to the prerequisites for entrance into CSULB as a graduate student stated in this *Catalog*, the Science Education department requires:

- California Multiple Subject or science teaching credential, or the equivalent*;
- GPA of at least 3.0 for the last 60 units of study completed.
- Those students participating in the informal science option may substitute one or more years experience working as an educator in an informal learning setting; a letter of support is required.

Students are expected to exhibit high standards of writing proficiency. Students missing any admission criteria may only be admitted after receiving the approval of a department graduate faculty committee.

Option in Elementary and Middle School Science Education

This option is designed for teachers who are K-8 generalists. It may also be appropriate for Single Subject teachers interested in increasing the breadth of their scientific knowledge.

Program of Study

The Program of Study includes successful completion of:

1. Take 6 units from the following:
EDP 519, 520, 595, 596 or other courses chosen in consultation with advisor;
2. Take all the following Science Education core courses:
SCED 550 Current Issues and Research in Science Education (3)
Prerequisite: Admission to M.S. in Science Education program. SCED 550 is a core course in the M.S. in Science Education.

SCED 551 Science Teaching, Learning and Curriculum Models (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550. SCED 551 is a core course in the M.S. in Science Education.

SCED 552 Nature of Science (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550.

SCED 697 Directed Research (1-3)

Prerequisites: Consent of instructor and admission to M.S. in Science Education program.

3. Take all the following science courses:

SCED 500 Life Science Applications for K-8 Teachers (3)

Prerequisites: Admission to M.S. in Science Education program; BIOL 200.

SCED 501 Earth Sciences Applications for K-8 Teachers (3)

Prerequisites: Admission to the M.S. in Science Education program and GEOL 102+104 or GEOL 106.

SCED 502 Physical Science Applications for K-8 Teachers (3)

Prerequisites: Admission to M.S. in Science Education program; PHSC 112.

4. Take the following course:

SCED 698 Thesis (1-3)

Prerequisites: Advancement to Candidacy for the M.S. in Science Education, 18 units of coursework required for M.S. Science Education completed, and consent of the chair of the thesis committee.

Option in Secondary Science Education

This option is aimed at teachers with a Single Subject credential in Science. Graduate students complete 9 units of graduate work in a Science discipline.

Program of Study

The Program of Study includes successful completion of:

1. Take 6 units from the following:

EDP 519, 520, 595, 596, or other courses chosen in consultation with advisor.

2. Take all the following Science Education core courses:

SCED 550 Current Issues and Research in Science Education (3)

Prerequisite: Admission to M.S. in Science Education program. SCED 550 is a core course in the M.S. in Science Education.

SCED 551 Science Teaching, Learning and Curriculum Models (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550. SCED 551 is a core course in the M.S. in Science Education.

SCED 552 Nature of Science (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550.

SCED 697 Directed Research (1-3)

Prerequisites: Consent of instructor and admission to M.S. in Science Education program.

3. Take 9 units of graduate level science (chosen in consultation with advisor)

4. Take the following course:

SCED 698 Thesis (1-3)

Prerequisites: Advancement to Candidacy for the M.S. in Science Education, 18 units of coursework required for M.S. Science Education completed, and consent of the chair of the thesis committee.

Option in Informal Science Education

This option is aimed at educators currently working in non-classroom settings such as museums, zoos, and nature centers, as well as those charged with fostering the public understanding of science.

Program of Study

The Program of Study (33 units) includes the successful completion of:

1. Take all the following Science Education core courses:

SCED 550 Current Issues and Research in Science Education (3)

Prerequisite: Admission to M.S. in Science Education program. SCED 550 is a core course in the M.S. in Science Education.

SCED 551 Science Teaching, Learning and Curriculum Models (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550. SCED 551 is a core course in the M.S. in Science Education.

SCED 552 Nature of Science (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550.

SCED 553 Science Learning in Informal Settings (3)

Prerequisite: Admission to Science Education M.S. program; consent of instructor. SCED 553 is a core course required of all Science Education M.S. candidates who have declared an option in informal science learning.

SCED 697 Directed Research (1-3)

Prerequisites: Consent of instructor and admission to M.S. in Science Education program.

2. Take 6 units of science courses from the following:

SCED 500, 501, 502, or other graduate-level science courses chosen in consultation with an advisor

3. Take 3 units research methodology from the following:

EDP 519, 520, 595, 596; REC 696, or other courses in consultation with an advisor

4. Take 3 units non-profit management or other practitioner-related course from the following:

REC 521, 528, or other courses in consultation with an advisor

5. Take 3 units elective, chosen in consultation with advisor

6. Take the following course:

SCED 698 Thesis (1-3)

Prerequisites: Advancement to Candidacy for the M.S. in Science Education, 18 units of coursework required for M.S. Science Education completed, and consent of the chair of the thesis committee.

Advancement to Candidacy

1. The regulations governing the master's degree are those in effect at the time of advancement to candidacy. A student must be designated as a Classified Student in good standing prior to advancing to candidacy.

2. A student must satisfy the general requirements of the University, including fulfilling the Graduation Writing Assessment Requirements (GWAR).

3. The student's M.S. program must be approved by a faculty graduate advisor, the department graduate advisor, the department chair, and the Associate Dean in the College of Natural Sciences and Mathematics.

4. Advancement to candidacy may take place upon satisfactory completion of six units in the M.S. program. A student must have been advanced to candidacy before initiating formal thesis research necessary to complete the M.S. degree.

Courses (SCED)

UPPER DIVISION

302. Elementary School Science Workshop (3)

Prerequisite: SCED 401.

Practicum on development and use of "hands-on" elementary school science teaching/learning activities, units, and learning centers.

Letter grade only (A-F). (Lecture 2 hrs., workshop 2 hrs.) Course fee may be required.

401. A Process Approach to Science (3)

Prerequisite: BIOL 200; PHSC 112; GEOL 106, or both GEOL 102 and 104; all with a "C" or better grade.

Processes of science as they relate to life, earth, and physical sciences. Practical approaches to understanding how science works modeled and integrated throughout.

Letter grade only (A-F). (Lecture 2 hrs., laboratory 3 hrs.) Course fee may be required.

403. Integrated Science (3)

Prerequisites: Completion of all credential breadth requirements for the Single Subject Teaching Credential Program in Science, three-fourths of the credential specializations courses, and consent of instructor. Enrollment limited to students who intend to pursue a Single Subject Credential in Science.

Requires presentations, discussions, critical evaluation by students on selected interdisciplinary topics in sciences, and field work in integrated science assignments.

Letter grade only (A-F). (Lecture 3 hrs.)

404. The Nature of Science and Scientific Reasoning for Teachers (3)

Prerequisites: Completion of at least three-fourths of the credential specialization courses for Single Subject Teaching Credential in science and consent of instructor. Enrollment limited to students who intend to pursue a Single Subject Credential in Science.

Course has three aims. The first is students better understand nature of science – its history, philosophy, psychology, and sociology. Second, students better understand methods of science and how to critically evaluate reports about scientific investigations. Finally, students learn how to apply these understanding to the 6-12 classroom.

Letter grade only (A-F). (Lecture 3 hrs.)

475. Teaching and Learning Science, K-8 (3)

Prerequisite: Admission to the Multiple Subject Credential Program.

Methods for teaching elementary school science. Development of sequenced, integrated inquiry-based science lessons addressing the needs of all learners.

60 contact hours, however, actual contact vary as course is offered with an on-line distance component (see *Schedule of Classes* footnote). 10 hours minimum of fieldwork in classrooms where at least 25% of students are classified as English learners, or concurrent enrollment in EDEL 482.

Letter grade only (A-F). Course fee may be required. Not open for credit to students with credit in EDEL 475. (Lec 2 hrs., activity 2 hrs.)

490A. Selected Topics in Science Education (1-3)

Prerequisite: Consent of instructor.

Topics in science education. May be repeated to a maximum of 6 units with different topics in different semesters.

Letter grade only (A-F). (Lecture 1-3 hrs)

490B. Selected Topics in Life Science Education (1-3)

Prerequisite: Consent of instructor.

Topics in life science education.

May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F). (Lecture 1-3 hrs)

490C. Selected Topics in Earth/Space Science Education (1-3)

Prerequisite: Consent of instructor.

Topics in earth and space science education.

May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F). (Lecture 1-3 hrs)

490D. Selected Topics in Physical Science Education (1-3)

Prerequisite: Consent of instructor.

Topics in physical science education.

May be repeated to a maximum of 6 units with different topics in different semesters. Letter grade only (A-F). (Lecture 1-3 hrs)

496. Directed Studies in Science Education (1-3)

Prerequisites: Consent of instructor.

Supervised study of current topics in science education.

Letter grade only (A-F). May be repeated to a maximum of 3 units with different topics in different semesters.

GRADUATE LEVEL

500. Life Science Applications for K-8 Teachers (3)

Prerequisites: Admission to M.S. in Science Education program; BIOL 200.

Emphasizes major themes and processes in life sciences, focusing on deepening understanding of concepts and approaches to teaching material in K-8. Approaches to developing/teaching inquiry-based/experiential learning units in biology modeled and integrated throughout course.

Letter grade only (A-F). (Seminar 3 hrs.)

501. Earth Sciences Applications for K-8 Teachers (3)

Prerequisites: Admission to the M.S. in Science Education program and GEOL 102+104 or GEOL 106.

Investigates earth science topics with focus on deepening connections between concepts in earth science and matter and energy cycling, providing applications of earth science concepts and activities in K-8 classrooms and schools.

Letter grade only (A-F). (Seminar 3 hrs.)

502. Physical Science Applications for K-8 Teachers (3)

Prerequisites: Admission to M.S. in Science Education program; PHSC 112.

Investigates physical science topics with focus on deepening students' science understanding while showcasing applications of physical science for students' personal lives and their K-8 classrooms and schools.

Letter grade only (A-F). (Seminar 3 hrs.)

550. Current Issues and Research in Science Education (3)

Prerequisite: Admission to M.S. in Science Education program. SCED 550 is a core course in the M.S. in Science Education.

Introduces students to body of research and practical knowledge shared by science education community. Includes choosing, studying, and discussing articles from science education literature relevant to key issues in science education. Course requirements include attending science teacher's conventions.

Letter grade only (A-F). (Seminar 3 hrs.)

551. Science Teaching, Learning and Curriculum Models (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550. SCED 551 is a core course in the M.S. in Science Education.

Introduces students to professional literature about science teaching and learning. Traces historical development of elementary/secondary science curriculum models. Students examine role science and education organizations played in reforming science curriculum, and analyze curricula from variety of teaching/learning perspectives.

Letter grade only (A-F). (Seminar 3 hrs.)

552. Nature of Science (3)

Prerequisites: Admission to M.S. in Science Education program and SCED 550.

A core course in the M.S. in Science Education. Looks at science from historical, philosophical, psychological, and sociological perspectives. Examines perceptions of science and scientists, especially views of science in different cultures and times. Discusses using these perspectives to teach students about nature of science.

Letter grade only (A-F). (Seminar 3 hrs.)

553. Science Learning in Informal Settings (3)

Prerequisite: Admission to Science Education M.S. program; consent of instructor. SCED 553 is a core course required of all Science Education M.S. candidates who have declared an option in informal science learning.

Examines unique characteristics of non-school learning settings and how they promote (or hinder) scientific understanding. These 'non-school settings' include science museums, zoos, aquaria, nature centers and even homes, where media such as television and the Internet play a prominent role. Multiple theoretical perspectives will be examined. Students will engage in their own research project in order to better understand an informal learning.

Letter grade only (A-F). (Seminar 3 hrs.)

560. Science Education Research Methods (3)

Prerequisites: Admission to the M.S. in Science Education program.

Examination and application of science education research methodology including various types of qualitative and quantitative methods, research designs, sampling methods, inferential statistics and hypothesis testing, interpretation and use of science education research instruments and development of a research proposal.

Letter grade only (A-F). (Seminar 3 hrs.)

580. Introduction to College Science Teaching -1 (1)

Prerequisite: Admission to Master's-level program in CNSM.

Addresses the fundamentals of college science instruction with an emphasis on immediate classroom application. Strategies for active learning, student assessment, and teacher development are introduced.

Letter grade only (A-F). (Seminar 1 hr)

590. Selected Topics in Science Education (1-3)

Prerequisite: Consent of instructor. (Undergraduates enroll in SCED 490; graduate students enroll in SCED 590). Topics in Science Education.

Topics in Science Education. Course content will vary from section to section.

May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in the Schedule of Classes.

Letter grade only (A-F). (Seminar 1-3 hrs.)

697. Directed Research (1-3)

Prerequisites: Consent of instructor and admission to M.S. in Science Education program.

Independent investigation of a research problem or directed project, under the direction of a faculty member.

May be repeated to a maximum of 3 units with different topics in the same semester. Letter grade only (A-F).

698. Thesis (1-3)

Prerequisites: Advancement to Candidacy for the M.S. in Science Education, 18 units of coursework required for M.S. Science Education completed, and consent of the chair of the thesis committee.

Planning, preparation, and completion of the thesis project in Science Education.

Letter grade only (A-F).

SINGLE SUBJECT TEACHER EDUCATION PROGRAM

College of Education

University Coordinator: Jared Stallones

Office: Teacher Preparation Advising Center (ED1-67)

Telephone: (562) 985-5325

Website: www.ced.csulb.edu/single-subject

Assistant University Coordinator: Deborah Mitchell

Assistant to the Coordinator: Jessica Vieira

Student Services Coordinator: Staci Goldberg-Berrey

Administrative Assistant: Brenda Ramos

Credential Advisors

Carol Zitzer-Comfort (English Education)

Jean Jacques Jura (Languages Other Than English Education)

Vikki Bisorca (Health Science Education)

Laurie Gatlin (Art Education)

Tim Williamson (Science Education)

Tim Keirn (Social Science Education)

Deborah Mitchell (Music Education)

Margaret Lichty (Home Economics Education)

Emyr Williams (Physical Education)

Angelo Segalla (Mathematics Education)

Vacant (Industrial and Technology Education)

Introduction

A teacher with a Single Subject Credential is authorized to teach the specific subject(s) named on the credential in departmentalized schools. This is commonly done in California high schools and in most California junior high and middle schools. However, a teacher authorized for single subject instruction may be assigned to teach any subject in his or her authorized fields at any grade level: pre-school, kindergarten and grades one through twelve; or in classes organized primarily for adults. The Single Subject Credential Program (SSCP) prepares university students to be credentialed in California for single subject instruction. At CSULB the program includes courses in the student's teaching subject area, in Secondary Education (EDSE), and in Single Subject Education (EDSS). Program requirements subject to change to align with changes in CTC regulations. For further program information visit www.ced.csulb.edu/single-subject.

Single Subject Credential Program (code 100)

The Single Subject Credential Program is a 45 unit program comprised of one prerequisite, four co-requisites, four core courses, and the capstone student teaching experience and student teaching seminar. EDSS 300, the prerequisite course, must be taken prior to other EDSS and EDSE courses. The corequisites may be taken prior to or concurrent with EDSS 300, or concurrent with the core courses. All course work must be completed prior to student teaching, except for the student teaching seminar which is taken concurrent with student teaching. Student teaching is a full teaching day, Monday through Friday, for approximately 20 weeks under the guidance of one or more

cooperating teachers and a university supervisor.

Requirements

Prerequisite:

Take the following course:

EDSS 300A-S Introduction to Teaching (3)

Prerequisites: Advanced sophomore or junior standing.

(separate sections offered for each subject area)

Corequisites:

Take the following courses:

HSC 411B Health Science for Secondary Teachers (3)

Prerequisite: Upper-division standing. Corequisite: Current CPR Certification required.

EDSP 350 Education of Exceptional Individuals (3)

Prerequisites: None.

Take one of the following courses:

EDP 301 Child Development and Learning: A Cross-Cultural Perspective (3)

Prerequisites: None.

EDP 302 Early and Late Adolescent Development and Learning: A Cross-Cultural Perspective (3)

Prerequisites: None.

EDP 305 Educational Psychology (3)

Prerequisites: None.

Take one of the following choices:

Level I technology course or state-approved exam

Candidates in the 11 subject area programs can meet the computer technology requirement through the following courses: Art (ART 305), English (ENGL 337), Home Economics (ETEC 444), Health Science (ETEC 444), Industrial Technology (ETEC 444), LOTE (RGR 470), Mathematics (MTED 301), Music (MUS 125T), KIN (KIN 354), Science (EDSS 300C, 450C, 473), Social Science (ETEC 444).

Core Courses:

Take the following courses:

EDSE 435 United States Secondary Schools:

Intercultural Education (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or consent of University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

EDSE 436 Curriculum, Instruction, Assessment and Classroom Management (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or consent of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

EDSE 457 Reading and Writing in the Secondary School (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or consent of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

EDSS 450A-S Curriculum and Methods (3)

(separate sections offered for each subject area)

Prerequisites: Consult catalog text for matching prerequisite information.

Capstone:

EDSS 472 Student Teaching (5)

Corequisite: EDSS 473. Prerequisite: EDSS 450 (A, C, D, F, G, H, M, N, P, or S) and admission to the Single Subject Credential Program, or permission of the University Coordinator; submission of application to student teach by the deadline (October 1 for Spring term; March 1 for Summer and Fall terms); passage of CBEST; character and identification clearance (fingerprint clearance); completion of all program course work; demonstration of subject matter competence; portfolio assessment in selected programs; approval for advancement to student teaching by the Credential Advisor and University Coordinator of the Single Subject Credential Program. Student teaching must be completed in the subject that will be authorized on the candidate's credential.

EDSS 473A-Z Student Teaching Seminar (3)

(separate sections offered for each subject area)

Prerequisite: Admission to the Single Subject Credential Program, or consent of the Single Subject Credential Program University Coordinator; advanced to student teaching. Corequisite: EDSS 472.

or for interns

EDSS 572 Intern Student Teaching (5)

Corequisite: EDSS 473. Prerequisite: Admission to the Single Subject Intern Program; offer of intern teaching position from a cooperating school district; submission of application to student teach by the deadline (October 1 for Spring term; March 1 for Summer and Fall terms); passage of CBEST; character and identification clearance (fingerprint clearance); completion of all program course work; demonstration of subject matter competence; portfolio assessment required in selected programs; approval for advancement to intern student teaching by the Credential Advisor and University Coordinator of the Single Subject Credential Program.

EDSS 473A-Z Student Teaching Seminar (3)

(separate sections offered for each subject area)

Prerequisite: Admission to the Single Subject Credential Program, or consent of the Single Subject Credential Program University Coordinator; advanced to student teaching. Corequisite: EDSS 472.

All professional coursework for the credential must be completed within seven years of admission to the program.

In addition to professional preparation, all credential candidates must demonstrate subject matter competence by one of the following: A) completion of a Commission-approved subject matter program; B) passing scores on the CSET exam; C) transcript review. Candidates should confer as early as possible with the Credential Advisor in their subject area to develop an efficient program plan.

Admission to the Program

Before beginning the Single Subject Credential Program, students should be admitted to the university. Apply for admission if you are A) a graduating senior at CSULB, B) transferring from another institution, or C) returning to the university after an absence of one or more semesters. Admission to the university does not constitute admission or acceptance in the SSCP. Application to the program is normally made as part of the course requirements for EDSS 300. Students may take the EDSS 300 course once they have completed a minimum of 60 semester or 90 quarter units.

Program Admission Requirements

1. Complete the prerequisite course EDSS 300 in the appropriate subject area with a minimum grade of "B."

2. Perform satisfactorily in the 45 hour field work requirement in EDSS 300.
3. Attain a grade point average of at least 2.67 in all baccalaureate and post baccalaureate course work or a grade point average of at least 2.75 in the last 60 semester units or 90 quarter units attempted.
4. Complete a personal interview with program faculty.
5. Submit two recommendation forms that speak to the candidate's potential for successful public school teaching.
6. Submit a written statement of professional goals and philosophy of education.
7. Provide evidence of fingerprint clearance (Certificate of Clearance) through the California Commission on Teacher Credentialing (CTC).
8. Submit a tuberculosis skin test or chest x-ray taken within the previous three years. Tuberculosis clearance must be valid through student teaching.
9. Take the CBEST exam. You must take all three parts of the exam and submit official scores. (Passage of the exam is required to advance to student teaching.)
10. Demonstrate proficiency in reading and writing English by (A) attaining the minimum passing score of 37 on the reading portion of the CBEST exam or by (B) achieving a "C" grade or better in a course satisfying the General Education requirement in literature and by (A) attaining the minimum passing score of 37 on the writing portion of the CBEST or by (B) fulfillment of the Graduation Writing Assessment Requirement (GWAR).
11. Demonstrate ability to communicate orally in English at the level required of public school teachers by demonstration of English production skills in the course EDSS 300 and through an oral interview with subject matter program faculty. In the case of candidates for a credential in teaching Languages Other Than English, there is a bilingual interview requirement in English and the target language.
12. Demonstrate personality and character traits that satisfy the standards of the teaching profession and suitable aptitude for teaching in public schools through the application documentation, the personal interview, and performance in the course EDSS 300. Candidates must continue to demonstrate appropriate character and personality traits through completion of the program.
13. Submit a completed program application to the EDSS 300 instructor.
14. Complete all requirements for admission to the program unique to the candidate's subject matter program.

Preliminary Credential

Successful completion of the Single Subject Credential Program leads to the Preliminary Credential, which is valid for five years.

Credential Requirements

1. Hold a bachelor's degree from an accredited institution.
2. Satisfy the U. S. Constitution requirement (POSC 100 or 391 or exam or equivalent course from another institution).
3. Pass CBEST.

4. Hold a Certificate of Clearance (fingerprint check).
5. Demonstrate subject matter competence.
6. Complete all prerequisite, corequisite, core and capstone courses with a "B" average and a minimum grade of "C". A minimum 3.0 grade point average must be maintained in all EDSS and EDSE courses. A minimum grade of "B" must be attained in EDSS 450.
7. Demonstrate Level I Computer proficiency.
8. Successfully complete student teaching and student teaching seminar.
9. Obtain a score of 3 or better on all 4 tasks in the state-mandated Teacher Performance Assessment (Cal TPA).

Student Teaching

Student Teaching is a full day, full semester responsibility following the school district calendar (approximately 20 weeks). Students teach three classes which represent different aspects or levels of the single subject major. The other two periods are for preparation and observation. The university determines the specific student teaching assignment. There are a wide variety of schools and teaching situations available in the program service area representative of the diversity of the region.

Advancement to Student Teaching is based upon a second thorough assessment of the candidate's qualifications. The process involves an evaluation of the applicant's file and an interview with faculty in the Single Subject Program. The criteria for advancement are as follows:

1. Potential for success in teaching, as indicated by successful leadership, teaching experience, or work experience. Updated information regarding the candidate's most recent experience, including work in EDSS 450, forms the basis of this assessment.
2. Continuing motivation for and enthusiasm toward teaching, together with those personality traits believed essential for successful teaching. Evidence includes a strong recommendation from the instructor of the 450 class and further recommendations from faculty who have worked with or have interviewed the student since the time of admission to the credential program.
3. Academic competence, overall and in the teaching major. The level of academic achievement of candidates is expected to be above average.

Advancement to Student Teaching Requirements

1. Member in good standing of the Single Subject Credential Program.
2. A GPA of 2.75 in the last 60 units, or 2.67 overall.
3. Complete all program courses, except Student Teaching and Seminar.
4. A minimum "B" grade point average in program courses, including prerequisites, corequisites and core courses, with no grade lower than "C." A minimum 3.0 grade point average must be maintained in all EDSS and EDSE courses. Completion of EDSS 450 with a minimum grade of "B."
5. TB clearance (clearance must be valid though completion of student teaching).
6. Pass the California Basic Educational Skills Test (CBEST), or approved alternate prior to the student teaching application deadline.

7. CSET test takers must submit passing scores with their student teaching application. Course-takers must satisfy the subject matter mastery requirement prior to the first day of student teaching.
8. Proof of identity and character clearance (Certificate of Clearance)
9. Attend a student teaching application meeting and submit a student teaching application by October 1 or March 1 of the semester prior to student teaching.

Student Teaching Application Process

1. Student Teaching applications are only distributed at mandatory student teaching information meetings held the first two weeks of the semester. Candidates for advancement to student teaching must attend a meeting. Meeting dates are posted outside the Single Subject Program office and are available on the website.
2. The application for Student Teaching is reviewed by the student's Single Subject major area. The Credential Center evaluates transcripts. The department then makes a recommendation to the University Single Subject Teacher Education Committee which takes final action. When approved by this committee, the student registers for student teaching. A priority system is used if sufficient funding is not available to allow all qualified applicants to enroll in student teaching.
3. A Certificate of Clearance must be on file in the Credential Center prior to the beginning of Student Teaching.

Single Subject Internship

The Internship Program provides an opportunity for qualified Single Subject Credential Program candidates to work as teachers of record while completing their preservice preparation. Internship positions are offered by the district in consultation with the Single Subject Program. An internship is an entry-level paid teaching position in a regular public secondary school classroom. The Intern Credential holder is an employee of the school district on a contractual basis and is subject to all district employment policies. Interns are also program students, subject to program requirements.

Interns hold considerable responsibility as the classroom teacher of record responsible for designing, developing, and implementing curriculum and instruction for a full load of classes for the length of the school year. In addition, they are expected to be fully participating members of the school faculty, including service on school committees, supervision of student activities, and attendance at school and district meetings and inservices. Only candidates who are truly ready for the responsibility and heavy workload should become interns. Candidates should consult with their Credential Program Advisor and the University Coordinator as they explore the possibility of doing an internship.

To be approved for an internship, candidates must meet the following requirements: be in good standing in the program, be enrolled in at least one program course each semester, pass the CBEST (or approved alternate), demonstrate subject matter competence (as determined by CTC subject matter requirements), have character clearance, demonstrate 120 hours of TPE training with 40 of those hours in ELL training, demonstrate relevant successful experience working with students, and show proof of meeting the U. S. Constitution requirement. The internship offer is made by

the school district, and must be in the candidate's teaching field. Interns cannot teach out of their field. Candidates must have the approval of the Credential Advisor in their subject area and the approval of the University Coordinator. There must be a District/University Internship Agreement in place between the district and CSULB.

Upon completing all program requirements for advancement to student teaching, Interns use their teaching position as the "student teaching" experience. Interns must submit an application to student teach by the regular deadlines: October 1 for Spring and March 1 for Fall student teaching. Interns register for 15 units of Intern Student Teaching and 3 units of Student Teaching Seminar. Interns must have a minimum of two class preparations as part of their teaching assignments. A University Supervisor observes the intern periodically during the term, conferences with the intern after site visits, and provides support as needed. The school provides a Site Support Teacher who functions as the Intern's on-site mentor. Interns are evaluated on program evaluation forms that are based on the *California Teaching Performance Expectations*.

Intern Application Guidelines and application materials are available in the Teacher Preparation Advising Center (ED1-67). Late applications may not be approved until the following semester. Candidates should contact the Single Subject Program office for a list of districts with which the program has intern contractual agreements.

The Early Completion Intern Option allows qualified candidates in English, Math, and Science to challenge the course work portion of the internship program and demonstrate their pedagogical skills by passage of the Teaching Foundations Examination and the California Teaching Performance Assessment while serving as an intern. See an advisor in the Teacher Preparation Advising Center for details.

Clear Credential

The Preliminary credential is valid for five years from the date of issuance and is not renewable. During the first five years of teaching, teachers earn the Clear Credential through their District-Sponsored Induction Program.

Petition Process

Appeals to program decisions or requests for policy waivers are made by filing a written appeal to the Single Subject Program Petition Committee. The Petition Committee reviews the written statement and supporting evidence. After the review, the Committee renders its final decision. Examples of petitionable policies are: the minimum grade point average required for program admission, completing all program courses prior to student teaching, and course equivalencies. Consult the program office for items not listed here. Students follow university policy to appeal a course final grade.

Single Subject Credential Program Majors

The subject matter programs listed below have been approved by the California Commission on Teacher Credentialing. Completion of a program as an undergraduate major (or as a returning graduate student) meets the subject matter competence requirement for the teaching credential. With careful planning, it may be possible for undergraduates to complete the professional preparation (education) courses

concurrent with the major, with the exception of student teaching and seminar (which may be done the first semester after graduation). Subject matter competence may also be demonstrated by passing the appropriate CSET exam. Candidates should consult the Credential Advisor in their area of interest to develop an efficient program plan.

Art Education (code 110)

Course requirements for demonstrating subject matter competence in Art are listed in the Art Department under Bachelor of Arts in Arts, Option in Art Education. Subject matter competence may be met through completion of 30 core units and 36 breadth and perspective units. Consult with the Single Subject Art Education Advisor for specific academic advisement and program information.

English Education (code 120)

Course requirements for demonstrating subject matter competence in English are listed in the English Department under Bachelor of Arts in English, Option in English Education. Subject matter competence may be met through completion of 35 core units and 18 breadth and perspective units. Consult with the Single Subject English Education Advisor for specific academic advisement and program information.

Health Science (code 130)

Course requirements for demonstrating subject matter competence in Health Science are listed in the Health Science Department under Bachelor of Science in Health Science, Option in School Health Education. Subject matter competence may be met through completion of 30 lower division units and 46 upper division units. Consult with the Single Subject Health Science Education Advisor for specific academic advisement and program information. The Health Science Subject Matter Program is being revised to meet new state standards.

Home Economics Education (code 140)

Course requirements for demonstrating subject matter competence in Home Economics are listed in the Family and Consumer Sciences Department under Bachelor of Arts in Family and Consumer Sciences, Option in Family and Consumer Science Education. Subject matter competence may be met through completion of 35 lower division units and 38 upper division units. Consult with the Single Subject Family and Consumer Sciences Education Advisor for specific academic advisement and program information. The Home Economics Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

Industrial and Technology Education (code 145)

Course requirements for demonstrating subject matter competence in Industrial and Technology Education are listed in the Engineering Technology Programs section of the Catalog. Subject matter competence may be met through completion of 61 lower and upper division units, plus 12 units for Concentration I or 13 units for Concentration II. Consult the Single Subject Industrial and Technology Education Advisor for specific academic advisement and program information.

Languages Other Than English (LOTE):
French (code 152)
German (code 153)
Italian (code 154)
Japanese (code 155)
Latin (code 156)
Spanish (code 158)

Course requirements for demonstrating subject matter competence in individual Languages Other Than English are listed under the Bachelor of Arts requirements in the appropriate department (French, German, Italian, Spanish: Romance, German and Russian Languages Dept.; Japanese: Asian and Asian American Studies Dept.; Latin: Comparative World Literature and Classics Dept.). In each instance, the Bachelor of Arts degree leads to subject matter competence in the language. Consult with the Single Subject Languages Other than English Education Advisor for specific academic advisement and program information.

Mathematics Education (code 165)

Course requirements for demonstrating subject matter competence in Mathematics are listed in the Mathematics and Statistics Department under Bachelor of Science in Mathematics, Option in Mathematics Education. Subject matter competence may be met through completion of 30 lower units and 36 upper division units. Consult with the Single Subject Mathematics Education Advisor for specific academic advisement and program information.

Music Education (code 170)

Course requirements for demonstrating subject matter competence in Music are listed in the Music Department under Bachelor of Music, Option in Music Education. Subject matter competence may be met through completion of 85 units for both choral/vocal and instrumental options. Consult with the Single Subject Music Education Advisor for specific academic advisement and program information.

Physical Education (code 175)

Course requirements for demonstrating subject matter competence in Physical Education are listed in the Kinesiology Department under Bachelor of Arts in Kinesiology, Option in Elementary, Secondary, or Adapted Physical Education. Subject matter competence may be met through completion of 29 lower division units and 40 upper division units. Consult with the Single Subject Physical Education Advisor for specific academic advisement and program information.

Science Education:

Biological Sciences (code 184)
Chemistry (code 181)
Geosciences (code 182)
Physics (code 183)

Course requirements for demonstrating subject matter competence in Science are listed in the Science Education Department under Subject Matter Competence for the Single Subject Credential. Breadth and specialization units vary for the four science areas. Consult with the Single Subject Science Education Advisor for specific academic advisement and program information. The Science

Subject Matter Program is being revised to meet new state standards. When the revised program has been approved by the Commission on Teacher Credentialing, the new course requirements will be in effect and supersede current requirements.

Social Science Education (code 185)
Behavioral Science, Economics,
Geography, History, Political Science

In order to demonstrate subject matter competence by course work for the Social Science teaching credential, students must complete 39 units from the core requirements listed below. To add breadth and perspective to the core, each student must complete 15 additional units in the breadth area. Consult the Social Science Education Credential Advisor in the Department of History for program information.

Core Requirements (39 units)

History: HIST 172, 173, 211, 212, 396, and 473

Economics: ECON 300

Prerequisites: GE Foundation requirements.

Geography: GEOG 100 and 306

Political Science: POSC 100 and 215

History-Social Science: EDSS 300

Prerequisite: Advanced sophomore or junior standing.

Capstone: HIST 401 (should be taken at or near conclusion of the subject matter program)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Breadth Requirements (15 units)

Breadth courses must be selected from each of the following fields.

1. Diversity in History

Select three units from the following:

HIST 338, 370 (same as CHLS 300), 394, 406A, 406B, 469, 485A, 485B, 486, or 490

2. United States Studies

Select six units from the following:

AFRS 332, 400; AIS 335, 485; ASAM 335I, 345, 346; ANTH 321, 322, 329; AMST 310, 350I; CHLS 300 (same as HIST 370)*, 350; ECON 355; GEOG 304; HIST 370 (same as CHLS 300)*, 371, 372, 373, 375, 376, 378, 379, 380A, 380B, 407I, 451, 469*, 471, 474I, 475, 477A, 477B, 478, 479, 480, 481, 482, 485A*, 485B*, 486*; PHIL 451I; POSC 308, 311, 312, 321, 323, 326, 412, 423, 424; RST 302I, 482I; SOC 420, 427; WGSS 308, 315, 318, 320

3. Global Studies

Select six units from the following:

AFRS 304; ANTH 307I, 323, 324, 332, 333, 335, 345; ASAM 301I; CHLS 450I; ECON 366, 372; GEOG 308I, 309I, 313I, 314I, 315I, 316, 318, 321, 322; HIST 304, 332, 334, 335, 336, 337, 338*, 339, 340, 341A, 341B, 353, 356, 357, 362, 364, 365, 382A, 382B, 383A, 383B, 384, 385, 386, 388, 391, 392, 394*, 400I, 406A*, 406B*, 407I, 409, 416, 418, 431, 432, 440, 441, 443, 461, 462, 463, 488, 491; POSC 358, 362, 367, 371; RST 308, 344, 352, 353I, 383I

*Cannot be used as part of this breadth requirement if this course is chosen as part of the Diversity in History requirement

Single Subject Education Courses (EDSS)

UPPER DIVISION

300A-S. Introduction to Teaching (3)

Prerequisite: Advanced sophomore or junior standing.

Structure, organization, culture of schools; curriculum, instruction, assessment, classroom management; history and current status of the subject area; becoming a reflective professional. Submission of application to the Single Subject Credential Program (SSCP). "B" grade or better required for admission to the SSCP. First course in the professional education sequence of the SSCP. Students register for the section bearing the letter associated with their discipline from the list below.

45-hour directed fieldwork required. Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters. (Lecture 3 hours)

- A. Art
- C. Science
- D. Health Science (Fall)
- F. LOTE: Languages Other Than English
- G. English
- H. Home Economics (Fall or Spring)
- M. Mathematics
- N. Music (Spring)
- P. Physical Education
- S. Social Science

450A. Curriculum and Methods in Teaching Art (3)

Prerequisite: EDSS 300A; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching art to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks. Required prior to student teaching.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450C. Curriculum and Methods in Teaching Science (3)

Prerequisite: EDSS 300C; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching science to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

(Lecture 2 hours, laboratory 1 hour + TBA) Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450D. Curriculum and Methods in Teaching Health Science (3) S

Prerequisite: EDSS 300D; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching health to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450F. Curriculum and Methods in Teaching Languages Other Than English (3)

Prerequisite: EDSS 300F; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching world languages to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450G. Curriculum and Methods in Teaching English (3)

Prerequisite: EDSS 300G; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching English to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450H. Curriculum and Methods in Teaching Home Economics (3) S

Prerequisite EDSS 300H; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching home economics to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450M. Curriculum and Methods in Teaching Mathematics (3)

Prerequisite: EDSS 300M; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching mathematics to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450N. Curriculum and Methods in Teaching Music (3) F

Prerequisite: EDSS 300N; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching music to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450P. Curriculum and Methods in Teaching Physical Education (3)

Prerequisite: EDSS 300P; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator; current standard first aid/CPR certification; completion of all skill performance proficiencies with an overall score of 3.5. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching physical education to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

450S. Curriculum and Methods in Teaching Social Science (3)

Prerequisite: EDSS 300S; admission to the Single Subject Credential Program or permission of the Single Subject Credential Program University Coordinator. Required prior to student teaching.

Objectives, curriculum, materials, instructional strategies, and assessment specific to teaching history and social science to diverse students. Reflective practice based on the California Standards for the Teaching Profession and state curriculum frameworks.

Fieldwork requirement. "B" grade or better required to advance to student teaching. Letter grade only (A-F). May be repeated to a maximum of 6 units.

472A,B,C. Student Teaching (5,5,5)

Corequisite: EDSS 473. Prerequisite: EDSS 450 (A, C, D, F, G, H, M, N, P, or S) and admission to the Single Subject Credential Program, or permission of the University Coordinator; submission of application to student teach by the deadline (October 1 for Spring term; March 1 for Summer and Fall terms); passage of CBEST; character and identification clearance (fingerprint clearance); completion of all program course work; demonstration of subject matter competence; portfolio assessment in selected programs; approval for advancement to student teaching by the Credential Advisor and University Coordinator of the Single Subject Credential Program. Student teaching must be completed in the subject that will be authorized on the candidate's credential.

Student teaching in the candidate's subject for a minimum of five periods daily for the length of the placement school's semester (approximately 20 weeks). Teach three classes (including at least two preparations); two additional periods are for preparation, observation, and conferencing with the cooperating teacher and university supervisor. See Advancement to Student Teaching section of this catalog for requirements.

Credit/No Credit grading only ("A" or "B" quality work required for credit). May be repeated to a maximum of 10 units.

473A-Z. Student Teaching Seminar (3)

Prerequisite: Admission to the Single Subject Credential Program, or consent of the Single Subject Credential Program University Coordinator; advanced to student teaching. Corequisite: EDSS 472.

Links theory to practice within the context of Teaching Performance Expectations during student teaching. Covers curriculum, instruction, assessment, classroom management, equity and access for all students. Prepares candidates for induction into the teaching profession.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

- A. Art
- C. Science
- D. Health Science
- F. LOTE
- G. English
- H. Home Economics
- M. Math
- N. Music
- P. Physical Education
- S. Social Science

- T. Industrial and Technology Education
- Z. Secondary Education

490. Selected Topics - Academic Subjects (1-3)

Prerequisite: Consent of instructor.

Selected secondary curriculum topics.

May be repeated to a maximum of 6 units with different topics; but only 6 units with a letter grade may be applied toward advanced degrees. Topics announced in the *Schedule Of Classes*.

497. Independent Study (1-3)

Prerequisites: Consent of instructor and Single Subject Program Coordinator.

Independent study undertaken under the supervision of a faculty member.

May be repeated to a maximum of 3 units.

GRADUATE LEVEL

572A,B,C. Intern Student Teaching (5,5,5)

Corequisite: EDSS 473. Prerequisite: Admission to the Single Subject Intern Program; offer of intern teaching position from a cooperating school district; submission of application to student teach by the deadline (October 1 for Spring term; March 1 for Summer and Fall terms); passage of CBEST; character and identification clearance (fingerprint clearance); completion of all program course work; demonstration of subject matter competence; portfolio assessment required in selected programs; approval for advancement to intern student teaching by the Credential Advisor and University Coordinator of the Single Subject Credential Program.

Use of the intern's teaching position as student teaching. Must be done in the subject that is authorized on the intern's credential. Interns must be approved by the program for contract positions in cooperating school districts.

Credit/No Credit grading only ("A" or "B" quality work required for credit). May be repeated to a maximum of 10 units.

Secondary Education Courses (EDSE)

UPPER DIVISION

435. United States Secondary Schools: Intercultural Education (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or permission of University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

Critical reflection on multicultural education in a diverse society. Philosophy, history and sociology of education as fundamental to understanding contemporary secondary schools. Curriculum and student populations in the context of issues and controversies in education. Approved CLAD Certificate course (Domain 3).

Fifteen hour fieldwork requirement. Letter grade only (A-F). May be repeated to a maximum of 6 units.

436. Curriculum, Instruction, Assessment and Classroom Management (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or permission of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

Explores systematic instruction, theories of learning, curriculum development, teaching strategies, assessment and evaluation of student progress, classroom management and discipline, and establishing successful learning environments for all students.

Fifteen hour fieldwork requirement. Letter grade only (A-F). May be repeated to a maximum of 6 units.

Secondary Education Courses (EDSE)

457. Reading and Writing in the Secondary School (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or permission of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

Emphasis on reading and writing assessment and instruction; textbook selection; vocabulary development; comprehension strategies; content area reading and study skills; writing instruction; English Language Development; the reading needs of less prepared, English language, and accelerated learners; and issues of diversity and equity.

Minimum fifteen hours of field work required. Letter grade only (A-F). May be repeated to a maximum of 6 units.

SCHOOL OF SOCIAL WORK

College of Health and Human Services

Director: Christian Molitor

Associate Director: Nancy Meyer-Adams (562) 985-5655

Undergraduate Program Coordinator/Undergraduate Advisor:
Lisa Jennings (562) 985-8629

Coordinators:

Admissions: Vacant

Field Education: Vacant

Distance Education: Marilyn Potts (562) 985-5183

MSW / BASW 24 Hour Information Line: (562) 985-5654 / 5427

School Office: SSPA, Room 161

Telephone / FAX: (562) 985-4616 / 985-5514

Faculty: Paul Abels (Emeritus), Jan Black (Emerita), Jolae Brocato, Stephan Buckingham, Ruth Chambers, Kenneth Chau (Emeritus, 1998), Simon Funge, Agathi Glezakos, Catherine C. Goodman (Emerita), Jean M. Granger (Emerita), Yolanda Green, Maria Gurrola, Lisa Jennings, Dan Jimenez (Emeritus), Christine Kleinpeter, Jeffrey Koob, Brian Lam, Cheryl Lee, Isaiah C. Lee (Emeritus), Rebecca Lopez, Nancy Meyer-Adams, Chikako Nagai, Julie O'Donnell, John Oliver (Emeritus), Eileen Mayers Pasztor, Marilyn Potts, Molly Ranney, Susan Rice (Emerita), Janaki Santhiveeran, Phillip Tan, Thomas Alex Washington, Steve Wilson

Assistant to the Director: Ann Radzicki, (562) 985-1878

Full-time Field Faculty: Venetta Campbell, Rashida Crutchfield, Tom Crowe, Michael Foster, Judy Green, Marian Klemek (Emerita), Stacey Peyer, Joy Rubin, Susan Salas

Students desiring information should contact the numbers listed above. Program applications (BASW, MSW) are available on the School's website (www.csulb.edu/social-work).

Career Possibilities

Social Worker • Hospital Discharge Planner • Services Eligibility Worker • Psychiatric Social Worker • Probation or Parole Officer • Delinquency Prevention Program Worker • Medical Social Worker • School Social Worker • Child Welfare Caseworker • Community Organization Administrator • Health Care Administrator • Director of Social Services • Researcher • Organization Administrator • Health Care Administrator • Researcher • Organization Administrator • Health Care Administrator • Employment Program Supervisor • Industrial Social Worker • Health Educator and Hospice Services Coordinator • Case Management • Gerontological Social Work • Community Organizer • Social Policy Analyst (For more information, see www.careers.csulb.edu.)

Introduction

The mission of the School of Social Work is to prepare a diverse student population for Bachelor of Arts in Social Work (BASW) and Master of Social Work (MSW) degrees for professional social work practice. The graduates of these programs are able to:

- demonstrate competent and ethical practice with diverse and multicultural populations from a base that builds on advances in social work knowledge, values and skills;
- enhance the well-being, and address the needs of diverse and multicultural populations across the life span; and

- advocate for social justice and social change and for elimination of oppression and discrimination.

Additionally, the mission is to provide a BASW and MSW education which is broadly accessible so that graduates can serve the needs of local, state and international communities in which they practice. In order to accomplish the mission, the School of Social Work draws on a diverse faculty who provide quality social work education and contribute to the community, the profession and the advancement of professional knowledge.

The BASW and MSW programs are accredited by the Council on Social Work Education (Council on Social Work Education, Commission on Accreditation, 1701 Duke Street, Suite 200, Alexandria, VA 22314, 703-683-8080).

The School, University and Council on Social Work Education regulations do not permit the substitution of life or work experience for curriculum or degree requirements.

Undergraduate Programs

Bachelor of Arts in Social Work (120 units)

The School of Social Work offers, in conjunction with the general education requirements, a professional program leading to a Bachelor of Arts in Social Work (BASW). The goals of the BASW program are to prepare students for entry level, professional, generalist social work practice and for graduate social work education, including advanced standing. Students learn to practice as professional social workers with persons and groups representing the range of human diversity and with systems of all sizes (individuals, families, groups, communities and institutions).

Social Work majors should consider taking courses as electives or for fulfillment of general education requirements in any of the ethnic studies disciplines, women's studies and gerontology programs in the Colleges of Health and Human Services and Liberal Arts. The School can make recommendations concerning those courses which would be most useful to students interested in acquiring broader information closely allied to professional social work practice.

Admission Under Impaction - Fall Only

Admission to the Social Work Program takes place in the fall semester only. Candidates are required to file a supplementation application with the School of Social Work by March 1st of the year you wish begin the BASW Program. Applications can be downloaded from the School of Social Work website at <http://www.csulb.edu/social-work>.

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major_upper.html#socialwork.

Admission Under Impaction for Continuing Students

Students who indicate an interest in a Social Work major when they enter as freshmen will be assigned a pre-social work major code. Acceptance into the pre-major by the University does not imply or assure subsequent acceptance into the major by the School. Students who are not accepted into the major cannot continue as pre-social work majors.

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major_upper.html#socialwork.

Admission Under Impaction for Transfer Students

Students must be eligible for admission to the University as transfer students and must apply for admission to the University no later than November 30 for admission the following fall. Students who are not admitted to the major will not be admitted to the University unless they have listed a second choice of major on the application form.

Refer to the following website for additional impaction criteria: http://www.csulb.edu/depts/enrollment/admissions/impacted_major_upper.html#socialwork.

Additional Requirements

To be allowed to continue in the major, students must complete the following:

- A. Pass Abnormal Psychology within the first two semesters
- B. Fulfill the Graduate Writing Assessment Requirement (GWAR).

Refer to the following website for more information:

<http://csulb.edu/divisions/aa/gwar/students/>

Students can contact the School's admissions office for academic advising concerning the requirements for admission into the BASW program.

Fieldwork

The field sequence has an integral role in the BASW curriculum providing an opportunity for students to apply social work knowledge and practice skills in an agency based educationally focused fieldwork internship. In the junior year, students complete an 80 hour practicum (SW 341) at a community agency (8 hours for 10 weeks). Students complete 450 hours of field placement (SW 495A/B) in their senior year for which they earn 14 academic units. Students complete 16 hours per week in an assigned agency placement. This must include either two 8-hour weekdays or one 8-hour weekday and two 4-hour weekday (Monday - Friday daytime hours) blocks. A variety of agencies in the surrounding communities are used, and the School's field faculty select the most appropriate field placement site for students. Criminal background checks and health screenings may be required for field placements.

Required Courses

Take all of the following courses:

SW 220 Introduction to Social Welfare (3)
Prerequisites: GE Foundation requirements.

SW 221 Introduction to Social Welfare Practicum (3)
Prerequisites: Consent of instructor. Corequisites: SW 220.

SW 330 Human Behavior and Social Environment: Birth Through Adolescence (3)
Prerequisites: GE Foundation requirements.

SW 331 Human Behavior and Social Environment: Young Adulthood Through Old Age (3)
Prerequisites: GE Foundation requirements.

SW 340 Generalist Social Work Practice (3)
Prerequisites: SW 220, 221, 330, 350. Corequisites: SW 341.

SW 341 Social Work Practicum (3)
Prerequisites: SW 331, 340 and 351. Supervised practicum in an applied social service agency or allied setting for a minimum of 80 hours (8 hours per week for 10 weeks).

SW 350 Social Policy: Law and Court Decisions (3)
Prerequisites: GE Foundation requirements.

SW 351 Social Policy: Formulation and Analysis (3)
Prerequisites: GE Foundation requirements.

SW 440 Generalist SW Practice with Groups (3)
Prerequisites: SW 331, 340, 341. Corequisites: SW 495A.

SW 441 Generalist SW Practice with Communities and Institutions (3)
Prerequisites: SW 331, 340, 341, 351. Corequisites: SW 495B.

SW 442 Generalist Social Work Practice with Individuals/Families (3)
Prerequisites: SW 331, 340, 341. Corequisites: SW 495A.

SW 465 Research Methods in Social Work (3)
Prerequisites: SW 440 and 442 and one course in elementary statistics. Corequisites: SW 441, 465 and 495B.

SW 495A Field Experience in Social Work (7)
Prerequisites: SW 330, 331, 340, 341, 350, 351.
Corequisites: SW 440 and SW 442.

SW 495B Field Experience in Social Work (7)
Prerequisites: SW 442 and 495A. Corequisites: Enrollment in two of the following: SW 440, 441, and 465.

Sequence of Required Courses

Full-time students will take the following sequence of courses starting with:

- First Level (fall): SW 220, 221, 330, 350
- Second Level (spring): SW 331, 340, 341, 351
- Third Level (fall): SW 440, 442, 495A
- Fourth Level (spring): SW 441, 465, 495B

Part-time students will take the following sequence of courses

- First Level (fall): SW 220, 221
- Second Level (spring): SW 330, 350
- Third Level (fall): SW 331, 351
- Fourth Level (spring): SW 340, 341
- Fifth Level (fall): SW 440, 442, 495A
- Sixth Level (spring): SW 441, 465, 495B

All Social Work courses must be completed with a grade no lower than a "C" (or 2.0) in classroom courses or a "CR" for practicum or field experience courses. If a student earns a grade lower than a "C" (or 2.0) in a classroom course or a "NC" in a practicum or field experience course, the student must repeat the course. All courses must be taken in sequence, therefore, a student cannot move forward in the Social Work program until each course has been successfully completed. All internship classes must be taken concurrently with direct generalist practice courses.

CalSWEC BASW Stipend Program

California Social Work Education Center (CalSWEC) is a unique partnership between social work education and the publicly supported child welfare agencies. A goal of the CalSWEC program is to recruit and prepare a diverse

group of social workers for careers in public child welfare. CalSWEC provides financial support to BASW students in exchange for a commitment to work in a public child welfare agency after graduation. The intent of the program is to strengthen and enhance the quality of practice by professionally trained and educated public child welfare social workers.

The IV-E stipends provide support for full-time students in their senior year enrolled in the BASW program. A CalSWEC reimbursement program is available for part-time students currently employed with the County Social Services department that provides child-welfare or assistance benefits eligibility functions. All part-time applicants must provide a letter of support from their agency administrator/director. Financial support for awarded part-time students will include actual cost of full tuition and fees, book costs as well as a travel allowance.

Application Process

Students must first be admitted into the BASW program. Students are required to submit a CalSWEC application. The application is supplemented with various questions designed to ascertain their interest and level of commitment to a career in public child welfare. Once accepted into the program students must undergo pre-screening for county employment, including fingerprinting and participation in the criminal clearance process as well as a psychological and/or medical exam. The student is required to sign a contract to secure full-time employment in a public child welfare agency after graduation.

Priority is given to applicants representing diverse population groups currently served by child welfare agencies in California. Fluency in a high demand language is also given priority. Years of service and other child welfare experience also weigh significantly into the selection process. Students in the program must be U.S. citizens or have a permanent visa.

An Awards Committee, made up of representatives of the CSULB School of Social Work and representatives of public child welfare agencies from counties surrounding the University, will review and finalize selection of candidates to whom the award will be offered.

Requirements

Students participating in the program must meet all the following criteria:

1. Successful admission to the BASW major;
2. Maintain a C (2.0) average;
3. Attendance at mandatory seminars/trainings on specialized topics;
4. Have a valid driver's license and secure use of a car as required for fieldwork;
5. Undergo pre-screening for county employment;
6. Complete required health screenings;
7. Fulfill work commitment upon graduation; students sign a contract to render one year of continuous and satisfactory full-time employment in a public child welfare agency;
8. Students must reimburse CalSWEC if they are unable to successfully complete any of the program requirements.

Graduate Programs

Master of Social Work

The School of Social Work offers a professional program culminating in a Master's degree in Social Work. Our goal is to prepare students to enter professional, multicultural social work practice. Students learn to practice as professional social workers with persons and groups representing the range of human diversity and with all size systems (individuals, families, groups, communities and institutions). In addition, students are prepared for advanced, specialized practice in concentrations representing Children, Youth and Families or Older Adults and Families.

The MSW Program emphasizes ecological and systems perspectives which focus on the fit and interactions of a person or system in relation to the various environments likely to be encountered. Within these perspectives, knowledge, values, and skills are used in a change-oriented process within a multicultural context to help individuals and social systems achieve improved quality of life and social participation, including advocacy for just institutions and equitable access to opportunities and resources.

In addition to the mission noted above, the MSW Program provides an educational experience which does the following:

1. Provides knowledge of and experience with ethnic diversity, teaches skill in ethnic-sensitive practice, and provides motivation and skill to combat oppressive policies and discrimination. As such, the program actively offers opportunity for graduate education to students of various ethnic, racial, and socio-economic backgrounds who have life experience in bridging cultural gaps;
2. Contributes to the quality of social services delivered in the adjacent communities (Los Angeles, Ventura, San Bernardino, Riverside, and Orange Counties) by providing an opportunity for advanced education to students who are already employed in the social services. These students may concurrently maintain employment within the social services and participate in the program to develop advanced skills in their area. Quality of services is also enhanced through close collaboration between the School of Social Work and community service agencies offering fieldwork experiences and through the labor force of MSWs educated in a program with multicultural emphasis and specializations which reflect the needs of our adjacent community as well as the needs of urban communities nationally;
3. Prepares social workers for leadership and specialized practice with a specific population group. The program maintains high standards and prepares social workers for the depth and complexity of generalist social work practice while being able to practice in a chosen area of concentration. Foundation knowledge, values, and skills required for intervention in a multicultural context are applied and developed through work within the area of specialization. Specialization consists of emphasis on a stage of the life cycle: either children, youth, and families or older adults and families. Specialized education is offered concurrently with basic foundation knowledge

from entry into the program. Students are expected to have experience in the social services upon which to draw after entry into the program;

4. Teaches analytic skills necessary for reflective and autonomous practice and necessary for contribution to the advancement of knowledge. Social workers should be capable of integrating knowledge and practice, should be able to apply grounded, scientific principles to practice, should be capable of conceptualizing practice principles on the basis of their experience, and therefore should be able to contribute to the development of new knowledge;
5. Educates students to the values and ethics of the profession. The social worker is expected to be committed to the value that people should have equal access to resources, services, and opportunities. Social workers should be advocates of humane and responsive service, have regard for the worth and dignity of the individual, and conduct themselves in accordance with the professional code of ethics.

Admission to Master of Social Work (MSW) Program

Students interested in 2-year and 3-year programs are admitted by University Enrollment Services to the MSW Program for the fall semester each year. Prospective students should apply directly to the University and then to the School of Social Work. International students must also apply to the Center for International Education (562) 985-5476. Review of applications by the School begins the first week of October.

School Deadlines

The School of Social Work MSW application deadline is February 1 for the following fall semester. The University application deadline is February 1 for the following fall semester.

Admission Requirements

To be admitted to the MSW Program, applicants must meet the following criteria:

1. Hold a Bachelor's degree that is grounded in liberal arts, from a university or college of recognized standing and be eligible for admission to graduate status at CSULB.
2. Demonstrate satisfactory academic achievement as evidenced by a cumulative undergraduate GPA of 2.8 or above on a 4.0 scale.
3. Completion of a prerequisite course in elementary statistics with a "C" or better.
4. Completion of the School's application which requires inclusion of:
 - Elementary Statistics prerequisite syllabus
 - three reference letters (a combination of academic and professional)
 - a summary of volunteer experience, work experience, and educational background
 - a personal statement

Applications that do not contain the above materials are considered to be incomplete, and will not be assessed for admissions decisions. Moreover, applications must be fully packaged by the applicant when submitted.

5. Preadmission interviews may be required by the School faculty.

Admission to MSW Advanced Standing Program

Students who have a 3.0 GPA and a BASW degree may be conditionally accepted to the MSW Advanced Standing Program. Upon successful completion of an intensive Summer Bridge Module (see below), the core content from the 1st year of the traditional MSW Program (or 30 units) will be waived and students will be Advanced to Candidacy to begin year two of the traditional MSW Program curriculum.

Admissions Criteria for Advanced Standing

In addition to the School's basic application procedures as well as University application procedures, the following are requirements for all Advanced Standing applicants:

- Graduation, within the last 5 years, from an undergraduate Social Work program that is accredited by the Council on Social Work Education at the time of the applicant's graduation.
- Applicants must have a cumulative 3.0 (on a 4.0 scale) grade point average for all undergraduate work.
- Provisional acceptance for persons currently enrolled in BASW/BSW programs is contingent on the successful completion of that program plus submission of a reference letter from an applicant's current field instructor, as well as a reference letter from the applicant's program advisor or a professor who taught one of the required courses during the senior year (two of three required references).
- All acceptances to the Advanced Standing Program are conditional until University Enrollment Services admits a student and all Summer Bridge modules have been successfully completed.

Waiver of the First Year Core: Common Body of Knowledge

The Master of Social Work degree is based upon a common body of knowledge. Students with a Bachelor's degree in social work from this University, or from other CSWE accredited undergraduate social work programs, within the last five years, will have met much of the First Year Core requirements. Students' transcripts are reviewed for completion of the necessary coursework for mastery of the common body of knowledge. A 3.0 GPA in the undergraduate social work courses is required.

Waivers of the First Year Core (30 units) are based upon previous educational background at the undergraduate level and upon completion of Summer Bridge courses and field placement in this School of Social Work. Summer Bridge courses will include modules from each of the program sequences: research, practice, human behavior and social policy. Summer Bridge fieldwork placement will include 160 hours (16 hours per week). Students, therefore, have a provisional admission to the School until they have successfully completed the summer program. When they successfully complete the Summer Bridge courses and field placement, they receive the Waiver of the First Year Core and enter the second year of the MSW Program in the Fall semester. Students are immediately Advanced to Candidacy upon receiving a Waiver of the First Year Core. The courses that are waived as the First Year Core are: SW 500, 503A, 503B, 505, 560 or 561, 592, 594A, 594B, 596A, and 596B.

Students, for whom the First Year Core is waived, are not eligible to apply for the Geriatric Social Work Education Consortium or Inter-University Consortium stipend.

MSW Program Requirements

Advancement to Candidacy

A conditionally classified or fully classified student must maintain a minimum GPA of 3.0 on all courses taken subsequent to admission. In addition, a GPA of 3.0 must be maintained in all courses required for the degree. A student will be eligible for advancement to candidacy for the degree after successfully completing 6 units of graduate level courses in Social Work.

All students must demonstrate competency in writing skills. Students must attempt to fulfill the Graduation Writing Assessment Requirement (GWAR) in the first semester of residence in the MSW Program or score at least a "4" on the GRE Writing Assessment. Either the GWAR or the GRE Writing Assessment must be passed to advance to candidacy.

Course Load

The California State University, Long Beach requirement for full-time status as a graduate student is 9 weighted units. Students in the three-year MSW Program must take at least 4 semesters of at least 3 courses or 9 units. Students who wish to complete the MSW degree in 2 years must take an overload of 6 units for 4 semesters or 15 units a semester.

Academic Units

The Master of Social Work program requires the completion of 60 semester units. Fifty-four units of required courses and 6 units of scheduled School electives must be taken to complete a concentration. For IUC, CalSWEC and PPS credential students, 3 of these 6 units will be a specific required elective (refer to those sections for more information).

Sequence of Required Courses

The MSW Program is taken in one of the four following sequences:

Plan A: (two years)

- Term 1 – SW 500, 503A, 505, 594A, 596A (Fall)
- Term 2 – SW 560 or 561, 592, 594B, 596B, 503B (Spring)
- Term 3 – SW 660 or 661, 680A, 693, 698A, 500/600 level elective (Fall)
- Term 4 – SW 670, 680B, 681 or 682, 699A, 500/600 level elective (Spring)

Plan B: Advanced Standing

Summer Bridge Module includes:

- Fieldwork – 16 hours per week for 10 weeks (160 hours total) plus 2 hours of seminar per week
- Human Behavior
- Social Policy
- Research
- Practice
- Technology

Second Year Coursework:

- SW 660 or 661, 680A, 693, 698A, 500/600 level elective (Fall)
- SW 670, 680B, 681 or 682, 699A, 500/600 level elective (Spring)

Plan C: (three years)

- Term 1 – SW 503A, 505 (Fall)
- Term 2 – SW 503B, 592, 500/600 level elective (Spring)
- Term 3 – SW 693, 594A (Summer)
- Term 4 – SW 596A, 500 (Fall)
- Term 5 – SW 596B, 560 or 561, 594B (Spring)
- Term 6 – SW 698A, 500/600 level elective (Summer)
- Term 7 – SW 680A, 660 or 661, 699A (Fall)
- Term 8 – SW 680B, 670, 681 or 682 (Spring)

Distance Education CYF Plan: (three years)

- Term 1 – SW 503A, 505 (Fall)
- Term 2 – SW 503B, 592 (Spring)
- Term 3 – SW 693, 594A (Summer)
- Term 4 – SW 596A, 500, 500/600 level elective (Fall)
- Term 5 – SW 596B, 560, 594B (Spring)
- Term 6 – SW 698A, 500/600 level elective (Summer)
- Term 7 – SW 680A, 660, 699A (Fall)
- Term 8 – SW 680B, 670, 681 (Spring)

Concentrations

The Master of Social Work degree offers opportunity for study in two areas of concentration: Children, Youth and Families or Older Adults and Families. The concentrations reflect two major areas of social concern and programs in our society.

The Children, Youth and Families (CYF) Concentration

The Children, Youth and Families (CYF) concentration prepares students for practice in a variety of settings. Students experience one year of placement in a generalist direct practice setting and may select either a direct practice or administrative practice setting for their second year.

Fieldwork placements are available in a variety of agencies in the surrounding five-county area, including public, private and non-profit agencies. Typical settings include child welfare/protective services, health care, mental health, public social services, schools, community-based outpatient agencies, corrections/juvenile justice, residential treatment, programs for persons with developmental disabilities, substance abuse treatment and other specialized programs.

Distance Education

The Children, Youth and Families Concentration (CYF) is also offered at off-campus locations throughout the state. Current distance education sites are in the Sonoma County and Ventura County areas. Courses are taught using face-to-face instruction, as well as interactive television and web-based instructional support. The distance education MSW is offered using a 3-year model. Students attend courses on Saturdays and complete fieldwork requirements during the second and third years of the program.

Required Courses for CYF Concentration

- SW 500 Foundations Generalist Social Work Practice (3)
Corequisites: SW 596A.
- SW 503A Human Behavior and Environment in Multicultural Perspectives: Prenatal through Adolescence (3)
Prerequisites: None.
- SW 503B Human Behavior and Environment in Multicultural Perspectives: Young Adulthood through Old Age (3)
Prerequisites: SW 503A.

- SW 505 Oppressed Groups (3)
Prerequisites: None.
- SW 560 Direct Intervention with Individuals and Families: Children, Youth and Families (3)
Prerequisites: SW 500 and 596A. Corequisites: SW 596B.
- SW 592 Community Projects I (3)
Prerequisites: None.
- SW 594A Research Methods I (3)
Prerequisites: None.
- SW 594B Research Methods II (3)
Prerequisites: SW 594A.
- SW 596A Field Instruction I (3)
Prerequisites: SW 500.
- SW 596B Field Instruction II (3)
Prerequisites: SW 500, and 596A. Corequisites: SW 560 or 561.
- SW 660 Direct Intervention with Groups: Focus on Children, Youth and Families (3)
Prerequisites: SW 560. Corequisites: SW 680A.
- SW 670 Social Work Administration (3)
Prerequisites: SW 500, 560 or 561, 596A/B, 660 or 661. Corequisites: SW 680B.
- SW 680A Field Instruction III (3)
Prerequisites: SW 500, 560 or 561, 596A/B. Corequisites: SW 660 or 661.
- SW 680B Field Instruction IV (3)
Prerequisites: SW 500, 560 or 561, 596A/B, 680A, 660 or 661. Corequisites: SW 670.
- SW 681 Advanced Policy Seminar: Children, Youth and Families (3)
Prerequisites: SW 505.
- SW 693 Community Projects II (3)
Prerequisites: SW 592.
- SW 698A Thesis or Project I (3)
Prerequisites: SW 594A, 594B. Completion of 30 MSW units with a minimum cumulative GPA of 3.0, and advancement to candidacy.
- SW 699A Thesis or Project II (3)
Prerequisites: SW 698A.
- Two Elective Courses (3,3)

The Older Adults and Families (OAF) Concentration

The Older Adults and Families (OAF) concentration prepares students for practice in the delivery of social services to older adults and their families, in the planning and evaluation of social services and in administration of services and policy development. Students experience one year of placement in a generalist direct practice setting and may select either a direct practice or administrative practice setting for their second year.

Fieldwork placements are available in a variety of agencies in the surrounding five-county area including public, private and non-profit agencies. Typical settings include health care, adult protective services, mental health, community-based outpatient agencies, rehabilitation, programs for the developmentally disabled, substance abuse treatment, senior programs and other specialty services.

Required Courses for OAF Concentration

- SW 500 Foundations Generalist Social Work Practice (3)
Corequisites: SW 596A.
- SW 503A Human Behavior and Environment in Multicultural Perspectives: Prenatal through Adolescence (3)
Prerequisites: None.

- SW 503B Human Behavior and Environment in Multicultural Perspectives: Young Adulthood through Old Age (3)
Prerequisites: SW 503A.
- SW 505 Oppressed Groups (3)
Prerequisites: None.
- SW 561 Direct Intervention with Individuals and Families: Older Adults and Families (3)
Prerequisites: SW 500, and 596A. Corequisites: SW 596B.
- SW 592 Community Projects I (3)
Prerequisites: None.
- SW 594A Research Methods I (3)
Prerequisites: None.
- SW 594B Research Methods II (3)
Prerequisites: SW 594A.
- SW 596A Field Instruction I (3)
Prerequisites: SW 500.
- SW 596B Field Instruction II (3)
Prerequisites: SW 500, and 596A. Corequisites: SW 560 or 561.
- SW 661 Direct Intervention with Groups: Focus on Older Adults and Families (3)
Prerequisites: SW 561. Corequisites: SW 680A.
- SW 670 Social Work Administration (3)
Prerequisites: SW 500, 560 or 561, 596A/B, 660 or 661. Corequisites: SW 680B.
- SW 680A Field Instruction III (3)
Prerequisites: SW 500, 560 or 561, 596A/B. Corequisites: SW 660 or 661.
- SW 680B Field Instruction IV (3)
Prerequisites: SW 500, 560 or 561, 596A/B, 680A, 660 or 661. Corequisites: SW 670.
- SW 682 Advanced Policy Seminar: Older Adults and Families (3)
Prerequisites: SW 505.
- SW 693 Community Projects II (3)
Prerequisites: SW 592.
- SW 698A Thesis or Project I (3)
Prerequisites: SW 594A, 594B. Completion of 30 MSW units with a minimum cumulative GPA of 3.0, and advancement to candidacy.
- SW 699A Thesis or Project II (3)
Prerequisites: SW 698A.
- Two Elective Courses (3,3)

Community Mental Health Specialization

The goal of the Community Mental Health Specialization is to help decrease statewide workforce shortages and meet the State of California's need for competent mental health graduate-level social workers who are trained to work with diverse client systems at every service level. Participants in this Community Mental Health Specialization will be qualified for direct practice and/or administrative positions in community mental health agencies and organizations in the public mental health sector, thus strengthening their career possibilities.

This specialization is available to students in both the Children, Youth and Families (CYF) and Older Adults and Families (OAF) concentrations and is specifically designed for graduate social work (MSW) students within these established concentrations as it offers advanced training in multicultural practice with mental health issues and practice (micro, mezzo and macro) across the lifespan. The Community Mental Health Specialization draws from the existing curriculum and expands it to include the 2nd year

field internship experience in a community mental health setting, the Thesis/Project with a mental/health focus, and a requirement that both electives have a mental health focus as well as additional skill building workshops.

Students in this specialization will be required to: (a) take SW 677 "Social Work Practice in Mental Health" as this course covers the Recovery Paradigm as it applies to community mental health services and consumer-driven/focused services as required by the California Mental Health Services Act (MHSA); (b) take a second mental health-focused elective of their choice; (c) have a mental health focus in their thesis or project; (d) complete a mental health field internship in their second year of field work, and (e) attend additional skill building workshops where they can further develop specific mental health practice competencies.

Field Education

The fieldwork sequence has an integral role in the MSW curriculum. The experience offers an opportunity for students to integrate and apply theoretical knowledge and social work practice and intervention skills in a community agency setting under the supervision of a qualified field instructor. A variety of agencies within the surrounding counties are utilized, reflecting the diverse settings in which social workers are employed. University field faculty select the most appropriate field placement site for students.

Each student has two fieldwork placements and concurrent enrollment in practice courses during the course of study. Each placement involves 500 hours of fieldwork in a community agency setting and attendance and participation in a fieldwork seminar that meets weekly on campus. The fieldwork sequence encompasses a total of 1000 hours, for which 12 units of academic credit are given. The academic year schedule begins in September and continues through mid May. Fieldwork includes attendance in a field seminar as well as internship in the community. Students complete 16 hours per week. This must include either two 8-hour weekdays or one 8-hour weekday and two 4-hour weekday blocks. No weekend placements are available. Students admitted to the Advanced Standing program complete one fieldwork placement for a total of 660 hours.

Students who are employed in social service agencies may request that their agency be evaluated as a site for the second year fieldwork only. The agency must be able to meet all criteria established by the School of Social Work to ensure the educational focus of fieldwork and provide a significantly different experience. Evaluation of fieldwork sites and approval to utilize an agency of employment as a fieldwork site will be completed by the fieldwork faculty.

The School of Social Work will reject an applicant or disqualify an enrolled student whose record of academic achievement or performance in field instruction does not meet the minimum standards of the profession.

CalSWEC MSW Stipend Program

The California Social Work Education Center (CalSWEC) is a partnership between the schools of social work, public human service agencies, and other related professional organizations that facilitates the integration of education and practice to assure effective, culturally competent service delivery to the people of California.

CalSWEC Child Welfare

The CalSWEC Child Welfare program is for graduate students who are interested in pursuing a social work career in the child welfare field. This program is only available to students admitted into the Children, Youth and Families Concentration of the MSW Program. Interested candidates must complete an application process.

Full-Time CalSWEC Child Welfare Stipend Program

The stipends provide for two years of support for students enrolled in the full-time model of the MSW Program. The student signs a contract to secure full-time employment in a public child welfare agency for two years post graduation but is expected to remain in public child welfare employment for longer than this minimum period.

Once accepted into the program, students must undergo pre-screening for county employment including fingerprinting, as well as psychological and/or medical exams and participation in the criminal clearance process.

Part-Time CalSWEC Child Welfare Stipend Program

Students eligible to apply for the part-time CalSWEC reimbursement program must be employees of the State or County Social Services department that provides the child welfare or assistance benefits eligibility functions. All part-time applicants must provide a letter of support from their agency administrator/director. Financial support for admitted students will include: tuition and fees, book costs and a travel allowance.

Students participating in the program sign a contract to render two years of full-time employment in their home public child welfare agency after graduation.

Requirements for CalSWEC Child Welfare Stipend Program (Full-time and Part-time)

Students participating in the program must meet all of the following criteria:

- Complete and graduate from the MSW Program in the Children, Youth and Families Concentration
- Maintain a "B" (3.0) average
- Have a valid drivers license, current automobile insurance, and secure the use of a car as required by fieldwork
- Complete a thesis or project with a focus on Child Welfare population, issue area or service delivery systems
- Take all of the required classes, including child welfare field internship placement, child welfare elective and participation in selected workshops or annual seminars on issues related to child welfare

Students must reimburse CalSWEC if they are unable to successfully complete any of the program requirements.

CalSWEC Mental Health Stipend Program

The CalSWEC Mental Health stipend program is for graduate students who are interested in pursuing a social work career in the mental health field and are willing to make a commitment to work full-time in a California county mental health agency or a county contracted agency after they have received their MSW degrees. Interested candidates must complete an application process.

Requirements for CalSWEC Mental Health Stipend Program

Students participating in the program must meet all of the following criteria:

- Sign a contract to work full-time in a California county mental health agency or a county contracted agency for a minimum of one year immediately after graduation
- Complete and graduate from the MSW Program at CSULB within the required timelines established for each program model
- Take all of the required courses, including mental health field internship placements, the approved mental health elective, and participation in selected workshops or annual seminars on issues related to mental health and research
- Complete a thesis or project focused on a mental health topic that is concentration specific (either CYF or OAF)
- Maintain a "B" (3.0) average
- Receive a security clearance/livescan to work in a California county mental health agency or a county contracted agency

Students must reimburse CalSWEC if they are unable to successfully complete any of the program requirements.

Inter-University Consortium

The Inter-University Consortium (IUC) is a specialized training program in public child welfare available in the MSW Program. The Inter-University Consortium/ Department of Children and Family Services (IUC/DCFS) Training Project is a collaborative endeavor between the Los Angeles County DCFS and the graduate programs of social work at CSULB, UCLA, USC, CSULA, CSUN and CSUDH. The overall goal of this collaborative project is to increase the professional skills and knowledge of Los Angeles County public child welfare workers.

The IUC project at CSULB is designed to prepare social work student interns in the most innovative and current programs at the South County DCFS Office. It is our intention at CSULB, to prepare future leaders in public child welfare. Our approach is founded on the Social Ecology Model, the California Redesign and the objectives of AB636. Students will experience (parallel process with their assigned cases) moving from entry to exit through child welfare services. CSULB's innovative project emphasizes the front end of child welfare services, working effectively with children and families in their communities to achieve safety, well-being and families to last a lifetime. CSULB's IUC/DCFS Project also offers student interns a unique and valuable opportunity to learn and practice the Kinship Caregiver's Model and to co-lead a children's group in a community public school as part of our emphasis in working with children and families in their community.

The stipends are available for one year for students enrolled in the two-year or three-year MSW Program. Students may apply for either the first or second year of field placement. This program is only available to students admitted into the Children, Youth and Families Concentration. Students who work at DCFS or are currently (or have been) CalSWEC students are not eligible. Interested candidates must complete an application process.

Requirements for Inter-University Consortium (IUC)

Students accepted into the program must:

- Sign a contract to secure full-time employment with the Los Angeles County Department of Children and Family Services for one year post graduation but is expected to remain in public child welfare employment for longer than this minimum period
- Have a valid driver's license, current automobile insurance, and secure the use of a car as required by fieldwork
- Complete pre-screening for county employment including livescan and DCFS physical and psychological examinations
- Complete one year of fieldwork in the IUC/DCFS placement
- Complete the designated specialty child welfare curriculum which includes:
 1. SW 643 – Social Work Practice within Child Welfare Services (3)
 2. SW 698A/699A – MSW Thesis or Project (6) (IUC Students' theses must focus on a child welfare population, issue area, or service delivery systems)
- Complete designated specialized training seminars
- Complete and graduate from the MSW Program at CSULB within the required timelines established for each program model

Students are responsible for payback of the stipend if they are unable to successfully complete any of the requirements of the program.

Geriatric Social Work Education Consortium

The John A. Hartford Foundation awarded a 3 year grant to support the development of geriatric field practicum sites. The grant funded an alliance of all of the social work graduate schools and four geriatric service providers in the greater Los Angeles area. This consortium was created and sponsored by the Partners in Care Foundation with the goal of enhancing the quality of life for the elderly.

The program continues with new funding and stipends are provided to MSW students in the Older Adults and Families concentration. Information regarding this program is presented to students in the field orientation and applications are made available.

Pupil Personnel Services Credential: Specialization in School Social Work and Child Welfare and Attendance (code 803)

The California Commission on Teacher Credentialing issues the Pupil Personnel Services Credential (PPSC). The School of Social Work, in collaboration with the College of Education, offers the combined School Social Work and Child Welfare and Attendance Specializations of the PPS Credential within the context of the Master of Social Work (MSW) degree. The PPS Credential in School Social Work and Child Welfare and Attendance authorizes the holder to be employed in the State of California as a School Social Worker and/or a Child Welfare and Attendance Specialist. The credential covers pre-kindergarten through 12th grade in public and other schools requiring the credential.

Requirements for the Pupil Personnel Services Credential (PPSC)

- Successful completion of all of the requirements for the 60 unit Master of Social Work (MSW) degree within the Children, Youth and Families Concentration.
- Completion of SW 665 "School Social Work" as one of the required electives within the 60 unit MSW Program, taken either prior to or concurrently with school social work fieldwork placement
- Successful completion of required School Social Work PPSC seminars covering specialized topics
- Demonstrated knowledge in the following areas of pupil personnel services, as defined in the Commission on Teacher Credentialing Standards: techniques for facilitating individual growth and development to achieve academic success; socio-cultural influences that affect pupils in a school setting; problem prevention and early intervention; consultation services; learning theory and psychological education; coordination and development of services; legal enablements and constraints; referral and utilization of services; human assessment as direct services to pupils; social interventions; consultation coordination and development of services; referral, utilization, involvement and use of community resources; social research and services based on research; code of professional ethics; attendance laws and the rights of minors; and skills using attendance laws and assessment skills
- Successful completion of 600 clock hours of field practice in the second year of field, demonstrating all of the required skills and knowledge areas, in an approved PPSC site, under the supervision of an experienced MSW level practitioner who holds a PPS Credential in school social work. Supervised hours of field practice will include at least 100 hours in each of two settings (elementary, middle and/or high school), offer experience in service delivery with populations representing ethnic diversity, and cover both school social work and child welfare and attendance competencies and standards.
- Completion of required application and forms from California Commission on Teacher Credentialing, including fingerprints, and a Certificate of Clearance
- Completion of required health screenings
- Successful performance on C-BEST Examination
- Certification of program completion and demonstrated competence by the PPSC Program Coordinator in the School of Social Work

Courses (S W)

LOWER DIVISION

220. Introduction to Social Welfare (3)

Prerequisite: GE Foundation requirements.

Offers an understanding of social welfare, and the knowledge, values, and skills essential to social work practice. It examines historical and philosophical perspectives including cultural, economic, political, and social forces.

221. Introduction to Social Welfare Practicum (3)

Prerequisite: Consent of instructor. Corequisite: SW 220.

Lecture classes and visiting and observing approved social service

agencies and allied activities.

Open to social work majors only. Credit/No Credit grading only.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

330. Human Behavior and Social Environment: Birth through Adolescence (3)

Prerequisites: GE Foundation requirements.

Multi-dimensional development from conception through adolescence is explored by examining expectations, resources and barriers presented by mainstream society. Influences of culture, ethnicity, family systems, socioeconomic status, sexism and racism are assessed for their impact on healthy child development.

Letter grade only (A-F).

331. Human Behavior and Social Environment: Young Adulthood through Old Age (3)

Prerequisites: GE Foundation requirements.

Multi-dimensional development in adulthood is explored by examining expectations, resources and barriers presented by mainstream society. Influences of culture, ethnicity, family systems, socioeconomic status, sexism and racism are assessed for their impact on healthy adult development.

Letter grade only (A-F).

340. Generalist Social Work Practice (3)

Prerequisites: SW 220, 221, 330, 350. Corequisite: SW 341.

Social work practice as a helping process with all size systems. Social work knowledge, ethics, values, principles, professional relationships, interviewing and beginning assessment and intervention phases are examined. The activities of the social worker in resolution of psychosocial problems.

Open to social work majors only. Letter grade only (A-F).

341. Social Work Practicum (3)

Corequisite: SW 331, 340, and 351. Supervised practicum in an applied social service agency or allied setting for a minimum of 80 hours (8 hours per week for 10 weeks).

Social work field practice includes interviewing, assessment, and intervention activities.

Credit/No Credit grading only. Open to social work majors only. Not open for credit to students with credit in SW 340A.

350. Social Policy: Law and Court Decisions (3)

Prerequisite: GE Foundation requirements.

Social policy as defined in legislation and judicial decisions affecting the rights of individual families, minorities, and the general welfare.

Letter grade only (A-F).

351. Social Policy: Formulation and Analysis (3)

Prerequisites: GE Foundation requirements.

Policy formulation and analysis related to social welfare institutions and major social welfare policies and programs. Current values and issues in social welfare policy.

Letter grade only (A-F).

406A. Applications of Social Work with Older Adults (3)

Prerequisite: Consent of instructor and upper division standing.

Provides an intergenerational service learning experience.

Students learn about the bio-psycho-social dimensions of the aging process and group work. This knowledge is applied by students when they co-facilitate weekly discussion support groups with older adults in independent living communities.

Letter grade only (A-F).

440. Generalist Social Work Practice with Groups (3)

Prerequisites: SW 331, 340, 341. Corequisite: SW 495A.

Adaptation of generalist frameworks of social work practice to generalist group approaches. Analysis of dynamics, theories, and principles underlying group practice. Programs, practice techniques, and roles involved with groups.

Open to social work majors only. Letter grade only (A-F).

441. Generalist Social Work Practice with Communities and Institutions (3)

Prerequisites: SW 331, 340, 341, 351. Corequisite: S W 495B.

Adaptation of generalist frameworks of social work practice to generalist approaches to community and institutional applications. Analysis of theories and principles underlying community practice. Adaptation of theories and activities to organizational contexts. Techniques and activities applicable to communities and neighborhoods.

Open to social work majors only. Letter grade only (A-F).

442. Generalist Social Work Practice with Individuals and Families (3)

Prerequisites: SW 331, 340, 341. Corequisite: SW 495A.

Adaptation of generalist frameworks of social work practice to generalist practice with individuals and families. Theories, techniques, activities, and role of social workers; differential approaches to study, assessment, intervention, and helping processes.

Open to social work majors only. Letter grade only (A-F).

445. Research Methods in Social Work (3)

Prerequisites: SW 440 and 442 and one course in elementary statistics. Corequisite: SW 441, 465 and 495B.

Introduction to research methods in social work with an emphasis on the evaluation of social work interventions and agency programs.

Open to social work majors only. Letter grade only (A-F).

490. Selected Topics in Social Work (1-4)

Open to social work majors only.

Topics of special interest in social work for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 4 units with different topics. Topics announced in the *Schedule of Classes*.

495A. Field Experience in Social Work (7)

Prerequisites: SW 330, 331, 340, 341, 350, 351. Corequisite: SW 440 and SW 442.

Open to senior social work majors only. First of two semesters with supervised practice in social work agency.

Two hours weekly field seminar on campus and 16 hours in internship. Credit/No Credit grading only.

495B. Field Experience in Social Work (7)

Prerequisites: SW 442 and 495A. Corequisite: Enrollment in two of the following: SW 440, 441, and 465.

Open to senior social work majors only. Second of two semesters with supervised practice in social work agency.

Two hours weekly field seminar on campus and 16 hours in internship. Credit/No Credit grading only.

499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study of special topics under supervision of a faculty member.

Open to social work majors only. Letter grade only (A-F).

GRADUATE LEVEL

500. Foundations for Generalist and Multicultural Social Work Practice (3)

Corequisites: SW 596A.

Provides knowledge and skills for generalist, multicultural practice with all size systems, from ecological perspective. Implementation

of principles, ethics, values, professional relationships, interviewing/communication skills and tasks of the initial, assessment and intervention phases, including examining multicultural differences and expectations.

Letter grade only (A-F).

503A. Human Behavior and Environment in Multicultural Perspectives: Focus on Prenatal through Adolescence (3)

Reviews key theoretical frameworks (including psychodynamic, bio-psycho-social, cognitive, systems, learning and role theories) for their clinical application to assessment, diagnosis and treatment of children and families. Focus is on the impact of poverty and socio-cultural factors in child development.

Letter grade only (A-F).

503B. Human Behavior and Environment in Multicultural Perspectives: Focus on Young Adulthood Through Old Age (3)

Prerequisite: SW 503A.

Reviews key theoretical frameworks (including psychodynamic, bio-psycho-social, cognitive, systems, learning and role theories) for clinical application to assessment, diagnosis and treatment of adults and families. Focus is on the impact of poverty and socio-cultural factors in adult development.

Letter grade only (A-F).

505. Oppressed Groups: Social Policy Analysis (3)

Analyzes the historical, economic and political factors underlying the United States social welfare system. The impact of current policies on oppressed groups will be examined.

Letter grade only (A-F).

560. Direct Intervention with Individuals and Families: Focus on Children, Youth and Families (3)

Prerequisites: SW 500 and 596A. Corequisite: SW 596B.

Focuses on practice related to interpersonal interaction with children, youth, family and adults. Emphasizes implementation of psychosocial study, assessment and intervention from multicultural perspectives. Cognitive-behavioral, family systems, psychosocial and crisis intervention/brief therapy approaches are examined using an ecological framework.

Letter grade only (A-F).

561. Direct Intervention with Individuals and Families: Focus on Older Adults and Families (3)

Prerequisites: SW 500, and 596A. Corequisite: SW 596B.

Examination of varied practice strategies in depth. Behavioral, cognitive, humanistic, psychosocial and psychodynamic models viewed in relation to the ecological systems and multicultural perspectives. Focuses on assessment through termination phases of the helping process.

Letter grade only (A-F).

590. Selected Topics in Social Work (3)

Prerequisite: Consent of instructor.

Letter grade only (A-F). May be repeated to a maximum of 6 units for majors and 9 units for non-majors with different topics. Topics announced in the *Schedule of Classes*.

591. Diagnosis and Treatment in Clinical Practice with Older Adults (3)

Prerequisites: Graduate standing.

Introduces the theory and application of clinical interventions with older adults. Within the eco-systems framework and multicultural perspective, emphasis is placed on understanding late-life problems and mental disorders, on developing skills in assessment and diagnosis, and treatment.

Letter grade only (A-F).

592. Community Projects I (3)

Acquisition and application of macro practice skills to community problems. Includes history and methods, relationship between professional values and ethical dimensions of community practice,

socio-political determinants of community problems, macro practice theory and models. Implications for culturally diverse, impoverished communities.

Letter grade only (A-F).

594A. Research Methods in Social Work I (3)

An introduction to research methods, including conceptualization of research problems, designs, sampling, measurement, and data collection. The emphases are on building skills for conducting multiculturally focused research and evaluating findings critically.

Not open for credit to students with credit in SW 594. Letter grade only (A-F).

594B. Research Methods in Social Work II (3)

Prerequisite: SW 594A.

Continuation of research methods, including qualitative and quantitative data analysis, program evaluation, grant writing, and preparation of reports for dissemination. There are continued emphases on the ability to conduct multiculturally focused research and evaluate findings critically.

Not open for credit to students with credit in SW 550. Letter grade only (A-F).

596A. Field Instruction I (3)

Corequisite: SW 500.

First of two semesters with supervised practice in social work agency. Develops basic skills with individuals, families, groups and communities, emphasizing multi-cultural practice. Two hours weekly field seminar on campus and 16 hours in agency placement.

Credit/No Credit grading only.

596B. Field Instruction II (3)

Prerequisites: SW 500, and 596A. Corequisite: SW 560 or 561.

Second of two semesters with supervised practice in social work agency. Develops basic skills with individuals, families, groups and communities, emphasizing multi-cultural practice. Two hours weekly field seminar on campus and 16 hours internship.

Credit/No Credit grading only.

599. Independent Study (1-3)

Prerequisites: Consent of School and instructor.

Independent study of special topics under supervision of a faculty member.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

642. Mental Health and the Older Adult: A Multi-Cultural Perspective (3)

Focuses on a broad-based selection of demographic, psychological and social issues concerned with the older person and their families. Topics will be described and analyzed from preventive, clinical and cross-cultural perspectives.

Letter grade only (A-F).

643. Social Work Practice within Child Welfare Services (3)

Prerequisite: SW 503A.

Child protective policies and practices, including adoption, family preservation, family foster care, kinship care, group/residential care, independent living, risk assessment. Accomplishments and controversies in service delivery, integrating multi-cultural practice and federally mandated outcomes related to child safety, well-being and permanency.

Letter grade only (A-F).

660. Direct Intervention with Groups: Focus on Children, Youth and Families (3)

Prerequisites: SW 560. Corequisite: SW 680A.

Teaching of advanced specialized skills needed to work with groups, emphasizing work with children, youth, and families. Focuses on clinical work with groups with special emphasis on eco-systems and multi-cultural perspectives.

Letter grade only (A-F).

661. Direct Intervention with Groups: Focus on Older Adults and Families (3)

Prerequisites: SW 561. Corequisite: SW 680A.

Teaching of advanced specialized skills needed to work with groups, emphasizing work with older adults and families. Focuses on clinical work with groups with special emphasis on ecosystems and multi-cultural perspectives.

Letter grade only (A-F).

662. Legal Issues in Social Work Practice (3)

Prerequisite: SW 503A.

Legal aspects concerning children, the family, and aged, abortion and illegitimacy issues, right to treatment, mental health commitment procedures, rights of the elderly, children's rights, marriage, and divorce are covered. Legal research and resources, legal reasoning, and understanding of court systems.

Letter grade only (A-F).

663. Assessment and Treatment of Alcohol and Substance Use Disorders (3)

Prerequisite: SW 503A.

Focus on clinical and policy issues significant for social work practice with individuals, family systems and the community. Content examines alcohol and substance abuse across diverse populations and the lifespan with a focus on multicultural and strengths-based practice.

Letter grade only (A-F).

665. School Social Work (3)

Prerequisite: SW 503A.

Social work practice in school-community-pupil relations. Attention to the school as a social institution. Services in schools as a specialized field of social work practice; models of practice; social work roles; and target groups of children.

Letter grade only (A-F).

670. Social Work Administration (3)

Prerequisites: SW 500, 560 or 561, 596A/B, 660 or 661. Corequisite: SW 680B.

Examines foundation for organizational leadership and problem solving, using theories of organizational behavior and management. Frameworks for governance, planning, monitoring, information management, human resources, fiscal responsibility, quality assurance, and community relations. Integration of multi-cultural and gender issues.

Letter grade only (A-F).

674. Clinical Diagnosis and Therapeutic Communication (3)

Prerequisite: SW 503A.

Reviews the major theoretical approaches to social work treatment to teach specific clinical interventions. Students are trained to skillfully and therapeutically intervene with a variety of diagnostic categories. Outcome research will be reviewed and evaluated.

Letter grade only (A-F).

675. Social Work Practice with Death, Dying and Loss (3)

Prerequisite: SW 503A.

Provides an overview of psychological, cultural and professional perspectives related to death and bereavement across the life span. Emotional impact of loss and coping strategies used to promote healing are explored.

Letter grade only (A-F).

677. Social Work Practice in Mental Health (3)

Prerequisite: SW 503A.

Focuses on social, economic and cultural factors as they affect social work practice in the mental health field including the Recovery Paradigm/consumer-focused services in accordance with the California Mental Health Services Act (MHSA).

Letter grade only (A-F).

678. Play Therapy with Children, Adolescents and Their Families (3)

Prerequisites: SW 500 and 503A.

Explores the use of play therapy as a social work practice intervention. Focuses on the modality of play therapy as a means of helping children, adolescents, and their families who are experiencing a variety of psychosocial dilemmas.

Letter grade only (A-F).

680A. Field Instruction III (3)

Prerequisites: SW 500, 560 or 561, 596A/B. Corequisite: SW 660 or 661.

First of two semesters with supervised practice in social work agency. Focus on advanced direct practice skills and administrative program development with emphasis on multi-cultural practice.

Two hours bi-weekly in field seminar and 16 hours in agency placement. Credit/No Credit grading only.

680B. Field Instruction IV (3)

Prerequisites: SW 500, 560 or 561, 596A/B, 680A, 660 or 661. Corequisite: SW 670.

Second of two semesters with supervised practice in social work agency. Focus on advanced direct practice skills and administrative program development emphasizing multi-cultural practice. Two hours bi-weekly field seminar and 16 hours agency. Preparation for entering professional employment.

Credit/No Credit grading only.

681. Advanced Policy Seminar: Children, Youth and Families (3)

Prerequisite: SW 505.

Designed to provide students with an advanced understanding of key issues, concepts, and skills associated with policy analysis, the development of policy alternatives, and political action on behalf of families and children in contemporary American society.

Letter grade only (A-F).

682. Advanced Policy Seminar: Older Adults and Families (3)

Prerequisite: SW 505.

Provides students with an advanced understanding of key issues, concepts, and skills associated with policy analysis, the development of policy alternatives, and political action on behalf of older adults and their families in contemporary American society.

Letter grade only (A-F).

683. Brief Treatment (3)

Prerequisite: SW 503A.

Covers the methodologies used in brief and/or time limited psychotherapy. Reviews the major forms of time-limited clinical treatment. Reviews the ethnic, gender and other-sensitivity issues related to the use of brief treatment and the empirical research on this treatment approach.

Letter grade only (A-F).

690. Selected Topics in Graduate Social Work (3)

Prerequisites: Consent of school.

Topics of special interest in social work selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

691. Non-Violent Conflict Resolution (3)

Prerequisite: SW 503A.

Designed to help the social work student examine conflict and violence, their own and others' responses to conflict situations on the intrapersonal, interpersonal and community levels, and to learn to deal with conflict in a productive, non-violent manner.

Letter grade only (A-F).

692. Spirituality in Social Work Practice (3)

Prerequisite: SW 503A.

Examines issues pertaining to spiritually sensitive social work practice. The rich and diverse forms of spiritual expressions and religious and philosophical ideologies that may be espoused by clients are explored.

Letter grade only (A-F).

693. Community Projects II (3)

Prerequisite: SW 592.

Integrates knowledge of cross-cultural practice, human behavior and research in identifying solutions to social problems. Builds on analysis from Community Projects I. Utilizing planning, program development and program implementation skills/techniques, students develop, implement and evaluate impact of a specific intervention.

Letter grade only (A-F).

698A. Thesis or Project I (3)

Prerequisites: SW 594A, 594B. Completion of 30 MSW units with a minimum cumulative GPA of 3.0, and advancement to candidacy.

Under the direction of the Thesis/Project Adviser, the student completes a thesis/project proposal, instruments and IRB protocol (if applicable), and drafts literature review.

Letter grade only (A-F).

699A. Thesis or Project II (3)

Prerequisite: SW 698A.

Finalization of literature review and completion of remaining chapters (typically, introduction, methodology, results, discussion and implications) of thesis/project.

Letter grade only (A-F).

SOCIOLOGY

College of Liberal Arts

Department Co-Chairs: Carole Campbell, Norma S. Chinchilla

Department Office: Psychology Building, Room 145

Telephone: (562) 985-4602

Faculty: Jake Alimahomed-Wilson, Nielan Barnes, Carole Campbell, Norma Stoltz Chinchilla, Jeffrey Davis, Shelley T. Eriksen, Gail C. Farmer, J. William Gibson, Gary Hytrek, Nancy Martin, Elizabeth McEneaney, Leakhena Nou, Oliver Wang, Juniper Wiley, Kerry Woodward, Kristine M. Zentgraf

Administrative Support Coordinators

Lily Monji, Jacqueline Southern

Students desiring information should contact the department office for referral to the faculty advisor:

Undergraduate Advisors: Oliver Wang, Kristine M. Zentgraf

Career Possibilities

Sociologist • Social Worker • Health Care Administrator • Community Organizer • School Counselor • Urban Planner • Personnel Manager • Statistician • Public Health Worker • College Student Service Worker • Lawyer • Lobbyist • City Planning Aide • Adoption Counselor • Market Researcher • Employment Interviewer • Management Trainee (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

Sociology courses are suitable for fulfilling general education or elective requirements for students of other majors.

Undergraduate Programs

Bachelor of Arts in Sociology (120 units)

Requirements

Lower Division (12 units):

Take all of the following courses:

SOC 100 Principles of Sociology (3)

Prerequisite/Corequisite: A GE Foundation course.

SOC 142 Social Trends and Problems (3)

Prerequisite/Corequisite: ENGL 100 or PSY 130 or equivalent.

SOC 250 Elementary Statistics (4)

Prerequisite: Knowledge of mathematical procedures usually covered in elementary high school algebra as demonstrated on a screening examination.

SOC 260 Introduction to Data Analysis (3)

Prerequisite: None

Recommended elective: ANTH 120

Upper Division (minimum 31 units):

Core (16 units)

Take all of the following courses:

SOC 355 Quantitative Methods of Social Research (4)

Prerequisites: SOC 100, 250, 260 and one upper division course in sociology.

SOC 356 Classical Sociological Theory (3)

Prerequisite: SOC 100.

SOC 357 Modern Sociological Theory (3)

Prerequisites: SOC 100, 356 and one other upper division course in sociology. Recommended: courses in the philosophy of science and research methods.

Take one of the following courses:

SOC 420, 427

Take one of the following courses:

SOC 335I, 354

Take nine units in one concentration

Take six units of electives from other upper-division courses in sociology.

Total credit for courses numbered 490 through 499 may not exceed twelve units. Completion of at least 51 semester units of college work is required before students will be accepted into upper division courses.

Department Recommendation: Lower division courses should be completed before upper division courses. Taking the courses in sequential order will allow students to gain maximum benefit from the curriculum. Experience has shown that students who take courses out of sequence do not perform as well academically: SOC 250 and 260 should be taken before SOC 355; SOC 356 should be taken before SOC 357.

Concentrations

Deviance and Social Control

SOC 342I, 345, 354*, 423, 440, 463, 495

Interaction and Group Relations

SOC 320, 325 (or WGSS 325), 335I*, 340 (or CHLS 350), 341 (or CHLS 352), 345, 346, 354*, 423, 426, 447, 464, 492, 495; WGSS 401I

Medical Sociology

SOC 350, 354*, 423, 462, 463, 464, 466, 493, 495; H SC 400

Research

Concentration is currently not available.

Social Change and Global Issues

SOC 346, 350, 354*, 358I, 410I, 420*, 427*, 430, 449, 494, 495; ANTH 307I; I/ST 317I or 318I; WGSS 401I

*If not taken as one of the core courses

Honors in Sociology

Students may be admitted to Sociology Honors program (an option of the University Honors Program) when they have:

1. A minimum of three semesters remaining before graduation;
2. A minimum cumulative GPA of 3.2 overall and a minimum GPA of 3.5 in Sociology courses;
3. Completed the lower division courses required for the major (SOC 100, 142, 250, 260) or have junior standing and a minimum of four sociology courses;
4. Submitted an application with one letter of recommendation from a faculty member.

To graduate with Honors in Sociology a student must:

1. Complete all regular requirements for the major in Sociology;

2. Complete 3 units of an Honors Selected Topics (SOC 487H or equivalent approved by the department honors advisor) and 6 units related to the Honors Thesis (SOC 488H and 489H or equivalent 6 units accepted by the department honors advisor). These required 9 units may be in addition to general requirements for the major in sociology or may be counted as part of the concentration or elective units required for the regular Sociology BA degree. SOC 488H and 489H are equivalent to UHP 496 and 498;
3. Do one of the following: Present own original research paper for a student research competition, present such a paper at a professional meeting, or write a research paper that the department honors advisor agrees is of professional quality;
4. Serve as a Student Teaching Fellow (peer facilitator) for at least one undergraduate sociology course OR serve as a research intern under faculty supervision.
Students are strongly encouraged to:
 1. Join Alpha Kappa Delta, the International Sociology Honor Society;
 2. Engage in service to the department or the discipline of sociology.

Minor in Sociology

A minimum of 24 units which must include:

Lower Division:

Take both of the following courses

SOC 100 Principles of Sociology (3)
Prerequisite/Corequisite: A GE Foundation course.

SOC 142 Social Trends and Problems (3)
Prerequisite/Corequisite: ENGL 100 or PSY 130 or equivalent.

Upper Division:

Take the following:

SOC 335I Social Psychology (3)
Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Take a minimum of 15 units selected from other upper division courses in sociology. Total credit for courses numbered 490 through 499 may not exceed 6 units.

Graduate Program

Master of Arts in Applied Sociology

This program's curriculum is designed to provide students with a strong theoretical and methodological foundation with specialization in one of the two thematic concentrations: Sociology of Health and Medicine; or Community Development and Social Change. Fieldwork placements provide direct and practical experience with local public and private agencies addressing community health and social justice issues.

The graduate coordinator serves as the general advisor for all entering graduate students. Upon admission, students will be assigned to a faculty member for advising and mentoring. Students can elect to keep this faculty member or, in consultation with the graduate coordinator, choose another faculty advisor. The faculty advisor is responsible for assisting students in writing a Plan of Study, which

outlines how individual students will fulfill the requirements of the program. Faculty advisors will also assist the student in selecting her/his thesis committee (two additional faculty members). Graduate thesis committees must be formed after completing a minimum of 12 units and before a maximum of 21 units.

Students may view the general requirements of the University, the specific requirements of the department and information about the steps leading to the master's degree in sociology in this catalog.

Admission Procedures

Consideration for admission requires submission of a program application and university application. Submit all program application materials to the Department of Sociology in one complete package.

Prerequisites

1. A Bachelor's degree with a major in Sociology, or related degree, and have earned a 3.0 GPA.
2. Completion of a minimum of one upper-division sociological theory course (equivalent to SOC 356 or SOC 357) and a research methods course (equivalent to SOC 355).
3. Students whose undergraduate work is deficient in sociology will be required to complete appropriate pre-requisite courses. Course deficiencies will be determined by the Department's Graduate Committee after taking into account each student's background and goals. Prerequisite courses will not count toward credit in the M.A.
4. Official scores from the Graduate Record Examination.
5. Official transcripts.
6. Three letters of recommendation, including at least two from individuals well acquainted with the applicant's academic ability.
7. A 3-4 page personal statement describing the student's qualifications and reasons for wanting to pursue an Applied Sociology M.A. at CSULB.
8. Experience in community organizations is helpful, but not required.

Program Requirements

All students must complete a minimum of thirty (30) units of upper division and graduate level courses, of which twenty-four (24) must be at the 500/600 graduate level. A student's program is outlined in the Plan of Study that must be developed in consultation with a sociology faculty advisor within the first 12 units at CSULB.

Requirements

1. Core Courses

Take the following courses:

SOC 656 Seminar in Sociological Theory (3)

SOC 670 Sociological Practice (3)

SOC 696 Methods in Applied Social Research (3)

2. Concentration Area Courses (3 courses, 9 units) in one concentration area:

Sociology of Health and Medicine:

Applicable courses include SOC 562; HCA 502; HSC 500, 503, 528, and 625.

Community Development and Social Change:

Applicable courses include SOC 536, 540; PPA 525, 610, 660 and 670.

3. Applied Skill Cluster (2 courses, 6 units): Applicable courses include ANTH 560, HSC 500, HSC 503, PPA 670.
4. Internship (one course, 3 units): SOC 695.
5. Capstone Course (1 course, 3 units): SOC 698.

Advancement to Candidacy

1. Students must satisfy the general requirements of the University for advancement to candidacy;
2. In order to be recommended for advancement to candidacy, students must obtain the written approval of their master's degree program course work by their committee chair and graduate advisor;
3. Students must file a written statement in the department approved by the Faculty Advisor, indicating how the student plans to complete all remaining requirements for the degree. The statement will include the members of the thesis committee, and the date for completing the thesis or for taking the comprehensive examination.

Capstone Experience

All graduate students must complete one of the following options:

- A. Comprehensive Examination in the areas of theory, applied research methods, and substantive issues in their concentration;
- B. Thesis.

Students following the comprehensive examination option will earn 3 units of credit in SOC 697 and those writing a thesis will be granted 3 units of credit in SOC 698.

Courses (SOC)

LOWER DIVISION

100. Principles of Sociology (3)

Prerequisite/Corequisite: A GE Foundation course.

Introduction to the sociological perspective as a tool for understanding society and culture, including the inter-personal, inter-group and global dimensions of social life.

142. Social Trends and Problems (3)

Prerequisite/Corequisite: ENGL 100 or PSY 130 or equivalent.

General introduction to the study of social trends and problems in American institutions including social inequality crime, health and illness, education, media, environment and war and terrorism. Emphasis is on social problems as products of the socio-historical and global context.

Open to non-majors for General Education credit in Category D.2.B.

161. Introduction to Latin American Studies (3)

Prerequisite/Corequisite: ENGL 100.

An interdisciplinary overview of history, society, and culture in Latin America – Mexico, Central American, the Caribbean, and South America. Examines the political, economic, social, and cultural conditions for conflict, change, and continuity over the last five hundred years.

Letter grade only (A-F). Same course as HIST 161 and LAS 161. Not open for credit to students with credit in HIST 161 and LAS 161.

250. Elementary Statistics (4)

Prerequisite: Knowledge of mathematical procedures usually covered in elementary high school algebra as demonstrated on a screening examination.

Introduction to descriptive and inferential statistics and applications in social and behavioral science research, performance of statistical

exercises by interactive computer. Emphasis upon knowledge of which statistical tests to use and how to interpret results.

Letter grade only (A-F). (Discussion 3 hr., Lab 2 hrs.) Not open for credit to students with credit in HDEV 250, C/LA 250, ANTH 202, MATH 108, 180 or PSY 110, 210.

260. Introduction to Data Analysis (3)

Use of computers and statistical programs to analyze data, prepare research documents, and explore Internet resources. Topics include principles of scientific research, data coding, entry, and editing. Prior course work in statistics or demonstrated knowledge of statistical procedures necessary.

Letter grade only (A-F).

UPPER DIVISION

317I. Problems in International Social Conflict (3)

Prerequisites: GE Foundation, one Explorations course, and upper division standing.

Interdisciplinary analysis of social conflict in the world. Topics may include ethnocentrism; nationalism; globalization; trade; aid; economic development; poverty; inequality; the environment; war; ideological, ethnic, gender, and religious conflict; democratization; social movements; new forms of civil society and social solidarity.

Letter grade only (A-F). Same course as I/ST 317I. Not open for credit to students with credit in I/ST 317I.

318I. Cases in International Social Conflict (3)

Prerequisites: GE Foundation, one Explorations course, and upper division standing.

Interdisciplinary analysis of social conflict in the world. Case studies will focus on globalization; technology; economic development; trade and aid; population growth; immigration; ideological, religious, ethnic and gender conflicts; war and civil unrest; human rights; democratization; global citizenship; environmental sustainability.

Letter grade only (A-F). Same course as I/ST 318I. Not open for credit to students with credit in I/ST 318I.

320. The Family (3)

Prerequisite: SOC 100 or consent of instructor.

Sociological study of the social forces that shape the family in various cultures. Key theories and research methods used by sociologists to study family dynamics and change will be reviewed.

325. Sociology of Women (3)

A sociological analysis of the social, political and economic status of women. Examines the history of women's roles and status; gender conflicts and social movements; and societal attitudes towards women in society.

Same course as WGSS 325. Not open for credit to students with credit in WGSS 325 or W/ST 325.

335I. Social Psychology (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines the origins and development of the self through the socialization process. Emphasis is on the social influence of small groups (family, peers, reference groups and subcultures) and societal organization and institutions on identity, role behavior and attitudes.

Not available to students with credit in PSY 351.

340. The Latino Population in the United States (3)

Prerequisite: GE Foundation requirements.

Survey of the comparative historical, transnational, cultural and socio-economic experience (including class, gender, immigration and settlement patterns) of the various Latino sub-groups in the United States.

Letter grade only (A-F). Same course as CHLS 350. Not open for credit to students with credit in CHLS 350.

341. Central American and Caribbean Peoples in California (3)

Survey of the socioeconomic conditions and cultural life of the Central American and Spanish-speaking Caribbean communities in California, such as Salvadoran, Guatemalan, Puerto Rican, and Cuban communities. Similarities and differences with the Mexican-American community will be examined.

Same course as CHLS 352. Not open for credit to students with credit in CHLS 352.

342I. Criminology (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Study of crime from a sociological perspective and the emerging interdisciplinary approaches to crime. Topics include definitions and measurement of crime, types of crime and crime statistics, and social policy issues involving the criminal justice system and crime prevention.

Not open for credit to students with credit in SOC 4411.

345. Juvenile Delinquency (3)

Study of juvenile delinquency from a sociological perspective. Topics include a historical examination of delinquency, major theories of delinquency, the social context of delinquency, the societal reaction, social policies involving the juvenile justice system and youth related social problems.

346. Race, Gender and Class (3)

Prerequisite: GE Foundation requirements.

Sociological examination of race/ethnicity, gender and class in the U.S. Examines the affect of ideology, social interactions and social institutions on the creation and maintenance of racial, gender and class inequality.

350. International Population Problems (3)

Prerequisite: GE Foundation requirements.

Overview of the basic demographic variables (fertility, mortality and migration) and methods (vital statistics and census) to the study of international population problems. Examines the historical and current trends and problems in world population composition, growth and movement.

354. Qualitative Methods of Social Research (4)

Prerequisites: SOC 100, 250, and one upper division course in sociology.

Review and critique of principles and essential features of classical and contemporary qualitative studies. Topics include research design, modes of participant observation, sampling and interview techniques, analysis and interpretation of data. Field assignments and individual research projects are required.

(Lecture 3 hours, laboratory 2 hours.)

355. Quantitative Methods of Social Research (4)

Prerequisites: SOC 100, 250, 260 and one upper division course in sociology.

Review of social research methods with emphasis on research design, including operationalization, measurement, scaling, reliability, validity and sampling; techniques of data collection and analysis. Individual student research projects are required.

(Lecture 3 hours, laboratory 2 hours) Letter grade only (A-F).

356. Classical Sociological Theory (3)

Prerequisite: SOC 100.

Social thought and historical forces leading to the emergence of sociology and an exploration of classical theories into the 1930s including such thinkers as Marx, Durkheim, Weber, Mead and Merton.

357. Modern Sociological Theory (3)

Prerequisites: SOC 100, 356 and one other upper division course in sociology. Recommended: courses in the philosophy of science and research methods.

Critical review of sociological thought from the 1930's to present. Major schools such as functionalism, interactionism, conflict, exchange, and system theory will be covered in depth and considered in relation to the nature of theory construction.

Not open for credit to students with credit in SOC 456. Letter grade only (A-F).

358I. The Sociology of Migration and Immigration (3)

Prerequisites: GE Foundation requirements and upper-division standing.

Focuses on historical and contemporary immigration to the United States. Examines causes and consequences of immigration; forces and events that propel migrants to move; patterns of economic adaptation and political incorporation; role of social institutions in immigrant adaptation, and the process by which immigrants become ethnics.

Letter grade only (A-F).

375. Art and Social Action: A Global Perspective (3)

Prerequisite: Upper division standing.

Examines the interconnections among global processes and global social problems from the perspectives of art and sociology. Analyzes historical, geographical, class and status components of these problems, and the role of art to promote social change.

Same course as ART 375. Not open for credit to students with credit in ART 375.

410I. Environmental Sociology (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper-division standing.

Studies society's relationships with nature, including both cultural and structural dimensions. Integrates anthropological studies of pre-modern societies, together with cultural geography's emphasis on the meanings of place and environmental studies' contributions.

Letter grade only (A-F).

420. Social Stratification (3)

Prerequisite: SOC 100.

Examines sociological approaches and theories of stratification and inequality. Emphasis on how social class affects opportunity structures, income, social mobility and life chances. Analyzes causes and consequences of economic, political and social inequality.

423. Child Abuse and Prevention (3)

Examines child abuse as a social problem; its history and causal factors, including social processes and changing family patterns. Emphasis on social interventions and policy implications, including role of concerned citizens and child advocates.

Not open for credit to students with credit in SW 423.

426 Sociology of Sexualities (3)

Analyzes social context of human sexuality, including effects of socialization, social class and racial, ethnic and gender identities on sexual identities, attitudes and behaviors. Explores the impact of public institutional arrangements such as capitalism and globalization on individual sexualities.

427. Social Order and Social Change (3)

Prerequisite: SOC 100 and upper division standing.

Sociological analysis of social order and change from a historical and contemporary perspective. Emphasizes interactions between social movements, politics, economics and culture in explaining differential patterns of change.

430. Sociology of Globalization (3)

Prerequisites: SOC 100 and upper division standing.

Sociological examination of globalization. Themes include emergence of global order, ideology and power; democracy; capital and labor mobility; technology; environment; inequality; culture; reactions to globalization.

Course may include a service learning component. Letter grade only (A-F).

436. Racism, Power, and Inequality (3)

Prerequisites: SOC 100 or SOC 142 or consent of instructor

Examines the origins, character, maintenance, and consequences of race, racism, power, and inequality in the United States. It also analyzes the tensions and conflicts behind the social, political, cultural, and institutional manifestations of racial oppression and white privilege.

Letter grade only (A-F).

440. Sociology of Deviance (3)

Prerequisite: SOC 100.

Study of deviance from sociological perspective. Focuses on role of social institutions that define, shape and maintain definitions and perceptions of deviance. Topics include theories of deviance, including micro-level processes that shape behaviors and attitudes.

(Lecture 3 hours.)

447. Sociology of Popular Culture (3)

Prerequisite: SOC 100 or consent of instructor

Applies sociological theories to the study of popular culture. Examines cultural forms of mass-mediated entertainment and self-expression and applies critical and analytical tools to understand complexity and influence of popular culture within American social life, community and identity.

Letter grade only (A-F).

449. Political Sociology (3)

Prerequisite: GE Foundation requirements.

Contributions of sociology to the study of political institutions and political relations, including analysis of political aspects of social systems, social context of action, social basis of power, citizenship rights, and effects of globalization on political processes.

Letter grade only (A-F).

462. Medical Sociology (3)

Prerequisite: GE Foundation requirements.

Epidemiological and sociological approaches to health and illness; patterns of physical and mental disease; patient and physician perspectives; causes of stress and coping; health care delivery and utilization; interaction of physician, nurse, therapist, health administrator, social worker, patient, and family.

463. Mental Illness and Society (3)

Prerequisite: SOC 100.

Epidemiological and sociological approaches to mental health and illness; prevalence and incidence of mental disorders; effects of family history, work experience and life-change events; social and legal status of the mental patient; governmental and organizational role in mental illness.

464. Aging and Society (3)

Prerequisites: SOC 100 or 142.

Examines the impact of the aging population upon society and the effects of the socially defined experience of aging upon the individual. Analysis of the relationship between age and such variables as gender, race/ethnicity, class, marital and health status.

466. AIDS and Society (3)

Prerequisites: GE Foundation requirements. Recommended: BIOL 100 or 200 or MICR 101 or MICR 300I.

Examines behavioral aspects and societal impact of the AIDS epidemic. Covers structural barriers such as poverty, sexism, and racism in HIV/AIDS prevention and treatment. Examines sexual identities, gender, race, culture and class. Emphasizes gender roles and gender power relations.

Letter grade only (A-F).

475. Religion and Social Change (3)

Prerequisites: SOC 100 or consent of instructor.

Advanced course in sociology explores the role of religion in large scale societal change, as well as social change within institutions of religion. Topics include the role of religion in social activism using

conceptual frameworks from the sociology of religion and social movements.

Lecture/Discussion. Letter grade only (A-F).

487H. Selected Topics - Honors (3)

Prerequisite: SOC 356 and admission to Sociology Honors Program or consent of the instructor.

Contemporary sociological topic, chosen by instructor. Covers topic's emergence, growth, relevant studies, debates, conclusions, and remaining questions. Students investigate one idea using recognized sociological research methods, and present research projects to each other for feedback and critique.

Letter grade only (A-F). May be repeated to a maximum of 12 units, with different topics in different semesters. Topics announced in the *Schedule of Classes*.

488H. Honors Research Seminar (3)

Prerequisites: SOC 355 and admission to the Sociology Honors Program or consent of instructor.

Foundational research processes for Honors Thesis. Includes literature review, hypothesis formulation and/or guiding ideas, and data collection. Group discussion of readings in social science research strategies, writing techniques, ethics, publication and related issues

Letter grade only (A-F).

489H. Honors Thesis (3)

Prerequisites: SOC 356, 488H and admission to the Sociology Honors Program or consent of instructor.

Continuation of independent student research project begun in SOC 488H, Honors Research. Students meet periodically with their thesis advisor and with other honors students to discuss their work and will present their completed research in a public forum.

Letter grade only (A-F).

490. Selected Topics in Sociology (1-3)

Topics of special interest in sociology selected for intensive study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

492. Selected Topics in Interaction and Group Relations (3)

Topics of special interest in Interaction and Group Relations selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Discussion)

493. Selected Topics in Medical Sociology (3)

Topics of special interest in Medical Sociology selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Discussion)

494. Selected Topics in Social Change and Global Issues (3)

Topics of special interest in Social Change and Global Issues selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. (Discussion)

495. Internship (1-4)

Prerequisites: SOC 100, 142, 335I, junior or senior standing, consent of instructor.

Supervised field experience in public and private agencies allowing students to relate sociological principles to community situations. Designed to provide career-related work experience in both research and applied fields. 1-4 units depending on field assignment and time required.

May be repeated to a maximum of 6 units. (6-10 hours per week field experience.)

496. Field Practicum (1-3)

Prerequisites: SOC 495.

Continuation of SOC 495. Permits students who continue working at a community agency to conduct special projects for that agency. Includes class meetings to discuss student projects, papers and evaluation activities for the agency. 1-3 units depending on field assignment.

May be repeated to a maximum of 4 units.

497. Peer Facilitation in Sociology (3)

Prerequisites: A grade of at least a "B" earned in at least one upper division course related to the peer facilitation activity and consent of instructor.

Conducting optional discussion sections, assisting an instructor in class exercises, projects or small group discussions, or tutoring individual students. Peer facilitation activities will be guided by meetings with the supervising faculty member and supplemented by reading and writing assignments.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

499./599. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study of special topics under faculty supervision.

May be repeated to a maximum of 4 units. In exceptional cases, may be repeated to a maximum of 6 units with consent of department.

GRADUATE LEVEL**536. Sociology of Race, Racism, and Racial Relations (3)**

Prerequisite: SOC 656 and 696 or consent of instructor

Applies sociological theories and principles to study race, ethnicity, inequality and racial/ethnic relations in the United States.

Letter grade only (A-F).

540. Urban Sociology (3)

Prerequisites: SOC 356, 357 or consent of instructor

Examines processes involved in shaping urban policies in large metropolitan areas. Identifies key urban problems of our day, dominant political alliances that run most cities, and means by which residents, community-based organizations, and unions can influence in policy making process.

Letter grade only (A-F).

560. Poverty and Public Policy (3)

Prerequisite: Graduate standing or consent of instructor

Examines poverty in the United States and the role of social policies in creating, perpetuating, and ameliorating it. Provides an historical, theoretical, and comparative background, yet focuses on contemporary policies and issues within the United States.

Letter grade only (A-F).

561. Applied Topics in Medical Sociology: Community, Culture and Health (3)

Prerequisites: SOC 462, SOC 562, or consent of instructor

Examines how economic and socio-political forces shape community health outcomes, policies and programs. Surveys a range of theoretical and methodological frameworks used in community-based health research. Applies knowledge by collecting, analyzing and reporting data on a community health topic.

Letter grade only (A-F).

562. Global Health (3)

Prerequisites: SOC 462 or equivalent or consent of instructor

Examines cultural and social causes of illness and access to and practice of healthcare. Major themes include stress and coping, social epidemiology, political and cultural considerations affecting illness, sociological perspectives on the life course, and activism for improved community health.

Letter grade only (A-F).

599./499. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent study under supervision of a faculty member.

May be repeated to a maximum of 4 units. In exceptional cases, to a maximum of 6 units with department consent. Undergraduates completing over 3 units of SOC 499 may not enroll. Letter grade only (A-F).

656. Seminar in Sociological Theory (3)

Prerequisites: SOC 356, 357 or equivalent or consent of instructor

Focuses on major issues, problems, positions and theorists defining and organizing sociological theory historically and today. Designed to encourage theoretical application, emphasizing current and relevance and applicability of sociological theory.

Letter grade only (A-F).

670. Sociological Practice (3)

Prerequisites: SOC 656 and SOC 696, or their equivalents or consent of instructor

Introduction to theoretical, thematic, and practical components of sustainable community development. Topics include definitions of community, strategies of empowerment, challenges to community-based research, working in the community, and values and ethics in community-based advocacy research.

690 Supervised Teaching Apprenticeship (3)

Prerequisites: Graduate standing, appointment as a teaching assistant, SOC 656, 670, 696 or their equivalents, or consent of instructor.

Seminar for teaching assistants designed to deal with problems and techniques of teaching sociology courses, pedagogical strategies, literature on teaching, course objectives, alternative teaching techniques, preparation of course syllabus, lectures, discussions, exams.

695 Internship (3)

Prerequisites: Graduate standing, SOC 656, 670, 696, or consent of instructor.

Supervised field experience in public and private agencies providing experiential learning.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters.

696. Methods in Applied Social Research (3)

Prerequisites: SOC 250, 260, and 355 or their equivalents or consent of instructor

Addresses theory and practice of applied social research, exploring quantitative and qualitative research methods. Major themes include research design, data collection, data analysis, interpretation and presentation of results.

Letter grade only (A-F).

697. Directed Research (1-3)

Prerequisite: Graduate Division Status and instructor consent.

Advanced research in applied sociology supervised on an individual basis.

Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

698. Thesis (3)

Prerequisites: Graduate standing and consent of instructor.

Planning, preparation, and completion of thesis for the master's degree.

Credit/No Credit grading only. May be repeated to a maximum of 6 units in different semesters.

SPANISH

College of Liberal Arts

Department of Romance, German, Russian Languages and Literaturesvvvv

Department Chair: Lisa Vollendorf

Co-Program Directors: Bonnie Gasior, Claire E. Martin

RGRLL Language Coordinator: Markus Muller

Single Subject Coordinator for L.O.T.E.: Jean-Jacques Jura

Department Office: Academic Services, Room 309

Telephone: (562) 985-4318

Faculty: Maria Carreira, Alicia del Campo, Bonnie Gasior, Claire E. Martin, Leslie Nord, Rita Palacios, Alexander Rainof, Lisa Vollendorf

Administrative Support Coordinator: Cerise Dragicevich

Students desiring information should contact the department office for referral to one of the faculty advisors: Credential Advisor, Graduate Advisor, Undergraduate Advisor.

Career Possibilities

Customs Inspector • Immigration Officer • Importer/Exporter • Foreign Service Officer • International Marketing Representative • Travel Guide • Social Worker • Linguist • Foreign Correspondent • Community Organization Worker • Lawyer • Librarian • International Student Advisor • Educator • Peace Corps Worker • Interpreter • Translator • CIA/FBI Agent (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Spanish Program offers courses in language, linguistics, literature, culture and translation leading to the following degrees and certificates: Bachelor of Arts and Master of Arts degrees in Spanish, Single Subject Teaching Credential in Spanish, Concentration in Spanish for the Bachelor of Arts in Liberal Studies, minor in Spanish, and the Bilingual Concentration for B.A. in Liberal Studies.

Undergraduate Programs

Bachelor of Arts in Spanish (120 units)

Prerequisites

One year of intermediate Spanish at the university level, or equivalent. Students who have completed sufficient high school Spanish or equivalent may take upper-division courses as soon as proficiency requirements have been met. Heritage speakers of Spanish who have never formally studied the language are recommended to take SPAN 250 (6-unit GE course).

Requirements

Take all of the following:

SPAN 300 Advanced Grammar and Composition (6)

Prerequisites: AP exam with a score of 4 or 5 or SPAN 201B or 201C or equivalent for non-native speakers. SPAN 250 or equivalent for heritage speakers.

SPAN 310 Introduction to Literary Analysis (3)

Prerequisite: SPAN 300.

SPAN 330 Literary Masterpieces: Spain (3)

Prerequisites: SPAN 310 or consent of Spanish Program Director; GE Foundation requirements.

SPAN 341 Literary Masterpieces: Spanish America (3)

Prerequisites: SPAN 310 or consent of Spanish Program Director.

SPAN 423 Introduction to Spanish Linguistics (3)

Prerequisite: SPAN 300 or consent of instructor.

Take one of the following: SPAN 430, 445

Take 18 upper-division selected from the following:

SPAN 314, 322, 335A, 335B, 350, 351, 400, 420, 426, 427, 428, 429, 430, 438, 439, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 455, 460, 461, 462, 463, 464, 465, 466, 467, 490, 491, 492, 493, 494, 499; RGR 346I, 400I, 424, 425, 450I, 470.

Take two years of a second foreign language at the college level.

Single Subject Teaching Credential in Spanish

Completion of the Spanish major meets the subject matter competence requirement for the Single Subject Teaching Credential in Spanish. Prospective students should consult the undergraduate Spanish Advisor and the Languages Other Than English (LOTE) Credential Program Advisor early to plan their program.

In addition to meeting the subject matter competence requirement for the teaching credential, prospective teachers of Spanish are also required to complete 45 units of professional preparation in the Single Subject Credential Program, including student teaching. Students may begin the professional preparation courses as early as the junior year. With careful planning, it is possible to complete all of the credential program courses, except for student teaching, as an undergraduate. Courses may also be completed as a post-baccalaureate student. Refer to the Single Subject Teacher Education section of this catalog or the website (www.ced.csulb.edu/single-subject) for a description of professional preparation requirements, courses, and application procedures.

Requirements

The same as for B.A. in Spanish.

Minor in Spanish

Requirements

A minimum of 18 units in Spanish, at least 15 of which must be upper division and must include:

SPAN 300 Advanced Grammar and Composition (6).

Students must file a Declaration of Minor and receive counseling from the undergraduate advisors. The minor in Spanish is available to any non-Spanish major.

N.B.: No course used to satisfy any requirement for the Minor in Spanish may be taken on a Credit/No Credit basis.

Graduate Programs

Master of Arts in Spanish

Prerequisites

1. A Bachelor of Arts degree in Spanish with minimum "B" (3.0) GPA overall; or
2. A Bachelor's degree with a minimum of 18 upper division units in Spanish equivalent to the Basic Core of the B.A. in Spanish at this University. Minimum "B" (3.0) GPA overall. Deficiencies will be determined by the Master's Degree Committee after consultation with the student and study of transcript records.

Advancement to Candidacy

1. Approval of a graduate program by the graduate advisor, the department chair, and the college associate dean of graduate studies.
2. Requirements: All deficiencies have been removed; the student has fulfilled the Graduation Writing Assessment Requirement (GWAR); the student has maintained at least a "B" (3.0) GPA in all work in Spanish.
3. The candidate may file for advancement to Candidacy after filing an individualized Course Planner, completing prerequisites, and completing at least 6 units (preferably no more than nine units) on the M.A. program. The candidate must file not later than one semester or summer session prior to completion of course requirements.

Requirements

1. Completion of a minimum of 30 units in SPAN in the 500 and 600 series distributed as follows: SPAN 650 Research Methods and Critical Theory (3) (required) + 2 courses in Linguistics + 2 courses in Latin American Literature/Culture + 2 courses in Peninsular Literature/Culture + 3 electives.
2. Two years of one of the following languages: Italian, Portuguese, French, or German, or pass an examination at intermediate level in one of those languages. Major or minor in a second foreign language may be used to fulfill this requirement, upon approval by the graduate advisor.
3. Maintain a GPA of at least "B" (3.0) in Spanish exclusive of courses taken in other programs.
4. Pass comprehensive examinations based on Graduate Reading List after course work completed.
5. Maximum of six units of transfer graduate credit are allowed, subject to approval by the graduate advisor.

Single Subject Teaching Credential in Spanish

For information, refer to the undergraduate section in this department.

Spanish Courses (SPAN)

LOWER DIVISION

100. Fundamentals of Spanish (6)

Prerequisite/Corequisite: Any Foundation course.

Two semesters of fundamental Spanish are covered in one semester in this intensive hybrid (blended) course.

Not open to heritage or native speakers of Spanish. Not open to students who have completed SPAN 101B. (4 hrs in class, 2 hrs online)

101B. Fundamentals of Spanish (4)

Prerequisite/Corequisite: Two years of high school Spanish or equivalent. Any Foundation course.

Fundamental skills of speaking, oral comprehension, reading and writing.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of Spanish.

200. Intermediate Spanish (6)

Prerequisites: SPAN 100 or SPAN 101B or a minimum of 3 years of high-school Spanish. Prerequisite/Corequisite: Any Foundation course.

Two semesters of Intermediate Spanish are covered in one semester in this intensive hybrid (blended) course.

Not open to heritage or native speakers of Spanish. Not open to students who have completed SPAN 201A or SPAN 201B. (4 hrs in class, 2 hrs online)

201A. Intermediate Spanish (4)

Prerequisite: SPAN 101B or three years of high school Spanish or equivalent.

Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading and writing skills.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of Spanish.

201B. Intermediate Spanish (4)

Prerequisite: SPAN 201A or four years of high school Spanish or equivalent. Prerequisite/Corequisite: Any Foundation course.

Continued development in speaking, oral comprehension, reading and writing skills.

Transfers and new students: placement exam strongly recommended. For further information, please refer to the RGRLL Department website www.csulb.edu/colleges/cla/departments/rgrll/. For non-native speakers only. Not open to heritage speakers or native speakers of Spanish.

201C. Intermediate Spanish III (4)

Prerequisite: Any Foundation course. SPAN 201B or a minimum of four (4) college-level courses in Spanish or AP Exam (Pass at level 4 or 5).

Advanced Intermediate skills of speaking, comprehension, reading, and writing.

For non-native speakers only.

250. Spanish for Bilinguals (6)

Prerequisite: Near native speaker oral skills and GE Foundation requirements (or concurrent enrollment in at least one Foundation course).

Addresses particular needs of bilingual student population. Emphasis on acquisition of solid grammatical base with development of writing and reading skills.

Letter grade only (A-F).

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300. Advanced Grammar and Composition (6)

Prerequisites: AP exam with a score of 4 or 5 or SPAN 201B or 201C or equivalent for non-native speakers. SPAN 250 or equivalent for heritage speakers.

Review of grammatical principles, general consolidation of the four language skills (reading, speaking, comprehension and writing) with special emphasis on writing papers and acquisition of cultural knowledge of the Hispanic world.

Check for the code 138 (for non-native speakers) and 139 (for heritage speakers) in the *Schedule of Classes*. (6 hours of activity)

310. Introduction to Literary Analysis (3)

Prerequisite: SPAN 300.

Discovery of literature as a work of art. Different levels of interpretation; complexity of structure related to content; literary appreciation.

Letter grade only (A-F).

314. Oral Communication (3)

Prerequisite: SPAN 300.

Emphasis will be placed on small-group discussion to improve communication skills in Spanish. Intended for non-native speakers.

322. Bilingual Teacher (3)

Prerequisites: SPAN 300 or consent of instructor.

Development and application of vocabulary for teaching elementary/secondary school subject matter in Spanish; application in actual teaching situations.

330. Literary Masterpieces: Spain (3)

Prerequisites: SPAN 310 or consent of instructor. GE Foundation requirements.

Critical analysis of masterworks of Spanish literature.

(Lecture 3 hours)

335A. Business Spanish (3)

Prerequisites: SPAN 300 (6 units) or consent of instructor.

Study of terminology and practices from the world of business, with a focus on business relating to the Spanish speaking world, including the Hispanic market in the United States. It focuses on commerce, management, banking, real estate, and labor relations.

Letter grade only (A-F).

335B. Business Spanish (3)

Prerequisites: SPAN 300 or consent of instructor.

Study of terminology and practices from the world of business, with a focus on business relating to the Spanish speaking world, including the Hispanic market in the United States. It focuses on marketing, finance, import and export.

Letter grade only (A-F).

341. Literary Masterpieces: Spanish America (3)

Prerequisites: SPAN 310 or consent of instructor.

Critical analysis of masterworks of Spanish American literature.

(Lecture 3 hours)

350. Hispanic Short Narrative (3)

Prerequisite: SPAN 310

An overview of representative short narrative from the Spanish-speaking world encompassing corresponding historical periods or thematic similarities.

Letter grade only (A-F).

351. Survey of Hispanic Theater (3)

Prerequisites: SPAN 310.

Explores the development of the genre of theater in the Hispanic World in its social, cultural, historical, and political context either across time periods (medieval to 20th century) or within a certain literary movement (Romanticism, Neoclassicism, etc.).

Letter grade only (A-F).

400./500. Don Quijote and the Critics (3)

Prerequisite: SPAN 310.

Designed to guide students through a close reading of Cervantes's *Don Quijote*, with special emphasis on various theoretical approaches to text. Provides basic introduction to literary criticism.

420./520. History of Spanish Language (3)

Prerequisite: One course in Spanish linguistics or consent of instructor.

Analysis of written and spoken Spanish from its inception through its current use in the Hispanic world.

423./523. Introduction to Spanish Linguistics (3)

Prerequisite: SPAN 300 or consent of instructor.

Overview of Spanish Linguistics. Areas of study: history of Spanish language, grammatical systems (Phonology, Morphology, Syntax), sociolinguistics status of Spanish in the U.S. and the teaching of Spanish as a second language.

426./526. Spanish Morphology and Syntax (3)

Prerequisite: Consent of instructor.

Morphemic and syntagmatics analysis of Spanish; introduction to transformational grammar.

(Lecture 3 hours)

427./527. Contrastive Analysis of Spanish and English (3)

Prerequisite: Consent of instructor.

Study of the known points of similarity and differences between the two languages.

428. Spanish Cinema (3)

Prerequisites: Upper-division standing.

Focus on socio-political and aesthetic aspects of Spanish Cinema, concentrating on the following periods. Early Francoism, Neo-Realism, The Barcelona School, the Transition Period, post Franco Years, and new trends in Spanish Cinema.

Taught in English. Letter grade only (A-F). Same course as FEA 392E. Not open for credit to students with credit in FEA 392E.

429./529. Studies in 19th and 20th Century Spanish Poetry (3)

Prerequisite: SPAN 330.

Examines salient poets from last two centuries, including Rosalía de Castro, Gustavo Adolfo Bécquer, Antonio Machado, Juan Ramón Jiménez, Vicente Aleixandre, Federico García Lorca, Gloria Fuertes, Jaime Gil de Biedma, and other more contemporary figures.

Undergraduates register in SPAN 429; graduates register in SPAN 529. Letter grade only (A-F). (Seminar 3 hours)

430. Spanish Civilization (3)

Prerequisites: SPAN 310.

Characteristic features of Spanish culture with special attention to the various institutions, economic, social and cultural configurations, and the ways of thinking.

438./538. Studies in Golden Age Literature (3)

Prerequisite: SPAN 330.

Survey of Spanish Golden Age literature. Readings will focus on the literary masterpieces of the Renaissance and Baroque periods by Gongora, Quevedo, Cervantes, Santa Teresa de Jesus, San Juan de la Cruz, Garcilaso de la Vega, and Calderon de la Barca.

439./539. Modern Spanish Narrative (3)

Prerequisite: SPAN 330 or consent of instructor.

Representative 19th and 20th century novelists.

Undergraduates register in SPAN 439, graduates register in SPAN 539. (Seminar)

441./541. Studies in Nineteenth and Twentieth Century Spanish American Narrative (3)

Prerequisite: SPAN 341 or consent of instructor.

Critical analysis of 19th and 20th century Spanish American prose fiction.

Undergraduates register in SPAN 441, graduates register in SPAN 541. (Seminar 3 hours).

442./542. Nation Building and Women's Writing in Nineteenth-Century Spanish America (3)

Prerequisites: SPAN 310 and 341 or consent of instructor.

Explores field of Spanish American women writers during nineteenth century and concept of nation building. Several genres are studied: epistolary narrative, short-story, travel narratives, essay, autobiography, and the novel.

443./543. Studies in Nineteenth and Twentieth Century Spanish American Poetry (3)

Prerequisite: SPAN 341 or consent of instructor.

Study of representative 19th and 20th century Spanish American poets.

Letter grade only (A-F). Undergraduates register in SPAN 443, graduates register in SPAN 543. (Seminar)

444./544. Nineteenth-Century Spanish America and The National Family Romance (3)

Prerequisites: SPAN 310 and 341 or consent of instructor.

Advanced course studies Spanish American canonical writers during the nineteenth century in relation to the concept of "family romance." These fictions constitute the foundational master narratives that were the guiding fictions for the new independent nations.

445. Latin American Civilization (3)

Prerequisite/Corequisite: SPAN 300.

Analysis of main currents in Latin American civilization.

446./546. Studies in Spanish Culture (3)

Prerequisite: SPAN 330.

Deals with some aspect of Spanish culture in an interdisciplinary fashion during a given period. Topics could include social, political, theoretical, and/or historical perspectives on the arts.

Undergraduates register in SPAN 446; graduates register in SPAN 546. Letter grade only (A-F). May be repeated to a maximum of 6 units. (Seminar 3 hours)

447./547. The Invention of Spain: Visions in Conflict (3)

Prerequisites: SPAN 300, 310, 330.

A social, historical and literary study of Spain from 1808 through the beginning of the Spanish Civil War in 1936. Many groups struggle to impose their vision of Spain as it emerges from the War of Independence in 1808, transitioning from the Antiguo Régimen to nationhood.

448./548. Romanticism and Realism (3)

Prerequisites: SPAN 300, 310 and 330.

A systematic tracing of the derivation of Spanish Romanticism in narrative forms, in its European and Peninsular trajectories and its transformation into realism toward mid nineteenth century.

449./549. Dictatorship to Democracy: Film and Literature in Spain (1930-today) (3)

Prerequisites: SPAN 310 and 330 or consent of instructor.

Advanced course explores Spanish culture through film and literature of the pre-Civil War period, the Franco period, and the transition to democracy, the advanced democracy of Spain today.

450./550. Studies in Colonial Spanish American Literatures (3)

Prerequisites: SPAN 310 and 341.

Focuses on canonical works from Spanish-American Colonial period (1500-1800). Covers large selection of literary texts of colonial period, including chronicles, relaciones, letters, diaries, poetry, autobiography, and travel literature.

455. Hispanic Cinema of the Americas (3)

Prerequisite: SPAN 310.

Focuses on development of New Hispanic Cinema produced in the United States and Latin America. Explores major themes and trends of New Hispanic Cinema: "Nueva Ola" in Argentina, "Cinema Novo: the Cuban revolutionary cinema, and "Magic Realism" of the Southwest.

Letter grade only (A-F).

460./560. Studies Spanish American Culture (3)

Prerequisite: SPAN 341.

In-depth study of some essays which have dealt with problem of what Spanish American nations are, and what they should be during the republican era. Includes authors from both nineteenth and twentieth centuries.

May be repeated to a maximum of 6 units with different topics in different semesters.

461. Introduction to Translation and Interpretation (3)

Prerequisites: SPAN 300 with a "B" or better or consent of instructor.

Designed to introduce student to basic techniques essential to terminology acquisition, concentration, written and sight translation and consecutive and simultaneous interpretation.

462. Written and Sight Translation I: English/Spanish (3)

Designed to train students in sight and written legal, financial, medical and technical translation, and to introduce the student to the basic techniques that are essential to terminology acquisition. (English into Spanish).

Letter grade only (A-F).

463. Written and Sight Translation II: Spanish/English (3)

Prerequisites: SPAN 461 or consent of instructor.

Designed to train students in sight and written legal, financial, medical and technical translation, and to introduce the student to the basic techniques that are essential to terminology acquisition. (Spanish into English).

Letter grade only (A-F).

464. Consecutive Interpretation I (3)

Prerequisites: SPAN 461 or consent of instructor.

Designed to train students in forensic consecutive interpretation.

Letter grade only (A-F).

465. Consecutive Interpretation II (3)

Prerequisites: SPAN 461 or consent or instructor.

Designed to train students in Medical, Civil Legal, Business, Technical and State Agencies consecutive interpretation, and basic techniques that are essential to terminology acquisition and to techniques relating to interpreting in the consecutive mode sentences of up to forty words in length.

Letter grade only (A-F).

466. Simultaneous Interpretation English/Spanish (3)

Prerequisites: SPAN 461 or consent of instructor.

Designed to introduce the student to the techniques that are essential to the five simultaneous operations that form an integral part of simultaneous interpretation. (English into Spanish).

Letter grade only (A-F).

467. Simultaneous Interpretation Spanish/English (3)

Prerequisites: SPAN 461 or consent of Spanish Program Director.

Designed to introduce the student to the techniques that are essential to the five simultaneous operations that form an integral part of simultaneous interpretation. Spanish into English.

Letter grade only (A-F).

490. Selected Topics in Spanish (3)

Prerequisite: SPAN 310.

Study of a particular aspect of Spanish literature, language or culture.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in *Schedule of Classes*.

491./591. Nobel Poets and Others (3)

Prerequisites: SPAN 330, 341, or consent of instructor.

Critical analysis of representative works of Nobel Poets (Aleixandre, Jiménez, Mistral, Neruda and Paz) and other significant poets (Albertik, Bécquer, Darío, García Lorca, Garcilaso, Góngora, Guillén, Vallejo, etc.)

Undergraduates register in SPAN 491, graduates register in SPAN 591. (Seminar 3 hours).

492./592. Studies in Hispanic Theater (3)

Prerequisites: SPAN 330 or 341, or consent of instructor.

Representative Spanish and Spanish American plays.

Undergraduates register in SPAN 492; graduates register in SPAN 592.

493./593. Women and War (3)

Prerequisite: SPAN 310.

Examines the relationship between women and war in a literary context.

Undergraduates register in 493; graduates register for 593. Letter grade only (A-F). (3 hours lecture)

494. Internship in Spanish (1-3)

Prerequisites: Consent of instructor and department chair.

Field work in Spanish, supplemented by readings and tutorials under the direction of a faculty member. Internships, small group discussion/teaching, and other assignments directed by a supervising faculty member.

May be repeated to a maximum of 6 units. No more than 3 units may be applied to the major in Spanish.

499. Independent Study (1-3)

Prerequisites: Consent of instructor and department chair.

Individual projects or directed readings with a professor of the student's choice.

May be repeated to a maximum of 6 units. (Requires tutorial meetings and demonstrations of progress as defined in a written proposal.)

GRADUATE LEVEL**500./400. Don Quijote and the Critics (3)**

Prerequisite: SPAN 310.

Designed to guide students through a close reading of Cervantes's *Don Quijote*, with a special emphasis on various theoretical approaches to the text. The class will provide a basic introduction to literary criticism.

520./420. History of Spanish Language (3)

Prerequisite: One course in Spanish linguistics or consent of instructor.

Analysis of written and spoken Spanish from its inception through its current use in the Hispanic world.

526./426. Spanish Morphology and Syntax (3)

Prerequisite: Consent of instructor.

Morphemic and syntagmatics analysis of Spanish; introduction to transformational grammar.

Letter grade only (A-F). (Lecture 3 hours)

527./427. Contrastive Analysis of Spanish and English (3)

Prerequisite: Consent of instructor.

Study of known points of similarity and differences between the two languages.

Letter grade only (A-F).

529./429. Studies in 19th and 20th Century Spanish Poetry (3)

Prerequisite: SPAN 330.

Examines salient poets from last two centuries, including Rosalía de Castro, Gustavo Adolfo Bécquer, Antonio Machado, Juan Ramón Jiménez, Vicente Aleixandre, Federico García Lorca, Gloria Fuertes, Jaime Gil de Biedma, and other more contemporary figures.

Undergraduates register in SPAN 429; graduates register in SPAN 529. Letter grade only (A-F). (Seminar 3 hours)

538./438. Studies in Golden Age Literature (3)

Prerequisite: SPAN 330.

Survey of Spanish Golden Age literature. Readings will focus on the literary masterpieces of the Renaissance and Baroque periods by Gongora, Quevedo, Cervantes, Santa Teresa de Jesus, San Juan de la Cruz, Garcilaso de la Vega, and Calderon de la Barca.

539./439. Modern Spanish Narrative (3)

Prerequisite: SPAN 330 or consent of instructor.

Representative 19th and 20th century novelists.

Letter grade only (A-F). Undergraduates register in SPAN 439, graduates register in SPAN 539. (Seminar)

541./441. Studies in Nineteenth and Twentieth Century Spanish American Narrative (3)

Prerequisite: SPAN 341 or consent of instructor.

Critical analysis of 19th and 20th century Spanish American prose fiction.

Undergraduates register in SPAN 441, graduates register in SPAN 541 Letter grade only (A-F). (Seminar 3 hours).

542./442. Nation Building and Women's Writing in Nineteenth-Century Spanish America (3)

Prerequisites: SPAN 310 and 341 or instructor's consent.

Explores field of Spanish American women writers during nineteenth century and concept of nation building. Several genres are studied: epistolary narrative, short-story, travel narratives, essay, autobiography, and the novel.

543./443. Studies in Nineteenth and Twentieth Century Spanish American Poetry (3)

Prerequisite: SPAN 341 or consent of instructor.

Study of representative 19th and 20th century Spanish American poets.

Undergraduates register in SPAN 443, graduates register in SPAN 543 Letter grade only (A-F). (Seminar)

544./444. Nineteenth-Century Spanish America and The National Family Romance (3)

Prerequisites: SPAN 310 and 341 or consent of instructor.

Advanced course studies Spanish American canonical writers during the nineteenth century in relation to the concept of "family romance." These fictions constitute the foundational master narratives that were the guiding fictions for the new independent nations.

546./446. Studies in Spanish Culture (3)

Prerequisite: SPAN 330.

Deals with some aspect of Spanish culture in an interdisciplinary fashion during a given period. Topics could include social, political, theoretical, and/or historical perspectives on the arts.

Undergraduates register in SPAN 446; graduates register in SPAN 546. Letter grade only (A-F). May be repeated to a maximum of 6 units. (Seminar 3 hours)

547./447. The Invention of Spain: Visions in Conflict (3)

Prerequisites: SPAN 300, 310, 330.

Social, historical and literary study of Spain from 1808 through the beginning of the Spanish Civil War in 1936. Many groups struggle to impose their vision of Spain as it emerges from the War of Independence in 1808, transitioning from the Antiguo Régimen to nationhood.

548./448. Romanticism and Realism (3)

Prerequisites: SPAN 300, 310 and 330

A systematic tracing of the derivation of Spanish Romanticism in narrative forms, in its European and Peninsular trajectories and its transformation into realism toward mid nineteenth century.

549./449. Dictatorship to Democracy: Film and Literature in Spain (1930-today) (3)

Prerequisites: SPAN 310 and 330 or consent of instructor.

Advanced course explores Spanish culture through film and literature of the pre-Civil War period, the Franco period, the transition to democracy, and the advanced democracy of Spain today.

Letter grade only (A-F).

550./450. Studies in Colonial Spanish American Literature (3)

Prerequisites: SPAN 310 and 341.

Focuses on canonical works from Spanish-American Colonial period (1500-1800). Covers a large selection of literary texts of colonial period, including chronicles, relaciones, letters, diaries, poetry, autobiography, and travel literature.

560./460. Studies in Spanish American Culture (3)

Prerequisite: SPAN 341.

In-depth study of some of the essays which have dealt with the problem of what the Spanish American nations are, and what they should be during the republican era. Includes authors from both nineteenth and twentieth centuries.

May be repeated to a maximum of 6 units.

590. Selected Topics in Spanish (3)

Study of a particular aspect of Spanish literature, language or culture.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics. Topics announced in *Schedule of Classes*.

591./491. Nobel Poets and Others (3)

Prerequisites: SPAN 330, 341, or consent of instructor.

Critical analysis of representative works of Nobel Poets (Aleixandre, Jiménez, Mistral, Neruda and Paz) and other significant poets (Albertik, Bécquer, Darío, García Lorca, Garcilaso, Góngora, Guillén, Vallejo, etc.)

Undergraduates register in SPAN 491, graduates register in SPAN 591. (Seminar 3 hours).

592./492. Studies in Hispanic Theater (3)

Prerequisite: SPAN 330 or 341, or consent of instructor.

Representative Spanish and Spanish American plays.

Letter grade only (A-F). Undergraduates register in SPAN 492; graduates register in SPAN 592.

593./493. Women and War (3)

Prerequisite: SPAN 310.

Examines the relationship between women and war in a literary context.

Undergraduates register in 493; graduates register for 593. Letter grade only (A-F). (3 hours lecture)

599. Directed Studies (1-3)

Prerequisites: Graduate standing, advanced to candidacy, consent of the instructor and chair or graduate advisor.

Selected topics on Hispanic Studies to be pursued in-depth.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics with consent of graduate advisor and department chair.

640. Selected Topics - Seminar in Spanish American Literature (3)

Prerequisite: SPAN 341 or consent of instructor.

Study of particular period, genre or author.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics in different semesters. Topics announced in *Schedule of Classes*. (Seminar 3 hours)

650. Research Methods and Critical Theory (3)

Prerequisite: SPAN 310.

An introduction to Master's level research methods, including information technology, library literacy, research paper preparation, conference presentations, and professionalization issues related to M.A.-level work. The idiom of critical theory will be introduced in an application-based setting.

Letter grade only (A-F). (Seminar 3 hours).

691. Seminar in Spanish Literature - The Spanish Civil War and Its Artistic Repercussions (3)

Prerequisite: SPAN 330, 341 or consent of instructor.

Examines fiction dealing with war themes written during and after the Spanish Civil War (1936-39). It includes authors such as Arturo Barea, Constanza de la Mora, Cesar Vallejo, Pablo Neruda, Dolores Ibárruri, Ernest Hemingway, Juan Goytisolo, George Orwell, and Ana María Matute.

Letter grade only (A-F). May be repeated to a maximum of 6 units. (Seminar 3 hours)

STUDENT RECREATION AND LEADERSHIP

College of Health and Human Services

Department of Kinesiology

Director: Rita Hayes

Office: PE 1, Rm 15

Telephone: 562-985-7351

Website: www.csulb.edu/recsports

Faculty:

Rita Hayes, Director, Club Sports and Recreation

William Harkness, Assistant Director, Club Sports and Recreation

Ken Kelly, Director, Student Transition and Retention Services

Jeff Klaus, Dean of Students/Interim Associate Vice President, Student Services

Glenn McDonald, Director of Intramural Sports

Valerie Bordeaux, Director, University Outreach and School Relations

Introduction

The Kinesiology Department and the Division of Student Services oversee a broad range of educational and student support service programs to assist students in achieving their academic goals and enhancing their personal, intellectual and social development. The division provides oversight and direction for more than 35 university programs and service areas that support students outside the classroom.

Through cooperation between the Department of Kinesiology, Associated Students, Inc. and the Division of Student Services, Student Recreation and Leadership courses are offered to students participating in intramural sports competition, club sports and student leadership.

Open to all students, the intramural program affords students the opportunity to play in 20 different activities. To receive credit for this program, students may enroll in SRL 200. To receive credit for this course, students must play one league activity and assist in supervising a league.

Intramural team activities are scheduled at varied times. League competition is available in 16 of the activities for men, women and co-educational participation. Students enrolled in the class must contact the Intramural Office to sign up for their activities. Upon completion of each activity, the student must notify the Intramural Department located in the Student Recreation and Wellness Center.

Students may participate in any of the club sports activities which are partially funded by the Associated Students, Inc., and administered through the Club Sports and Recreation Office.

Sports are:

Aikido	alpine ski-snowboard
archery	baseball
bowling	breakdancing
bellydancing	capoeira
cheer	crew
cricket	cycling
fishing	gymnastics
ice hockey	jiu jitsu
Kung Fu	lacrosse
paintball	rollerhockey
rugby	running
sailing	salsa
Shotokan Karate	soccer
surfing	Sword Club

tennis

ultimate Frisbee

water ski/wakeboard

wrestling

triathlon

volleyball

wheelchair sports

Students registering for SRL 210 must attend regular practices and competitions, assist the club with fund raisers and adhere to club rules and regulations. For information on practice times and meeting locations, contact the individual club coach or president. Visit the Club Sports and Recreation website (www.csulb.edu/recsports) or visit the Recreational Sports Office (KIN Building, Rm 20A). In addition to participation in club sport activities, students may receive credit for leadership training and service performed with some university-sponsored programs by registering in SRL 210L.

Students may apply no more than four (4) semester units of lower-division SRL courses toward the baccalaureate degree within the 20-unit maximum on activity units.

The California State University is committed to providing equal opportunities to men and women in all campus programs, including intercollegiate athletics. For a listing of Intercollegiate Athletic teams, visit longbeachstate.com.

Courses (SRL)

200. Intramural Activities (1)

Repeatable credits include previous credits from SAR 200.

210 A-W. Sport Clubs/Leadership (1)

Prerequisite: Participation/competition in sport clubs/leadership. Enrollment subject to consent of instructor or Director of Club Sports and Recreation.

Athletes enrolled who fail to qualify for squad must withdraw from the course. It is the student's responsibility to contact teams regarding practice times and eligibility requirements.

May be repeated to a maximum of 4 units, including previously earned credits from SAR 210. Credit/No Credit grading only.

- A. Archery
- B. Crew
- D. Ice Hockey
- E. Martial Arts
- F. Rugby
- G. Sailing
- H. Ski and Snowboard
- I. Soccer
- J. Water Ski
- L. Leadership
- N. Lacrosse
- O. Wakeboard and Waterski
- P. Paintball
- Q. Racquetball
- R. Roller Hockey
- S. Cultural Dances
- T. Ultimate Frisbee
- U. Volleyball
- V. Running
- W. Bowling

TEACHER EDUCATION

College of Education

Department Chair: Felipe Golez

Department Office: Lynda Stassi, Office Manager
Education Building (ED) 1, Room 13, (562) 985-4506

Teacher Preparation Advising Center

Lisa Isbell, Co-Director
Jan Condou, Associate Director
Education Building (ED) 1, Room 67, (562) 985-9259

Faculty: Shuhua An, Paul Boyd-Batstone, Ella Glenn Burnett, Catherine DuCharme, Felipe Golez, Deborah Hamm, Cynthia Hutten-Eagle, William Jaynes, Ruth Knudson, Marina C. Krause, Trinidad Lewis, Xin Li, Ping Liu, Carol Lord, Corinne Martinez, Huong Tran Nguyen, Jyotsna Pattnaik, Ruth Piker, Leslie Reese, Olga Rubio, Fay Shin, Linda Symcox, Joan Theurer, Victor Wang, Linda C. Whitney, Shelley Xu, Jessica Zacher

Multiple Subject Credential Program Coordinators

Lisa Isbell, MSCP Program and MSCP Intern Program
Olga Rubio, MSCP Spanish BCLAD Emphasis
Fay Shin, MSCP Asian BCLAD Emphasis

Websites:

Department of Teacher Education: www.ced.csulb.edu/teacher-ed
Teacher Preparation Advising Center: www.ced.csulb.edu/tpac
Multiple Subject Credential Program: www.ced.csulb.edu/mscp

Introduction

The Department of Teacher Education offers coursework in credential, certificate, and Master's degree programs that include preliminary and advanced professional preparation. The department houses the Multiple Subject Credential Program, a Reading Certificate program, a Reading and Language Arts Specialist credential program, and Master's degree programs in Early Childhood Education, Reading, Dual Language Development, Mathematics Education, and Curriculum and Instruction. Credential program requirements and subject to change to align with changes in CTC regulations.

Multiple Subject Credential Program (code 200)

A teacher with a Multiple Subject Credential is authorized to teach grades pre-K through 12 in self-contained classrooms. The Multiple Subject Credential Program (MSCP) prepares students to be credentialed in the State of California for elementary and middle school instruction. The program allows for daytime field experiences in elementary classrooms and includes methodology courses and student teaching. The program can be completed in one summer and two semesters or three semesters, depending upon when prerequisites and corequisites are taken, when the student begins the program, and whether a part-time or full-time schedule is followed. Program requirements must be met within five years of the date of admission to the program.

The department has four Preliminary Multiple Subject Credential Program (MSCP) tracks:

- Multiple Subject Credential Program (post-baccalaureate)
- Multiple Subject Internship Program (post-baccalaureate)

- Integrated Teacher Education Program (ITEP)
- Bilingual Authorization in Spanish, Korean, Mandarin, and Vietnamese (available for each track)

For program information and advisement, contact the Teacher Preparation Advising Center (ED1-67; 562/985-9259) or visit the website: www.ced.csulb.edu/tpac

Preliminary Credential

Successful completion of any track in the Multiple Subject Credential Program leads to the Preliminary Credential, which is valid for five years. Requirements for the Preliminary Credential are:

1. Hold a bachelor's degree from an accredited institution.
2. Satisfy the U. S. Constitution requirement (POSC 100 or 391 or equivalent course from another institution or exam).
3. Pass California Basic Educational Skills Test (a test of basic reading, writing and math) or CTC-approved alternative exam.
4. Hold a Certificate of Clearance (fingerprint background check).
5. Demonstrate Level I computer technology competence (embedded in program course work).
6. Demonstrate subject matter competence by passing the California Subject Examinations for Teachers: Multiple Subjects (CSET: Multiple Subjects).
7. Complete professional preparation courses (in the MSCP) with a grade point average of 3.0 in all subject specific pedagogy (methods) courses with no grade lower than "C."
8. Successfully complete student teaching.
9. Pass the Reading Instruction Competence Assessment (RICA) exam.
10. Pass the California Teaching Performance Assessment (CalTPA).
11. For Bilingual Authorization candidates only: Demonstrate competence in specialized pedagogy, knowledge of the target culture, and proficiency in the target language. The culture knowledge and target language proficiency requirements may be met through course work or state-approved exams.

Clear Credential

The Preliminary Credential is valid for five years from the date of issuance and is not renewable. During the first five years of teaching, teachers earn the clear credential through their district-sponsored Induction Program.

Multiple Subject Credential Program Structure

The MSCP is a 40-unit program separated into three successive phases. Students must complete each phase before advancing to the next one.

- Phase One – Students complete program prerequisites (and may take any or all corequisites) and submit applications. Subject matter competence must be demonstrated at the time of application to the program by submission of a passing score on all three sections of the California Subject Examinations for Teachers: Multiple Subjects (CSET: Multiple Subjects).

- Phase Two – Students complete corequisite courses and five subject specific pedagogy courses.
- Phase Three – Students complete student teaching.

Admission to the University

Admission to the university and the MSCP are two separate processes. Applications to the university are made on-line through CSU Mentor (www.csumentor.edu). Graduating seniors, transfer students, and returning students should apply for post-baccalaureate admission to the university with the objective of entering the credential program (identify the program objective as Multiple Subject Credential). Admission to the university does not constitute admission to the program.

Admission to the Program

Matriculated students may be admitted to the program based on their current undergraduate or graduate status. Pre-program advisement and brochure materials are available in the Teacher Preparation Advising Center (ED1-67). Prospective candidates may obtain a program application by attending one of the regularly scheduled information and application meetings (see schedule at www.ced.csulb.edu/mscp). Candidates are required to comply with all program policies and procedures detailed in the MSCP Handbook, which is available for purchase at the Campus Copy Center, located in the bookstore, or online at www.ced.csulb.edu/mscp.

Candidates in the Multiple Subject (post-baccalaureate), Intern, or ITEP tracks who wish to add a Bilingual Authorization to their credential must meet with the appropriate language advisor to discuss requirements for the language authorizations in Spanish, Korean, Mandarin, or Vietnamese. Candidates for the post-credential Bilingual Authorization must possess a valid SB 2042 teaching credential OR a valid Ryan teaching credential with CLAD authorization OR the equivalent. They should consult the Bilingual Authorization advisor to plan their course of study.

Program Admission Requirements

1. Complete all prerequisite courses in one of the four MSCP tracks, with a minimum grade of "B" in EDEL 380 and no grade lower than "C" in any other prerequisite or corequisite course.
2. Attain a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate course work or a grade point average of at least 2.75 in the last 60 semester or 90-quarter units attempted.
3. Complete and pass an interview with a department faculty advisor.
4. Submit three letters of recommendation.
5. Submit a typed personal statement describing why you have chosen teaching as a career, what you hope to accomplish as a teacher, and how you view the role of the teacher.
6. Submit a negative tuberculosis skin test or chest X-ray taken within the last three years. Tuberculosis clearance must be valid through student teaching.
7. Submit one photocopy of all university and/or college transcripts.

8. Submit proof of having taken the California Basic Educational Skills Test (CBEST). Note: You must take all three parts of the test. (Passage of the exam is required to advance to student teaching.) For alternatives to CBEST, contact the Teacher Preparation Advising Center.
9. Submit proof of having demonstrated subject matter competence by passing all three subtests of the California Subject Examinations for Teachers: Multiple Subjects (CSET: Multiple Subjects)
10. Demonstrate proficiency in reading and writing English by (1) attaining the minimum passing score of 37 on the reading portion of the CBEST and by (2) attaining the minimum passing score of 37 on the writing portion of the CBEST exam. (Passage of CBEST or a CTC-approved alternative is required to advance to student teaching.)
11. Attach a copy of a Certificate of Clearance or a photocopy of a California emergency/substitute teaching permit.
12. Demonstrate ability to communicate orally in English at the level required of public school teachers by demonstration of English production skills in the course EDEL 380 (EDEL 200 for ITEP candidates) and through an oral interview with department faculty. Bilingual Authorization candidates complete a bilingual interview in English and the target language.
13. Demonstrate character and personality traits that satisfy the standards of the teaching profession and suitable aptitude for teaching in public schools through the application documentation, the personal interview, and performance in the course EDEL 380. Candidates must continue to demonstrate appropriate character and personality traits through completion of the program.
14. Submit the application packet, including documentation, by March 1 to begin pedagogy courses in summer or fall terms, OR by October 1 to begin pedagogy courses in winter or spring terms. THESE DEADLINES ARE STRICTLY ENFORCED.

Student Teaching

The final phase of the MSCP is student teaching. For some candidates, student teaching is a full-time five days per week experience for the length of the university semester. Candidates in alternative programs may have different student teaching schedules. All student teachers have one placement in a K-2 classroom where they gain experience with early literacy instruction utilizing a balanced and comprehensive approach to reading. The other placement is in an intermediate classroom (grades 3-6) or in a middle school classroom (grades 6-8). One student teaching placement must be in a public school. There are several ways to complete student teaching: one regular semester, two semesters, two consecutive summers, one entire summer, or one summer and part of one regular semester. Candidates should be aware that there is limited availability in the summer and all requests may not be accommodated. A separate application is required to advance to student teaching. Applications for student teaching must be submitted in person to the Multiple Subject Student Teaching Office one semester prior to the first assignment. Application packets are available at www.ced.csulb.edu/fpo well in advance of the actual meeting dates. Deadlines for submitting applications to student teach are:

March 1 - for Summer/Fall Student Teaching

October 1 - for Spring Student Teaching

Students should note that these deadlines are firm. Late applications are not accepted.

Advancement to Student Teaching Requirements

Students must meet the following requirements to advance to student teaching:

1. Completion of all program prerequisite, corequisite and subject specific pedagogy requirements in Phases 1 and 2 of one of the MSCP tracks. Students must complete all five subject specific pedagogy (methods) courses with a 3.0 grade point average and no grade lower than "C." A grade of "D" or "F" in a program course will result in being dropped from the program. In addition, EDEL 413 and 431 must be completed with a "C" grade or better. The overall grade point average must continue to meet the program admission standard.
2. Passage of the California Basic Educational Skills Test (CBEST) or CTC-approved alternative.
3. A negative tuberculosis skin test or chest x-ray valid through completion of student teaching.
4. Proof of identity and character clearance (Certificate of Clearance).
5. Bilingual Authorization candidates must meet additional bilingual authorization pedagogy and culture of emphasis requirements (see Track 4, below).
6. For students who wish to student teach at the kindergarten level: completion of EDEL 420 with a grade of "C" or better.
7. Submission of a student teaching application by the appropriate deadline.

Track One – Preliminary Multiple Subject Credential Program

The Preliminary credential is the basic Multiple Subject Credential. This track is comprised of foundational and subject specific pedagogy course work followed by the student teaching semester.

Prerequisites

Take the following courses concurrently:

EDEL 380 Teaching and Learning in a Democratic Society (3)

Corequisites: EDSP 303.

EDSP 303 Preparing to Teach Special Populations in the General Education Classroom (1)

Prerequisites: Concurrent enrollment in EDEL 380.

Corequisites

May be taken prior to or after admission to the MSCP, but must be completed prior to student teaching:

EDEL 413 Developmentally Appropriate Teaching Practices (2)

Prerequisites: None.

EDEL/EDP/LING 431 Cultural and Linguistic Diversity in Schools (3)

Prerequisites: None.

Subject Specific Pedagogy (Teaching Methods)

Students must be officially admitted to the MSCP to take these courses. Course may be taken off-campus at an

elementary school site during daytime school hours; at least one must be taken on-campus:

EDEL 442 Teaching and Learning Language Arts, K-8 (RICA) (3)

Prerequisites: Admission to the Multiple Subject Credential Program.

EDEL 452 Teaching and Learning Reading, K - 8 (RICA) (3)

Prerequisite: Admission to the Multiple Subject Credential Program or Education Specialist Credential Program.

EDEL 462 Teaching and Learning Mathematics, K-8 (3)

Prerequisites: Admission to the Multiple Subject Credential Program.

EDEL 472 Teaching and Learning History/Social Science, K-8 (3)

Prerequisites: Admission to the Multiple Subjects Credential Program.

SCED 475 Teaching and Learning Science, K-8 (3)

Prerequisite: Admission to the Multiple Subject Credential Program.

Student Teaching

All requirements for advancement to student teaching must be met: EDEL 482 Student Teaching (16)

Track Two – Multiple Subject Internship

The intern program is for full-time teachers in districts with which CSULB has a contractual intern agreement. All students in this program must be employed by the district as the full-time teacher of record in a multiple subject classroom and have met all program and intern program admission requirements. The program requires 24 units of foundational and subject specific course work followed by 16 units of intern student teaching.

Application Requirements

1. Hold a Bachelor's degree from an accredited institution.
2. Demonstrate subject matter competence by passing the California Subject Examinations for Teachers: Multiple Subjects (CSET: Multiple Subjects).
3. Meet the U.S. Constitution requirement (by course work or exam).
4. Pass the CBEST (or CTC-approved alternative).
5. Be assigned full-time to a self-contained K-8 multiple subject classroom in a partner school district.
6. Meet the program grade point average requirement of 2.67 overall or 2.75 in the last 60 semester or 90 quarter units.
7. Complete MSCP prerequisite and corequisite courses.
8. Have submitted an application to the MSCP program.
9. Become officially admitted to the Multiple Subject Credential Program.
10. Complete an interview with the Intern Program Director.

Prerequisites

Same (4 units) as for Track One in the Preliminary credential program.

Corequisites (5 units)

Same (5 units) as for Track One in the Preliminary credential program.

Subject Specific Pedagogy

Same (15 units) as for Track One in the Preliminary credential program.

Student Teaching

All requirements for advancement to student teaching must be met:

EDEL 572A Multiple Subject Internship (8)
Prerequisites: Admission to 2042 Multiple Subject Internship and advancement to Intern Student Teaching.

EDEL 572B Multiple Subject Internship (8)
Prerequisites: Admission to 2042 Multiple Subject Internship and advancement to Intern Student Teaching.

Note: Interns must attend a Student Teaching Application Meeting and apply to student teach by the October 1 deadline for spring and the March 1 deadline for summer and fall.

Additional Requirements for Bilingual Authorization Interns

Bilingual Authorization Interns should refer to Track 4, below, for pedagogy and culture of emphasis requirements.

Early Completion Intern Option

The Early Completion Intern Option allows qualified candidates to challenge the course work portion of the internship program and demonstrate their pedagogical skills by passage of the California Teaching Performance Assessment while serving as an intern. See an advisor in the Teacher Preparation Advising Center for details.

Track Three – Integrated Teacher Education Program

For the Integrated Teacher Education Program (ITEP) requirements, please refer to the Liberal Studies section of this catalog.

Track Four – Bilingual Authorization in Spanish and Asian Languages

The Bilingual Authorization track prepares Multiple Subject teachers to work in dual language classrooms, English development classrooms, or where a language other than English is required for instruction, support, and communication with parents and other professional communication. With appropriate substitutions and/or additional course work, Bilingual Authorization may be added to the Preliminary credential. Candidates must demonstrate knowledge of the target culture, specific pedagogical skills, and fluency in speaking, listening, reading and writing in the target language. The program prepares candidates for Bilingual Authorization in four languages: Spanish, Korean, Mandarin, and Vietnamese.

Prerequisites

Same (4 units) as for Track One in the Preliminary credential program.

Corequisites

Same (5 units) as for Track One in the Preliminary credential program.

Subject Specific Pedagogy

Same (15 units) as for Track One in the Preliminary credential program, with the addition of one of the following:

Spanish: EDEL 453S – Methodology for Spanish and English Instruction in a Bilingual Setting (3)
Prerequisites: None.

Korean: EDEL 453K – Methodology for Korean and English Instruction in a Bilingual Setting (3)
Prerequisites: None.

Mandarin: EDEL 453M – Methodology for Mandarin and English Instruction in a Bilingual Setting (3)
Prerequisites: None.

Vietnamese: EDEL 453V – Methodology for Vietnamese and English Instruction in a Bilingual Setting (3)
Prerequisites: None.

Culture of Emphasis

For MSCP and Intern track students, the culture of emphasis component is met through one of the following courses or the appropriate CSET: LOTE V exam:

Spanish: CHLS 340 – Latino Education in the U.S. (3)
Prerequisites: None.

Korean: EDEL 455K – Teaching the Korean American Bicultural Student (3)
Prerequisites: None.

Mandarin: EDEL 455C – Teaching the Chinese American Bicultural Student (3)
Prerequisites: None.

Vietnamese: EDEL 455V – Teaching the Vietnamese American Bicultural Student (3)
Prerequisites: None.

Language of Emphasis

All Bilingual Authorization candidates must demonstrate target language proficiency by passing the appropriate CSET: LOTE Subtest III (language and communication) prior to completion of the program. See the program advisor for recommended courses to prepare for the exam.

Student Teaching

All MSCP program requirements and additional Bilingual Authorization requirements for advancement to student teaching must be met: EDEL 482 Student Teaching (16)

Petition Process

Appeals to program decisions or requests for policy waivers are made by filing a written appeal to the Department of Teacher Education Admissions and Standards Committee. The committee reviews the written petition and supporting documentation and renders a decision. Examples of petitions typically reviewed are: waive a deadline for submission of a test score, waive an application deadline, and readmission to student teaching. Decisions of the committee are final. Students follow university policy to appeal a course final grade.

Reading Certificate (code 415)

This certificate is granted by the California Commission on Teacher Credentialing (CCTC).

The Reading Certificate provides classroom teachers with advanced preparation in reading/language arts assessment and instruction, as well as theory and research in teaching reading, grades K-12. Some candidates may wish to complete the 12-unit Reading Certificate program as a terminal objective, while others may wish to complete it as a prerequisite to the Reading/Language Arts Specialist Credential Program.

The state requires that a candidate must have three years of teaching experience prior to recommendation for the Reading Certificate. (Applicants to the program should

note that there is no teaching experience requirement for completion of the Masters in Education Option in Reading and Language Arts.)

Prerequisites

See the Master's Degree Program Option in Reading/Language Arts.

Application

See the Master's Degree Program Option in Reading/Language Arts.

Requirements

Take all of the following:

- EDRG 540 Advanced Studies in Literacy (3)
Prerequisite: A valid teaching credential or admission to an approved masters, certificate, or advanced credential program; or consent of instructor.
- EDRG 551 Assessment and Instruction in Reading and Writing (3)
Prerequisites: Admission to Reading Certificate Program or consent of instructor.
- EDRG 558 Language Study for Reading Teachers (3)
Prerequisites: EDRG 540 and admission to the Reading Certificate program or consent of instructor.
- EDRG 559 Practicum Teaching Reading/Language Arts (3)
Prerequisites: EDRG 551 and admission to the Reading Certificate program or consent of instructor.

Reading and Language Arts Specialist Credential (code 410)

The Reading/Language Arts Specialist Credential prepares teachers to become school and district literacy leaders and supervisors. The reading/language specialist's role is multifaceted, including diagnostician, teacher of intervention for children or youth with delayed literacy development, collaborator with other school and district specialists, provider of professional development for classroom teachers, and reading program coordinator or facilitator. Note: All courses required for the Reading/Language Arts Specialist Credential can be applied to the MA in Reading/Language Arts. See catalog program description and the faculty advisor in the Department of Teacher Education for more information.

Prerequisites

Successful completion of the Reading Certificate program, or a valid Reading Certificate, or equivalent.

Application to the Program

See the Master's Degree Program Option in Reading/Language Arts.

Program Requirements

- EDRG 543 Integration of Technology in Reading/Language Arts (3)
Prerequisites: EDP 443 or ETEC 444 or equivalent; or a course approved by CTC, or a course approved by CCTC to meet the Level I technology requirement or approval of the instructor.
- EDRG 544 Foundations of Literacy Research (3)
Prerequisite: California Reading Certificate or consent of instructor. Introduction to critical analysis of literacy research, with emphasis on classic and contemporary studies.
- EDRG 554 Reading/Language Arts Curriculum: Leadership and Supervision (3)
Prerequisite: California Reading Certificate or consent of instructor.

EDRG 556 Theoretical Models & Processes of Reading (3)
Prerequisite: California Reading Certificate or consent of instructor.

EDRG 651 Advanced Diagnosis and Intervention in Reading/Language Arts (3)
Prerequisites: EDRG 551 or equivalent; valid California Reading Certificate or consent of instructor.

Master of Arts in Education

Candidates for Master's programs must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time. Program application deadlines may vary. Visit the College of Education website for specific program details, application guidelines and materials, and application deadlines (www.ced.csulb.edu/departments-programs). All university regulations governing the master's degree apply to college programs. Program requirements published in the university catalog in effect during the year a candidate advances to candidacy are the requirements the candidate will be held to (catalog rights). Candidates may take up to 6 units of course work that can be applied to the Master's program prior to program entry (units must be taken at postbaccalaureate level). This may be extended to 9 units, at the program coordinator's discretion and with approval of the associate dean, if the units are taken at CSULB.

Option in Curriculum and Instruction, Elementary Education

The Master of Arts in Education, Option in Curriculum and Instruction, Elementary Education (30-33 units) is designed to foster the development of educators who are caring, effective, reflective, and committed to improving their schools. Coursework prepares teachers to apply theoretical insights and research findings to the practical problems they encounter in their work in curriculum and instruction. Visit the program website for program details (www.ced.csulb.edu/programs/curriculum-and-instruction/ma-curriculum-instruction-elementary).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. A valid teaching credential or by consent of the program coordinator.
4. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

The Curriculum and Instruction, Elementary Education application must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional Admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. They should meet with the program coordinator to plan their program no later than completing 6 units. For Advancement to Candidacy (Clear Admission status), students must:

1. Be enrolled in the university
2. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
3. Fulfill all program prerequisite and admission requirements.
4. Resolve all incomplete grades.
5. Maintain a 3.0 grade point average.
6. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

1. Methods of Social Science Inquiry (6 units):

Take the following:

EDP 400 Introduction to Educational Research (3)
Prerequisites: None.

Take one of the following Tracks:

Comprehensive Examination Track:

Take one of the following:

EDP 520 Quantitative Research Methods in Education (3)
Prerequisites: EDP 400 or equivalent.

EDCI 533 Action Research Methods: Teachers as Inquirers (3)

Prerequisite: Admission to the Curriculum and Instruction Master's Program or consent of instructor.

Thesis Track:

Take one of the following:

EDP 595 Qualitative Research Methods (3)
Prerequisites: ED P 400 or equivalent.

EDP 696 Thesis Study: Plan Development and Organizing Aspects (3)
Prerequisites: EDP 400 or 419 and EDP 520 or 595.

2. Core (15 units):

Take all of the following:

EDCI 500 Studies in Curriculum and Instruction (3)
Prerequisite: Admission to the Curriculum and Instruction Master's Program or consent of instructor. Must be taken during the first or second semester in the Master's Program.

EDCI 505 History of Education in the United States (3)
Prerequisites: Admission to an approved masters program or consent of the instructor. Must be taken during the first or second semester.

EDCI 530 Cross-cultural Education: US and Global Perspectives (3)
Prerequisite: Admission to an approved Master's program or consent of the instructor.

EDCI 625 Analysis of Curriculum, Instruction, and Assessment (3)

Prerequisites: EDCI 500, 505, EDP 400; and one of the following EDP 520, 595, or 696 or EDCI 533; consent of the instructor.

EDCI 695 Seminar in Curriculum and Instruction (3)
(to be taken in final semester)

Prerequisites: EDCI 500, 505, 625 and advancement to candidacy, or by consent of instructor.

3. Concentration (9 units): Candidates select an area of concentration, in consultation with the program advisor, tailored to their professional goals. Candidates are responsible for taking prerequisite courses if required. The concentration may be in one of the following patterns:

A. Advanced Methods (9 units):

Take all of the following:

EDRG 540 Advanced Studies in Literacy (3)

Prerequisite: A valid teaching credential or admission to an approved masters, certificate, or advanced credential program; or consent of instructor.

EDCI 570 Advanced Studies in Teaching History-Social Science (3)

Prerequisites: EDEL 472; EDP 400, EDP 520 or 696, or equivalent.

B. Advanced Coursework in Educational Technology:

Take 9 units from the following:

EDSP 542, ETEC 523, 525, 530, 551, 553;

- C. Take 9 units of advanced coursework in a self-selected concentration chosen in consultation with the program advisor (e.g., Social and Multicultural Foundations).
4. Capstone (choose A or B option in consultation with the program advisor):

A. Comprehensive Examination and the following:

EDCI 695 Seminar in Curriculum and Instruction (3)

B. Thesis and the following:

EDCI 698 Thesis Study in Curriculum & Instruction (6)

Option in Curriculum and Instruction, Secondary Education

The Master of Arts in Education, Option in Curriculum and Instruction, Secondary Education (30-33 units) is designed to foster the development of educators who are caring, effective, reflective, and committed to improving their schools. Coursework prepares teachers to apply theoretical insights and research findings to the practical problems they encounter in their work in curriculum and instruction. Visit the program website for program details (www.ced.csulb.edu/departments-programs).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. A valid teaching credential or by consent of the program coordinator.
4. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

The Curriculum and Instruction, Secondary Education application must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. They should meet with the program coordinator to plan their program no later than completing 6 units. For Advancement to Candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Resolve all incomplete grades.
3. Maintain a 3.0 grade point average.
4. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

1. Methods of social science inquiry (6 units):

EDP 400 Introduction to Educational Research (3)
Prerequisites: None.

EDP 520 Research Methods in Education (3)
Prerequisites: EDP 400 or equivalent.

2. Core (15 units):

EDCI 500 Studies in Curriculum and Instruction (3)
Prerequisite: Admission to the Curriculum and Instruction Master's Program or consent of instructor. Must be taken during the first or second semester in the Master's Program.

EDCI 505 History of Education in the United States (3)
Prerequisites: Admission to an approved masters program or consent of the instructor. Must be taken during the first or second semester.

EDCI 530 Cross-cultural Education: US and Global Perspectives (3)
Prerequisite: Admission to an approved Master's program or consent of the instructor.

EDCI 625 Analysis of Curriculum, Instruction, and Assessment (3)
Prerequisites: EDCI 500, 505, EDP 400; and one of the following EDP 520, 595, or 696 or EDCI 533; consent of the instructor.

EDCI 695 Seminar in Curriculum and Instruction (3)
(to be taken in final semester)
Prerequisites: EDCI 500, 505, 625 and advancement to candidacy, or by consent of instructor.

3. Concentration (9 units):

Candidates select an area of concentration, in consultation with the program advisor, tailored to their professional goals. A concentration must follow a pattern or theme; a disparate set of unrelated courses is not a concentration. Thesis candidates should shape their concentration around research methodology and content related to their thesis topic. Candidates must submit a written statement containing a coherent rationale for and description of the concentration sequence at the time of advancement to candidacy. Concentrations may follow one of the patterns listed below or may be uniquely devised by the candidate. A concentration must have the approval of the program advisor. Candidates are responsible for taking prerequisite courses if required.

- A. Educational Technology (e.g., ETEC 523, 551, 553, 623);
- B. Educational Foundations (e.g., EDP 573; SCAE 574, 575, 576);
- C. Advanced coursework in the candidate's teaching discipline;
- D. Advanced coursework toward a Supplementary Authorization;
- E. Advanced coursework toward the Clear Credential;
- F. Advanced coursework toward CTEL certification;
- G. Research methods courses in preparation for the thesis (e.g., EDP 595, 596, 696; EDCI 533).

4. Capstone Experience

Candidates select one of the following capstone experiences in consultation with the program advisor. Selection should be made at the time of advancement to candidacy in order to develop a program plan consistent with the selected capstone experience.

- A. Comprehensive Examination.
- B. Thesis. (Candidates take EDCI 698 [Thesis Study] for two semesters while writing a thesis, for a total of 6 units; candidates may need to take additional research methodology courses in order to prepare for thesis research and writing – which may be courses in the candidate's concentration.)

Option in Dual Language Development

The Master of Arts in Education, Option in Dual Language Development (30-33 units) focuses on bilingualism in school and societal contexts. The program, through its action research approach, seeks to develop a cadre of teacher-leaders who systematically and purposefully examine and refine their own pedagogy with respect to the instruction of language minority students. Visit the program website for program details (www.ced.csulb.edu/departments-programs).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. A valid teaching credential with BCLAD/CLAD emphasis or certification, or by consent of the program coordinator.
4. Demonstration of bilingual proficiency or six (6) college semester units of a language other than English, or verified equivalent.

5. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

The Dual Language Development program application must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. They should meet with the program coordinator to plan their program no later than completing 6 units. For Advancement to Candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Resolve all incomplete grades.
3. Maintain a 3.0 grade point average.
4. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

1. Methods of Social Science Inquiry Requirements (6 units):

Take both of the following:

EDP 400 Introduction to Educational Research (3)
Prerequisites: None.

EDCI 533 Action Research Methods: Teachers as Inquirers (3)
Prerequisite: Admission to the Curriculum and Instruction Master's Program or consent of instructor.

2. Core (15 units):

Take all of the following:

EDCI 541 Designing Curriculum and Instruction in Primary and Second Language Settings (3)
Prerequisites: A valid California CLAD teaching credential or equivalent.

EDRG 551B Assessment of Literacy with Bilingual Students (3)
Prerequisites: Speaking and reading competence in Spanish; consent of the instructor.

EDCI 532 Socialization of Literacy in More Than One Language (3)
Prerequisites: Admission to the Masters of Education program, Option in Elementary Education, Dual Language Specialization, or consent of the instructor.

LING 650 Seminar in Bilingualism (3)

Prerequisites: LING 420, 421 or consent of instructor.

Take one of the following:

EDCI 530 Cross-cultural Education: US and Global Perspectives (3)

Prerequisite: Admission to an approved Master's program or consent of the instructor.

SCAE 562 Agency, Resistance & Identity in Education (3)

Prerequisites: None.

SCAE 564 Language and Educational Policies (3)

Prerequisites: None.

3. Concentration (6 units):

Take 6 units of advisor-approved electives.

4. Capstone Requirement (3-6 units):

One of the following chosen in consultation with an advisor:

Comprehensive Examination and EDCI 695 (3 units)

Thesis and EDCI 698 (6 units)

Option in Early Childhood Education

The Master of Arts in Education, Option in Early Childhood Education (30-33 units) is designed to foster the development of educators who are able to apply research-based knowledge in designing developmentally and culturally appropriate curriculum and assessment strategies for children ages birth through 8. Candidates develop parent involvement strategies, reflect on issues facing the field, evaluate the quality of early childhood programs in their local communities, critically evaluate policies that impact young children and their families around the world, and utilize technology to enhance communication and learning. Visit the program website for program details (www.ced.csulb.edu/departments-programs).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 3.0 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. EDP 301 or HDEV 307I or PSY 361.
4. EDEL 420.
Prerequisites: None.
5. EDEL 482 or one year of documented and approved teaching experience.
6. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

The Early Childhood Education program application must be submitted to the College of Education Graduate

Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. They should meet with the program coordinator to plan their program no later than completing 6 units. For Advancement to Candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Resolve all incomplete grades.
3. Maintain a 3.0 grade point average.
4. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

1. Research methods (6 units):

Take the following:

EDP 400 Introduction to Educational Research (3)
Prerequisites: None.

Take one of the following:

EDP 520 (for Comprehensive Examination track) (3)
Prerequisites: EDP 400 or equivalent.

EDP 595 or EDP 696 (for Thesis track) (3)
Prerequisites: EDP 400 or equivalent.

2. Core courses (21 units):

Take all of the following:

EDEC 520 Early Childhood Curriculum and Assessment: Critical Perspectives (3)
Prerequisites: None.

EDEC 521 Historical and Contemporary Perspectives in Early Childhood (3)
Prerequisites: None.

EDEC 522 Parent Education and Involvement in Educational Environments (3)
Prerequisites: None.

EDEC 523 Leadership, Advocacy and Supervision of Early Childhood Programs (3)
Prerequisites: None.

EDEC 526 Adv Study of Infant & Toddler Programs (3)
Prerequisites: EDP 301 or consent of instructor.

EDEC 621 Research in Early Childhood Education (3)
Prerequisites: EDP 400 and teaching experience.

EDEC 622 Seminar in Early Childhood Care and Education: International Perspectives (3)
Prerequisites: None.

3. One of the following chosen with program advisor consultation:

Comprehensive Examination and EDEC 695 (3 units)
Thesis and EDEC 698 (6 units)

Option in Reading/Language Arts

The Master of Arts in Education, Option in Reading/Language Arts (33-36 units) is designed for experienced classroom teachers who want to pursue in-depth study

of issues related to reading and language arts education. The program provides educators with the theoretical and professional knowledge necessary to develop innovative, research-based reading and language arts curricula and to instill the leadership skills necessary for successful reading program implementation for all students, including English language learners. Visit the program website for program details (www.ced.csulb.edu/adepartments-programs).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. A minimum 3.00 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. A valid elementary or secondary teaching credential.
4. CLAD/CTEL certification is strongly recommended
5. For international students whose primary language is not English, a minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

The Reading/Language Arts program application must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission to the Program

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. They should meet with the program coordinator to plan their program no later than completing 6 units. For Advancement to Candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Resolve all incomplete grades.
3. Maintain a 3.0 grade point average.
4. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

1. Take all of the following (27 units; please contact the program advisor prior to beginning coursework):

EDRG 540 Advanced Studies in Literacy (3)
Prerequisite: A valid teaching credential or admission to an approved masters, certificate, or advanced credential program; or consent of instructor.

EDRG 543 Integration of Technology in Reading/
Language Arts (3)
Prerequisites: EDP 443 or ETEC 444 or equivalent; or a course approved by CTC, or a course approved by CCTC to meet the Level I technology requirement or approval of the instructor.

EDRG 544 Foundations of Literacy Research (3)
Prerequisite: California Reading Certificate or consent of instructor. Introduction to critical analysis of literacy research, with emphasis on classic and contemporary studies.

EDRG 551 Assessment and Instruction in Reading and Writing (3)
Prerequisites: Admission to Reading Certificate Program or consent of instructor.

EDRG 554 Reading/Language Arts Curriculum:
Leadership and Supervision (3)
Prerequisite: California Reading Certificate or consent of instructor.

EDRG 556 Theoretical Processes & Models of Reading (3)
Prerequisite: California Reading Certificate or consent of instructor.

EDRG 558 Language Study for Reading Teachers (3)
Prerequisites: EDRG 540 and admission to the Reading Certificate program or consent of instructor.

EDRG 559 Practicum in Teaching Reading and Language Arts (3)
Prerequisites: EDRG 551 and admission to the Reading Certificate program or consent of instructor.

EDRG 651 Advanced Diagnosis and Intervention in Reading/Language Arts (3)
Prerequisites: EDRG 551 or equivalent; valid California Reading Certificate or consent of instructor.

2. Take one of the following chosen in consultation with the program advisor (3-6 units):
Comprehensive Examination and EDRG 695 (3 units), or Thesis and EDRG 698 (6 units)

Option in Mathematics Education

The Master of Arts in Education, Option in Mathematics Education is designed for teachers seeking to enhance their knowledge and skills in mathematics content and pedagogy. Candidates investigate research-based mathematics teaching and learning with a focus on developing their ability to assess the learning needs of diverse students, support students in achieving mathematics proficiency, integrate technology in mathematics instruction, and develop a balanced mathematics instructional program that focuses on conceptual understanding, procedural fluency, and problem solving. Graduates of this program meet the pedagogy course work requirement for the Mathematics Instruction Added Authorization [MIAA]. (They must also demonstrate Mathematics subject matter competence through relevant course work or by examination to be eligible for the authorization.) Visit the program website for program details (www.ced.csulb.edu/departments-programs).

Prerequisites

The following are required for admission to the program:

1. Baccalaureate degree from an accredited college or university.
2. Minimum 2.85 overall grade point average in the last 60 semester (90 quarter) units of coursework.
3. A valid teaching credential (may be waived by program coordinator).

4. Six (6) units in teaching mathematics (may be waived by program coordinator).
5. For international students whose primary language is not English, minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Application

Candidates must apply separately to both the university and the program by posted deadlines. Applications should be submitted at the same time.

The application for Graduate Admission to the University is available online through CSUMentor (www.csumentor.edu). One complete set of official transcripts must be submitted with the university application. This set of transcripts will be used to determine grade point average eligibility. Failure to submit transcripts in a timely manner will result in a delayed review of the application.

The Mathematics Education program application must be submitted to the College of Education Graduate Studies Office (ED1-7). An application and directions can be downloaded at www.ced.csulb.edu/graduate/application-packets. The program application does not require a set of transcripts.

Conditional Admission

Successful applicants are admitted to the program with Conditional admission status.

Advancement to Candidacy - Clear Admission

Students should advance to candidacy as early as possible. They should meet with the program coordinator to plan their program no later than completing 6 units. For Advancement to Candidacy (Clear Admission status), students must:

1. Fulfill the campus Graduation Writing Assessment Requirement (GWAR).
2. Resolve all incomplete grades.
3. Maintain a 3.0 grade point average.
4. Submit to the Graduate Studies Office an Advancement to Candidacy form signed by the program advisor.

Requirements

1. Research and Methods (6 units).

Take the following:

EDME 501 Assessment in Teaching/Learning Math (3)
Prerequisite: Basic teaching credential or consent of instructor.

EDME 502 Research in Math Teaching/Learning (3)
Prerequisite: Basic teaching credential or consent of instructor.

2. Core (9 units).

Take one of the following:

EDME 500 Contemporary Issues in Math Education (3)
Prerequisite: Basic teaching credential or consent of instructor.

MTED 511 Mathematics Teaching and Learning (3)
Prerequisites: Consent of instructor.

Take the following:

EDME 505 Technology in Teaching/Learning Math (3)
Prerequisites: Basic teaching credential, EDME 501 and EDME 502 or equivalent, or consent of instructor.

EDME 550 Global Perspectives in Math Teaching (3)
Prerequisite: Basic teaching credential or consent of instructor.

3. Concentration (12 units).

Take all of the following:

MTED 500 Advanced Perspectives of Concepts

Foundational to Algebra for Teachers (3)

Prerequisites: Multiple Subjects Credential, or consent of instructor.

EDME 503 Advanced Math Methods in Teaching, 1 (3)

Prerequisite: Basic teaching credential or consent of instructor.

EDME 504 Advanced Math Methods in Teaching, 2 (3)

Prerequisite: Basic teaching credential or consent of instructor.

EDME 520 Algebra: Research-Based Pedagogy (3)

Prerequisite: Basic teaching credential or consent of instructor.

4. Capstone Requirement (3-6 units)

One of the following chosen in consultation with an advisor:

Comprehensive Examination and EDME 695 (3 units)

Thesis and EDME 698 (6 units)

Career Technical Education Track (CTE) (code 337)

The Career Technical Education track is a 13-17 unit Clear credential program comprised of Early Orientation (one 2-unit course), Initial Preparation (9 units in 4 core courses plus two 1-unit courses of supervised field practica), and Advanced Preparation (one 3-unit course and one 1-unit course of supervised field practicum; or completion of one of the options described below). A minimum grade of "C" is required in all courses to maintain program standing.

Candidates complete the Initial Preparation in two semesters of course work and supervised fieldwork, after which they are eligible for Advanced Preparation. The Advanced Preparation requirement can be met in any of 5 ways: (1) 4 units of course work, including a supervised field practicum; (2) completion of a BTSA/Induction program; (3) two years of documented successful teaching; (4) completion of another appropriate credential program, e.g., Single Subject; (5) completion of a Designated Subjects track in Supervision and Coordination of Teaching. Candidates must complete all Initial and Advanced preparation requirements for the Clear credential within three years of obtaining the Preliminary credential. Candidates will determine how to meet the Advanced Preparation requirement in consultation with the program advisor as they develop their individual education plan.

Program Courses

Initial Preparation

Early Orientation (two units; completed prior to or during first semester)

1. CTED 400 Early Orientation to Career Technical Education (2)

Prerequisite: Preliminary Designated Subjects Career Technical Education credential and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator.

Semester 1 (6 units):

2. CTED 401A Curriculum, Instruction, and Assessment in Career Technical Education (3)

Prerequisite: CTED 400, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 401B.

3. CTED 401B Field Practicum in Career Technical Education I (1)

Prerequisite: CTED 400, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 401A.

4. CTED 402 Effective Learning Environments in Career Technical Education (2)

Prerequisite: CTED 400, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 401A and CTED 401B.

Semester 2 (5 units):

5. CTED 403A Foundations of Career Technical Education (2)

Prerequisite: CTED 400, CTED 401A, CTED 401B, CTED 402, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 403B.

6. CTED 403B Field Practicum in Career Technical Education II (1)

Prerequisite: CTED 400, CTED 401A, CTED 401B, CTED 402, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 403A.

7. CTED 404 Addressing the Needs of All Learners in Career Technical Education (2)

Prerequisite: CTED 400, CTED 401A, CTED 401B, CTED 402, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 403A, CTED 403B.

Advanced Preparation

Semester 3:

8. CTED 405A Advanced Preparation in Career Technical Education (3)

Prerequisite: CTED 400, CTED 401A, CTED 401B, CTED 402, CTED 403A, CTED 403B, CTED 404, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 405B.

AND

CTED 405B Field Practicum in Career Technical Education III (1)

Prerequisite: CTED 400, CTED 401A, CTED 401B, CTED 402, CTED 403A, CTED 403B, CTED 404, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or permission of the CTE program coordinator. Corequisite: CTED 405A.

OR

alternative method of demonstrating Advanced Preparation competencies determined with program advisor.

9. Meet the Clear credential health education requirement

10. Meet the Clear credential U.S. Constitution requirement

Program Admission

Prospective candidates should consult the Career Technical Education advisor regarding credential requirements, application procedures, and schedule of course offerings.

NOTE: Candidates for admission to the program (a) must have already successfully completed Early Orientation or (b) must enroll in Early Orientation in their first semester in the program.

Program Application

Applicants must (a) submit a program application to the college Credential Center, (b) submit a written statement of purpose for pursuing the CTE credential as part of the application, and (c) schedule an interview with the CTE program advisor. Applications may be downloaded from the Designated Subjects Credential Program page of the College of Education website: www.ced.csulb.edu

Applicants to the CTE program must hold a valid Designated Subjects Preliminary Credential in Career Technical Education. Prospective candidates should consult the college Credential Center to file for their Preliminary Credential.

Requirements for the Preliminary Credential

1. Three years of verifiable work experience directly related to each industry sector named on the credential. Experience may be full-time or part-time, paid or unpaid. One year is equal to 1000 clock hours.
2. High school diploma requirement met by: (a) U.S. high school diploma, (b) GED, or (c) foreign equivalent of a high school diploma.
3. Verification by a Commission-approved program sponsor of having been apprised of the requirements for both the Preliminary and the Clear credentials.
4. Completed Commission on Teacher Credentialing form 41-4 (application for the Preliminary credential).
5. Have filed for or can demonstrate fingerprint clearance (CTC form 41-LS).
6. Recommendation by a Commission-approved CTE program sponsor.

Requirements for the Clear Credential

Successful completion of the CTE program leads to recommendation for the Clear credential. The Clear credential is valid for 5 years and may be renewed.

Requirements

1. Possess a valid California Preliminary CTE credential.
2. Complete a Commission-approved program of personalized preparation that includes training in Specially Designed Academic Instruction in English (SDAIE).
3. Verify completion of one of the following:
 - A. Two years of successful teaching on the basis of the Preliminary CTE credential in the areas listed on the credential;
 - B. A Commission-approved program of advanced personalized preparation as determined by the program sponsor.
4. U. S. Constitution requirement met by course work or examination.
5. Health education, including but not limited to the study of nutrition; the psychological and sociological effects of abuse of alcohol, narcotics, and drugs; and the use of tobacco. Requirement includes CPR training covering infant, child and adult CPR skills.
6. Complete study in computer-based technology, including the uses of technology in educational settings.
7. Credential application form 41-4.

8. Credential processing fee.

9. Recommendation for the Clear credential by a Commission-approved CTE program sponsor.

Adult Education Track (AE)

Commission on Teacher Credentialing standards for the Adult Education teaching authorization have recently been revised. The AE program at CSULB is undergoing revision and will take effect immediately upon approval.

Adult Education Track (AE)

The Adult Education track is a 10-unit Clear credential program comprised of an Early Orientation course (2 units), two core courses (6 units), and one supervised field practicum course (2 units). A minimum grade of "C" is required in all courses to maintain program standing.

Program Courses

1. ADED 410 Early Orientation to Adult Education (2)
Prerequisite: Preliminary Designated Subjects Adult Education Credential and admission to the Designated Subjects Credential Program Adult Education Track; or consent of program advisor.
2. ADED 420 Curriculum, Instruction, Assessment, and Classroom Management in Adult Education (3)
Prerequisite: Admission to the Designated Subjects Credential Program Adult Education Track and completion of or concurrent enrollment in ADED 410; or consent of instructor.
3. ADED 430 Foundations of Adult Education (3)
Prerequisite: Admission to the Designated Subjects Credential Program Adult Education Track and completion of or concurrent enrollment in ADED 410; or consent of instructor.
4. ADED 440 Field Practicum in Adult Education (2)
Prerequisite: Admission to the Designated Subjects Credential Program Adult Education Track and concurrent enrollment in ADED 420; or consent of instructor.

Program Admission

Prospective candidates should consult the Adult Education advisor regarding credential requirements, application procedures, and schedule of course offerings. NOTE: Candidates for admission to the program (a) must have already successfully completed Early Orientation or (b) must enroll in Early Orientation in their first semester in the program.

Program Application

Applicants must:

1. Submit a program application to the College of Education Credential Center,
 2. Submit a written statement of purpose for pursuing the AE credential as part of the application, and
 3. Schedule an interview with the AE program advisor.
- Applications may be downloaded from the Designated Subjects Credential Program section of the College of Education website: www.ced.csulb.edu. Applicants to the AE program must hold a valid Designated Subjects Preliminary Credential in Adult Education. Prospective candidates should consult the college Credential Center to file for their Preliminary Credential.

Requirements for Preliminary Credential

1. Three years of verifiable work experience directly related to each industry sector named on the credential. Experience may be full-time or part-time, paid or unpaid. One year is equal to 1000 clock hours.

- High school diploma requirement met by: (a) U.S. high school diploma, (b) GED, or (c) foreign equivalent of a high school diploma.
- Verification by CSULB of having been apprised of the requirements for both the Preliminary and the Clear credentials.
- Completed Commission on Teacher Credentialing form 41-4 (application for the Preliminary credential).
- Have filed for or can demonstrate fingerprint clearance (CTC form 41-LS).
- Recommendation for the Preliminary credential by CSULB.

Requirements for Clear Credential

Successful completion of the AE program leads to recommendation for the Clear credential. The Clear credential is valid for 5 years and may be renewed.

Requirements

- Possess a valid California Preliminary AE credential.
- Complete a Commission-approved program, i.e., CSULB program.
- Successful teaching of a minimum of one course in each of four terms within the five-year period of validity of the Preliminary Adult Education credential.
- U. S. Constitution requirement met by course work or examination.
- Health education, including but not limited to the study of nutrition; the psychological and sociological effects of abuse of alcohol, narcotics, and drugs; and the use of tobacco. Requirement includes CPR training covering infant, child, and adult CPR skills. The accepted course at CSULB is HSC 411B.
- Credential application form 41-4.
- Credential processing fee.
- Recommendation for the Clear credential by CSULB.

Petition Process for the Designated Subjects Program

Appeals to program decisions or requests for policy waivers are made by filing a written appeal or request with the CTE or AE program advisor. If a satisfactory decision cannot be arrived at, the advisor takes the petition or request to a faculty review committee. The committee reviews the written statement and supporting evidence and renders a decision. The decision may be appealed to the college Student Affairs Committee. For grade appeals, follow university policy described in the current catalog.

Adult Education Courses (ADED)

410. Early Orientation to Adult Education (2)

Prerequisite: Preliminary Designated Subjects Adult Education Credential and admission to the Designated Subjects Credential Program Adult Education Track; or consent of program advisor.

Competencies in Adult Education at an introductory level. Curriculum, instruction, assessment, use of technology, students with special needs, English learners, collaboration with other educators, orientation to school settings, professional growth. Topics are covered in depth in subsequent program courses.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing.

420. Curriculum, Instruction, Assessment, and Classroom Management in Adult Education (3)

Prerequisite: Admission to the Designated Subjects Credential Program Adult Education Track and completion of or concurrent enrollment in ADED 410; or consent of instructor.

Curriculum design, instructional strategies, assessment, and classroom management for teachers of Adult Education. Emphasis on integrating content with instruction and assessment.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing.

430. Foundations of Adult Education (3)

Prerequisite: Admission to the Designated Subjects Credential Program Adult Education Track and completion of or concurrent enrollment in ADED 410; or consent of instructor.

Principles and practices of adult education, including history, philosophical perspectives, adult learning theory, and professional responsibilities of the Adult Educator.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing.

440. Fieldwork Practicum in Adult Education (2)

Prerequisite: Admission to the Designated Subjects Credential Program Adult Education Track and concurrent enrollment in ADED 420; or consent of instructor.

Supervised fieldwork for students in the Designated Subjects Credential Program Adult Education Track.

Credit/No Credit grading only.

Career Technical Education Courses (CTED)

400. Early Orientation to Career Technical Education (2)

Prerequisite: Preliminary Designated Subjects Career Technical Education credential and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator.

Competencies in Career Technical Education at an introductory level. Curriculum, instruction, assessment, use of technology, special needs students, English learners, collaboration with other educators, orientation to school settings, professional growth. Topics are covered in depth in subsequent program courses.

Letter grade only (A-F). May be repeated to a maximum of 4 units in different semesters.

401A. Curriculum, Instruction and Assessment in Career Technical Education (3)

Prerequisite: CTED 400, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 401B.

Curriculum design, pedagogy, and assessment for teachers of Career Technical Education. Emphasis on integrating content with instruction and assessment.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. May be repeated to a maximum of 6 units in different semesters.

401B. Career Technical Education Field Practicum I (1)

Prerequisite: CTED 400, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 401A.

First supervised field experience in the candidate's teaching setting. Candidates apply knowledge and skills learned in CTED 401A. For candidates who do not yet have a teaching position, 25 hours of structured fieldwork in an appropriate educational setting determined in consultation with the instructor.

Credit/no credit grading only. May be repeated to a maximum of 2 units in different semesters.

402. Effective Learning Environments in Career Technical Education (2)

Prerequisite: CTED 400, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 401A and CTED 401B.

Classroom and laboratory management and instructional technology for Career Technical Education teachers. Integrating content, instruction, and assessment through behavioral and learning management theory and practice. Uses of technology to support instructional and administrative goals.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. May be repeated to a maximum of 4 units in different semesters.

403A. Foundations of Career Technical Education (2)

Prerequisite: CTED 400, 401A, 401B, 402, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 403B.

Themes, concepts, purposes, principles, legal and ethical issues, and historical trends in Career Technical Education. Development of professional perspectives, including growth as a teacher through reflective practice.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. May be repeated to a maximum of 4 units in different semesters.

403B. Career Technical Education Field Practicum II (1)

Prerequisite: CTED 400, 401A, 401B, 402, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 403A.

Second supervised field experience in the candidate's teaching setting. Candidates apply knowledge and skills learned in CTED 401A, CTED 402, and CTED 403A. For candidates who do not yet have a teaching position, 25 hours of structured fieldwork in an appropriate educational setting determined in consultation with the instructor.

Credit/no credit grading only. May be repeated to a maximum of 2 units in different semesters.

404. Addressing the Needs of All Learners in Career Technical Education (2)

Prerequisite: CTED 400, 401A, 401B, 402, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 403A, 403B.

Working with diverse students in the Career Technical Education classroom. Making content accessible to English learners through SDAIE and other strategies. Basic knowledge, skills and strategies for teaching special populations. Promoting a positive, inclusive learning environment.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. May be repeated to a maximum of 4 units in different semesters.

405A. Advanced Preparation in Career Technical Education (3)

Prerequisite: CTED 400, 401A, 401B, 402, 403A, 403B, 404, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 405B.

Covers major competencies in Career Technical Education at the Advanced Preparation level. Topics include curriculum, instruction, assessment, use of technology, special needs students, English learners, collaboration with other educators, and professional growth.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. May be repeated to a maximum of 6 units in different semesters.

405B. Career Technical Education Field Practicum III (1)

Prerequisite: CTED 400, CTED 401A, CTED 401B, CTED 402, CTED 403A, CTED 403B, CTED 404, Preliminary Designated Subjects Career Technical Education credential, and admission to Designated Subjects Career Technical Education program; or consent of the CTE program coordinator. Corequisite: CTED 405A.

Advanced supervised field experience in the candidate's teaching setting. Candidates apply knowledge and skills learned in CTED 401A, CTED 402, CTED 403A, 404 and CTED 405A. For candidates who do not yet have a teaching position, 25 hours of structured fieldwork in an appropriate educational setting determined in consultation with the instructor.

Credit/no credit grading only. May be repeated to a maximum of 2 units in different semesters.

Curriculum and Instruction Courses (EDCI)

GRADUATE LEVEL

500. Studies in Curriculum and Instruction (3)

Prerequisite: Admission to the Curriculum and Instruction Master's Program or consent of instructor. Must be taken during the first or second semester in the Master's Program.

Introduction to graduate study. Overview of curriculum and instruction as a field of inquiry. Reading critically and conducting educational research. Using reflective strategies to analyze and improve professional practice.

Letter grade only (A-F).

505. History of Education in the United States (3)

Prerequisites: Admission to an approved masters program or consent of the instructor. Must be taken during the first or second semester.

Advanced exploration of the major historical and philosophical paradigms of elementary and secondary education in the United States from which contemporary educational reform movements, curricula, and instructional practices have emerged.

Letter grading only (A-F).

530. Cross-cultural Education: US and Global Perspectives (3)

Prerequisite: Admission to an approved Master's program or consent of the instructor.

Critical analyses of cultural diversity, educational equity, and global interdependence to enhance cross-cultural competence. Students will investigate research literature, apply research-based knowledge to their educational practice, and infuse cross-cultural concepts, skills, and attitudes into the K-12 curriculum.

Letter grade only (A-F).

532. Socialization of Literacy in More Than One Language (3)

Prerequisites: Admission to the Masters of Education program, Option in Elementary Education, Dual Language Specialization, or consent of the instructor.

Examination of the social and cultural relationships between language and text from early utterances to adult literacy processes. Analyses of the contexts and conditions that influence literacy development for first and second language learners.

Ten hours fieldwork required. Letter grade only (A-F).

533. Action Research Methods: Teachers as Inquirers (3)

Prerequisite: Admission to the Curriculum and Instruction Master's Program or consent of instructor.

Examination of goals and features of action research, with focus on developing skills in data collection and analysis in order to support sustained action research as a teacher/researcher in classroom settings.

Letter grade only (A-F).

Curriculum and Instruction Courses (EDCI)

541. Designing Curriculum and Instruction in Primary and Second Language Settings (3)

Prerequisites: A valid California CLAD teaching credential or equivalent.

Principles of curriculum development, including primary, dual, and second language teaching and learning. Critical literacy. Includes research and program design internationally. (Offered in US or Mexico.)

Ten hours fieldwork required. Letter grade only (A-F).

570. Advanced Studies in Teaching History-Social Science (3)

Prerequisites: EDEL 472; EDP 400, EDP 520 or 696, or equivalent.

Intensive study of selected topics related to teaching and learning history-social science. Students engage in a systematic inquiry into their own practice as they conduct a teacher action research project.

Letter grade only (A-F).

615. Contemporary Issues in Elementary and Secondary Education (3)

Prerequisite: EDCI 500 and admission to an approved masters program or consent of the instructor.

Advanced analysis of current trends and issues in specific areas of elementary and secondary education. In-depth exploration of research perspectives and societal factors that influence the direction of elementary and secondary education in America.

Letter grade only (A-F).

625. Analysis of Curriculum, Instruction, and Assessment (3)

Prerequisites: EDCI 500, 505, EDP 400; and one of the following EDP 520, 595, or 696 or EDCI 533; consent of the instructor.

Advanced study of curriculum design, instructional processes, and student assessment through analysis of theory and research on teaching and learning. California K-12 Content Standards and the California Standards for the Teaching Profession are used to align curriculum, instruction, and assessment.

Letter grade only (A-F).

695. Seminar in Curriculum and Instruction (3)

Prerequisites: EDCI 500, 505, 625 and advancement to candidacy, or by consent of instructor.

Studies in curriculum and instruction. Course content varies.

Offered on an irregular basis; consult the *Schedule of Classes*.

Letter grade only (A-F).

697. Directed Research in Curriculum and Instruction (1-3)

Prerequisites: Consent of instructor, department chair, and associate dean.

Individual research or intensive study under the guidance of a faculty member.

A student may enroll for one to three units to a maximum of six units for certificate and degree purposes, subject to a suitable change in course content. Application for enrollment must be made by October 1 for the spring semester or by March 1 for the fall semester or summer session. May be repeated to a maximum of 6 units in different semesters.

698. Thesis Study in Curriculum and Instruction (3)

Prerequisites: Advancement to candidacy; approval of thesis advisor, department chair and associate dean.

Planning, preparation, and completion of thesis under supervision of a thesis committee.

Application for enrollment must be made in the Graduate Studies Office by October 1 for the spring semester or by March 1 for the fall semester or summer session. Credit/no credit grading only. May be taken for a maximum of 6 units in different semesters.

Early Childhood Education Courses (EDEC)

GRADUATE LEVEL

520. Early Childhood Curriculum and Assessment: Critical Perspectives (3)

Examines the history of competing movements in American early childhood curriculum thinking, program models, and current debates. Develops curriculum and assessment measures that integrate anti-bias, inclusive, and multicultural and global education into a unified approach.

Ten hours of fieldwork required. Letter grade only (A-F).

521. Historical and Contemporary Perspectives in Early Childhood (3)

Historical and contemporary perspectives in early childhood education and their impact on ECE programs, practices, and policies. Role of national/global organizations in institutionalizing and promoting various ECE perspectives and images of childhood. Debates over perspectives.

Ten hours of field work required. Letter grade only (A-F).

522. Parent Education and Involvement in Educational Environments (3)

Analysis of theories, research, issues, policies, programs, and practices pertaining to parent involvement in diverse and inclusive educational settings. Students design and implement home-based and school/center-based parent involvement activities.

Ten hours of field work required. Letter grade only (A-F).

523. Leadership, Advocacy and Supervision of Early Childhood Programs (3)

Discussion of various types of ECE programs, program development and implementation, different management approaches and leadership styles, and advocacy for young children and their families. Analysis of position statements and state documents pertaining to ECE programs.

Ten hours of field work required. Letter grade only (A-F).

526. Advanced Study of Infant and Toddler Programs (3)

Prerequisites: EDP 301 or consent of instructor.

Analysis of theories, research, and policies on infant and toddler care and education. Discussion of curriculum, environmental plan, and assessment for infant and toddlers. Infant/toddler program assessment.

Ten hours of fieldwork required. Letter grade only (A-F).

621. Research Seminar in Early Childhood Education (3)

Prerequisites: EDP 400 and teaching experience.

Discussion and analysis of research including qualitative research design and review of literature on topics pertaining to the field of Early Childhood Education.

Ten hours of field work required. Letter grade only (A-F).

622. Seminar in Early Childhood Care and Education: International Perspectives (3)

Discussion of ECE programs around the world. Analysis of social, political, and economic influences on policies related to the care and education of young children. Examines the role of international and national agencies in protecting children's welfare and education.

Letter grade only (A-F).

695. Seminar in Early Childhood Education (3)

Prerequisites: Advancement to candidacy, approval of the Early Childhood Education program advisor, and written application submitted to the Graduate Studies Office by March 1 for the fall semester or by October 1 for the spring semester.

For qualified candidates preparing to take the comprehensive examination. Consideration of curriculum role of the school and topics related to the effectiveness and excellence in early childhood education.

Letter grade only (A-F).

697. Directed Research in Early Childhood Education (1-3)

Prerequisites: Consent of instructor, department chair, and associate dean.

Individual research or intensive study under the guidance of a faculty member.

Application for enrollment must be made by October 1 for the spring semester or by March 1 for the fall semester or summer session.

May be repeated to a maximum of 6 units in different semesters for certificate and degree purposes, subject to suitable change in course content.

698. Thesis Study in Early Childhood Education (3)

Prerequisites: Advancement to candidacy; approval of thesis advisor, department chair, and associate dean.

Planning, preparation, and completion of thesis under supervision of a thesis committee.

Application for enrollment must be made in the Graduate Studies Office by October 1 for the spring semester or by March 1 for the fall semester or summer session. Credit/no credit only. May be repeated to a maximum of 6 units in different semesters.

Elementary Education Courses (EDEL)

LOWER DIVISION

100. Introduction to Teaching and Learning in Diverse Contemporary Classrooms (1)

Prerequisite: Acceptance in the Integrated Teacher Education Program.

Addresses the qualities of an effective teacher, components and purposes of an effective professional portfolio, and critical issues in diverse contemporary classrooms.

Ten hours of field experience. Letter grade only (A-F).

200. Introduction to the Teaching Profession (3)

Introduction to the concepts and issues related to K-8 education in a democratic society.

Letter grade only (A-F). Minimum 45 hours structured fieldwork in approved elementary, self-contained classroom required. A grade of "B" or better required for admission to the Multiple Subject Credential Program.

UPPER DIVISION

300. Cultural and Linguistic Diversity in Schools (3)

Prerequisites: Completion of EDEL 100 and 200. This course is intended for ITEP students only and requires admittance to the methods phase of the ITEP program

Future elementary school teachers will study schools and write reflective papers using a critical/pragmatic lens examining differentiated curriculum, instruction, and multiple assessment methods for diverse student populations during their 40 hours of school-based field experience.

Letter grade only (A-F).

380. Teaching and Learning in a Democratic Society (3)

Corequisite: EDSP 303.

Professional, historical, social, philosophical, legal, and political concepts and issues related to K-8 education in contemporary society. 45 hours structured fieldwork in approved elementary, self-contained classroom required.

Required prerequisite for admission to the Multiple Subject Credential Program. Letter grade only (A-F).

413. Developmentally Appropriate Teaching Practices (2)

Research-based theories and principles of development, learning, and motivation; developmentally appropriate teaching practices; subject specific pedagogy in health and physical education.

A minimum of 10 hours fieldwork in K-8 classrooms with a minimum 25% English Learners required. Letter grade only (A-F).

420. Teaching and Learning in the Kindergarten and Primary Grades (3)

Theories, research, policies and current trends/debates surrounding teaching and learning in the kindergarten and primary grades.

Integrates curriculum, pedagogy, and assessment with a special focus on diverse learners in the kindergarten and primary grades.

Ten hours of field work required.

430. Social and Cultural Diversity in US Schools (3)

Examination of personal attitudes towards social groups and diversity issues. Study of historical and structural factors that either empower or oppress people based on language, class, race/ethnicity, gender, sexual orientation, ability, or religion. Study of educational responses to diversity.

Letter grade only (A-F).

431. Cultural and Linguistic Diversity in Schools (3)

Multicultural education, including concepts of culture, educational equity, social justice, multiple forms of diversity, and anti-bias/anti-racist curriculum. Models of English language acquisition, bilingual education theory, and instructional accommodations for diverse students.

Ten hours fieldwork required. Letter grade only (A-F). Same course as EDP 431 and LING 431. Not open for credit to students with credit in EDP 431.

434. Cambodian Culture, Education and Diaspora (1-3)

Examination and analysis of conditions leading to the diaspora of Cambodians during the Pol Pot era and to resettlement in California, including social and psychological effects for individuals and families. Examination of current educational issues in Cambodia and local Cambodian communities. Required service learning takes place in Cambodia.

Letter grade only (A-F).

439. SDAIE: Specially Designed Academic Instruction in English (3)

Theories of second language acquisition and practical applications, including methods of teaching content to English language learners; oral, reading and writing strategies; and curriculum development with application to K-12 teaching.

Letter grade only (A-F). Same course as EDP 439 and EDSE 439. Not open for credit to students with credit in EDP 439 and EDSE 439.

442. Teaching and Learning Language Arts, K-8 (RICA) (3)

Prerequisite: Admission to the Multiple Subject Credential Program.

Language arts and visual/performance arts curriculum; developmentally appropriate practice, assessment- and research-based instruction in culturally/linguistically diverse classrooms; English Language Development; SDAIE; relationships among oral language, writing, spelling, reading, literature, and technology.

Ten hours fieldwork in K-8 classroom with a minimum 25% English Learners required. Letter grade only (A-F).

452. Teaching and Learning Reading, K-8 (RICA) (3)

Prerequisite: Admission to the Multiple Subject Credential Program or Education Specialist Credential Program.

Content, methods, and assessment for teaching reading to all students in culturally diverse, literature-based classrooms, including phonemic awareness, phonics, vocabulary development, comprehension, diagnosis, and the use of technology.

Ten hours fieldwork in K-8 classroom with a minimum 25% English learners required. Letter grade only (A-F).

Elementary Education Courses (EDEL)

452B. Teaching Reading in Spanish and English, K-8 (BCLAD) (1-3)

Prerequisite: Admission to the Multiple Subject Credential BCLAD (bilingual) Program.

Theory, research, and practice of teaching reading in two languages, including transfer of literacy skills from L1 to L2. Examines teacher beliefs and assumptions about literacy development among language minority students.

Letter grade only (A-F).

452C. Biliteracy: Teaching English and Chinese K-8 (3)

Prerequisites: Admission to the Multiple Subject Credential Program or consent of instructor.

Content, methods, and assessment for teaching literacy in K-8 English and Chinese bilingual settings. Course lectures, activities, and assignments in English and Chinese. Ten hours fieldwork in elementary bilingual and sheltered English/Chinese classrooms required.

Letter grade only (A-F).

453K. Methodology for Korean and English Language Instruction in a Bilingual Setting (3)

Content, methods, and assessments for teaching English and Korean to all students including English language learners in bilingual settings. Fluency and literacy in Korean required. Course requirement for Korean bilingual authorization.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. Minimum of ten hours of fieldwork.

453M. Methodology for Mandarin and English Language Instruction in a Bilingual Setting (3)

Content, methods, and assessments for teaching English and Mandarin to all students including English language learners in bilingual settings. Fluency and literacy in Mandarin required. Course requirement for Mandarin bilingual authorization.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. Minimum of ten hours of fieldwork.

453S. Methodology for Spanish and English Language Instruction in a Bilingual Setting (3)

Content, methods, and assessments for teaching English and Spanish to all students including English language learners in bilingual settings. Fluency and literacy in Spanish required. Course requirement for Spanish bilingual authorization.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing. Minimum of ten hours of fieldwork.

453V. Methodology for Vietnamese and English Language Instruction in a Bilingual Setting (3)

Content, methods, and assessments for teaching English and Vietnamese to all students including English language learners in bilingual settings. Fluency and literacy in Vietnamese required. Course requirement for Vietnamese bilingual authorization.

Minimum grade of "C" required to maintain program standing. Minimum of ten hours of fieldwork. Letter grade only (A-F).

455C. Teaching the Chinese-American Bicultural Student (3)

Chinese culture and Chinese-American history, socioeconomic contexts of Chinese immigration and contributions to the U.S., contemporary issues of the Chinese community and Chinese-American students, with particular emphasis on socialization patterns, bicultural issues, and teaching strategies.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing.

455K. Teaching the Korean-American Bicultural Student (3)

Korean culture and Korean-American history, socioeconomic

contexts of Korean immigration and contributions to the U.S., contemporary issues of the Korean community and Korean-American students, with particular emphasis on socialization patterns, bicultural issues, and teaching strategies.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing.

455V. Teaching the Vietnamese-American Bicultural Student (3)

Vietnamese culture and Vietnamese-American history, socioeconomic contexts of Vietnamese immigration and contributions to the U.S., contemporary issues of the Vietnamese community and Vietnamese-American students, with particular emphasis on socialization patterns, bicultural issues, and teaching strategies.

Letter grade only (A-F). Minimum grade of "C" required to maintain program standing.

458. Newspaper in Education (1-3)

Use of the daily newspaper as an instructional tool in the classroom. Newspaper articles, features and editorials as a means of providing current content and bases for improvement of reading skills, interests, critical thinking and problem solving. Understanding mass media.

Same course as EDSE 458. Not open for credit to students with credit in EDSE 458.

462. Teaching and Learning Mathematics, K-8 (3)

Prerequisites: Admission to the Multiple Subject Credential Program.

Learning theories, research, and instructional practices for teaching mathematics to all students in culturally and linguistically diverse classrooms.

Ten hours fieldwork in K-8 classroom with minimum 25% English learners required. Letter grade only (A-F).

472. Teaching and Learning History-Social Science, K-8 (3)

Prerequisites: Admission to the Multiple Subjects Credential Program.

Theory, research, and content for standards-based history-social science teaching in diverse classrooms.

Ten hours fieldwork in K-8 classroom with a minimum 25% English learners required. Letter grade only (A-F).

482. Student Teaching in Diverse Classrooms (8)

Prerequisites: Admission to 2042 Multiple Subject Credential Student Teaching including successful completion of Teacher Performance Assessment (TPA) Tasks 1 and 2.

Integrated student teaching in K-8 public schools with separate eight week assignments at two of the following levels: K-2, 3-5, or 6-8. Emphasis on teaching in diverse, mainstreamed classrooms. Weekly seminar.

Credit/No Credit grading only with an equivalent grade of "A" or "B" and satisfactory completion of TPA Task 4 required for credit. May be repeated to a maximum of 16 units.

482B. Student Teaching in Bilingual Classrooms (8)

Prerequisite: Admission to Multiple Subject Credential BCLAD Student Teaching.

Teaching assignment for one semester in a public school in grades K-6 with assignments at primary and intermediate levels, or one semester in a designated bilingual classroom. Emphasis on teaching experiences with children of limited English proficiency and on primary language instruction. Weekly seminar.

Credit/No Credit grading only, with an equivalent grade of "A" or "B" required for credit. May be repeated to a maximum of 16 units in the same semester.

482C. Student Teaching in Bilingual Classrooms (8)

Prerequisite: Admission to Multiple Subject Credential BCLAD Student Teaching.

Teaching assignment for one semester in a public school in grades K-6 in a designated bilingual classroom under an emergency

credential, with assignments at the primary and intermediate levels. Emphasis on teaching experiences with limited-English proficient speakers and primary language instruction.

Weekly seminar. Credit/No Credit grading only, with an equivalent grade of "A" or "B" required for credit. May be repeated to a maximum of 16 units in the same semester.

482D. Student Teaching in Diverse Classrooms (8)

Prerequisite: Admission to 2042 Multiple Subject Credential Student Teaching including successful completion of Teaching Performance Assessment Tasks 1 and 2.

One semester integrated student teaching assignment in a K-8 public school with assignments at two of the following levels: K-2, 3-5, or 6-8. Emphasis on experiences in diverse, mainstreamed classrooms with English Learners. One assignment includes gifted students, students with disabilities, or EL students.

Weekly seminar included. Credit/No Credit grading only with an equivalent grade of "A" or "B" required for credit including passage of TPA Task 4. May be repeated to a maximum of 16 units in different semesters.

482E. Student Teaching in Bilingual Classrooms-Asian Languages (8)

Prerequisite: Admission to Multiple Subject Asian BCLAD Credential Program Student Teaching.

Integrated student teaching assignment in a K-8 public school at two of the following: K-2, 3-5, or 6-8 (one must be in an Asian Language/English bilingual setting). Emphasizes experiences in diverse, mainstreamed classrooms with English Learners whose native language is one of the following: Cantonese, Khmer, Korean, Mandarin, or Vietnamese.

Seminar included. Credit/No Credit grading only with an equivalent grade of "B" or better required for credit including passage of TPA Task 4. May be repeated to a maximum of 16 units in the same semester.

482F. Student Teaching in Spanish Dual Language Development Classrooms (8)

Prerequisite: Admission to Multiple Subject Credential Student Teaching.

One semester integrated student teaching in a K-8 public school with assignments at two of the following: K-2, 3-5, or 6-8. Emphasizes experiences in diverse classrooms with English Learners. Practicum in using Spanish for instruction. Spanish primary language management for explanation, clarification, and review.

Seminar included. Credit/No Credit grading only with an equivalent grade of "B" or better required for credit including passage of TPA Task 4. May be repeated to a maximum of 16 units in the same semester.

490. Selected Topics - Elementary Education (1-3)

Topics of current interest in elementary education selected for intensive study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

497. Independent Study (1-3)

Prerequisites: Consent of instructor and department chair.

Independent study undertaken under the supervision of a faculty member.

May be repeated to a maximum of 6 units but no more than 3 units applicable to credential or major requirement.

GRADUATE LEVEL

572A. Multiple Subject Internship (8)

Prerequisites: Admission to 2042 Multiple Subject Internship and advancement to Intern Student Teaching.

The Intern is a full-time teacher in a public school district with which CSULB has an intern agreement. Intern Student Teaching is a two-semester or one-semester culminating fieldwork experience.

Weekly seminar. Credit/No Credit grading only with an equivalent grade of "A" or "B" required for credit including passage of TPA Task 4. May be repeated to a maximum of 16 units in different semesters.

572B. Multiple Subject Internship (8)

Prerequisites: Admission to 2042 Multiple Subject Internship and advancement to Intern Student Teaching.

The Intern is a full-time teacher in a public school district with which CSULB has an intern agreement. Intern Student Teaching is a two-semester or one-semester culminating fieldwork experience.

Weekly seminar. Credit/No Credit grading only with an equivalent grade of "A" or "B" required for credit including passage of TPA Task 4. May be repeated to a maximum of 16 units in different semesters.

599. Selected Topics - Teacher Education (1-3)

Study of a special topic in teacher education. Students must be enrolled in a Masters or Advanced Credential or Specialist Program.

Letter grade only A-F). May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*.

Mathematics Education Courses (EDME)

GRADUATE LEVEL

500. Contemporary Issues in Mathematics Education (3)

Prerequisite: Basic teaching credential or consent of instructor.

Advanced study in mathematics education. Emphasis on contemporary issues addressed in the National Council for the Teaching of Mathematics Principles and Standards and described in the Mathematics Framework for California Public Schools.

Letter grade only (A-F).

501. Assessment in Teaching and Learning Mathematics (3)

Prerequisite: Basic teaching credential or consent of instructor.

Designing advanced assessment methods aligned with the National Council of Teachers of Mathematics Assessment Standards; interpreting and using assessment results for planning and teaching mathematics in linguistically and culturally diverse classrooms.

Letter grade only (A-F).

502. Research in Mathematics Teaching and Learning (3)

Prerequisite: Basic teaching credential or consent of instructor.

Advanced study of mathematics education research. Emphasis on development of teacher-researchers in an inquiry learning process of research design, methods, data collection, and data analysis in qualitative, quantitative, and mixed methods approaches through conducting action research in teaching practices.

Letter grade only (A-F).

503. Advanced Mathematics Methods in Teaching, 1 (3)

Prerequisite: Basic teaching credential or consent of instructor.

Advanced study in mathematics methods by applying state and national mathematics principles and standards to research-based practices.

Letter grade only (A-F).

504. Advanced Mathematics Methods in Teaching, 2 (3)

Prerequisite: Basic teaching credential or consent of instructor.

Advanced study of the teaching and learning of mathematics in linguistically and culturally diverse classrooms. Topics include teaching and learning pre-algebra, algebra, plane and solid geometry, measurement, data analysis, probability, learning theories, assessment, state and national academic content standards.

Letter grade only (A-F).

Mathematics Education Courses (EDME)

505. Technology in Teaching and Learning Mathematics (3)

Prerequisites: Basic teaching credential, EDME 501 and EDME 502 or equivalent, or consent of instructor.

Advanced approaches to integrating contemporary technologies in teaching and learning mathematics. Focus on integrating technology to provide differentiated and individualized learning opportunities to meet the needs of linguistically and culturally diverse students.

Letter grade only (A-F).

520. Algebra: Research-Based Pedagogy (3)

Prerequisite: Basic teaching credential or consent of instructor.

Integration of pre-algebra and algebra content and pedagogy in mathematics classrooms. Exploration of recent research trends, national policies, and standards related to algebra curriculum and teaching.

Letter grade only (A-F).

550. Global Perspectives in Mathematics Teaching (3)

Prerequisite: Basic teaching credential or consent of instructor.

Developing global perspectives in mathematics teaching through case study and lesson analysis; exploring, analyzing, and applying multifaceted teaching approaches of different cultural and educational systems.

Letter grade only (A-F).

695. Advanced Studies in Mathematics Education (3)

Prerequisites: Advancement to candidacy in the Mathematics Education Program; approval of the Program Advisor; written application to take the comprehensive examination to the College of Education Graduate Office by March 1 for the fall semester or by October 1 for the spring semester.

Studies of problems and issues in the teaching and learning of mathematics. Relating research to teaching practice. For qualified candidates preparing to write the comprehensive examination.

Letter grade only (A-F).

698. Thesis Study in Mathematics Education (3)

Prerequisites: Advancement to candidacy in the Mathematics Education Program; approval of thesis advisor, department chair, and associate dean.

Planning, preparation, and completion of thesis under supervision of a thesis advisor.

Credit/No Credit grading only. May be repeated for a maximum of 6 units in different semesters. Application for enrollment must be made in the Graduate Studies Office by October 1 for the spring semester or by March 1 for the fall semester or summer session.

Education Middle School Courses (EDMS)

GRADUATE LEVEL

693. Developing Teacher Leadership in Middle Level Education (3)

Prerequisite: Students must be enrolled in either a Teacher Education Masters Program, or the Tier II Professional Administrative Services Credential Program, or consent of instructor.

Involves administrators and teachers in developing middle level teacher leadership through the lens of teacher empowerment. Theory and practice of collaborative and action research models as tools for school improvement.

Letter grade only (A-F). Same course as EDAD 693. Not open for credit to students with credit in EDAD 693 and EDEL 693.

Reading Education Courses (EDRG)

GRADUATE LEVEL

520. Resources for Reading Teachers (3)

Prerequisite: Admission to the Reading Certificate Program or consent of instructor.

Exploration of appropriate and theoretically grounded reading resources and strategies that can be used to help all children succeed in reading. Includes survey and analysis of age appropriate multicultural texts for children and adolescents.

Letter grade only (A-F).

540. Advanced Studies in Literacy (3)

Prerequisite: A valid teaching credential or admission to an approved masters, certificate, or advanced credential program; or consent of instructor.

Emphasizes advanced study of literacy research, theory, and practice. Survey of issues of first and second language acquisition/development, and curriculum trends in literacy.

Letter grade only (A-F).

543. Integration of Technology in Reading/Language Arts (3)

Prerequisites: EDP 443 or ETEC 444 or equivalent; or a course approved by CTC, or a course approved by CCTC to meet the Level I technology requirement or approval of the instructor.

Investigation and evaluation of software and media programs for reading/language arts. Current issues in technology, change strategies for staff development, integration of technology in the curriculum.

Letter grade only (A-F).

544. Foundations of Literacy Research (3)

Prerequisite: California Reading Certificate or consent of instructor. Introduction to critical analysis of literacy research, with emphasis on classic and contemporary studies.

Includes experimental designs, descriptive studies, case studies, correlational research, ethnographies, and the teacher-as researcher.

Letter grade only (A-F).

551. Assessment and Instruction in Reading and Writing (3)

Prerequisites: Admission to Reading Certificate Program or consent of instructor.

Comprehensive study of literacy assessment and instruction including examination and evaluation of effective literacy procedures, strategies, and materials. Emphasis on detection and correction of reading difficulties.

Fieldwork required. Letter grade only (A-F).

551B. Assessment of Literacy with Bilingual Students (3)

Prerequisites: Speaking and reading competence in Spanish; consent of the instructor.

Evaluation of measures, strategies, and materials used to assess literacy in bilingual students. Special emphasis on issues regarding the interpretation of assessment data, program placement, and instruction of English learners.

Requires diagnostic assessment/instruction plan. Participation by speakers of languages other than Spanish is possible as literacy assessments in diverse languages become available. Letter grade only (A-F).

554. Reading/Language Arts Curriculum: Leadership and Supervision (3)

Prerequisite: California Reading Certificate or consent of instructor. Examines varied roles and responsibilities of the Reading/Language Arts Specialist including intervention, curriculum development, supervision, program development, and leadership. Letter grade only (A-F).

556. Theoretical Models and Processes of Reading (3)

Prerequisite: California Reading Certificate or consent of instructor. Exploration and analysis of current and historical theoretical models of the reading process. Examination of their influence on curriculum and instructional issues in literacy. Letter grade only (A-F).

558. Language Study for Reading Teachers (3)

Prerequisites: EDRG 540 and admission to the Reading Certificate program or consent of instructor. Relationships among phonology, morphology, semantics, syntax, pragmatics, and the teaching of reading. Focus on phonemic awareness, phonics, decoding strategies, vocabulary, spelling, grammar skills, and English language learners. Letter grade only (A-F).

559. Practicum in Teaching Reading/Language Arts (3)

Prerequisites: EDRG 551 and admission to the Reading Certificate program or consent of instructor. Methods and intervention approaches for meeting the needs of struggling readers at various levels of reading acquisition, including tutoring or small-group instruction of students. Classroom field experience is required. Letter grade only (A-F).

651. Advanced Diagnosis and Intervention in Reading/Language Arts (3)

Prerequisites: EDRG 551 or equivalent; valid California Reading Certificate or consent of instructor. Includes clinical practicum and seminar on diagnosing and providing appropriate intervention for children with delayed literacy development. Letter grade only (A-F).

695. Seminar in Reading (3)

Prerequisites: Advancement to candidacy, approval of Reading Program advisor, and written application submitted to the Graduate Studies Office by October 1 for the spring semester; successful completion of all required course work for the Master of Arts in Education, Option in Elementary or Secondary Education, Specialization in Reading. Letter grade only (A-F). May be repeated to a maximum of 6 units in different semesters.

697. Directed Research in Reading (1-3)

Prerequisites: Consent of instructor, department chair, and associate dean. Individual research or intensive study under the guidance of a faculty member. Application for enrollment must be made by October 1 for the spring semester or by March 1 for the fall semester or summer session. May be repeated to a maximum of 6 units in different semesters.

698. Thesis Study in Reading (3)

Prerequisites: Advancement to candidacy; approval of thesis advisor, department chair, and associate dean. Planning, preparation, and completion of thesis under supervision of a thesis committee. Application for enrollment must be made in the Graduate Studies Office by October 1 for the spring semester or by March 1 for the fall semester or summer session. Credit/no credit only. May be repeated to a maximum of 6 units in different semesters for certificate and degree purposes, subject to suitable change in course content.

Secondary Education Courses (EDSE)

UPPER DIVISION

435. United States Secondary Schools: Intercultural Education (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or consent of University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

Critical reflection on multicultural education in a diverse society. Philosophy, history and sociology of education as fundamental to understanding contemporary secondary schools. Curriculum and student populations in the context of issues and controversies in education. Approved CLAD Certificate course (Domain 3).

Fifteen hour fieldwork requirement. Letter grade only (A-F). May be repeated to a maximum of 6 units.

436. Curriculum, Instruction, Assessment and Classroom Management (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or consent of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

Explores systematic instruction, theories of learning, curriculum development, teaching strategies, assessment and evaluation of student progress, classroom management and discipline, and establishing successful learning environments for all students.

Fifteen hour fieldwork requirement. Letter grade only (A-F). May be repeated to a maximum of 6 units.

439. SDAIE: Specially Designed Academic Instruction in English (3)

Theories of second language acquisition and practical applications, including methods of teaching content to English language learners; oral, reading and writing strategies; and curriculum development with application to K-12 teaching.

Letter grade only (A-F). Same course as EDEL 439 and EDP 439. Not open for credit to students with credit in EDEL 439 and EDP 439.

457. Reading and Writing in the Secondary School (3)

Prerequisite: EDSS 300 (A, C, D, F, G, H, M, N, P, or S); or admission in the Single Subject Credential Program; or consent of the University Coordinator of the Single Subject Credential Program. Required course in the Single Subject Credential Program.

Emphasis on reading and writing assessment and instruction; textbook selection; vocabulary development; comprehension strategies; content area reading and study skills; writing instruction; English Language Development; the reading needs of less prepared, English language, and accelerated learners; and issues of diversity and equity.

Minimum fifteen hours of field work required. Letter grade only (A-F). May be repeated to a maximum of 6 units.

458. Newspaper in Education (1-3)

Use of the daily newspaper as an instructional tool in the classroom. Newspaper articles, features and editorials as a means of providing current content and bases for improvement of reading skills, interests, critical thinking and problem-solving. Understanding mass media.

Same course as EDEL 458. Not open for credit to students with credit in EDEL 458.

Secondary Education Courses (EDSE)

490. Selected Topics - Secondary Education (1-3)

Prerequisite: Consent of instructor.

Topics of current interest in secondary education selected for intensive study.

May be repeated to a maximum of 6 units with different topics. Topics announced in the *Schedule of Classes*. May enroll for a maximum of 6 units for certificate and degree, subject to suitable change in topic content.

497. Independent Study (1-3)

Prerequisites: Consent of instructor and department chair.

Independent study undertaken under the supervision of a faculty member.

May be repeated to a maximum of 6 units, but no more than 3 units applicable to credential or major requirement.

THEATRE ARTS

College of the Arts

Department Chair: Joanne Gordon

Department Office: Theatre Arts (TA), Room 221

Telephone: (562) 985-7891

Faculty: Craig Fleming, Nicki Genovese, Joanne Gordon, Holly Harbinger, W. Jeffrey Hickman, David Jacques, Daniila Korogodsky, Ezra LeBank, Patrick McDonough, Hugh O'Gorman, Nancy Jo Smith, Maria Viera

Administrative Coordinator: Ashley Boehne Ehlers

Career Possibilities

Actor • Director • Stage Manager • Lighting Designer • Costume Designer • Set Designer • Technical Director • Teacher • Theatre Administrator • Theatre Manager • Director of Development • Box Office Manager • Managing Director • Artistic Director • Marketing Director • Screenwriter • Playwright • Writer (Some of these, and other careers, require additional education or experience. For more information, see www.careers.csulb.edu.)

Introduction

The Department of Theatre Arts offers the Bachelor of Arts degree with opportunities for options in Performance (acting) and Technical Theatre (scenery/costume/lighting).

The W. David Sievers Memorial Scholarship in acting, named for the first faculty member of the theatre program, is awarded annually to new students who exhibit potential in the field of performance. This award consists of a modest sum and is determined through competitive audition judged by faculty. In addition, the Fine Arts Affiliates of the University and the Dramatic Allied Arts Guild of Long Beach provide for monetary awards to qualified students in all areas of theatre. For further information contact the Department of Theatre Arts.

The Department of Theatre Arts offers graduate study leading to the Master of Fine Arts degrees. The candidate is urged to observe the general requirements stated in this *Catalog*, as well as the specific departmental requirements stated here and, more fully, in the Department Program Planners, available upon request from the department.

All majors are required to participate in the departmental production program. Furthermore, majors enrolled in any acting course are expected to audition and participate in departmental productions in that semester. The student is expected to accept any role in which he/she is cast. Majors are also expected to seek approval from their advisor before making any commitment to a theatre program which lies outside of the departmental academic program.

The Theatre Arts Department holds division II membership in the National Association of Schools of Theatre (National Association of Schools of Theatre, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, phone: 703-437-0700). The Bachelor of Arts and the Master of Fine Arts degrees are accredited by the association. The department is also a member in good standing with the Theatre Communications Group, the International Theatre Institute of the United States and the United States Institute of Theatre Technology.

Undergraduate Programs

Bachelor of Arts in Theatre Arts (120 units)

The Bachelor of Arts in Theatre Arts provides the opportunity for the student to gain a broad exposure to the discipline. The curriculum requires study in Acting, Technical and Design Crafts, the History, Literature and Criticism of Theatre, and Directing. After completion of the lower division core students may choose to audition/interview for placement in the performance or design options

Requirements

Lower Division Core:

Take all of the following courses:

THEA 101 Fundamentals of Script Analysis (3)
Prerequisites: None

THEA 111 Theatre Arts Showcase (1)
Prerequisites: None

THEA 114A Fundamentals of Acting (3)
Prerequisites: None

THEA 142 Elementary Stagecraft (3)
Prerequisites: None

THEA 146 Costume Crafts I (3)
Prerequisites: None

THEA 148 Stage Lighting I (3)
Prerequisites: None

THEA 201 Writing for the Theatre Arts (3)
Prerequisite: ENGL 100.

THEA 221 History of Theatre and Drama to 1660 (3)
Prerequisite: THEA 101 or concurrent enrollment or consent of instructor.

THEA 222 History of Theatre & Drama Since 1660 (3)
Prerequisite: THEA 221 or consent of instructor.

THEA 271 Stage Management (3)
Prerequisites: None

Upper Division Core:

Take all of the following courses:

THEA 324I Theatre Today (3)
Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

THEA 374 Fundamentals of Directing (3)
Prerequisites: THEA 101 and 114A or consent of instructor.

THEA 426 Dramatic Theory and Criticism (3)
Prerequisites: None

Take 21 units from the following:

THEA 112, 114B, 144, 214, 215, 262, 290, 316, 318A, 318B, 341, 352, 364, 375, 413, 414, 415, 425I, 427, 433, 442, 447, 449, 462, 476, 490, 498.

No more than eight units of Theatre Arts activity (cast and/or crew) will apply toward degree requirements. Crew requirements for all majors: One major running crew assignment in residence for each of the areas of costume, stagecraft and lighting to be satisfactorily completed. Students with transfer credit in those related courses must fulfill the same running crew requirements within the first three semesters of matriculation into the University.

At the beginning of the semester, all incoming students, including transfer students (including those who have been inactive for a year in our department), are required to audition or interview. Auditions and interviews are conducted by appropriate faculty/student groups. These auditions are required for admittance to certain upper division classes and are therefore used for appropriate placement of students at their level of competency as determined by the faculty.

Option in Performance: Acting (120 units)

Lower Division Core:

Take all of the following courses:

THEA 101 Fundamentals of Script Analysis (3)
Prerequisites: None

THEA 111 Theatre Arts Showcase (1)
Prerequisites: None

THEA 114A Fundamentals of Acting (3)
Prerequisites: None

THEA 142 Elementary Stagecraft (3)
Prerequisites: None

THEA 146 Costume Crafts I (3)
Prerequisites: None

THEA 148 Stage Lighting I (3)
Prerequisites: None

THEA 201 Writing for the Theatre Arts (3)
Prerequisite: ENGL 100.

THEA 221 History of Theatre and Drama to 1660 (3)
Prerequisite: THEA 101 or concurrent enrollment or consent of instructor.

THEA 222 History of Theatre & Drama Since 1660 (3)
Prerequisite: THEA 221 or consent of instructor.

THEA 271 Stage Management (3)
Prerequisites: None

Upper Division Core:

Take all of the following courses:

THEA 324I Theatre Today (3)
Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

THEA 374 Fundamentals of Directing (3)
Prerequisites: THEA 101 and 114A or consent of instructor.

THEA 426 Dramatic Theory and Criticism (3)
Prerequisites: None

Take all of the following courses:

THEA 112 Beginning Voice and Speech for Actor (3)
Prerequisites: None

THEA 114B Fundamentals of Acting (3)
Prerequisite: THEA 114A or equivalent.

THEA 214 Intermediate Acting (3)
Prerequisites: THEA 112, 114A and B. Should be taken directly following THEA 114B.

THEA 262 Beginning Movement for the Actor (3)
Prerequisites: None

Take nine units from the following courses:

THEA 144, 215, 290, 312, 316, 318A, 318B, 375, 413, 414, 415, 462, 476, 490, 498.

All performance majors will also fulfill four performance requirements to graduate. This requirement is met through acting, understudying, directing or assistant directing for a Mainstage or Second Stage production; acting or directing for a Showcase production; or by a special assignment approved by the performance faculty.

Option in Technical Theatre: Scenery/Costume/Lighting Design (120 units)

Lower Division Core:

Take all of the following courses:

THEA 101 Fundamentals of Script Analysis (3)
Prerequisites: None

THEA 111 Theatre Arts Showcase (1)
Prerequisites: None

THEA 114A Fundamentals of Acting (3)
Prerequisites: None

THEA 142 Elementary Stagecraft (3)
Prerequisites: None

THEA 146 Costume Crafts I (3)
Prerequisites: None

THEA 148 Stage Lighting I (3)
Prerequisites: None

THEA 201 Writing for the Theatre Arts (3)
Prerequisite: ENGL 100.

THEA 221 History of Theatre and Drama to 1660 (3)
Prerequisite: THEA 101 or concurrent enrollment or consent of instructor.

THEA 222 History of Theatre and Drama Since 1660 (3)
Prerequisite: THEA 221 or consent of instructor.

THEA 271 Stage Management (3)
Prerequisites: None

Upper Division Core:

Take all of the following courses:

THEA 324I Theatre Today (3)
Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

THEA 374 Fundamentals of Directing (3)
Prerequisites: THEA 101 and 114A or consent of instructor.

THEA 426 Dramatic Theory and Criticism (3)
Prerequisites: None

Take all of the following courses:

THEA 352 Foundations of Visual Expression (3)
Prerequisites: None

THEA 433 Design for Theatre (3)
Prerequisites: THEA 142, 146, 148 or consent of instructor.

Take 15 units from the following courses:

THEA 144, 341, 342, 441, 442, 444, 446, 447, 448, 449, 476, 498.

All technical theatre majors will also fulfill four production requirements in order to graduate. This requirement is met through scene, lighting, sound, costume, or makeup design or assistant design; technical direction or assistant; prop master; master painter; stage management or assistant; cutter or stitcher; or by special assignments as approved by the faculty in the appropriate area.

Minor in Theatre Arts

This minor may be combined with any major at CSULB except the BA in Theatre Arts. Students are admitted to the minor after having completed a minimum of 30 units of college level course work including all 12 units of General Education Foundation courses with a cumulative GPA of 3.0 or higher.

Requirements

A minimum of 21 units is required for the minor.

Take all of the following:

THEA 101 Fundamentals of Script Analysis (3)
Prerequisites: None

THEA 221 History of Theatre and Drama to 1660 (3)
Prerequisite: THEA 101 or concurrent enrollment or consent of instructor.

THEA 222 History of Theatre and Drama Since 1660 (3)
Prerequisite: THEA 221 or consent of instructor.

Take one of the following:

THEA 114A, 142

Take 9 units from the following (at least 3 units must be upper division):

THEA 112, 114A, 114B, 142, 146, 148, 214, 262, 316, 374, 433, 426

Recommended GE Capstone

(Note: will not be counted as part of the minor):

THEA 324I Theatre Today (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Graduate Programs

Master of Fine Arts in Theatre Arts

The Master of Fine Arts Degree in Theatre Arts is the terminal degree offering the professional training deemed necessary by the major Theatre Arts Schools in the United States.

All students admitted to the MFA program are members of California Repertory Company and are subject to the operating procedures of the company. CalRep, the professional arm of the Theatre Arts Department, prepares and performs plays from the canon of international dramatic literature.

MFA Transfer and Residence Policy

Transfer credit allowable toward the MFA may not exceed 20 units. The Graduate Advisor must approve all transferred credit use in the MFA Program.

Criteria for Admission to the Program

1. Students applying for the MFA program must have completed a bachelor's or master's degree in Theatre Arts from an accredited institution with a 3.0 GPA in upper-division theatre courses, meet University admission requirements, and submit evidence of creative ability and professional intent in one of the following areas: Acting, Technical Theatre/Design, Theatre Management, Dramatic Writing;
2. When an undergraduate degree has been completed in a program having different requirements than those at CSULB or in some field other than Theatre Arts, additional preparation and time may be required before the student can be considered for classified status in the degree program. Units of credit from coursework in a graduate program may be acceptable after review by the faculty evaluation committee, and approval by the Dean;
3. Admission to the program in Acting requires audition, professional resume, and interview. Admission to the program in Technical Theatre/Design requires interview and/or submission of original work such as manuscripts, designs, renderings, slides, digital images, models and/or working drawings;
4. All students admitted into the MFA program will be admitted as conditionally classified. In order to obtain fully

classified status, a committee from the Theatre Arts faculty must authorize continuation in the program after evaluating academic progress, individual skills development, and review of performance or portfolio at the end of the student's first full year of residence.

Advancement to Candidacy

1. Attain fully classified status;
2. Remove all undergraduate deficiencies determined by the departmental evaluation and the Dean of the College;
3. Submit a program for approval by the department chair, the graduate advisor and the Dean of the College.

Requirements

The MFA degree is a 60-unit degree requiring full time residency. The options share a common core of courses. The remainder of courses offer the opportunity further to develop artistic skills in particular options. The program culminates in a major creative project and written project report.

Option in Acting

The Acting option requires work in voice, movement, and process each semester. Process classes explore a wide range of acting styles. Ongoing performances in public presentations are required. 60 units required.

Take all of the following:

THEA 517 Repertory Theatre I (2)

Prerequisites: Acceptance into the MFA Program.

THEA 518 Repertory Theatre II (2)

Prerequisites: Acceptance into the MFA Program.

THEA 519 Repertory Theatre III (2)

Prerequisites: Acceptance into the MFA Program.

THEA 520A Voice I (2)

Prerequisite: Acceptance into the MFA Program.

THEA 520B Voice I (2)

Prerequisites: Acceptance into MFA Program.

THEA 521A Voice II (2)

Prerequisites: Acceptance into MFA Program.

THEA 521B Voice II (2)

Prerequisites: Acceptance into the MFA Program.

THEA 522A Voice III (2)

Prerequisite: Acceptance into MFA Program.

THEA 522B Voice III (2)

Prerequisite: Acceptance into MFA Program.

THEA 523 Theory/Practice of Contemporary Theatre (3)

Prerequisite: None

THEA 524 Dramaturgy (3)

Prerequisite: Acceptance into the MFA Program.

THEA 530A Acting in Repertory I (2)

Prerequisite: Acceptance into the MFA program.

THEA 530B Acting in Repertory I (2)

Prerequisite: Acceptance into the MFA program, THEA 530A.

THEA 531A Acting in Repertory II (2)

Prerequisite: Acceptance into the MFA program.

THEA 531B Acting in Repertory II (2)

Prerequisite: Acceptance into the MFA program, THEA 531A.

THEA 532A Acting in Repertory III (2)

Prerequisite: Acceptance into the MFA program.

THEA 532B Acting in Repertory III (2)

Prerequisite: Acceptance into the MFA program, THEA 532A.

- THEA 564A Movement I (2)
Prerequisite: Acceptance into the MFA Program.
- THEA 564B Movement I (2)
Prerequisite: Acceptance into the MFA Program.
- THEA 565A Movement II (2)
Prerequisite: Acceptance into the MFA Program.
- THEA 565B Movement II (2)
Prerequisite: Acceptance into MFA Program.
- THEA 566A Movement III (2)
Prerequisites: Acceptance into the MFA Program.
- THEA 566B Movement III (2)
Prerequisite: Acceptance into MFA Program.
- THEA 696 Aesthetic Theory and Conceptualization (3)
Prerequisites: None
- THEA 699 MFA Thesis/Project (1-6)
Prerequisite: Advancement to candidacy and consent of department chair.

Option in Technical Theatre/Design

This option requires work in a variety of skills development emphasizing the technological as well as the artistic aspects of design and execution. Continuous advancing assignments in productions for public performances are required.

Requirements

Concentration core classes:

Take all of the following:

- THEA 517 Repertory Theatre I (2)
Prerequisites: Acceptance into the MFA Program.
- THEA 518 Repertory Theatre II (2)
Prerequisites: Acceptance into the MFA Program.
- THEA 519 Repertory Theatre III (2)
Prerequisites: Acceptance into the MFA Program.
- THEA 523 Theory/Practice of Contemporary Theatre (3)
Prerequisite: None
- THEA 524 Dramaturgy (3)
Prerequisite: Acceptance into the MFA Program.
- THEA 541 Portfolio Development (3)
Prerequisite: None
- THEA 544 Visual Concepts in Theatre Design (3)
Prerequisite: None
- THEA 550 Computer Graphics for Theatre (3)
Prerequisite: None
- THEA 552 Collaborative Studies (3)
Prerequisite: None
- THEA 584 Rendering and Painting for Theatre (2)
Prerequisites: None
- THEA 699 MFA Thesis/Project (1-6)
Prerequisite: Advancement to candidacy and consent of department chair.

Costume Concentration: 60 units:

Take all of the following courses:

- THEA 546A Advanced Costume Design I (2)
Prerequisites: None
- THEA 546B Advanced Costume Design I (2)
Prerequisite: THEA 546A or consent of instructor
- THEA 556A Advanced Costume Design II (2)
Prerequisites: None
- THEA 556B Advanced Costume Design II (2)
Prerequisite: THEA 556A or consent of instructor.

- THEA 656A Advanced Costume Design III (2)
Prerequisites: None
- THEA 656B Advanced Costume Design III (2)
Prerequisite: THEA 656A or consent of instructor.
- THEA 540 Non-traditional Material Use in the Theatre (2)
Prerequisite: Consent of instructor.
- THEA 554 Textile Applications in Theatre Design (2)
Prerequisites: None
- THEA 583 Theatrical Patterning Methods (2)
Prerequisites: None

Take 8 units of electives.

Scenery Concentration:

Take all of the following:

- THEA 540 Non-traditional Material Use in Theatre (2)
Prerequisite: Consent of instructor.
- THEA 545 Computer Aided Design for the Theatre (2)
Prerequisites: None
- THEA 554 Textile Applications in Theatre Design (2)
Prerequisites: None
- THEA 580A Scene Design I (2)
Prerequisites: None
- THEA 580B Scene Design I (2)
Prerequisite: THEA 580A or consent of instructor.
- THEA 585A Scene Design II (2)
Prerequisites: None
- THEA 585B Scene Design II (2)
Prerequisite: THEA 585A or consent of instructor.
- THEA 685A Scene Design III (2)
Prerequisites: None
- THEA 685B Scene Design III (2)
Prerequisites: THEA 685A or consent of instructor.

Take 7 units of electives.

Lighting Concentration:

Take all of the following:

- THEA 545 Computer Aided Design for the Theatre (2)
Prerequisites: None
- THEA 548A Advanced Lighting Design I (2)
Prerequisite: Consent of instructor.
- THEA 548B Advanced Lighting Design I (2)
Prerequisite: THEA 548A or consent of instructor.
- THEA 555 Virtual and Automated Lighting Design (2)
Prerequisite: None
- THEA 648A Advanced Lighting Design II (2)
Prerequisite: None
- THEA 648B Advanced Lighting Design II (2)
Prerequisites: THEA 648A or consent of instructor.
- THEA 649A Advanced Lighting Design III (2)
Prerequisite: None
- THEA 649B Advanced Lighting Design III (2)
Prerequisite: THEA 649A or consent of instructor.

Take 10 units of electives.

Option in Theatre Management

The option in Theatre Management requires work in a number of different areas including front of house, box office management, press relations, outreach, development, contracts, and fundraising. Successful completion of different assignments in each area is necessary for advancement in the program. 60 units required.

Take all of the following:

THEA 502 Seminar in Theatre Management I (3)

Prerequisites: Acceptance into the MFA Program.

THEA 503 Leadership and the Arts (3)

Prerequisites: Acceptance into the MFA Program or senior standing and completion of THEA 476 or consent of instructor.

THEA 504 Managing Not-For-Profit Arts Organization (3)

Prerequisites: Acceptance into the MFA Program or senior standing and completion of THEA 476 or consent of instructor.

THEA 505 Theatre Management Internship (3)

Prerequisites: Consent of instructor.

THEA 507 Entertainment Law (3)

Prerequisite: Acceptance into the MFA Program.

THEA 517 Repertory Theatre I (2)

Prerequisites: Acceptance into the MFA Program.

THEA 518 Repertory Theatre II (2)

Prerequisites: Acceptance into the MFA Program.

THEA 519 Repertory Theatre III (2)

Prerequisites: Acceptance into the MFA Program.

THEA 523 Theory/Practice of Contemporary Theatre (3)

Prerequisite: None

THEA 524 Dramaturgy (3)

Prerequisite: Acceptance into the MFA Program.

THEA 550 Computer Graphics for Theatre (3)

Prerequisite: None

THEA 602 Seminar in Theatre Management II (3)

Prerequisites: Acceptance into the MFA Program.

THEA 603 Producing Commercial Theatre (3)

Prerequisite: Acceptance into the MFA Program.

THEA 699 MFA Thesis/Project (1-6)

Prerequisite: Advancement to candidacy and consent of department chair.

MKTG 500 Marketing Concepts (3)

Prerequisite: MBA standing required.

ACCT 500 Managerial and Financial Accounting (3)

Prerequisite: MBA standing required.

Take 6 units of electives.

Electives with advisors approval may be taken from the University at large.

Option in Dramatic Writing

ADMISSION IS SUSPENDED TO NEW STUDENTS.

Requirements

The MFA in Theatre Arts, Option in Dramatic Writing degree program is 60 units, normally requiring full-time residency. The program culminates in a major thesis writing project of publishable/produced quality. Course requirements are arranged according to the following structure:

Core A (12 units) Dramatic Writing:

Take all of the following:

FEA 604A Graduate Seminar in Dramatic Writing (3)

Prerequisite: None

FEA 604B Graduate Seminar in Dramatic Writing (3)

Prerequisites: FEA 604A and consent of instructor.

FEA 604C Graduate Seminar in Dramatic Writing (3)

Prerequisites: FEA 604A and 604B, or consent of instructor.

FEA 604D Graduate Seminar in Dramatic Writing (3)

Prerequisites: FEA 604A, 604B, 604C, and consent of instructor.

Core B (9 units) History, Theory, Criticism, Production and Writing:

Take all of the following:

THEA 523 Theory/Practice of Contemporary Theatre (3)

Prerequisite: None

THEA 524 Dramaturgy (3)

Prerequisite: Acceptance into the MFA Program.

THEA 696 Aesthetic Theory and Conceptualization (3)

Prerequisites: None

Core B.1 (12 units)

Take 12 units from the following:

THEA 374, 375, 380, 426, 427, 507, 550, 694

Core C (6 units) Rhetorical Theory, Criticism, and Communication Studies:

Take the following:

COMM 633 Seminar in Interpretive Communication (3)

Prerequisite: COMM 541 or consent of instructor.

COMM 640 Rhetorical Theory and Criticism II (3)

Prerequisite: COMM 541.

Core D (6 units) Comparative World Literature & Classics:

Take two courses chosen from the following:

CWL 502, 503, 504, 537, 538, 540, 545, 549 (topic per advisement), 552, 561

Take the following course:

THEA 699 MFA Thesis/Project (1-6)

Prerequisite: Advancement to candidacy and consent of department chair.

Take 9 units of electives

Master of Business Administration / Master of Fine Arts in Theatre Management

The MBA/MFA degree will prepare arts professionals in all areas of both arts administration and business for professional careers in arts management—in performing and exhibiting arts organizations, in arts service organizations, in government, funding agencies and arts councils. The program prepares students for high level administrative positions and provides the background essential for advancement in professional management careers.

Admission

Candidates for this program must hold the equivalent of an undergraduate degree from an accredited institution of higher learning with a minimum of 24 units of upper division work in Theatre Arts. They should have achieved an undergraduate grade point average (GPA) of at least 2.75 (B-) and 3.0 GPA in upper division theatre courses. All candidates for admission are required to complete the Graduate Management Admission Test (GMAT) and achieve a score of at least 475. The GMAT measures general verbal, mathematical, and analytical writing skills that are developed over a long period of time and are associated with success in the first year of study at graduate schools of management. For each applicant, there is a departmental evaluation, based upon diagnostic examination and an analysis of official undergraduate transcripts to determine deficiencies and all areas which must be strengthened by the graduate program.

Requirements

Business Core 1 (12 units)

Take all the following courses:

ACCT 500 Managerial and Financial Accounting (3)
Prerequisite: MBA standing required.

FIN 501 Financial Management Concepts (3)
Prerequisite: MBA standing required.

MGMT 500 Business Policies/Operations/Organizations (3)
Prerequisite: MBA standing. Recommended preparation: IS 310 or 410.

MKTG 500 Marketing Concepts (3)
Prerequisite: MBA standing required.

Business Core 2 (21 units)

Take all the following courses:

ACCT 610 Advanced Cost Accounting, Budgeting and Control (3)
Prerequisite: ACCT 500 or equivalent with a grade of "C" or better.

FIN 600 Seminar in Business Finance (3)
Prerequisite: MBA standing required.

HRM 652 Sem in Human Resources Management (3)
Prerequisite: None

IS 601 Quantitative Methods for Managerial Decision Making (3)
Prerequisite: MBA standing required.

IS 602 Management of Information Systems (3)
Prerequisite: MBA standing required.

MGMT 647 Seminar in Management Planning and Control Systems (3)
Prerequisites: MBA standing, plus MGMT 500 or equivalent.

MKTG 661 Seminar in Marketing Policies (3)
Prerequisite: MKTG 500.

Business Elective (3 units)

Theatre Core (9 units)

Take all the following courses:

THEA 523 Theory/Practice of Contemporary Theatre (3)
Prerequisite: None

THEA 524 Dramaturgy (3)
Prerequisite: Acceptance into the MFA Program.

THEA 696 Aesthetic Theory and Conceptualization (3)
Prerequisites: None

Theatre Management (24 units)

Take all the following courses:

THEA 502 Seminar in Theatre Management I (3)
Prerequisites: Acceptance into the MFA Program.

THEA 503 Leadership and the Arts (3)
Prerequisites: Acceptance into the MFA Program or senior standing and completion of THEA 476 or consent of instructor.

THEA 504 Managing Not-For-Profit Arts Organization (3)
Prerequisites: Acceptance into the MFA Program or senior standing and completion of THEA 476 or consent of instructor.

THEA 507 Entertainment Law (3)
Prerequisite: Acceptance into the MFA Program.

THEA 550 Computer Graphics for Theatre (3)
Prerequisite: None

THEA 602 Seminar in Theatre Management II (3)
Prerequisites: Acceptance into the MFA Program.

THEA 603 Producing Commercial Theatre (3)
Prerequisite: Acceptance into the MFA Program.

Theatre Practicum (12 units)

Take all the following courses:

THEA 517 Repertory Theatre I (2)
Prerequisites: Acceptance into the MFA Program.

THEA 518 Repertory Theatre II (2)
Prerequisites: Acceptance into the MFA Program.

THEA 519 Repertory Theatre III (2)
Prerequisites: Acceptance into the MFA Program.

Culminating Thesis/Project (3 units)

Take the following course:

THEA 699 MFA Thesis/Project (1-6)
Prerequisite: Advancement to candidacy and consent of department chair.

Theatre Electives (6 units)

Electives from the University at large (per advisement)

Courses (THEA)

LOWER DIVISION

101. Fundamentals of Script Analysis (3)

Basic approach to analysis of play script, intended to provide theatre practitioners and generalists with tools necessary to understand literary text of a play, and its application to work in performance, design and critical/ historical studies.

Letter grade only (A-F).

110A,B. Theatre Arts Activity-Cast (1,1)

Participation in acting projects; open to students cast in University-sponsored productions.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment.)

111. Theatre Arts Showcase (1)

Participation in weekly projects dealing with all aspects of Theatre Arts.

Credit/No Credit grading only. May be repeated to a maximum of 8 units.

112. Beginning Voice and Speech for the Actor (3)

Theory and practice in developing command of oral techniques for stage including breath support, resonance, free vocal release, and articulation.

Letter grade only (A-F). (2 hours lecture, 4 hours activity)

113. Introduction to Acting (3)

Prerequisite/Corequisite: A GE Foundation course.

Review of actors and acting, past and present; their work as artists; basic exercises in voice, diction, movement, and personality projection. Open only to non-Theatre Arts majors. Attendance at University sponsored productions required.

Letter grade only (A-F).

114A. Fundamentals of Acting (3)

Development and preparation of the actor's instrument: voice, body, imagination. Exercises in relaxation, sensory work, motivations and relationships. Individual study of textual problems for actors.

Letter grade only (A-F). (2 hours lecture, 2 hours activity)

114B. Fundamentals of Acting (3)

Prerequisite: THEA 114A or equivalent.

Development and preparation of the actor's instrument: voice, body, imagination. Exercises in relaxation, sensory work, motivations and relationships. Individual study of textual problems for actors.

Letter grade only (A-F). (6 hours lab)

122. Theatre for the 21st Century (3)

Prerequisite/Corequisite: A GE Foundation course.

Exploring live theatre in the context of emerging technologies.

Letter grade only (A-F). Not open for credit to students with credit in THEA 124.

140A,B. Theatre Arts Activity — Crew (1,1)

Participation in technical play production projects; specific assignment determined through consultation with faculty or staff supervisors of Scenery, Lighting, Costume, Makeup, Sound, Tech Production, or Management areas.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment)

142. Elementary Stagecraft (3)

Basic physical equipment of the theatre, elementary scenic design, construction, rigging, painting and drafting. Practical lab assignments dealing with preparation of scenery and props for University sponsored productions.

Letter grade only (A-F). (6 hours activity)

144. Stage Makeup (3)

May be taken concurrently with THEA 146.

Practical introduction to techniques of theatrical make-up. Students must be clean-shaven due to nature of course. Preparation of make-up material for University sponsored productions.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

146. Costume Crafts (3)

May be taken concurrently with THEA 144.

Techniques of costume and accessory construction for stage; use of fabrics, materials and equipment. Preparation of costumes and accessories for University sponsored productions.

Letter grade only (A-F). (2 hours lecture, 4 hours lab)

148. Stage Lighting (3)

Theory and practice of modern stage lighting; functions of light; design, layout; properties of various instruments; practical experience in hanging and focusing of equipment for University sponsored productions.

Letter grade only (A-F). (2 hours lecture, 4 hours lab)

201. Writing for the Theatre Arts (3)

Prerequisite: ENGL 100.

The study and application of rhetorical strategies of invention, arrangement, and style to write expository, analytic, and argumentative prose with special emphasis on particular features of writing in the Theatre Arts.

Letter grade only (A-F).

210A,B. Theatre Arts Activity — Cast (1,1)

Participation in acting projects; open to students cast in University-sponsored productions.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment)

214. Intermediate Acting (3)

Prerequisites: THEA 112, 114A and B. Should be taken directly following THEA 114B.

Introduction to scene study. Application of techniques of body, voice and imagination to dramatic texts thereby stimulating an acting process for role development.

Letter grade only (A-F). (6 hours lab)

215. Introduction to Audition Techniques (3)

Prerequisite or Corequisite: THEA 114A.

Introduction to fundamentals of auditioning for theatrical productions. For beginning actors. Focus on preparing and coaching monologues, dramatic sides and callbacks.

Letter grade only (A-F). (6 hours lab)

221. History of Theatre and Drama to 1660 (3)

Prerequisite: THEA 101 or concurrent enrollment or consent of instructor.

Development of Theatre Arts from primitive origins to the 17th Century.

Letter grade only (A-F). Not open for credit to students with credit on THEA 321.

222. History of Theatre and Drama Since 1660 (3)

Prerequisite: THEA 221 or consent of instructor.

Development of Theatre Arts from 17th Century to present.

Letter grade only (A-F). Not open for credit to students with credit on THEA 322.

240A,B. Theatre Arts Activity — Crew (1,1)

Participation in technical play production projects; specific assignment determined through consultation with faculty or staff supervisors of Scenery, Lighting, Costume, Makeup, Sound, Tech Production, or Management areas.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment).

262. Beginning Movement for the Actor (3)

Beginning movement training for the actor based on physical conditioning and non-verbal communication related to beginning acting process.

Letter grade only (A-F). (6 hours activity)

271. Stage Management (3)

Management skills required for the professional stage manager. Examines responsibilities, and function of stage manager in relation to director, designer, and performer.

Letter grade only (A-F). (2 hours lecture, 2 hours activity)

290. Selected Topics in Theatre Arts (3)

Prerequisite: Consent of instructor.

Topic of current interest in Theatre Arts selected for intensive study.

Letter grade only (A-F). May be repeated to a maximum of 9 units with different topics in different semesters. Topics announced in the *Schedule of Classes*. (2 hours lecture, 2 hours activity)

UPPER DIVISION

310A,B. Theatre Arts Activity — Cast (1,1)

Participation in acting projects; open to students cast in University-sponsored productions.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment)

312. Applied Voice and Speech for the Actor (3)

Prerequisite: THEA 112 or equivalent.

Further study of vocal techniques for theatre, including variety of quality, force, tempo and pitch, scansion, and imagery. Application of basics learned in 112 to more complicated dramatic texts.

Letter grade only (A-F). (2 hours lecture, 4 hours activity)

316. Rehearsal and Performance (3)

Prerequisites: THEA 114A and 114B.

Performance based class focusing on interrelationship of actor and director. Working with director on creative process, interpreting demands of director and combining these with actor's creative process.

Letter grade only (A-F). (6 hours lab)

318A. Advanced Actor's Process (3)

Prerequisites: THEA 214, 316 and consent of instructor.

Playing Action: Intensive scene study in late 19th century dramatic texts.

Letter grade only (A-F). (6 hours lab)

318B. Advanced Actor's Process (3)

Prerequisites: THEA 318A or consent of instructor.

Character in action: Process of actor role development through Michael Chekhov acting technique and 20th century dramatic texts.

Letter grade only. (A-F). (6 hours lab.)

324I. Theatre Today (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Examines current trends, achievements and problems in contemporary western theatre and dramatic literature. Particular attention will be paid to multicultural expression in the theatre.

Same course as CWL 324I. Not open for credit to students with credit in CWL 324I.

340A,B. Theatre Arts Activity — Crew (1,1)

Participation in technical play production projects; specific assignment determined through consultation with faculty or staff supervisors of Scenery, Lighting, Costume, Makeup, Sound, Tech Production, or Management areas.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment.)

341. Presentation Techniques for Theatre (3)

Develop understanding of form, shape, line, and tone through exercises with various media. Explore approach to visualization and presentation techniques for theatre design.

Letter grade only (A-F). (2 hours lecture, 2 hours activity)

342. Advanced Technical Theatre (3)

Prerequisite: THEA 142 or consent of instructor.

Investigation of tools, materials, and procedures used in scenic construction and rigging. Supervised practical application of the techniques through scenic drafting and work on University sponsored productions.

(2 hours lecture, 2 hours activity)

344. Intermediate Theatrical Makeup Design (3)

Prerequisites: THEA 144 or consent of instructor.

Further exploration of practical theatrical makeup techniques. Design, preparation, and application of theatrical makeup for University sponsored productions.

Letter grade only (A-F).

352. Foundations of Visual Expression (3)

Introduction to basics of visual composition stressing a link to Theatre Design. Emphasizes development of visual discipline, creative skills and poetic and artistic nature of theatre design.

Letter grade only (A-F). (2 hours lecture, 2 hours activity)

364. Stage Combat (3)

Prerequisite: THEA 262 or consent of instructor.

Practical study of unarmed combat for stage. Covers technique, safety, and application of combat skills for acting process.

Letter grade only (A-F). (6 hours activity)

365. Improvisation and Comedy (3)

Survey of basic improvisation techniques and laboratory for short-form improvisation, long-form improvisation and self-generated material.

Letter grade only (A-F). (2 hours lecture, 2 hours lab.)

371. Intermediate Stage Management (3)

Prerequisites: THEA 271. Corequisites: Theatre Activity Unit.

In-depth study of Actor's Equity Association contract and legalities, advanced rehearsal, technical rehearsal and performance scheduling and management: including dance, opera, musical theatre and touring theatre. Students will be expected to Lead

Assistant Stage Manager a Cal Rep/Studio Heavy production, or Stage Manager a Player's Light production.

Letter grade only (A-F). Requires a 30-hour lab and a 60-hour activity unit.

374. Fundamentals of Directing (3)

Prerequisites: THEA 101 and 114A or consent of instructor.

Introduction to script analysis, rehearsal techniques, director's prompt book and organization of stage space and time.

Using contemporary realistic plays to develop actor/director communication skills. Intensive scene work.

Letter grade only (A-F). (6 hours lab)

375. Intermediate Directing (3)

Prerequisite: THEA 374 and consent of instructor.

Intensive work using nonrealistic plays to develop director's concept, advanced script analysis and approach to challenges of style. Introduction to collaboration with set, lighting, costume, sound, and make up designers. Intensive scene work with student actors focusing on rehearsal techniques.

Letter grade only (A-F). (6 hours lab)

380. Playwriting (3)

Creative writing for the stage. Study of character, concept, theme, dialogue and structure.

Letter grade only (A-F).

390. Selected Topics in Theatre Arts (1-3)

Prerequisite: Consent of Instructor

Topics of current interest in Theatre Arts selected for intensive study.

Letter grade only (A-F). May be taken to a maximum of 9 units.

Topics announced in the *Schedule of Classes*. (Lecture 1-3 hours)

410A,B. Theatre Arts Activity — Cast (1,1)

Participation in acting projects; open to students cast in University-sponsored productions.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment).

413. Film/Video Acting (3)

Prerequisite: THEA 318A and consent of Instructor

Acting techniques required for stylistic range and variety of film and television scripts. Video recording and playback of scenes and filmic acting exercises to adjust acting skills to these media.

Letter grade only (A-F). (6 hours activity)

414. Period Scene Study (3)

Prerequisite: THEA 318A and/or consent of instructor.

Scenes from period plays including Greek, Shakespeare, Comedy of Manners. Analysis of play's structure in terms of language, background, human behavior.

Letter grade only (A-F). (6 hours activity)

415. Preparing for the Profession (3)

Prerequisite: THEA 318A or consent of instructor.

Designed to acquaint actor with auditioning skills and practical business information necessary for acting professionally. Topics include: picture, resume, interview, audition, agent, casting, director, unions, contracts, job market and career strategies.

Letter grade only (A-F). (6 hours activity)

425I. Theatre and Cinema (3)

Prerequisite: GE Foundation requirements, one or more Explorations courses, THEA 324I, and upper-division standing.

Examines relationships between theatre and cinema both historically and concerning problems of realism, comedy and melodrama.

Letter grade only (A-F).

426./526. Dramatic Theory and Criticism (3)

A study of the theories of dramatic literature and performance. Analysis of dramatic works in relationship to theory, cultural context, and critical methodologies.

Letter grade only (A-F).

427. Dramatic Construction (3)

Prerequisites: GE Foundation requirements; at least one Exploration course in Theatre Arts or in literature (an English literature course, comparative world literature course, foreign language literature course, or other literature course); and upper division standing.

Examination of dramatic and literary theories that focus on narrative construction as applied to drama, film, storytelling and screenwriting.

Letter grade only (A-F).

433. Design for Theatre (3)

Prerequisites: THEA 142, 146, 148 or consent of instructor.

Integration of styles and methods of theatrical costume, makeup, sound, scenery, and lighting design.

Letter grade only (A-F).

440A,B. Theatre Arts Activity — Crew (1,1)

Participation in technical play production projects; specific assignment determined through consultation with faculty or staff supervisors of Scenery, Lighting, Costume, Makeup, Sound, Tech Production, or Management areas.

Letter grade only (A-F). (60 hours minimum participation time or major crew assignment).

441. Scenographic Techniques (3)

Prerequisite: THEA 142 or consent of instructor.

Study of drafting techniques used to translate designer's vision to finished set on stage. Includes both traditional and computer aided design and drafting tools.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

442. Scenic Technical Skills (3)

Prerequisite: THEA 142 or consent of instructor.

Use of materials and construction methods in stage properties, set dressing and furniture. Painting techniques for scenery and properties. Supervision in practical application of these elements in University sponsored productions.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

444. Scenic Design (3)

Prerequisite: THEA 101, 142, 433.

Comprehensive study in techniques and art of scenic design. Course includes practical hands-on instruction in design conceptual development and two and three dimensional visual expressions of ideas.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

446. Costume Design (3)

Prerequisite: THEA 101, 146 or consent of instructor.

Development of costume design through character and script analysis and understanding of line, space, color, and texture. Planning and presentation of costume rendering.

May be repeated for a maximum of 6 units in different semesters. (2 hours lecture, 2 hours lab)

447./547. Costume Technical Skills (3)

Prerequisite: THEA 101, 146, or consent of instructor.

Analysis of structure of costumes and accessories. Advanced technical projects using materials, patterning and construction methods in costume and accessories. Supervision in practical application of these elements in University sponsored productions.

Letter grade only (A-F). May be repeated for a maximum of 6 units in different semesters. (2 hours lecture, 2 hours lab)

448. Lighting Design (3)

Prerequisites: THEA 101, 148 or consent of instructor.

Techniques of designing lighting for various stage forms; creative planning and projection of designs for specific productions.

Letter grade only (A-F). May be repeated to a maximum of 6 units. (2 hours lecture, 2 hours lab)

449. Sound Design for the Theatre (3)

Introduction to scope, tools, materials and practices of sound in theatre today.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

462. Advanced Movement for the Actor (3)

Prerequisite: THEA 262 or consent of instructor.

Kinesthetic approaches to theatrically utilizing heightened physical language to explore character, relationship and truth.

Letter grade only (A-F). (6 hours lab)

476. Theatre Management (3)

Examination of administration, management and promotion of a producing theatre organization. Practical application required in University-sponsored productions.

Letter grade only (A-F).

480. Advanced Playwriting (3)

Prerequisite: THEA 380 or consent of instructor

Exploration of advanced playwriting concepts including non-traditional approaches to narrative, stylistic innovation, theatricality and heightened poetic language.

Letter grade only (A-F). (2 hours lecture, 2 hours lab.)

490. Selected Topics in Theatre Arts (3)

Prerequisites: Consent of instructor.

Topics of current interest in Theatre Arts selected for intensive study.

Letter grade only (A-F). May be taken to a maximum of 9 units. Topics announced in the *Schedule of Classes*. (Lecture 2 hours, activity 2 hours)

498. Selected Topics in Theatre Arts (3)

Prerequisites: Consent of instructor.

Independent projects and research of advanced nature in areas of Theatre Arts under faculty supervision.

Letter grade only (A-F). May be repeated to a maximum of 6 units of the same topic in the same area. Topics announced in the *Schedule of Classes*.

- A. Acting
- B. Directing
- C. Costume
- D. Scenery
- E. Properties
- K. Theatre criticism
- L. Movement
- M. Makeup
- N. Lighting
- O. Voice
- P. Stage management
- Q. Theatre management

GRADUATE LEVEL

502. Seminar in Theatre Management I (3)

Prerequisites: Acceptance into the MFA Program.

Study of contemporary principles of management processes specifically targeted to people pursuing professional Theatre Arts Management careers. Principles and practices of marketing, development, fund-raising, and publicity are analyzed and assessed through research and study.

Letter grade only (A-F). May be repeated to a maximum of 6 units. (2 hours lecture, 2 hours lab)

503. Leadership and the Arts (3)

Prerequisites: Acceptance into the MFA Program or senior standing and completion of THEA 476 or consent of instructor.

Study of contemporary principles of leadership and leadership development processes with special concern for application to people working in the arts. Context for leadership in arts organization is assessed and matched against students' personal leadership styles.

Letter grade only (A-F). (2 hours lecture, 2 hours lab)

504. Managing the Not-For-Profit Arts Organization (3)

Prerequisites: Acceptance into the MFA Program or senior standing and completion of THEA 476 or consent of instructor.

Study of principles of organizational management as applied to not-for-profit arts organizations. Issues include strategic planning and analysis, organizing, staffing, leading and controlling. Additionally studied are principles and practices of fundraising in not-for-profit environment.

Letter grade only (A-F).

505. Theatre Management Internship (3)

Prerequisites: Consent of instructor.

Required internship with local area theatre to provide management students with access to nationally recognized companies and the opportunity to work with leaders in the field.

Letter grade only (A-F).

507. Entertainment Law (3)

Prerequisite: Acceptance into the MFA Program.

Overview of legal aspects of entertainment business, especially in performing arts.

Letter grade only (A-F).

517. Repertory Theatre I (2)

Prerequisites: Acceptance into the MFA Program.

Design, preparation, rehearsals and performances of selected plays in California Repertory Company and University Players.

Letter grade only (A-F). May be repeated to a maximum of 4 units (6 hours lab)

518. Repertory Theatre II (2)

Prerequisites: Acceptance into the MFA Program.

Design, preparation, rehearsals and performances of selected plays in California Repertory Company and University Players.

Letter grade only (A-F). May be repeated to a maximum of 4 units (6 hours lab)

519. Repertory Theatre III (2)

Prerequisites: Acceptance into the MFA Program.

Design, preparation, rehearsals and performances of selected plays in California Repertory Company and University Players.

Letter grade only (A-F). May be repeated to a maximum of 4 units. (6 hours lab)

520A. Voice I (2)

Prerequisite: Acceptance into the MFA Program.

Groundwork in Voice and Speech techniques for professional actors.

Letter grade only (A-F). (6 hours lab)

520B. Voice I (2)

Prerequisites: Acceptance into MFA Program.

Application of vocal technique into various styles of verse and prose for meaningful vocal expressiveness.

Letter grade only (A-F). (6 hours lab)

521A. Voice II (2)

Prerequisites: Acceptance into MFA Program.

Exploration of extensive vocal variety and expressiveness, using

four components of voice: quality, force, tempo, pitch. Expanding the boundaries.

Letter grade only (A-F). (6 hours lab)

521B. Voice II (2)

Prerequisites: Acceptance into the MFA Program.

Analysis and development of dialects and accents for performance.

Letter grade only (A-F). (6 hours lab)

522A. Voice III (2)

Prerequisite: Acceptance into MFA Program.

Advanced study of dialects. Coursework covers research, analysis, and performance of selected dialects in context of a play.

Letter grade only (A-F). (6 hours lab)

522B. Voice III (2)

Prerequisite: Acceptance into MFA Program.

Exploration of microphone techniques. Coursework covers stand-up, radio drama, dubbing, animation, and practice in development of a demo-tape for professional voice-over work.

Letter grade only (A-F). (6 hours lab)

523. Theory and Practice of Contemporary Theatre (3)

Critical exploration of major schools of thought between 1980-present including styles, genres and both national and international trends. Contributions of theatre practitioners and theorists and role of audience in this period.

Letter grade only (A-F).

524. Dramaturgy (3)

Prerequisite: Acceptance into the MFA Program.

Dramaturgical approaches to textual analysis, dramatic structure and the theatrical event.

Letter grade only (A-F).

526./426. Dramatic Theory and Criticism (3)

Study of the major theories of dramatic literature and performance. Analysis of dramatic works in relationship to theory, cultural context, and critical methodologies.

Letter grade only (A-F).

530A. Acting in Repertory I (2)

Prerequisite: Acceptance into the MFA program.

Foundation and development of individual and ensemble acting techniques necessary for repertory actor and company. Applicable and related to performance schedule.

Letter grade only (A-F). (6 hours lab)

530B. Acting in Repertory I (2)

Prerequisite: Acceptance into the MFA program and THEA 530A.

Variable modules of technique training in ensemble and interaction skills for repertory actor. Dependent upon needs of individual actor, ensemble and/or performance schedule.

Letter grade only (A-F). (6 hours lab)

531A. Acting in Repertory II (2)

Prerequisite: Acceptance into the MFA program.

Development of a variety of acting techniques available to actor for playing situation, character, style and theatricality. Applicable and related to performance schedule.

Letter grade only (A-F). (6 hours lab)

531B. Acting in Repertory II (2)

Prerequisite: Acceptance into the MFA program and THEA 531A.

Variable technique modules in further development of repertory acting skills for playing situation, character, style and theatricality. Dependent upon needs of individual actor, ensemble and/or performance schedule.

Letter grade only (A-F). (6 hours lab)

532A. Acting in Repertory III (2)

Prerequisite: Acceptance into the MFA program.

Advanced and professional technique training of skill variety in the repertory actor. Applicable and related to performance schedule.

Letter grade only (A-F). (6 hours lab)

532B. Acting in Repertory III (2)

Prerequisite: Acceptance into the MFA program and THEA 532A.

Variable advanced technique modules for expansion and enrichment of professional acting skills for the individual and ensemble. Dependent upon needs of individual actor, ensemble and/or performance schedule.

Letter grade only (A-F). (6 hours lab)

540. Non-traditional Material Use in the Theatre (2)

Prerequisite: Consent of instructor.

Creative use of non-traditional materials in the design and fabrication of props, accessories and set dressing. Exploration into decorative techniques and processes in fabrication and finishing.

Letter grade only (A-F). (4 hours lab)

541. Portfolio Development (3)

Study of content and presentation forms of designer's portfolio, resume and cover letter. Acquaints the designer/technician with interview skills and practical business information.

Letter grade only (A-F). (4 hours lab)

544. Visual Concepts in Theatre Design (3)

Foundations in visual conceptualization emphasizing development of visual discipline, creative skills and the poetic nature of theatre design.

Letter grade only (A-F). (4 hours lab)

545. Computer Aided Design for the Theatre (2)

Applications of two/three dimensional computer aided design/drafting programs to problems in technical theatre and design. Course concentrates on application of 2D-CADD programs to common theatrical drafting problems. Course explores use of 3D-CADD programs as design tools in theatrical spaces.

Letter grade only (A-F). (4 hours lab)

546A. Advanced Costume Design I (2)

Development of costume design through character and script analysis, and understanding of line, space, color and texture.

Letter grade only (A-F). (4 hours lab)

546B. Advanced Costume Design I (2)

Prerequisite: THEA 546A or consent of instructor.

Exploration of elements of design as demanded by a variety of scripts and styles.

Letter grade only (A-F). (4 hours lab)

547./447. Costume Technical Skills (3)

Prerequisite: THEA 101, 146, or consent of instructor.

Analysis of structure of costumes and accessories. Advanced technical projects using materials, patterning and construction methods in costume and accessories. Supervision in practical application of these elements in University sponsored productions.

Letter grade only (A-F). May be repeated for a maximum of 6 units in different semesters. (2 hrs. lecture, 2 hrs. lab).

548A. Advanced Lighting Design I (2)

Prerequisite: Consent of instructor.

Techniques of designing lighting for various stage forms.

Letter grade only (A-F). (4 hours lab)

548B. Advanced Lighting Design I (2)

Prerequisite: THEA 548A or consent of instructor.

Creative planning and development of lighting designs for specific

productions.

Letter grade only (A-F). (4 hours lab)

550. Computer Graphics for Theatre (3)

A comprehensive study of tools and techniques incorporated in Adobe PhotoShop and their application to theatre. Techniques in scanning, digital image manipulation and exporting to hard and soft copies are covered.

Letter grade only (A-F). (1 hour lecture, 2 hours lab)

552. Collaborative Studies (3)

Explores aesthetic visions, directorial approaches, dramaturgical practices and performance styles that characterize contour and magic of Theatre. Use of collaborative study and presentation affords a greater expanse of creativity with the integration of methodologies as seen in Professional arenas.

Letter grade only (A-F). (2 hours lecture, 4 hours lab)

554. Textile Applications in Theatre Design (2)

Exploration and creative application of techniques of manipulating, painting and dyeing textiles for theatrical design.

Letter grade only (A-F). (4 hours lab)

555. Virtual and Automated Lighting Design (2)

Comprehensive study in techniques of virtual and automated lighting design. Course includes practical instruction in WYSIWYG virtual lighting software; Emphasis Control software and hardware; Vari*Lite, Martin, and High End automated fixtures, and the Catalyst Media Server.

Letter grade only (A-F). (Activity 4 hours)

556A. Advanced Costume Design II (2)

Development of skills in visual communication and style, including advanced rendering techniques and presentation.

Letter grade only (A-F). (4 hours lab)

556B. Advanced Costume Design II (2)

Prerequisite: THEA 556A or consent of instructor.

Development of skills in research, interpretation, conceptualization and integrating multiple sources in design.

Letter grade only (A-F). (4 hours lab)

564A. Movement I (2)

Prerequisite: Acceptance into the MFA Program.

Practical study in movement fundamentals, body mechanics, and non-verbal communication. Exploration of movement as actor's tool to aid in acting process.

Letter grade only (A-F). (6 hours lab)

564B. Movement I (2)

Prerequisite: Acceptance into the MFA Program.

Analytical and practical exploration of movement principles of weight, space, time, and energy and their application to acting process.

Letter grade only (A-F). (6 hours lab)

565A. Movement II (2)

Prerequisite: Acceptance into the MFA Program.

Practical study of unarmed combat for stage. Coursework covers technique, safety, choreography, and application to acting process, including performance of scenes that include combat.

Letter grade only (A-F). (6 hours lab)

565B. Movement II (2)

Prerequisite: Acceptance into MFA Program.

Practical study of armed combat for stage, including quarterstaves, broadswords, sabres, rapiers and daggers. Coursework covers technique, safety, choreography, and application to acting process.

Letter grade only (A-F). (6 hours lab)

566A. Movement III (2)

Prerequisites: Acceptance into the MFA Program.

Historical and practical study of movement styles from selected theatrical periods through eighteenth century. Coursework covers social dancing, movement, manners, and handling of period costumes, props, and accessories.

Letter grade only (A-F). (6 hours lab)

566B. Movement III (2)

Prerequisite: Acceptance into MFA Program.

Historical and practical study of movement styles of nineteenth and twentieth centuries. Coursework covers social dancing, movement, manners, and handling of period costumes, props, and accessories.

Letter grade only (A-F). (6 hours lab)

580A. Scene Design I (2)

Development of scene design through script analysis and understanding of space, form, line, color, texture and mood. Planning and development of scenic rendering and model.

Letter grade only (A-F). (4 hours lab)

580B. Scene Design I (2)

Prerequisite: THEA 580A or consent of instructor.

Exploration of elements of scenic design as demanded by a variety of scripts and styles with specific challenges and complex production format.

Letter grade only (A-F). (4 hours lab)

581. Scenographic Techniques (2)

Study of drafting techniques used to translate designer's vision to finished set on stage. Includes both traditional and computer aided design and drafting tools.

Letter grade only (A-F). (4 hours lab)

583. Theatrical Patterning Methods (2)

Exploration of fitting, advanced patterning and construction techniques. Projects in fitting problems, flat patterning, draping, understructures and tailoring for theatre.

Letter grade only (A-F). (4 hours lab)

584. Rendering and Painting for Theatre (2)

Introduction to rendering basics and painting stressing links to art of theatre design. Developing ability to depict form and space. Emphasizes development of visual discipline, drawing and rendering techniques used in visual presentation of stage design and scenic painting.

Letter grade only (A-F). (4 hours lab)

585A. Scene Design II (2)

Projects in scene design for the multi-set play. Consideration of stylistic unity, current trends and approaches as well as shifting problems. Development of advanced rendering techniques.

Letter grade only (A-F). (4 hours lab)

585B. Scene Design II (2)

Prerequisite: THEA 585A or consent of instructor.

Further development of skills in scene design for multi-set play. Development of advanced model making techniques.

Letter grade only (A-F). (4 hours lab)

590. Selected Topics - Graduation Design (3)

Prerequisite: Consent of Instructor.

Advanced design projects and concepts with faculty supervision.

Letter grade only (A-F). May be repeated for a maximum of 9 units in different semesters. Topics announced in the *Schedule of Classes*.

- C. Costumer
- D. Scenery
- N. Lighting

602. Seminar in Theatre Management II (3)

Prerequisites: Acceptance into the MFA Program.

Study of application of contemporary principles of management processes specifically targeted to people pursuing professional Theatre Arts Management careers. Applications of principles and practices of marketing, development, fund-raising, and publicity are analyzed and assessed through research and study.

Letter grade only (A-F). May be repeated to a maximum of 9 units.

603. Producing Commercial Theatre (3)

Prerequisite: Acceptance into the MFA Program.

Examination of all facets of professional theatre production including off-Broadway, Broadway, regional and stock operations.

Letter grade only (A-F).

614. Advanced Period Scene Study (3)

Prerequisite: Acceptance by audition into MFA program.

Acting in Shakespeare and advanced scene study from selected theatrical periods and plays. Analysis and exercises include language, background, and human behavior.

Letter grade only (A-F).

648A. Advanced Lighting Design II (2)

Direct application of cueing and structuring of the total lighting design within the time constraints of rehearsal and production.

Letter grade only (A-F). (4 hours lab)

648B. Advanced Lighting Design II (2)

Prerequisites: THEA 648A or consent of instructor.

Development of skills in lighting design process for a variety of scripts and styles with specific challenges and complex production formats.

Letter grade only (A-F). (4 hours lab)

649A. Advanced Lighting Design III (2)

Development of skills in lighting for musical, opera, video, and dance.

Letter grade only (A-F). (4 hours lab)

649B. Advanced Lighting Design III (2)

Prerequisite: THEA 649A or consent of instructor.

Development of skills in lighting for other production venues.

Letter grade only (A-F). (4 hours lab)

656A. Advanced Costume Design III (2)

Development of skills in costume design for musical, opera, and dance.

Letter grade only (A-F). (4 hours lab)

656B. Advanced Costume Design III (2)

Prerequisite: THEA 656A or consent of instructor.

Development of skills in costume design for other production venues.

Letter grade only (A-F). (4 hours lab)

685A. Scene Design III (2)

Development of skills in scene design for musical, opera, and dance.

Letter grade only (A-F). (4 hours lab)

685B. Scene Design III (2)

Prerequisites: THEA 685A or consent of instructor.

Further development of skills in scene design for other production venues.

Letter grade only (A-F). (4 hours lab)

686. Theatrical Tailoring (2)

Investigation of tailored garments and understructures in selected historical periods. Projects in traditional and contemporary hand machine tailoring techniques, and in specialized construction

for undergarments. Supervision in practical application of these elements in university sponsored productions.

Letter grade only (A-F). (4 hours lab)

690. Selected Topics in Theatre Management (1-3)

Prerequisite: Consent of the instructor.

Topics of current interest in Theatre Arts selected for intensive study.

Letter grade only. (A-F). May be taken for maximum of 9 units. Topics announced in the *Schedule of Classes*. (2 hours lecture, 2 hours lab.)

694. Selected Topics in Theatre Arts (3)

Prerequisite: Consent of instructor.

Advanced individual projects with faculty supervision in an area of Theatre Arts specialization.

Letter grade only (A-F). May be repeated to a maximum of 9 units. Limited to 3 units in any one area per semester and no more than 6 units in one semester with a total of 9 units in any one area.

Topics announced in the *Schedule of Classes*.

- A. Acting
- B. Directing
- C. Costumes
- D. Scenery
- F. Playwriting
- J. Theatre History
- K. Theatre Criticism
- L. Movement
- M. Makeup
- N. Lighting
- O. Voice
- P. Stage Management
- Q. Theatre Management

696. Aesthetic Theory and Conceptualization (3)

Study of theoretical aesthetics as it applies to creative act. Practical application of research and variable aesthetic elements in production style and conceptualization.

Letter grade only (A-F).

699. MFA Thesis/Project (1-6)

Prerequisite: Advancement to candidacy and consent of department chair.

Planning, preparation and completion of thesis related to field of specialization.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

UNIVERSITY COURSES

University Academic Programs

Vice Provost for Academic Affairs and Dean of Graduate Studies:

Cecile Lindsay

Office: Academic Affairs

Educational Opportunity Program (EOP)

100. Educational Opportunity Program Orientation (2)

Introduction and orientation to college life for EOP students. Review of campus and community resources available to support students participating in the EOP. Instruction in various academic survival skills necessary for college success.

Letter grade only (A-F).

300. Orientation for EOP Transfer Students (1)

Assists with decisions regarding academic, professional and personal lives. Familiarizes students with University academic policies, MyCSULB, Beach board, library research tools and databases, exploration of academic programs and career options, refines study skills and provides network opportunities.

Credit/No Credit grading only.

International Education (INTL)

400. Upper Division Coursework Taken at a Foreign University (1-4)

Advanced college level coursework completed at a foreign university under the auspices of a CSULB exchange program. Course content is planned in cooperation with CSULB faculty.

500. Graduate Level Coursework Taken at a Foreign University (1-4)

Graduate college level coursework completed at a foreign university under the auspices of a CSULB exchange program. Course content is planned in cooperation with CSULB faculty.

Letter grade only (A-F).

Internship Program

CBA 493. Business Internship (1-3)

Prerequisites: Classified business major, consent of instructor, IS 301.

Qualifying students placed in career-related paid assignments in private or public agencies or businesses. Organized plan utilizing series of seminars and learning agreements required with selected reading and writing assignments.

May be repeated to a maximum of 6 units. A minimum of 120 hours paid experience per semester is required.

ED P 492. Internships in the Human Services (3)

Prerequisite: Consent of instructor.

Students are placed in agencies and organizations to engage in volunteer or paid work in human services/mental health. The required 15 hour seminar focuses on personal values, interpersonal communications skills, critical thinking, and problem solving. Development of knowledge and skills transferable to future careers will be stressed.

A minimum of 120 hours field experience is required for the semester.

FEA 492. Internship (3)

Prerequisites: Senior standing in major or consent of instructor.

Students intern with cooperating media facilities.

Credit/No Credit grading only. May be repeated to a maximum of 6 units. (6 hours lab)

Supplemental Instruction (S/I)

60. Supplemental Instruction (1)

An adjunct support class tied to select general education courses. Students enroll in the target GE course and the SI class together.

University (UNIV)

200. U.S. Military Basic Training (3)

Prerequisite: GE Foundation requirements.

For active U.S. military service members and veterans only. Credit granted with verification of successful completion of Basic Training for U.S. Army, Navy, Air Force, Marines, or Coast Guard.

300. Selected Topics in Civic Engagement in American Society (3)

Prerequisites: GE Foundation requirements, one or more Exploration courses, and upper division standing.

Focuses on students with interests in civic engagement. Students investigate civic issues and will also travel to a geographic location affected by the issue engaging in service learning work.

May be repeated to a maximum of 6 units in different semesters. Topics announced in the *Schedule of Classes*.

Writing Proficiency

WPE 10. Preparation for the WPE (1)

Non-baccalaureate-level course designed to prepare students for the Writing Proficiency Examination (WPE) for which a passing score is 11. Recommended for students who have not yet attempted the WPE or who have previously failed the test with a score of 8 or below.

Credit/No Credit grading only. May be repeated until the WPE is successfully passed. (Activity)

WPE 20. Preparation for the WPE (1)

Non-baccalaureate-level course designed to prepare students for the Writing Proficiency Examination (WPE) for which a passing score is 11. Recommended for students who have previously failed the WPE with a score of 9 or 10.

Credit/No Credit grading only. May be repeated until the WPE is successfully passed. (Activity)

ENGL 301A. English Proficiency (3)

Prerequisites: ENGL 100 or equivalent.

Intermediate course in English usage with emphasis on building proficiency in oral and written language.

Enrollment limited to students needing language development beyond skills acquired in ENGL 100, as assessed by scores on the Writing Proficiency Exam. May be repeated to a maximum of 6 units. Not applicable to credit in any degree program of the Department of English.

ENGL 301B. English Proficiency (3)

Prerequisites: ENGL 100 or equivalent.

Advanced course in English usage with emphasis on building proficiency in written language.

May be repeated to a maximum of 6 units. Not applicable to credit in any degree program of the Department of English. Enrollment limited to students needing language development beyond skills acquired in ENGL 100, as assessed by scores on the Writing Proficiency Exam. May be used to satisfy the GEAR.

UNIVERSITY HONORS PROGRAM

University Academic Programs

Associate Vice President for Undergraduate Studies:

Lynn Mahoney

Interim Director: Nele Hempel-Lamer

Assistant Director: Terri Iler

Office: Library West (LBW), Room 214

Phone: (562) 985-4706

The University Honors Program provides a selected group of highly qualified students with a unique educational experience. With small classes and opportunities to work closely with distinguished faculty and advisors, the University Honors Program offers students the best of a small college experience alongside the opportunities afforded by a comprehensive university setting. It unites the committed student and faculty member in a learning relationship in which each has the highest expectations of the other. Students will be immersed in the learning process and therefore must have both the ability and willingness to do intense and often self-directed intellectual work as well as a desire to make the most of the opportunities available in the University.

Available within the University Honors Program are three alternatives designed to meet the varying needs of students.

1. General Honors;
2. Honors in the Major;
3. Combination of the above for which coursework prescribed for General Honors and departmental requirements for Honors in the Major are successfully satisfied. A single capstone learning experience can be used to satisfy the General Honors and Honors in the Major requirements.

Students who successfully complete the requirements of the University Honors Program will receive a Certificate and an annotation on their transcript which marks the graduate as a person of intellectual accomplishment, one who has demonstrated a disciplined curiosity and dedication to the pursuit of knowledge.

General Honors

General Honors offers a special approach to the General Education requirements of the University through a cohesive and unified program of study. It is a program of carefully selected courses and specially designed, multi-disciplinary seminars from which a student chooses a minimum of 24 units (a minimum of 15 units in the case of upper-division transfers or continuing CSULB students who enter the Program), most of which are applied toward the 48 units of General Education courses required for graduation of all students. General Honors courses encourage student participation on an academic level not generally possible in the usual curricular offering and prepare students to write an Honors Thesis that demonstrates that the student has acquired the intellectual confidence and academic independence that are indicative of the maturely educated person.

Admission Requirements

There are three ways a student may enter the University Honors Program:

- Incoming students are invited to apply to General Honors on the basis of high school class standings, ACT composite score, and/or SAT scores. Normally, students should be in the upper ten percent of their high school classes, and have a composite ACT score of at least 24, and/or strong SAT scores, and a GPA of 3.5 or better. However, if not all of these criteria are met, a combination of them may be evaluated in addition to a letter of recommendation and a personal statement reviewed by the Honors Program Director.
- Any student who maintains a 3.5 or better overall GPA at California State University, Long Beach, in 12 or more units of coursework is eligible to participate in General Honors with a letter of recommendation from an instructor and a personal statement reviewed by the Honors Program Director. Students with a GPA of 3.5 or better in 12 or more units at California State University, Long Beach, normally will be granted automatic acceptance into the Program upon application.
- CSULB students not meeting the designated criteria may petition for admission to General Honors. Students are required to submit letters of recommendation from two instructors familiar with their work. These exceptional cases will be reviewed by the Director and the University Honors Program Advisory Board. Students are encouraged to petition if they have a good explanation for not meeting the basic requirements and/or a strong motivation to participate in the Program.
- Transfer students may enter General Honors provided they have a minimum equivalent of a 3.5 GPA in all coursework at the accredited institution from which they are transferring.

Qualified students may enter General Honors as late as their junior year. Where Honors transfer agreements have been negotiated with a community college (such as with Long Beach City College) up to 12 transfer units will be accepted as meeting the requirements of the CSULB University Honors Program. Otherwise a waiver of some of the required Honors credits (not more than 6) may be granted by the Director and the University Honors Program Advisory Board.

Academic Requirements

General Honors students must complete all University-wide graduation requirements and the requirements for their major. General Honors is itself not a major. A student must maintain an overall GPA of 3.00 or better in Honors and in all University courses attempted.

General Honors Plan I (minimum of 24 units) is designed for entering freshmen and consists of a minimum of 18 units of lower- and upper-division General Education courses (which may include UHP 100 and UHP 150) and a culminating 6-unit senior thesis/project in the student's major (UHP 496, Research Participation, and UHP 498, Senior Thesis/Project).

General Honors Plan II (minimum of 15 units) is primarily designed for upper-division transfers from community colleges and current CSULB students who have achieved a GPA of 3.5. It consists of a minimum of 9 units of upper-division General Education courses and a culminating 6-unit senior thesis/project in the student's major (UHP 496, Research Participation, and UHP 498, Senior Thesis/Project).

Honors in the Major (available in select majors only)

Many CSULB majors provide students with an option to pursue Honors in the Major. Students in General Honors whose major department offers an Honors in the Major option may apply to participate in both programs, in which case the General Honors thesis requirement would be satisfied through the Honors in the Major option. Honors in the Major (minimum of 9 units) consists of a minimum of one upper-division Honors-specific course in the student's major department and a culminating 6-unit senior thesis/project (courses in the major department equivalent to UHP 496 and UHP 498).

Although Honors in the Major requirements may vary among departments, usually they entail independent study, seminar courses, high levels of performance, and senior projects or theses culminating in a broad knowledge of subject matter. Information concerning Honors in the Major is available in the University Honors Program office and in participating departmental offices.

Admission Requirements

Please contact the department office or the University Honors Program office for information regarding admission. Normally a student must be a declared major, usually with at least sophomore (30 units) standing.

Academic Requirements

1. Completion of the requirements for the major. (The approval of the department chair and the Departmental Faculty Honors Advisor must be obtained to change any of the general major requirements.)
2. Completion of a minimum of one upper-division Honors-specific course in the student's major department and a culminating 6-unit senior thesis/project (courses in the major department equivalent to UHP 496 and UHP 498).

General Information

Students who have failed to enroll in courses for Honors credit for two consecutive semesters will normally be withdrawn from the Program.

Courses (UHP)

Special Honors sections of regular General Education (GE) courses in various departments as listed on the University Honors Program website at www.csulb.edu/uhp.

LOWER DIVISION

100. Angles of Vision — Honors (3)

Analytical and critical approaches leading to original and creative thinking. Development of seminar skills: preparation of analytical essays and oral presentations, examination of models and techniques of reasoning, conceptualization of research problems, writing documented paper.

101. Art, Community, Place: The LA Interchange — Honors (3)

Prerequisite/Corequisite: One GE Foundation course.

Explores cultural products and performances available in the Greater Los Angeles region; considers interdisciplinary understanding of how art enriches individuals and communities; investigates the arts community's interest in sustainability.

Letter grade only (A-F).

150. Exploring a Text — Honors (3)

Prerequisite: ENGL 100.

Close reading of a work (or works) of literature — fiction or non-fiction — exploring issues of personal identity, moral choice, freedom and commitment.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics.

201. Sustainability and Technology in Los Angeles — Honors (3)

Prerequisite/Corequisite: One Category B.2 GE Foundation course.

Explores major scientific issues behind our understanding of sustainability such as biodiversity, population, food and water resources, climate change, energy, public health, and the overall forecast for the environment and the human condition for the next several decades. Laboratory activities include combinations of field-trips, collecting data, and in-class analysis and reporting.

Letter grade only (A-F).

UPPER DIVISION

300. Junior Colloquium — Honors (3)

Studies of selected interdisciplinary topics, problems or issues with a view toward integration of the areas of study involved in lower-division courses.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics.

301. Politics and Policy in Los Angeles — Honors (3)

Prerequisites: GE Foundation and upper-division status.

Examines politics and policy in Los Angeles and the surrounding region, including a consideration of governing structures, demographic trends and needs, environmental issues, and growth and development patterns, and relies on service-learning to inform work inside the classroom.

Letter grade only (A-F).

401. The History of Los Angeles: Invention of a City — Honors (3)

Prerequisites: GE Foundation and upper-division status.

Interdisciplinary examination of the history of Los Angeles, one of the most diverse cities in the world. Traces the social, economic, and cultural features of Los Angeles's urban development from the eighteenth century to the present.

Letter grade only (A-F).

490. Selected Topics — Honors (3)

Identification and critical analysis of current problems in selected areas.

Letter grade only (A-F). May be repeated to a maximum of 6 units with different topics.

496. Research Participation — Honors (3)

Prerequisite: Consent of program director and supervising faculty.

Independent research for the UHP senior thesis/project; conducted under the supervision of a faculty mentor and the program director.

Letter grade only (A-F).

497. Directed Studies — Honors (1-3)

Prerequisite: Consent of program director and supervising faculty.

Independent study under supervision of a faculty member.

Letter grade only (A-F). May be repeated to a maximum of 6 units.

498. Senior Thesis/Project — Honors (3)

Prerequisite: Consent of program director and supervising faculty.

Final completion of a thesis or a project; or an exhibit or a performance.

Letter grade only (A-F).

WOMEN'S, GENDER, AND SEXUALITY STUDIES

College of Liberal Arts

Department Chair: Pamela Roberts

Office: MHB-819
Telephone: (562) 985-4839
FAX: (562) 985-1868

Faculty: Lori Baralt, Elyse Blankley (Women's, Gender, and Sexuality Studies and English), Norma Chinchilla (Women's, Gender, and Sexuality Studies and Sociology), Jennifer Reed, Maythee Rojas, Shira Tarrant

Academic Advisor: Jennifer Reed

Administrative Support Coordinator: Benjamin Blanchard

Career Possibilities

Positions in business, government, and the non-profit sector. Please see <http://www.csulb.edu/colleges/cla/departments/wgss/students/degrees/what2do.htm>

Introduction

The Department seeks to provide students with skills in civic literacy that are a significant part of a 21st century university education. At the heart of this is the assertion that gender and sexuality are fundamental categories of social organization and power that are inseparable from race, ethnicity, class, nationality, and other categories of difference.

The Department offers a major and a minor. Designated WGSS courses may be used to fulfill General Education requirements for students of other majors.

Bachelor of Arts in Women's, Gender, and Sexuality Studies (120 units)

Requirements

This program requires 48 units. Courses cannot be counted for more than one category within the major. Requirements include 6 lower division units and 42 units distributed among the following, among which 39 units must be upper division:

Core Courses

Take all of the following courses:

WGSS 101 Women and Their Bodies (3)
Prerequisite/Corequisite: One GE Foundation course.

WGSS 102 Women In Contemporary Society (3)
Prerequisite/Corequisite: One GE Foundation course.

WGSS 300 Principles of Feminism (3)
Prerequisites: ENGL 100 and upper division standing or consent of instructor.

WGSS 301 Feminist Research Methods (3)
Prerequisites: Upper division standing and the completion of at least one other WGSS course.

WGSS 415 Feminist Theory (3)
Prerequisites: WGSS 300 or consent of instructor.

WGSS 495 Senior Capstone Seminar (3)
Prerequisite: WGSS 301.

Take one of the following courses:

WGSS 392 Feminist Pedagogy: Peer Facilitation (3)
Prerequisite: Previous or concurrent WGSS class and consent of instructor.

WGSS 496 Community Service Learning in Women's Issues (3)
Prerequisites: Upper division standing and two prior women's studies courses, or consent of instructor.

Clusters

To include a minimum of 3 units from each of the following five clusters and an additional 3 units from any cluster. In addition, students are required to take an additional 9 units from any combination of WGSS classes.

Gender and Sexuality

The study of the construction and maintenance of sexual difference, sexual behaviors, desires and identities.

WGSS 205, 356, 416, 442 and 490 (depending on topic and with prior approval of the WGSS advisor).

Cultural Studies

Women's place in culture through which societal ideas about women and gender have historically been created and maintained.

WGSS 318, 365, 410, 432, 445A, 445B and 490 (depending on topic and with prior approval of the WGSS advisor).

Feminist Aesthetics

Examines art, literature and film as sites of women's theoretical and political work and as sources of the constructions and representations of gendered identities.

WGSS 216, 314, 316, 420, and 490 (depending on topic and with prior approval of the WGSS advisor).

Feminist Analysis

Examines the role of women within the legal, economic and political structures of our society.

WGSS 307, 308, 350, 401, 440 and 490 (depending on topic and with prior approval of the WGSS advisor).

Feminist Change

Women as agents of change and in social movements that address gendered lives.

WGSS 424, 425, 430, 449 and 490 (depending on topic and with prior approval of the WGSS advisor).

Note: Students must earn a grade of at least "C" in all upper division major courses.

Minor in Women's, Gender, and Sexuality Studies

Requirements

A minimum of 24 units will be required for the minor in Women's, Gender and Sexuality Studies, to be selected with the approval of the department's undergraduate advisor. Courses cannot be counted for more than one category within the minor and must be selected from among the following courses:

Lower Division

Take both of the following courses:

WGSS 101 Women and Their Bodies (3)
Prerequisite/Corequisite: One GE Foundation course.

WGSS 102 Women In Contemporary Society (3)
Prerequisite/Corequisite: One GE Foundation course.

Upper Division (18 units)

Take all of the following courses:

WGSS 300 Principles of Feminism (3)
Prerequisites: ENGL 100 and upper division standing or consent of instructor.

WGSS 318I U.S. Women of Color (3)
Prerequisites: ENGL 100 and upper division standing or consent of instructor.

WGSS 401I Bodies and Borders: Feminism and Globalization (3)
Prerequisites: GE Foundation requirements, one or more Explorations course, and upper division standing.

Take one of the following courses: WGSS 392, 496

Take six additional units from any cluster(s) referenced in the B.A. program requirements.

Courses (WGSS)

LOWER DIVISION

101. Women and Their Bodies (3)

Prerequisite/Corequisite: One GE Foundation course.

Introduction to the rapidly expanding body of literature and ideas related to the biology and sexuality of women.

102. Women In Contemporary Society (3)

Prerequisite/Corequisite: One GE Foundation course.

Introduction to some of the basic questions raised by the contemporary feminist movement relating to the social, political, and economic status of women.

205. Introduction to Queer Studies (3)

Prerequisites: GE Foundation requirements.

Introduction to the interdisciplinary field of queer studies. Focus is on the relationship between gender and sexualities. Prepares students for further study in gender and sexuality studies.

216. Hollywood and Beyond: Gender, Race, and Sex in the Movies (3)

Prerequisite: GE Foundation requirements.

Explores ideologies of gender, race, sexuality, and class in mainstream and independent films. Focus is on learning to critically evaluate representations of identity and their social and political significance, including hegemonic and alternative representations.

UPPER DIVISION

General Education Category A must be completed prior to taking any upper division course except upper division language courses where students meet formal prerequisites and/or competency equivalent for advanced study.

300. Principles of Feminism (3)

Prerequisites: ENGL 100 and upper division standing or consent of instructor.

Introduction to principles of feminist history, thought, theory, methodology, and current issues that emphasizes but is not limited to the United States.

Letter grade only (A-F).

301. Feminist Research Methods (3)

Prerequisites: Upper division standing and the completion of at least one other WGSS course.

Examines how feminist scholars frame and conduct research. Students explore feminist adaptations and critiques of traditional academic disciplines and design and conduct a research project using a range of bibliographic and research tools.

Letter grade only (A-F).

307I. U.S. Women and the Economy: Money, Sex, and Power (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Interdisciplinary examination of the economic roles of women; analysis of the sexual division of labor and domestic work. Special focus on the origin, migration, settlement, and economic patterns of and problems facing US women from major ethnic and racial groups.

308. Women and the Law (3)

History of women's experience under the law; constitutional law; 19th amendment and ERA; equal protection issues; discrimination in employment; marriage and family law.

309I. Women in Science (3)

Prerequisites: GE Foundation requirements, upper division standing, six units of General Education science courses and consent of instructor.

Examines women and their roles in science in terms of their socio-historical context, their specific contributions, and the nature of the scientific problems they pursued, including methodology and outcomes. Explores the cultural and institutional obstacles to the success of women in science.

Letter grade only (A-F). Same course as NSCI 309I. Not open for credit to students with credit in NSCI 309I. (Lec 3 hours)

312. Women in the Ancient and Medieval West (3)

Prerequisite: ENGL 100.

Examines roles and experiences of women in Western Europe from prehistory to sixteenth century. Themes may include: construction of gender roles, relation between symbols and reality, interaction of private/public life, access to power/opportunity; possibility of a "women's culture."

Same course as HIST 319. Not open for credit to students with credit in HIST 319.

313. American Indian Genders and Sexualities (3)

Analysis of popular, feminist, queer and tribally specific theories and representations of American Indian genders and sexualities with a focus on literatures by American Indian women, men and two-spirit peoples.

Same course as AIS 313. Not open for credit to students with credit in AIS 313.

314. Women Narrate Their Lives (3)

Study of lives of a cross-section of Women in U.S. from colonial era to present based on biographical and autobiographical sources.

315. Black Women in America (3)

Prerequisites: ENGL 100 and upper division standing or consent of instructor.

Examination of American black women from eighteenth century to present. Taught from interdisciplinary perspective and presented in their own voices.

Letter grade only (A-F).

316. Women in the History of U.S. Film (3)

History of women as they are represented, presented as images, or constructed in the development of U.S. film. Theory and analysis of film from a feminist perspective.

Same course as FEA 317. Not open for credit to students with credit in FEA 317.

318I. U.S. Women of Color (3)

Prerequisites: ENGL 100 and upper division standing or consent of instructor.

Examines condition, position, experiences and accomplishments of U.S. women of color. Covers historical and contemporary issues using theoretical essays, personal narratives, historical documents, literature, and media images.

319. The Ethnic Experience in the U.S. (3)

Examination of dynamics of development of our multicultural society, emphasizing study of four distinct ethnic strands of American society (Asian American, Black American, Mexican American, and American Indian) and their role in maintenance of cultural diversity in United States.

Same course as AIS 319, ASAM 319, AFRS 319, CHLS 319. Not open for credit to students with credit in AFRS 319, AIS 319, ASAM 319, or CHLS 319.

320. Latina Women in the United States (3)

Prerequisite: Junior standing or consent of instructor.

Examines cultural, political, economic, and sexual forces that mold Latina women. Focus on cultural stereotypes, class, gender identity, sexuality, and politics of race.

Same course as CHLS 415. Not open for credit to students with credit in CHLS 415.

325. Sociology of Women (3)

A sociological analysis of social, political and economic status of women. Examines history of women's roles and status; gender conflicts and social movements; and societal attitudes towards women in society.

Same course as SOC 325. Not open for credit to students with credit in SOC 325.

350. Feminist Issues in Mental Health (3)

Introduces issues related to the mental health of women, from historical, anthropological, sociological and psychological perspectives. Emphasis is on the relationship of power, sexism, sex role socialization and gender stereotypes to mental health.

356. Lesbian Histories and Culture (3)

Examination of lesbianism from psychological and historical perspectives; includes discussions of lesbianism in literature, representations of lesbianism in various media; the place of lesbianism in the politics of the women's movement and in gay liberation, and the development of "queer theory."

365I. Popular Culture: Women, Gender and Sexuality (3)

Prerequisites: GE Foundation requirements, one or more Explorations courses, and upper-division standing.

Analyzes the construction of images of women in popular culture. Discussion of theories of culture, gender and ideology. Analysis of film, advertising, magazines and popular fiction.

370. Masculinities (3)

Prerequisite: GE Foundation requirements.

Focuses on understanding contemporary social and political issues in relation to masculinities. Thematic areas include: the social

construction of masculinities, militarism, men and violence, sexuality, sports, work, media and masculinities, men and feminism, and possibilities for change.

375. Reproductive Justice (3)

Prerequisites: Upper-division status or instructor consent

Explores how race, class and sexuality intersect with political and socio-economic forces in shaping women's reproductive lives. Highlights how women have contested these forces to control their own reproductive lives.

381. Asian American Women (3)

Reconstructs and examines Asian American women's history and contemporary experiences. Assesses complexities of intersecting social categories of oppression and Asian American women's active pursuit of equality and dignity.

Same course as ASAM 381. Not open for credit to students with credit in ASAM 381, or HIST 381.

382. Women and Literature (3)

Prerequisites: GE Foundation requirements.

Survey of literature by women authors writing in English, across a range of historical periods; examination of works in various genres that present complexity of women's lives and challenges of female authorship; exploration of feminist critical approaches.

Same course as ENGL 382. Not open for credit to students with credit in ENGL 382.

392. Feminist Pedagogy: Peer Facilitation (3)

Prerequisite: Previous or concurrent WGSS class and consent of instructor.

Peer facilitation of small group discussion, teaching assistance and other assignments directed by a supervising faculty member, supplemented by seminar, reading and journal writing.

May be repeated to a maximum of 6 units. Letter grade only (A-F).

401I. Bodies and Borders: Feminism and Globalization (3)

Prerequisites: GE Foundation requirements, one or more Explorations course, and upper division standing.

Covers feminist perspectives on contemporary globalization. Examines how we might imagine a more equitable world and why feminism should be concerned with global perspectives. Topics include colonialism, tourism, food production, women's labor, migration, militarism, and social movements.

402. Women in Political Theory (3)

Prerequisite: Students must have completed one course in either political science or women's studies.

Differential treatment of women and men in western political theories, including femininity, power, rationality and the role of women in family. Classic and contemporary texts.

Same course as POSC 401. Not open for credit to students with credit in POSC 401.

406A. Asian Women: East and Northeast Asia (3)

Prerequisite: Upper division standing.

Exploration of the histories of women in China, Japan and Korea from prehistory to the present. Major themes include women's contributions to social, cultural and political change, and the complex relationship between feminism and nationalism in the modern period.

Same courses as A/ST 406A and HIST 406A. Not open for credit to students with credit in A/ST 406A and HIST 406A.

406B. Asian Women: South and Southeast Asia (3)

Emphasis on modern period; exploration of complexities of women's roles in multicultural, multilingual societies in South and Southeast Asia, including gender as a continuing site of contention in nationalist discourse.

Letter grade only (A-F). Same course as A/ST 406B and HIST406B. Not open for credit to students with credit in A/ST 406B, HIST 406B.

410. Women, Religion, and Spirituality (3)

Prerequisites: ENGL 100 and upper division standing, or consent of instructor.

Study of women as spiritual and religious beings responding to and coping with largely patriarchal religious doctrine. Examines socio-religious construction of women and women's religious experience from prehistory to present day. Focus on feminist transformations of religious traditions.

Same course as R/ST 410. Not open for credit to students with credit in R/ST 410.

415. Feminist Theory (3)

Prerequisites: WGSS 300 or consent of instructor.

Examines contemporary feminist theoretical perspectives. Discussion of primary sources from a number of positions, including liberal, socialist, poststructural, "third world", postmodernist and postcolonial feminisms. Issues include gender and sexuality, race, ethnicity, class and nationality. Focus on discussion of current debates which cross disciplinary boundaries. Active student participation required.

Letter grade only (A-F).

416. Queering Gender (3)

Prerequisite: Upper-division standing.

Explores intellectual debates in the emergent field of queer theory, particularly as it connects to women's experiences and the politics of gender. Focuses on the intervention that queer theory seeks to make into heteronormative culture on all levels of social life.

417. Sexuality, Crime and Punishment (3)

Prerequisites: CRJU majors: CRJU 101, 110, 302, 303, and 304. All other majors: upper-division standing and at least one other WGSS course, or consent of the instructor.

A transdisciplinary and critical examination of the accepted boundaries of human sexual behavior and opposing perspectives regarding the roles of criminal justice actors and institutions in regulating sex and secuality, with special attention paid to sex-related crimes, offender and victims.

Same course as CRJU 461. Not open for credit to students with credit in CRJU 461.

420. Mothers and Daughters (3)

Analyzes how mothering is "reproduced" in daughters, and why/how patriarchal culture regulates the mother/daughter bond. Course materials include novels, film, and interdisciplinary theoretical works. Special emphasis on the mother/daughter relationship in a range of historical, racial, class and sexual contexts.

424. Women and Environmental Justice (3)

Prerequisites: GE Foundation requirements and upper division standing.

Examines complex relationship between women and nature and their treatment through 1) socio-religious ideologies, 2) international development, 3) environmental pollution, and 4) patterns of consumption and waste in industrialized nations. Third World feminists' insights largely frame the debate.

425. Women and Power (3)

Prerequisites: A previous WGSS class (101, 102, or 300) and upper division standing or consent of instructor.

Examination of ways power has been defined, obtained, shaped and maintained, and effect this has historically had on women. Applies theory to contemporary issues affecting women and explores strategies for empowerment.

430. Women and Violence (3)

Women as victims and survivors of physical, psychological, and philosophical violence. Problems of rape, woman battering, incest, pornography and sexual harassment; examination of legal, religious and philosophical issues and alternatives for change.

432. Women in the City (3)

Examines the way women respond to urban environment, both literally and imaginatively. Special attention paid to sexual division of space, particular needs of immigrant and third world women, and utopian cities of sisterhood. Readings feature literary texts, augmented by an interdisciplinary range of theoretical and empirical studies of cities.

440. Issues in Women's Health (3)

Prerequisites: Upper division standing; ENGL 100; and WGSS 101, BIOL 205, BIOL 207.

Fundamentals of anatomy and physiology relevant to the cause, prevention, and treatment of various health issues, including reproductive organ dysfunction, sexually-transmitted disease, infertility, contraception, pregnancy, osteoporosis, cancer, and cardiovascular disease. Emphasizes lifestyle habits such as diet, exercise, and stress.

441. Women Writers of the Harlem Renaissance (3)

Prerequisites: ENGL 100 and upper division standing or consent of instructor.

Explores literature and lives of women authors of American Harlem Renaissance Period of 1920s. Examines critical reception, relative obscurity, and current re-discovery of these writers. Utilizes theoretical essays, biographical narratives, historical documents, and media images.

Same course as ENGL 441. Not open for credit to students with credit in ENGL 441.

442. Sexing Chicana Literature (3)

Prerequisites: ENGL 100 and upper division standing or consent of instructor.

Analyzes how Chicana authors explore race, class, and gender. Focuses on use of sexuality, particularly with regard to cultural and literary stereotypes vs. experience and aesthetic practice. Themes will include desire, identity, empowerment through "traditional" roles, and violence and the body.

Same course as ENGL 442. Not open for credit to students with credit in ENGL 442.

445A. Latinas and Revolution: Central America and Late 20th Century Mexico (3)

Prerequisite/Corequisite: ENGL 100 and upper division standing or consent of instructor.

Examines how war and struggles for democracy shape the social consciousness and political activism of Latinas. Uses literature, film, history, and political theory to examine the role of violence in women's lives, community organizing, and the conceptualization of a pan-Latina feminist movement.

Letter grading only (A-F). Same course as CHLS 450A. Not open for credit to students with credit in CHLS 450A.

445B. Latinas and Revolution: Caribbean, U.S. and Early 20th Century Mexico (3)

Prerequisite/Corequisite: ENGL 100 and upper division standing or consent of instructor.

Examines how war and struggles for democracy shape the social consciousness and political activism of Latinas. Uses literature, film, history, and political theory identify differences in contexts of community struggle and points of intersection within Latina activism.

Letter grading only (A-F). Same course as CHLS 450B. Not open for credit to students with credit in CHLS 450B.

449. Feminism and International Human Rights (3)

Prerequisite: Upper division standing or consent of instructor.

Analyzes contemporary women's international human rights issues and social movements as influences on contemporary international human rights system. Covers international law, human rights treaty system, World Conferences, current issues, landmark cases, local/global activism, feminist intellectual debates.

Letter grade only (A-F).

455. Philosophical Perspectives on Sex and Love (3)

Prerequisite: Six units of philosophy or consent of instructor.

Philosophical perspectives on sex and love explores philosophical issues concerning sex, gender and love through readings and discussion of classical and contemporary philosophical sources. Topics such as sexual perversion, romantic love and gender discrimination are examined.

Same course as PHIL 455. Not open for credit to students with credit in PHIL 455.

462. Feminist Geography. (3)

Prerequisite: GEOG 360 or consent of instructor

An introduction to feminist geography. Students will critically engage with international research on topics such as geographies of emotion, care and health; femininities and masculinities; feminist post-structural theories and philosophies; and feminist methodological approaches to geographical research.

Same course as GEOG 462. Not open for credit to students with credit in GEOG 462.

Letter grade only (A-F).

475. Language and Gender in Cross-Cultural Perspective (3)

Analysis of men's and women's communication in its social and cultural context; role of gender in interpreting conversational interactions in the U.S. and elsewhere; acquisition of gender differences; cultural dimensions or perceptions and stereotypes and their effect on communication.

Same course as ANTH 475, LING 470.

485A. History of Women in the U.S. Early Period (3)

Prerequisite: GE Foundation requirements.

Survey of roles and activities of American women from colonial period to 1850, with focus on slavery, immigration, family, economy, law, and politics.

Same course as HIST 485A. Not open for credit to students with credit in HIST 485A or 485A.

485B. History of Women in the U.S. Since 1850 (3)

Prerequisite: GE Foundation requirements.

Changing roles and status of women in economic and social change; suffrage movement; women in union movement and WW II; the decade of the sixties and the "second wave" of feminism.

Same course as HIST 485B. Not open for credit to students with credit in HIST 485B.

490. Selected Topics in Women's, Gender, and Sexuality Studies (1-3)

Topics of current interest in women's studies, selected for intensive study.

May be repeated to a maximum of 6 units with different topics.

Topics announced in the *Schedule of Classes*.

492. Selected Topics in Women's, Gender, and Sexuality Studies (1-3)

Topics of current interest in women's studies, selected for intensive study.

May be repeated to a maximum of 6 units with different topics.

Topics announced in the *Schedule of Classes*.

495. Senior Capstone Seminar (3)

Prerequisite: WGSS 301.

Capstone course intended to integrate the multidisciplinary body of knowledge accumulated in the major or minor.

496. Community Service Learning in Women's Issues (3)

Prerequisites: Upper division standing and two prior women's studies courses, or consent of instructor.

Allow students opportunity to practice theories and knowledge gained as a result of studying women's issues. Students will work in community with agencies addressing women's issues.

498. Field Work (1-3)

Prerequisite: Consent of instructor.

Practical experience in campus or community organizations concerned with women's issues.

May be repeated to a maximum of 6 units.

499./599. Directed Studies (1-3)

Prerequisite: Consent of instructor.

Independent work in areas of special interest to student and instructor.

May be repeated to a maximum of 6 units.

GRADUATE LEVEL**599./499. Directed Studies (1-3)**

Prerequisite: Consent of instructor.

Independent work in areas of special interest to student and instructor.

May be repeated to a maximum of 6 units.

GENERAL POLICIES AND REGULATIONS

Election of Regulations for Degree Requirements (Catalog Rights)

Undergraduate students acquire “catalog rights” with respect to the requirements for a degree program by maintaining “attendance” continuously. This means that, if continuous attendance is maintained and the degree objective is not changed, students may choose to graduate under the requirements for the degree in effect 1) at the time they began the study in a California community college or another campus of The California State University, 2) at the time they entered CSULB, or 3) at the time of graduation from CSULB. Substitutions for discontinued courses may be authorized or required by the Dean of the College. Students who change their major, including changing from “undeclared” status to a defined degree objective or from one option to another option under the same degree, are governed by the degree major requirements in effect at the time of the change or declaration of major. Students who change majors are advised that some courses counted for General Education or double counted for General Education and a major may become unacceptable for General Education in connection with a new major. These students should check with the University Center for Undergraduate Advising.

The term “attendance” means, literally, attendance in a course for at least one semester (or quarter) unit credit in at least one semester (or two quarters) in a calendar year, culminating in a record of enrollment on the student’s official transcript. For the purpose of establishing catalog rights, the course must be at the baccalaureate or graduate level in a California community college, a California State University, or a University of California campus. Enrollment resulting in a withdrawal (the grading symbols W, WE or WU) does not count as attendance in a course, and so does not preserve “catalog rights.”

Once “catalog rights” are established, absence related to an approved medical, military or academic leave or for attendance at another accredited institution of higher education will not be considered an interruption of attendance, provided that the absence does not exceed two years (see Educational Leave).

Failure to remain in continuous attendance will mean that the student must meet the regulations current at the time of resuming the degree program or those applicable at the time of graduation. In addition, for graduate students, a failure to maintain continuous attendance means the automatic revocation of “candidacy” for the degree (advancement to candidacy) and of “catalog rights.”

Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this *Catalog*, students and others who use this *Catalog* should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of the California State University,

by the Chancellor or designee of the California State University, or by the President or CSULB designee. It is not possible in a publication of this size to include all of the rules, policies and other information that pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, college, or administrative office.

Nothing in this *Catalog* shall be construed as, operate as or have the effect of an abridgment or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the Chancellor of the California State University, or the President of the campus. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This *Catalog* does not constitute a contract or the terms and conditions of a contract between the student and the campus or the California State University. The relationship of students to the campus and the California State University is one governed by statute, rules, and policy adopted by the Legislature, the Trustees, the Chancellor, the Presidents and their duly authorized designees.

The Federal Military Selective Service Act (the “Act”) requires most males residing in the United States to present themselves for registration with the Selective Service System within thirty days of their eighteenth birthday. Most males between the ages of 18 and 25 must be registered. Males born after December 31, 1959, may be required to submit a statement of compliance with the Act and regulations in order to receive any grant, loan, or work assistance under specified provisions of existing federal law. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public postsecondary institution.

Selective Service registration forms are available at any U.S. Post Office, and many high schools have a staff member or teacher appointed as a Selective Service Registrar. Applicants for financial aid can also request that information provided on the Free Application for Federal Student Aid (FAFSA) be used to register them with the Selective Service. Information on the Selective Service System is available and the registration process may be initiated online at <http://www.sss.gov>.

Information concerning the academic programs of CSULB may be obtained from the Office of the Provost, BH 303, at (562) 985-4128 and may include:

1. the current degree programs and other educational and training programs;
2. the instructional, laboratory, and other physical plant facilities which relate to the academic program;
3. the faculty and other instructional personnel;
4. data regarding student retention at CSULB and, if available, the number and percentage of students completing the program in which the student is enrolled or has expressed interest; and
5. the names of associations, agencies, or governmental bodies which accredit, approve, or license the institution and its programs, and the procedures under which any

current or prospective student may obtain or review upon request a copy of the documents describing the institution's accreditation, approval, or licensing.

Graduation Rates

Over two-thirds of students who begin CSULB as freshmen eventually earn baccalaureate degrees and just over 53% do so within six years. Nearly 80% of CSULB transfer students eventually earn baccalaureate degrees and almost 70% do so within four years of transferring.

CSULB's current graduation rates are higher than most other public, comprehensive universities of similar large size, funding and student mix. CSULB graduation rates have been improving and the campus continues to work toward still more gains.

Graduation Rates for All Freshmen		
Starting Fall Cohort Term	6-Year Graduation Percentage	Estimated Eventual Graduation Percentage
2005	53.3	64.7
2004	53.2	64.0
2003	53.5	64.0
2002	54.3	66.4
2001	46.0	58.7

Graduation Rates for All Transfer Students		
Starting Fall Cohort Term	4-Year Graduation Percentage	Estimated Eventual Graduation Percentage
2007	69.1	78.9
2006	67.7	77.7
2005	68.0	77.2
2004	67.0	76.6
2003	59.7	70.4

Recent graduates who began as freshmen took an average of 5.05 years to complete baccalaureate degrees (for graduates whose degrees were awarded in the college year 2009-10). Among freshmen, time to degree is quicker for students who arrive well prepared academically, especially in math and English.

Recent graduates who began as junior transfers graduated in an average of 3.07 years (for graduates whose degrees were awarded in the college year 2009-10). Average time to degree is significantly longer for engineering. Among transfers, time to degree is quicker for students who have received good advising in a community college and who have completed proper major preparation courses. Some transfers at CSULB having taken more units than the transfer minimum and with courses that cannot be credited toward degrees.

College of Major	Average years to degree completion for students coming as freshmen	Average years to degree completion for students coming as transfers
Health and Human Services	5.13	2.89
Liberal Arts	4.77	2.71
Business Administration	4.96	2.94
Education	5.30	3.15
Engineering	5.83	5.43
The Arts	5.22	3.39
Natural Sciences and Mathematics	5.20	3.29

Completing a baccalaureate degree in a reasonable period of time is an important goal for students and parents. Baccalaureate degrees typically require 120-132 units (about 40-44 courses). Earning a 120-unit degree within four years requires full time attendance (15 or more units per semester) and is a "full-time job" that requires about 45 hours per week attending class and studying. Degrees in engineering, sciences and the arts generally require more courses and timely completion requires attending winter session, summer session and/or attending longer than four years. CSULB continues to work to reduce time to degree for freshmen and for transfer students.

CSULB has an obligation, under the federal Student Right-To-Know law, to provide information regarding graduation rates to prospective and current students. The "six-year freshman cohort graduation rate" describes the percentage of students who began as freshmen and completed degrees within six years at the same campus. Although important, this measure does not provide complete information, because some students take longer than six years to graduate, some come as transfer students, and some attend several undergraduate institutions before receiving baccalaureate degrees. The tables here show 6-year freshman and 4-year transfer cohort rates and estimated total eventual graduation rates for both freshmen and transfer students. Estimated eventual graduation rates are based on a methodology developed by the California State University system that takes into consideration the number of students still enrolled in good academic standing at the six-year point in time.

Accreditation

The University is accredited by the Western Association of Schools and Colleges (985 Atlantic Avenue, Suite 100, Alameda, CA 94501, 510-748-9001), the agency responsible for granting regional accreditation to colleges and universities in California, Hawaii, and Guam. It is

accredited by the California State Board of Education and is on the list of approved institutions of the American Association of University Women. Additional information concerning University accreditation may be obtained from the Office of the Provost. Additional information concerning departmental accreditation may be obtained from the department concerned or the Office of the Provost.

- American Language Institute, CCPE – Commission on English Language Program Accreditation, 1725 Duke Street, Suite 500, Alexandria, VA 22314-3457, phone: 703-519-2070
- Art – National Association of Schools of Art and Design (NASAD), 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, Telephone: 703-437-0700, Fax: 703-437-6312, E-mail: info@arts-accredit.org
- Business Administration – ACSB International – The Association to Advance Collegiate Schools of Business (AACSB), 777 South Harbour Island Boulevard, Tampa, FL 33602, Phone: 813-769-6500, Fax: 813-769-6559, E-mail: jerryt@aacsb.edu, Web: www.aacsb.edu
- Chemistry (undergraduate) – American Chemical Society, Committee on Professional Training, 1155 16th Street, NW, Washington, DC 20036, Phone: 202-872-4589
- Communicative Disorders (graduate) – American Speech-Language-Hearing Association, (ASHA) Council on Academic Accreditation in Audiology, and Speech-Language Pathology, 10801 Rockville Pike, Rockville, MD 20852, Phone: 301-897-0140, Fax: 301-571-0481, E-mail: ptice@asha.org, Web: www.asha.org/about/academia/accreditation/
- Dance – National Association of Schools of Dance (NASD), 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, Phone: 703-437-0700, Fax: 703-437-6312, E-mail: info@arts-accredit.org, Web: www.arts-accredit.org
- Design – National Association of Schools of Art and Design (NASAD), 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, Telephone: 703-437-0700, Fax: 703-437-6312, E-mail: info@arts-accredit.org
- Dietetics (didactic program) – Accreditation for Dietetics Education (CADE-ADA), 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606, Phone: 312-899-4872, Fax: 312-899-4817, E-mail: bmitchell@eatright.org, Web: www.eatright.org/cade
- Education – National Council for Accreditation of Teacher Education (NCATE), 2010 Massachusetts Avenue NW, Suite 500, Washington, DC 20036, Phone: 202-466-7496, Fax: 202-296-6620, E-mail: ncate@ncate.org, Web: www.ncate.org
- Engineering (undergraduate: Aerospace, Chemical, Civil, Computer, Electrical, Engineering Technology, Mechanical) – Accreditation Board for Engineering and Technology, Inc. (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202, Phone: 410-347-7700, Fax: 410-625-2238, E-mail: info@abet.org, Web: www.abet.org
- Family and Consumer Sciences – American Association of Family and Consumer Sciences (AAFCS), Council for Accreditation (CFA), 400 North Columbus Street, Suite 202, Alexandria, VA 22314, Phone: 703-706-4600, 800-424-8080, Fax: 703-706-4663, E-mail: gmcginnis@aafcs.org, Web: www.aafcs.org
- Health Care Administration – Association of University

- Programs in Health Administration (AUPHA), 2000 14th Street North Suite 780, Arlington, VA 22201, Phone: 703-894-0960, Fax: 703-894-0941, Web: www.aupha.org; Commission on Accreditation of Healthcare Management Education (CAHME), 2111 Wilson Blvd., Arlington, VA 22201, Phone: 703-351-5010, Fax: 703-991-5989, E-mail: info@cahme.org, Web: www.cahme.org; Commission on Collegiate Nursing Education (CCNE), One Dupont Circle NW, Suite 530, Washington, DC 20036, Phone: 202-887-6791, Fax: 202-887-8476, E-mail: jbutlin@aacn.nche.edu, Web: www.aacn.nche.edu/accreditation
- Health Science (graduate) – Commission on Collegiate Nursing Education (CCNE), One Dupont Circle NW, Suite 530, Washington, DC 20036, Phone: 202-887-6791, Fax: 202-887-8476, E-mail: jbutlin@aacn.nche.edu, Web: www.aacn.nche.edu/accreditation; Council on Education for Public Health (CEPH), 1015 15th Street, NW, Washington, DC 20005, (202) 789-1050
- Kinesiotherapy – Commission on Accreditation on Allied Health Education Programs, 35 East Wacker Drive, Suite 1970, Chicago, IL 60601-2208, phone: 7312-553-9355
- Music – National Association of Schools of Music (NASM), 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, Phone: 703-437-0700, Fax: 703-437-6312, E-mail: info@arts-accredit.org, Web: www.arts-accredit.org
- Nursing – Commission on Accreditation of Healthcare Management Education (CAHME), 2111 Wilson Blvd., Arlington, VA 22201, Phone: 703-351-5010, Fax: 703-991-5989, E-mail: info@cahme.org, Web: www.cahme.org;
Commission on Collegiate Nursing Education (CCNE), One Dupont Circle NW, Suite 530, Washington, DC 20036, Phone: 202-887-6791, Fax: 202-887-8476, E-mail: jbutlin@aacn.nche.edu, Web: www.aacn.nche.edu/accreditation; Council on Education for Public Health (CEPH), 1015 15th Street, NW, Washington, DC 20005, (202) 789-1050
- Physical Therapy – American Physical Therapy Association (APTA), Commission on Accreditation in Physical Therapy, Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA 22314, Phone: 703-706-3245, Fax: 703-838-8910, E-mail: accreditation@apta.org, Web: www.capteonline.org
- Public Policy and Administration – National Association of Schools of Public Affairs and Administration (NASPAA), Commission on Peer Review and Accreditation (COPRA), 1120 G Street NW, Suite 730, Washington, DC 20005, Phone: 202-628-8965, Fax: 202-626-4978, E-mail: byrne@naspaa.org, Web: www.naspaa.org
- Recreation and Leisure Studies – National Recreation and Park Association/American Association for Physical Activity and Recreation, (NRPA/AAPAR) Council on Accreditation, 22377 Belmont Ridge Road, Ashburn, VA 20148, Phone: 703-858-2150, Fax: 703-858-0794, E-mail: dtimmerman@nrpa.org, Web: www.councilonaccreditation.org
- Social Work – Council on Social Work Education (CSWE), Office of Social Work Accreditation and Educational Excellence, 725 Duke Street, Suite 500, Alexandria, VA 22314, phone: 703-683-8080, Fax: 703-739-9048, E-mail:

- dpierce@cswe.org, Web: www.cswe.org
- Theatre Arts – National Association of Schools of Theatre (NAST), 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, Phone: 703-437-0700, Fax: 703-437-6312, E-mail: info@arts-accredit.org, Web: www.arts-accredit.org
 - University Art Museum – American Association of Museums, Suite 200, 1225 Eye St., NW, Washington, DC 20005, phone: 202-289-1818

CSULB Principles of Shared Community

CSULB affirms the importance of democratic and transparent decision-making processes as a shared community. The University believes that all members of the University community have not only a right, but also a responsibility, to participate in the governance of this community. Therefore, the University is committed to providing an opportunity for all its members – faculty, students, staff, and administrators – to join in the decision making process either through direct participation or representative governance.

CSULB is committed to creating a community in which a diverse population of students and employees can learn and work while they share in creating an atmosphere of tolerance, civility, and respect for the rights and sensibilities of each individual. (Policy 07-09)

CSULB Statement on Civility and Acts of Violence

California State University, Long Beach, takes pride in its tradition of maintaining a civil and non-violent learning, working, and social environment. Civility and mutual respect toward all members of the University community are intrinsic to the establishment of excellence in teaching and learning. They also contribute to the maintenance of a safe and productive workplace and overall healthy campus climate.

The University espouses and practices zero tolerance for violence against any member of the University community (i.e., students, faculty, staff, administrators, and visitors). Violence and threats of violence not only disrupt the campus environment, they also negatively impact the University's ability to foster open dialogue and a free exchange of ideas among all campus constituencies.

To fulfill this policy, the University strives: 1) to prevent violence from occurring; and 2) to enforce local, state, and federal laws, as well as University regulations, regarding such conduct. The University also has established procedures for resolving and/or adjudicating circumstances involving violence, as well as threats of violence. A threat of violence is an expression of intention that implies impending physical injury, abuse, or damage to an individual or his/her belongings. All allegations of such incidents (i.e., acts and threats) will be aggressively investigated. Allegations that are sustained may result in disciplinary action up to and including dismissal from employment, expulsion from the University, and/or civil and criminal prosecution.

Members of the campus community are encouraged to promptly report any acts of violence, threats of violence, or other behavior which by intent, act, or outcome harm themselves or others. (Approved October 1997)

Nondiscrimination Policy

Race, Color, Ethnicity, National Origin, Age and Religion

The California State University does not discriminate on the basis of race, color, ethnicity, national origin, age, or religion in its programs and activities, including admission and access. Federal and state laws, including Title VI of the Civil Rights Act of 1964 and the California Equity in Higher Education Act, prohibit such discrimination. Larisa E. Hamada, the Director of campus Equity and Diversity, has been designated to coordinate the efforts of California State University, Long Beach, to comply with all applicable federal and state laws prohibiting discrimination on these bases. Inquiries concerning compliance may be presented to this person at 1250 Bellflower Blvd., Long Beach, CA 90840, (562) 985-5471.

Disability

The California State University does not discriminate on the basis of disability in its programs and activities, including admission and access. Federal and state laws, including sections 504 and 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, prohibit such discrimination. Larisa E. Hamada, the Director of campus Equity and Diversity, has been designated to coordinate the efforts of California State University, Long Beach, to comply with all applicable federal and state laws prohibiting discrimination on the basis of disability. Inquiries concerning compliance may be presented to this person at 1250 Bellflower Blvd., Long Beach, CA 90840, (562) 985-5471.

Sex/Gender/Gender Identity/Sexual Orientation

The California State University does not discriminate on the basis of sex, gender, gender identity or sexual orientation in its programs and activities, including admission and access. Federal and state laws, including Title IX of the Education Amendments of 1972, prohibit such discrimination. Larisa E. Hamada, the Director of campus Equity and Diversity, has been designated to coordinate the efforts of California State University, Long Beach, to comply with all applicable federal and state laws prohibiting discrimination on these bases. Inquiries concerning compliance may be presented to this person at 1250 Bellflower Blvd., Long Beach, CA 90840, (562) 985-5471.

The California State University is committed to providing equal opportunities to male and female CSU students in all campus programs, including intercollegiate athletics.

Inquiries Concerning Compliance

Inquiries concerning compliance or the application of these laws to programs and activities of California State University, Long Beach, may be referred to the specific campus officer(s) identified above or to the Regional Director of the Office for Civil Rights, United States Department of Education, 50 Beale Street, Suite 7200, San Francisco, California 94105.

Equal Access and Opportunity, Non-discrimination/Non-harassment

California State University, Long Beach is a comprehensive, urban university. The University has a professional, cultural and ethnical commitment to provide a climate that enables each individual to realize his/her potential for excellence and that nurtures academic growth and professional development.

Diversity is both an ideal and an imperative. California State University, Long Beach takes pride in its student body and employees, and affirms that this diversity enriches the work and learning environment of the campus. For this reason, the recognition of diversity in our University community extends beyond the limits established by federal or state laws or regulations.

In addition to fully meeting its obligations of nondiscrimination under federal and state law, CSULB is committed to creating a community in which a diverse population can learn, live, and work in an atmosphere of tolerance, civility, and respect for the rights and sensibilities of each individual, without regard to professional rank, employment status, economic status, ethnic background, political views, or other personal characteristics or beliefs.

CSULB takes seriously its tradition of maintaining civility and mutual respect toward all members of the University community. These qualities are intrinsic to the establishment of excellence in teaching and learning. They also contribute to the maintenance of a productive workplace and an overall positive campus climate. Civility and mutual respect thrive only when equal opportunity and access exist, and when retaliation for exercising rights, privileges and obligations is not feared. (Policy 03-09)

The Director of Equity and Diversity, is the designated campus coordinator for equal employment opportunity, affirmative action, and civil rights.

Policy Promoting Equal Employment and Educational Opportunity

California State University, Long Beach affirms the equal worth of every individual and of distinctive groups of people, and fosters fair and equal treatment and access for all members of the university community. Therefore, the University is committed to the principles of equal opportunity in education and employment, to policies and practices that ensure equal opportunity and consideration, and to the protection of civil rights.

It is the policy of California State University, Long Beach to provide programs, services, and benefits, including employment, without regard to race, religion, color, ancestry, ethnicity, gender/gender identity, marital status, pregnancy, national origin, age, mental or physical disability, sexual orientation, disabled veterans other protected veterans' status. (PS 03-09)

Reasonable accommodation to disability is considered a means of establishing equal opportunity.

Policy Prohibiting Discrimination and Harassment

California State University, Long Beach affirms

that students, employees, volunteers, members of the public, and recipients of services, and/or benefits provided by CSULB have the right to a University free from discrimination and harassment, including hostile environment, on the basis of race, color, ancestry, national origin, ethnicity, gender/gender identity, religion, sexual orientation, marital status, disability, age, pregnancy, veteran status (Vietnam-Era, special disabled and other protected—<http://www.opm.gov/veterans/html/vgmedal2.htm>.) These protected categories are identified in the state statute, the Fair Employment and Housing Act, and, to a large extent, in a number of federal statutes.

Retaliation for exercising one's right to protection from discrimination and/or harassment or for participating in the investigation of a complaint is prohibited by law, and will not be tolerated.

The policy applies to all CSULB programs and activities, including, but not limited to, Educational, cultural, recreational, and social and/or athletics programs and activities provided, sponsored, administered, or assisted by CSULB; CSULB academic programs and/or activities; CSULB-sponsored off-campus programs; housing supplied or regulated by CSULB; the administration of educational policies, admission policies, and employment policies and actions, including but limited to, recruitment, hiring, education, upgrading, promotion, transfer, demotion, layoff, recall, termination, rates of pay or other forms of compensation, and selection for training, including apprenticeships; choice of contractors and suppliers of goods and services; provision of services and benefits to CSULB students, employment, volunteers, or the public; receipt of CSULB services and benefits provided by CSULB contractors or vendors.

Federally-required affirmative action plans are available for inspection in the University Library, Reserve Book Room during normal business hours.

Confidentiality

The University is committed to maintaining a safe environment in which individuals can be unafraid to discuss concerns. Any member of the University community may seek general information and guidance about discrimination, harassment, and retaliation issues in confidence and anonymously.

However, the University's obligation is to take appropriate action to stop prohibited behavior and to prevent retaliation. This may preempt any request for anonymity or confidentiality.

Complaint Resolution Procedures

Resolution of discrimination, harassment and retaliation complaints is available to all members of the University community. The procedures vary, but are all intended to resolve complaints in a timely and responsive manner at the earliest possible stage.

For employees represented by a collective bargaining agreement, the collective bargaining agreement outlines procedures, process and timelines. Information is available from your campus union representative, or online at http://www.calstate.edu/LaborRel/Contracts_HTML/contracts.shtml

For employees not eligible to file a complaint or

grievance under a collective bargaining agreement or whose collective bargaining agreement incorporates CSU system-wide complaint procedure, the complaint procedure is outlined in CSU Executive Order 928. It is available online at: http://www.calstate.edu/LaborRel/Contracts_HTML/contracts.shtml

For students or other members of the campus community, guests, visitors, affiliates and associates, the Campus Complaint Resolution Procedure will apply. Forms are available in the Office of Equity and Diversity, USU 301. Please note: for students, these complaint procedures are applicable if the alleged offender is an employee, vendor, contractor, or visitor. Alternatively, if the alleged offender is a student, complaints should be filed in the Office of Judicial Affairs.

Campus Complaint Procedure – Informal

This procedure is initiated by speaking with one of the following persons of your choice: Immediate supervisor, program/office director, department chairperson/director, dean/associate dean, designated resource person (list available from the Office of Equity and Diversity or online at <http://www.csulb.edu/depts/oed/policies/complaints.html>), Director of Equity and Diversity.

These individuals are expected to: provide information about University policy and procedures, ensure the safety and security of the complainant in the immediate environment, ensure the due process of the individual(s) charged, ensure confidentiality to the extent possible by and with all parties, report the complaint to the Director of Equity and Diversity within five (5) working days from receipt of the complaint, consult with the Director of Equity and Diversity at least once per week until the complaint is resolved, an outcome is reached, or the complaint is referred to the Director of Equity and Diversity for review and consideration, maintain notes of the complaint and log of all contacts made, report monthly to the Director of Equity and Diversity of the number, nature, and outcome of the complaints. The outcome of all informal complaints must be reported to the Director of Equity and Diversity. If the proposed remedy is unsatisfactory to the complainant, or if the complaint is not resolved in the informal process, the complaint may proceed to the formal level.

Campus Complaint Procedure – Formal

An allegation becomes a formal complaint only when it is filed in writing on an official University discrimination complaint resolution form and is signed, or when the Director of Equity and Diversity files the complaint. The form is available from the Office of Equity and Diversity.

The alleged offender will be notified of the complaint by the Director of Equity and Diversity. The alleged offender is required to respond in writing.

If agreement is reached, the Director of Equity and Diversity shall provide all concerned parties with a written statement of the resolution.

If agreement is not reached, the Director of Equity and Diversity will proceed to evaluate the applicability of University policy prohibiting discrimination, harassment, and retaliation to the alleged behavior.

The Director of Equity and Diversity is authorized to

interview anyone deemed necessary to the investigation. The investigation will normally be completed within thirty (30) working days.

Time limits may be extended or waived by the President or upon request of the Director of Equity and Diversity.

At the conclusion of the investigation, the Director of Equity and Diversity will submit a report of the complaint, investigation and findings and recommendations to all concerned parties, and the appropriate division executive. The division executive will notify the Director of Equity and Diversity of resulting action.

Campus Complaint Timeline

Pursuant to Executive Order 1045 a student/applicant for admission (applicant) on any one of the 23 campuses of the California State University may file a complaint related to discrimination, harassment, or retaliation.

Immediately following a discriminatory, harassing, or retaliatory act/action, or as soon as possible thereafter, students/applicants who believe they are or may have been victims of discrimination, harassment or retaliation, may initiate the Informal Resolution process to receive information and advice about the procedures that exist for resolving such matters.

For the purpose of this executive order, day is defined as work day which means Monday through Friday, excluding all official holidays or campus closures at the campus where the complaint originated.

Within twenty (20) work days after the end of the academic term (semester/quarter), in which the most recent alleged discriminatory/harassing/retaliatory act occurred, a student/applicant may file a formal discrimination/harassment/retaliation complaint.

Within ten (10) work days of receipt of a formal complaint, an intake interview shall be conducted with the student/applicant.

Within thirty (30) work days of the initial intake interview of a formal complaint, the investigator shall complete his/her investigation, write and submit the investigative report to the campus designated Management Personnel Plan (MPP) employee responsible for the implementation of, and compliance with, Executive Order 1045. The timeline for the investigation shall not be extended pursuant to Article VIII, Sections E or F of Executive Order 1045 for a period longer than an additional forty (40) days.

Within ten (10) work days of the receipt of the investigative report, the campus designated Management Personnel Plan employee shall review the investigative report and notify the student/applicant in writing of the outcome of the campus investigation. If the same Management Personnel Plan employee is the person who investigated the complaint, he/she shall provide the student/applicant with notification of the outcome of the campus investigation within ten (10) work days of completing the report. A separate notification shall be provided to the accused(s), indicating whether or not the allegations at Formal Level I were substantiated.

Within ten (10) work days of receipt of the Formal Level I decision, the student/applicant may file a written

appeal with the Office of the Chancellor.

Within thirty (30) work days of receipt of a written appeal to the Office of the Chancellor (CO), the CO designee shall respond to the complainant. A separate notification shall be provided to the accused(s), indicating whether or not the allegations at Formal Level II were substantiated.

The CSU review of a written complaint filed by a student/applicant under this executive order shall end following a final decision by the CO designee.

The timelines noted above may be extended for the following reasons:

If the student/applicant, the accused, a witness, the campus investigator/CO designee, or other necessary person involved in the complaint process is unavailable because of any reason deemed to be legitimate by the campus investigator/CO designee, the timelines in this executive order will be automatically adjusted according to the period of absence. The student/applicant will receive written notification of the period of extension.

Timelines set forth herein may also be extended by mutual agreement. If the student/applicant does not agree or does not respond to the CSU's request for a timeline extension, the CSU will respond to the complaint/appeal within the timelines set forth in this executive order. In that event, the response will be interim in nature as it will be based upon the information available at the time. The interim response will note that the investigation/review is continuing until the CSU is satisfied its duty to respond appropriately to the allegation(s) has been discharged. The interim response should include a summary of the allegations, a description of the investigative/review process, and should also provide the student/applicant with an anticipated date of completion of the investigation/review, whereupon the final response will be issued.

Student Complaint Procedure

The California State University takes very seriously complaints and concerns regarding the institution. If you have a complaint regarding the CSU, you may present your complaint as follows:

(1) If your complaint concerns CSU's compliance with academic program quality and accrediting standards, you may present your complaint to the Western Association of Schools and Colleges (WASC) at <http://www.wascsenior.org/comments>. WASC is the agency that accredits the CSU's academic program.

(2) If your complaint concerns an alleged violation by CSU of a state law, including laws prohibiting fraud and false advertising, you may present your claim to the campus president or designee at [name, title and e-mail address]. The president or designee will provide guidance on the appropriate campus process for addressing your particular issue.

If you believe that your complaint warrants further attention after you have exhausted all the steps outlined by the president or designee, or by WASC, you may file an appeal with the Associate Vice Chancellor, Academic Affairs at the CSU Chancellor's Office. This procedure should not be construed to limit any right that you may have to take civil or criminal legal action to resolve your complaint.

Campus Standards of Conduct

Both productivity at work and the learning process are significantly impaired by alcohol abuse and the use of illicit drugs. Substance abuse among college students inhibits their educational development and is of serious nationwide concern.

California State University, Long Beach is dedicated to the elimination of the use of illicit drugs and alcohol abuse. The University is making every effort to create an environment that promotes and reinforces good health. This includes responsible living, respect for community and campus standards and regulations, individual responsibility within the community, and the intellectual, social, emotional, ethical, and physical well-being of all members of the campus community.

On campus property, the solicitation, sale, use or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics, as those terms are used in California statutes, are prohibited.

Consumption of alcohol is prohibited in individual offices, classrooms, laboratories, or generally accessible public or open areas, such as the quad and athletic fields.

Information regarding campus policies on the consumption of alcohol may be obtained by calling the Office of Student Life and Development at 985-8668.

Pursuant to Title 5 of the California Code of Regulations, violations by students of the above regulations, when campus related, may, after due process, result in the student being placed on probation, being suspended, or being expelled. Additionally, violations of laws committed on campus property, or at a campus event, will also be subject to referral and prosecution through off-campus authorities. Penalties by enforcement agencies for violations of the law may include imprisonment, fines, or both; these are in addition to administrative sanctions imposed by the University.

More detailed descriptions of student regulations concerning drugs, or alcohol, may be found elsewhere in the CSULB *Catalog*, or in the Residence Hall Calendar and Handbook, or the Regulations for Campus Activities, Organizations and the University Community.

Pursuant to Education Code Section 89535, employees may be disciplined, up to and including termination, for the following causes:

1. Conviction of criminal offenses involving the illegal use of drugs.
2. Appearing for work impaired by the use of alcohol and/or controlled substances.
3. Addiction to the use of controlled substances.

More detailed descriptions of employee regulations concerning drugs, or alcohol, may be found in the Administrative Policies and Procedures Handbook and the Faculty and Staff Handbooks.

Don't Put Your Health at Risk

To become dependent upon chemicals such as illicit drugs and/or alcohol is to put your health at risk. Chemical dependency is a condition in which the use of mood altering substances such as drugs or alcohol is associated with problems in any area of life on a more or less continuing basis.

One does not, however, have to be addicted or chemically dependent to suffer health risks from the use of illicit drugs or alcohol.

Alcohol and illicit drugs (in all the many forms) may, and often do, impair physical coordination and judgment, diminish control over impulsive behavior, and cause many short- and long-term health consequences.

Alcohol-related illnesses now represent the third leading cause of death in the United States exceeded only by cancer and heart disease, and medical research has established very strong evidence that alcohol abuse contributes significantly to cancer and heart disease. There is clear evidence of serious negative effects on babies due to use of illicit drugs and alcohol by the mother during pregnancy.

If You Have an Alcohol/Drug-Related Problem, We Want to Help

The California State University, Long Beach Student Health Services (SHS) offers substance abuse counseling and resources for students, faculty, and staff. This includes an Athletic Assistance Program for student athletes (offered as a separate program due to NCAA testing and eligibility requirements and conference affiliation rules for competition).

An experienced and specially trained counselor/educator under the supervision of the Medical Director, serve as the coordinator and counselor of this program and is available for consultation. All contacts with the Student Health Services personnel are strictly confidential.

Information concerning the prevention of drug and alcohol abuse and rehabilitation may be obtained through Linda Pena at the Alcohol, Tobacco & Other Drugs (ATOD) Program in the Student Health Services at (562) 985-1732.

The California State University, Long Beach Student Health Services is located at the corner of Beach Drive and Merriam Way. The telephone number is (562)985-4771.

Security on Campus

Campus Security Act

California State University, Long Beach University Police, obtains its powers to arrest from the California Penal Code and the California Education Code.

Reporting Emergencies on Campus

The on-campus emergency phone number is 9-1-1. The non-emergency phone number is (562) 985-4101. Any problems concerning behavior of members of the campus community, thefts, vandalism, fire, and all related matters should immediately be brought to the attention of the University Police.

Procedures for Reporting Crimes on Campus

Whenever students or employees become victims of a crime while on the campus of CSULB, or whenever they have witnessed a crime or feel that there is a possibility that a crime is about to occur, they should notify University Police as soon as possible. There are numerous emergency phones located throughout the campus and parking lots, which are direct lines to the University Police dispatcher. Contact University Police by simply locating the nearest emergency phone or by using the emergency phone that is located in all elevators. Individuals may also contact the mobile police units that patrol the campus on a 24-hour schedule. Parking

enforcement officers also patrol the parking lots and have direct radio contact with the police dispatcher and the mobile police units. The University Police is located at the far east end of campus, between parking lot "11" and parking lot "9" on Palo Verde Avenue. The Department is open 24 hours a day to respond to any call for service or to any emergency.

Opening Classrooms

Custodians are responsible for unlocking all outside doors and classrooms which do not contain equipment (audiovisual, computers, etc.) at 7:00 am. University Police personnel are responsible for opening buildings on weekends and holidays. Persons requesting a door opened must have proper authorization. Questions of interpretation and special access matters should be directed to University Police.

Security of Buildings

Personnel who require regular access to specific buildings and rooms may request keys. Requests must be approved by the appropriate department and, for some facilities, by the appropriate administrator. Individuals granted special access to rooms and buildings must assume personal responsibility for facilities and equipment during the time they are using these facilities and equipment and must ensure that the door is locked at the conclusion of work.

University Police will ensure that all buildings are secured every night. An individual desiring to remain in a building after normal closing hours is required to notify University Police.

A faculty or staff member who does not have a key but who requires access to a particular building or room after normal instructional or working hours must present proper identification to University Police before being given access to the building. Graduate Assistants and other students who require entrance to a building during other than normal hours must have proper identification and prior approval in writing from the appropriate administrator. This authorization must be on file with University Police.

Anyone who has difficulty in gaining authorized access to an area or who needs assistance in securing a building or room should contact University Police.

Policy Concerning Law Enforcement on Campus

California State University Police Officers are sworn Law Enforcement Officers under California Penal Code, Section 830.2, and in compliance with State Statute meet the peace officer standards and training requirements mandatory for all California law enforcement officers. In addition, California State University Police Officers undergo training specially designed to meet the needs and problems of a contemporary university community.

The primary responsibility of the University Police is the preservation of the public peace and the protection of life and property against all unlawful acts. The department will take all possible measures to prevent crime and accidents, investigate thoroughly all suspicious and criminal activity, and apprehend offenders quickly in all cases where crimes are committed.

Type and Frequency of Programs to Inform Campus Personnel About Security Procedures and Practices

University Police actively invites fraternities and sororities, as well as sports groups and clubs on campus, to participate in the "Acquaintance/Date Rape" lectures. These classes are

scheduled flexibly at no charge to meet the group's needs. The University Police also conducts new employee, new student, and special groups orientations. Officers routinely address residence hall students on a variety of topics, such as drug and alcohol abuse, and the problem of sexual assaults.

Programs Designed to Prevent Crime

University Police offers an evening escort service for all students and employees. They are picked up and escorted to their vehicles or to the residence halls.

University Police provides employees with information about California law and how to avoid being a victim. Advice is also provided about securing valuables and protecting vehicles.

Statistics on Major Crimes

University Police reports statistics on major crimes monthly to the Office of the President, to the Chancellor's Office, and to the Department of Justice.

Information concerning CSULB policies, procedures, and facilities for students and others to report criminal actions or other emergencies occurring on campus may be obtained from University Police, (562) 985-4101.

Information concerning the CSULB annual crime statistics reports may be obtained online at the University Police website <http://daf.csulb.edu/offices/ppfm/police/> or by contacting University Police directly at (562) 985-4101.

Firearms on Campus

Any person who brings or possesses a firearm on the grounds of the University, without the prior written permission of the Chief of University Police, or as otherwise provided by law, is in violation of State law (California Penal Code, Section 626.9), and University Regulations, and is punishable by imprisonment. Any person who brings or possesses a device that expels a metallic projectile, such as a B-B or pellet, through the force of air pressure, CO2 pressure, or spring action, or a spot-marker gun, on the grounds of the University, without the permission of the University Police, is in violation of University Regulations; such action may result in University or legal sanctions.

Off-Campus Monitoring of Criminal Activity at Campus Events

The University Police Department has a close working relationship with the City of Long Beach Police Department and other local law enforcement agencies. Reports and information are routinely exchanged and reviewed as needed.

Policy for the Use of Alcohol and Drugs on Campus

Alcoholic beverages generally may not be consumed on campus except at sponsored events and with specific approval of the Director of Student Life and Development.

Alcoholic beverages may only be consumed on University premises that have been licensed by the Department of Alcoholic Beverage Control or on other University premises at "approved group sponsored events." Sponsors of such events must obtain prior written approval from the office of Student Life and Development. Approval normally will be limited to events in such areas as the

University Student Union, the Soroptimist House, or the Chart Room.

The solicitation, sale, use or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics, as those terms are used in California statutes, is prohibited on campus property. Excepted are drugs which are lawfully prescribed or lawfully permitted for the purpose of bona fide research, instruction or analysis.

CSULB is dedicated to the elimination of the use of illicit drugs and alcohol abuse. The CSULB Student Health Services offers substance-abuse consultation programs for students, faculty and staff who may need assistance in overcoming the personal problems associated with alcohol or drug abuse. These programs include a Student Assistance Program for students, an Employee Assistance Program for faculty and staff, and an Athletic Assistance Program for student athletes (offered as a separate program due to NCAA requirements). All contacts with the Health Center and its personnel are confidential.

More detailed descriptions of campus regulations concerning alcohol and drugs may be found in the current editions of the CSULB *Catalog*, the CSULB *Schedule of Classes*, *Regulations for Campus Activities, Organizations*, and the University Community, and the Faculty, Staff and Student Handbooks.

Policy on Sexual Assault

Students, faculty, and staff who are victims of sexual assault committed at or upon the grounds of the University, or upon off-campus grounds or facilities maintained by affiliated student organizations, are required by law to be advised of specified information, to include treatment, related campus procedures, referral options, and other assistance which may be available [California Education Code, Section 67385]. This policy is designed to provide the written procedures and information required.

Rape, including acquaintance rape, or any other form of sexual assault, will not be tolerated by California State University, Long Beach. Where there is evidence that campus-related sexual assault has been committed, severe campus disciplinary action will be initiated. Such campus disciplinary action may include, after due process, the possibility of dismissal, suspension or disenrollment. Additionally, where the victim initiates criminal action, the perpetrator is subject to criminal penalties which may include fines and imprisonment.

Sexual Assault

The term "sexual assault" includes, but is not limited to, rape, acquaintance rape, sexual battery, forced sodomy, forced oral copulation, rape by a foreign object, or threat of sexual assault [California Education Code, Section 67385(d)].

Rape is a criminal offense. "Rape" is generally defined as an act of sexual intercourse accomplished with a person not the spouse of the perpetrator, under specified circumstances. For example, it may involve the use or threat of force, violence, retaliation, or fear of or actual immediate and unlawful bodily injury. Rape also occurs when the victim is incapable of giving legal consent, for example, when:

- a) the victim has a mental disorder, or is developmentally or physically disabled;
- b) the victim is prevented from

resisting the assault due to intoxicating substances (e.g. alcohol or drugs); or c) the victim is unconscious of the nature of the act, and such condition was known or reasonably should have been known to the accused (Reference: California Penal Code, Section 261, and the following sections). Spousal rape is also prohibited under the "Spousal Rape" provisions of the California Penal Code, Section 262.

"Acquaintance Rape" is forced sexual intercourse undertaken by someone the victim knows, against the will of the victim or as a result of threats, force or fear.

"Sexual Battery" is defined as the touching of an intimate part of another person, if the person is unlawfully restrained and if the touching is against the will of the person touched, for the purpose of sexual arousal, sexual gratification, or sexual abuse [Reference: California Penal Code, Section 243.4 (e) (i)].

"Assault with intent to commit a sexual battery" is defined as an unlawful attempt, coupled with the present ability, to commit a violent injury (e.g., rape) or sexual battery on the person of another. (Reference: California Penal Code, Section 220; 240; 261; and following sections).

"Consent" is defined as positive cooperation in an act or attitude pursuant to an exercise of free will. The person must act freely and voluntarily and have knowledge of the nature of the act or transaction involved. A current or previous dating or marital relationship is not sufficient to constitute consent where, under specified conditions, consent is at issue [Reference: California Penal Code, Section 261.6; 266(c)].

"Unlawful Sexual Intercourse with a minor" is an act of sexual intercourse accomplished with a person not the spouse of the perpetrator, where the person is under the age of 18 years (California Penal Code, Section 261.5).

Any person who willfully and lewdly commits any lewd or lascivious act upon or with the body or any part of a child under the age of 14 years with the intent of arousing, appealing to, or gratifying the sexual desires or passions of either the child or defendant is guilty of a felony. Any person who commits any act in the previous sentence with a person 14 or 15 years old, and the defendant is at least 10 years older than the child is guilty of a public offense (California Penal Code, Section 288). Any person who intentionally gives, transports, provides, persuades or makes available to another a child under age 16 for lewd or lascivious acts is guilty of a felony, punishable by fine and imprisonment [California Penal Code, Section 266(j)]. Every person who annoys or molests any child under the age of 18 is punishable by fine and imprisonment, or both fine and imprisonment (California Penal Code, Section 647.6).

University Jurisdiction

California State University, Long Beach views seriously its obligation to uphold the laws of the larger community of which it is a part. An association with the University does not exempt a person from local, state, or federal laws, but rather imposes the additional obligation to abide by all of the rules and regulations of the California State University.

A student charged with a sexual abuse or sexual assault or sexual battery violation which is campus-related may be subject to prosecution under appropriate California criminal

statutes, as well as being subject to student discipline under the Student Conduct Procedures (Reference: Chancellor's Executive Order 1043, "Student Conduct Procedures"; and Title V, California Code of Regulations, Section 41301-41302, "Student Discipline").

Employees charged with a sexual abuse violation which is campus-related may be subject to prosecution under appropriate California criminal statutes, as well as being subject to discipline under the California Education Code, Sections 89535-89540. Such campus disciplinary action for employees may include demotion, suspension, or dismissal.

Campus Reporting Procedures

Persons involved in, or possessing knowledge of, a campus-related abuse violation are strongly encouraged to notify University Police immediately. University Police may be contacted by:

- using any of the blue lighted telephones
- by depressing the red button on all public pay telephones
- dialing (562) 985-4101 or 9-1-1
- anonymous tips can be made by calling (562) 986-5131

An officer will be dispatched and will assist the victim to a medical facility for medical care and collection of evidence. An officer will assist the victim with a police report should the victim desire to make one. An officer will remain available to the victim until a friend or relative can be located.

The University Police Department cannot hold reports of crime in confidence. Confidential reports for purposes of inclusion in the annual disclosure of crime statistics can generally be made to other CSU campus security authorities identified as the following:

- Associate Vice President/Dean of Students
University Student Union 219, (562)985-8670
- Associate Vice President, Faculty Affairs
(562) 985-4128, Brotman Hall 303
- Assistant Dean of Students
(562) 985-7547, University Student Union, Room 217
- Director, Athletic
(562) 985-4655, Pyramid Annex
- Director, Counseling and Psychological Services
(562) 985-4001, Brotman Hall 226
- Director, Equity and Diversity
(562) 985-8256, University Student Union 301
- Director, Housing and Residential Life
(562) 985-4187, Housing Office
- Director, Judicial Affairs
(562) 985-5270, Brotman Hall 377
- Director, Staff Human Resources
(562) 985-4031, Brotman Hall 335
- Director, Student Health Services
(562) 985-4771, Student Health Center

Alternatively, one may anonymously report a crime to the above listed campus authorities. Each respective unit or person contacted will be responsible for reports, as may require by law, to be filed for their respective unit, e.g. violations under the Child Abuse Reporting Law, Jeanne Clery Act or Meagan's law.

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act

Access crime statistics for CSULB: These are mandated statistics known as the Jeanne Clery Disclosure of Campus

Security Policy and Campus Crime Statistics Act. Hard copies of this brochure may be obtained from CSULB Police Department's main station located on the southern end of parking lot 11, 1250 Bellflower Blvd, or from the police substation located in the University Student Union room, 237. This report is also available on the University Police web site at <http://daf.csulb.edu/offices/ppfm/police>, and can be downloaded in the PDF format. This report is prepared in cooperation with the Police agencies surrounding our main campus and our alternate sites, Housing and Residential Life, the Judicial Affairs Office and the Division of Student Services. Each entity provides updated information on their educational efforts and programs to comply with the Act.

The following are among the options available to a victim and more than one option may be exercised:

1. Criminal Prosecution: University Police - (562) 985-4101
Emergency: 9-1-1
2. Civil Action: Consult an attorney.
3. University Disciplinary Process, where accused is:
 - A. Faculty: Academic Employee Relations
(562) 985-5208; BH-300
 - B. Staff: Staff Human Resources
(562) 985-4128; BH-303
4. Informal Mediation: Office of the University Ombuds
(562) 985-5983; FND-140.
5. Alternative Campus Housing Assignments: Director, Housing (562) 985-4187; Housing Office
6. Academic Assistance:
 - A. Counseling and Psychological Services
(562) 985-4001; BH 226
 - B. Women's Resource Center (562) 985-5466; LA3-105
 - C. Academic Advising Center (562) 985-4837; Horn Center, Room 103

In the event there are requests for information from the press, concerned students, parents, and others, prudence will be exercised, and when required by law, confidentiality will be maintained. When appropriate, only the Department Director (for matters strictly within the Director's purview), or the University Director of Public Affairs (for inquiries by the media), will respond.

Victims are advised that there could likely be a need to identify both the victim and the assailant in the course of investigation and hearings under University student disciplinary proceedings, as well as under employee disciplinary proceedings, or criminal prosecutions. In the case of student disciplinary actions against an assailant, the victim is required to be promptly notified by the Director, Judicial Affairs of the status of the proceedings, and the general terms of the disposition.

Persons are reminded of the importance of preserving such evidence as may be necessary to the proof of criminal sexual assault. With respect to sexual assault involving student discipline, both the accused and the accuser are entitled to have an advisor present during a campus disciplinary proceeding, and to be informed of the outcome of the campus student disciplinary proceeding. Student victims of sexual assault may request changes in academic and living arrangements precipitated by the offense where such changes are reasonably available.

Support Services

Sexual assault violations often result in physical harm, psychological harm, or both. Even if the victim decides not to report the incident to authorities, it is urged that the victim seek medical and counseling assistance for potential emotional trauma and the possibility of sexually transmitted diseases.

- The University Counseling and Psychological Services provides crisis counseling as well as ongoing assistance to students who have experienced sexual assault; BH 226, (562) 985-4001, www.csulb.edu/caps.
- The University Student Health Center offers routine medical examinations, including pregnancy tests and tests for sexually transmitted diseases; (562) 985-4771.
- The University Women's Resource Center provides support, resource materials, and referrals to community services women and men, LA3-105, (562) 985-8576, www.csulb.edu/wrc.
- S.A.R.T (Sexual Assault Response Team) The University Police is an active participant of the Long Beach S.A.R.T. process. This process offers individual forensic exams to victims of sexual assault and child molestation. Coordination is with University Police, Long Beach Police Department, District Attorney's office, a forensic nurse and a rape crisis counselor. The police dispatcher activates the S.A.R.T process after the officers have connected with the victim. The University Police may be reached by calling (562) 985-4101 or 9-1-1. S.A.R.T. is located at Long Beach Community Hospital. A victim may be driven to Long Beach Community Hospital, 1720 Termino Ave., Long Beach, for the S.A.R.T. services. The emergency room staff will contact S.A.R.T. directly.

Additionally, referrals are available through the following non-university agencies:

- YWCA GLA Sexual Assault Crisis Program
(877) 943-5778
- East LA Rape and Battery Hotline
(800) 585-6231
- Rape Crisis Hotlines – Orange County
(949) 831-9110 and (714) 957-2737
- The Rape Treatment Center – Santa Monica Hospital,
(310) 319-4000
- Safe At Home Confidential Address Program
(877)322-5227, www.ss.ca.gov/safeathome/

Also, Counseling and Psychological Services office maintain lists of referrals within the community which deal with the issues of rape and sexual assault crisis, including legal, medical, and therapeutic support services. The phone number for the Counseling and Psychological Services office is (562) 985-4001.

Victims of Violent Crime Statute

A person who has sustained physical injury as a direct result of a crime of violence, or is legally dependent for support upon a person who has sustained physical injury or death as a direct result of a crime of violence (or, in the event of a death caused by a crime of violence, has legally assumed or voluntarily paid the medical or burial

expenses incurred as a direct result thereof) may qualify for indemnification by the State of California for the out-of-pocket wages, medical and/or burial expenses incurred as a result of the crime (California Government Code, Section 13900, et seq.). Claims must be filed with the State Board of Control for the State of California. The Statute provides that, absent certain extenuating circumstances, a claimant has one year from the date of the crime to file his or her claim with the State Board of Control. For further information regarding this program, contact:

University Police - CSULB, 1250 Bellflower Blvd., Long Beach, CA 90840, Telephone: (562) 985-4101

Los Angeles District Attorney - Telephone: (800) 380-3811

Website: da.co.la.ca.us/vwap/roster.htm

State of California - Victim Compensation Program, P.O. Box 3036, Sacramento, CA 95812-3036, Telephone: (800) 777-9229, Hearing impaired, please call the California Relay Service at (800) 735-2929, Email: info@vcgcb.ca.gov

Student Educational Records and Privacy Rights

The federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232 g) and regulations adopted thereunder (34 C.F.R. 99) set out requirements designed to protect students' privacy in their records maintained by the campus. The statute and regulations govern access to certain student records maintained by the campus and the release of such records. The law provides that the campus must give students access to most records directly related to the student, and must also provide opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. The law generally requires the institution to receive a student's written consent before releasing personally identifiable data about the student. The institution has adopted a set of policies and procedures governing implementation of the statutes and the regulations. Copies of these policies and procedures may be obtained on the Enrollment Services website. Copies can also be obtained at the Office of Enrollment Services or the Office of Judicial Affairs. Among the types of information included in the campus statement of policies and procedures are: (1) the types of student records maintained and the information they contain; (2) the official responsible for maintaining each type of record; (3) the location of access lists indicating persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) student access rights to their records; (6) the procedures for challenging the content of student records; (7) the cost to be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office is: Family Policy Compliance Office, U.S. Department of Education,

400 Maryland Ave., S.W., Washington, D.C. 20202-5920.

The campus is authorized under the Act to release "directory information" concerning students. CSULB designates the following items authorized by FERPA as Directory Information: student's name, address (see below for conditions), telephone number (see below for conditions), email address (see below for conditions), major field of study, dates of attendance, grade level, enrollment status, and degrees, honors, and awards received. Addresses, telephone numbers, and email addresses for currently enrolled students will be released to CSULB personnel and units solely for the purpose of conducting legitimate University business. They may not be shared with individuals or organizations outside the University except in accordance with the following provisions. Addresses, telephone numbers, and email addresses may be released for non-commercial use by individuals or organizations outside the University provided the requests for such information have been reviewed and approved by the appropriate University personnel. Requests from the academic offices of accredited educational institutions shall be reviewed by the Provost and Senior Vice President for Academic Affairs or designee. All other requests shall be reviewed by the Vice President for Student Services or designee. Otherwise, the University may disclose any of the items designated as "directory information" above without prior written consent, unless the student provides a request that certain information not be released (non-disclosure). Requests for non-disclosure may be made directly by the student utilizing their self-service account in the student system via the Internet. If the student does not have access to the Internet, their request for non-disclosure must be requested on the "Authorization to Withhold Student Information" form, available in the Office of Enrollment Services. Specifying items as directory information allows the University to disclose this information without prior written consent. It does not require that the University release the information except under court direction. In addition to the above, the Director of Athletics may provide information concerning participation of students in athletic events, including the height and weight of athletes. The University will also respond to requests for information regarding the employment status of students serving as Teaching Associates (TAs), Graduate Assistants (GAs), or Instructional Student Assistants (ISAs) and the departments that employ them.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons have responsibilities in campus' academic, administrative, or service functions and have reason for accessing student records associated with their campus or other related academic responsibilities. Student records may also be disclosed to other persons or organizations under certain conditions (e.g., as part of accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; for specified health or safety matters; or to other institutions in which the student has enrolled or seeks to enroll).

Career Placement Information

The Career Development Center office may furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. Any such data provided must be in a form that does not allow for the identification of any individual student. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or graduates of all campuses in the California State University system.

Use of Social Security Number

Pursuant to the authority contained in Section 41201, Title 5, California Code of Regulations, and Section 6109 of the Internal Revenue Code (26 U.S.C. 6109), the University uses the social security number to identify students and their records including identification for purposes of financial aid eligibility and the repayment of financial aid and other debts payable to the institution. Also, the Internal Revenue Service requires the University to file information returns that include the student's social security number and other information such as the amount paid for qualified tuition, related expenses, and interest on educational loans. That information is used by the IRS to help determine whether a student, or a person claiming a student as a dependent, may take a credit or deduction to reduce federal income taxes.

Taxpayers who claim Hope Scholarship or Lifetime Learning tax credit will be required to provide the campus with their name, address, and Social Security Number.

Student Grievance Policy

The CSULB grievance policy and procedure are designed to provide the campus community with a protocol to accommodate circumstances for which no other policy or procedure exists. This policy does not cover grade appeals, prohibited discrimination, or any other issues that are covered by existing policies. Students are advised to consult appropriate additional campus resources (e.g., the *Undergraduate and Graduate Catalog*, "The Regs"). The Office of the Dean of Students has staff to help students understand the details of the grievance procedure and may be called upon for assistance.

Student Grievance Procedure

The student grievance procedure at CSULB is intended to provide a formal, standardized means for students to seek redress concerning the actions of faculty members, administrators, or staff members of the university-actions that are unauthorized or unjustified and that adversely affect the status, rights, or privileges of the students. Further, the purpose is to establish due process and safeguards that will be followed by the university in the adjudication of grievances.

A grievance filed under this policy must be initiated within one year of the alleged violation. A grievance may not be filed on the basis of a student's judgment of an instructor's or administrator's competence; such judgments are solely the province of the academic department involved or of the administrator's supervisor.

The grievance procedure is not designed to replace open communication and understanding, which are vital to the academic process. The student may withdraw the grievance at any stage, at which point the process will immediately terminate. During all stages of the grievance, the burden of proof will be on the student.

The person or entity against whom the complaint is made is referred to in this document as the respondent. The initiator of the grievance is referred to as the grievant. For nonacademic matters, the term dean is also construed to refer to the responsible individual of comparable level – typically an associate vice president or vice president.

In the event that the respondent is at the level of dean or higher, the complaint should be directed to the responsible person at the next higher administrative level. If the chair or program director was directly involved in the original decision or denied the student an opportunity for due-process review at the local level, the student should seek informal resolution through the dean of the college (or designee).

If after ten instructional days beyond the initial informal meeting a satisfactory resolution is not reached, the department chair or program director will meet with the student grievant and the respondent. Within fifteen instructional days of that meeting, the chair or program director will complete an investigation of the allegations and will reach conclusion. The chair or program director shall promptly communicate the decision to the student and the respondent. If the grievant is not satisfied with the results of the informal process, he or she may initiate a formal grievance procedure by contacting the appropriate college dean (or designee) or the responsible person at the next nonacademic level within fifteen instructional days of the decision. (P.S. 07-01)

Formal Grievance Procedure

To initiate the formal grievance procedure, the student is required to submit a written "statement of grievance" – a clear, concise, signed, and dated statement of events from the student's perspective. The statement should provide enough information to present a complete understanding of the situation and of the remedy sought by the student.

A student initiates the formal procedures by submitting the statement of grievance to the appropriate department chair or program director. The chair or director will then submit a copy of the statement of grievance to the appropriate college dean or next appropriate higher administrative level and to the respondent. The respondent is required to submit a written response to the chair or program director with ten instructional days. The chair or program director will then provide a copy of the respondent's reply to the grievant and to the college dean or next appropriate higher administrative level.

The dean or appropriate administrator has a period of ten instructional days to review the case, during which he or she may opt to seek additional information from the parties involved or from witnesses. By the end of that ten-day period, the dean or administrator will either (1) render a decision or (2) convene a College Hearing Committee to investigate further. The student shall have the right to request that a College Hearing Committee be convened.

College Hearing Committee

If required, a College Hearing Committee will consist of an administrator representing the dean, two faculty members

elected from the Faculty Council of the appropriate College, a student representative elected from the Student Council of the appropriate College, a designee of the vice president for student services, and faculty adviser elected by the Academic Advising Council appropriate to the grievance. All meetings of the College Hearing Committee will be closed to the public, and no transcripts will be prepared. If the college hearing committee seeks evidence by means of personal testimony, the meeting at which such evidence is presented shall be conducted in the manner of any other academic committee meeting and is not considered a formal hearing. Both the grievant and respondent shall be given opportunities to present their views. There shall be no cross-examination.

The charge of a College Hearing Committee is to investigate and then to recommend to the dean a proposed resolution. The College Hearing Committee will review the grievance and, if necessary, forward supplemental queries to the respondent and to the department chair and program director involved – along with direction to submit written responses with twenty instructional days. Once the College Hearing Committee has received the written responses, it will review all available evidence, conduct deliberations, and then choose one of the three courses of action:

- Remand the grievance to the dean with a recommendation of immediate corrective action in favor of the grievant – based on sufficient evidence of a violation of (1) university regulation or policy or (2) principle of due process or (3) both.
- Defer a decision to allow for further investigation and gathering of evidence. In the case of such a continuation, both the grievant and the respondent will be notified in writing of the additional evidence required and whether that evidence should be provided in writing or in personal testimony.
- Dismiss the grievance based on a (1) lack of sufficient evidence of a violation of the university regulation or policy and (2) confirmation of adherence to principles of due process.

The College Hearing Committee will forward the recommendation to the dean. The dean will then make a decision and forward that decision to the respondent and grievant. If neither the respondent nor the grievant requests further review, then the grievance process ends.

If either party wishes to appeal the decision of the Dean, the appeal, in writing, may be made to the Provost (academic) or appropriate Vice President (non-academic). The appeal must be made within 10 instructional days of the dean's decision. The Provost or Vice President will notify both parties of the appeal and convene a University Hearing Committee to investigate further.

University Hearing Committee

If required, a University Hearing Committee will consist of an administrator representing the Provost, three faculty members selected from the Panel on Professional Responsibility according to the procedures of that policy, and a student elected from the Associated Students, Inc. All meetings of the University Hearing Committee will be closed to the public, and no transcripts will be prepared. If the University Hearing Committee seeks evidence by means of personal testimony, the meeting at which such evidence

is presented shall be conducted in the manner of any other academic committee meeting and is not considered a formal hearing. Both the grievant and respondent shall be given opportunities to present their views. There shall be no cross-examination.

The charge of a University Hearing Committee is to investigate and then to recommend to the Provost a proposed resolution. The University Hearing Committee will review the grievance and, if necessary, forward supplemental queries to the respondent and to the Provost – along with direction to submit written responses within 20 instructional days. Once the University Hearing Committee has received the written responses, it will review all available evidence, conduct deliberations, and then choose one of the three courses of action:

- Remand the grievance to the Provost with a recommendation of immediate corrective action in favor of the grievant – based on sufficient evidence of a violation of (1) university regulation or policy or (2) principle of due process or (3) both.
- Defer a decision to allow for further investigation and gathering of evidence. In the case of such a continuation, both the grievant and the respondent will be notified in writing of the additional evidence required and whether that evidence should be provided in writing or in personal testimony.
- Dismiss the grievance based on a (1) lack of sufficient evidence of a violation of the university regulation or policy and (2) confirmation of adherence to principles of due process.

The University Hearing Committee will forward the recommendation to the Provost. The Provost will then make a decision and forward that decision to the respondent and grievant. The University Hearing Committee shall function as the final level of this grievance process.

41301. Standards for Student Conduct

The University is committed to maintaining a safe and healthy living and learning environment for students, faculty, and staff. Each member of the campus community must choose behaviors that contribute toward this end. Student behavior that is not consistent with the Student Conduct Code is addressed through an educational process that is designed to promote safety and good citizenship and, when necessary, impose appropriate consequences.

(a) Student Responsibilities

Students are expected to be good citizens and to engage in responsible behaviors that reflect well upon their university, to be civil to one another and to others in the campus community, and to contribute positively to student and university life.

(b) Unacceptable Student Behaviors

The following behavior is subject to disciplinary sanctions:

(1) Dishonesty, including:

- (A) Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage.
- (B) Furnishing false information to a University official, faculty member, or campus office.
- (C) Forgery, alteration, or misuse of a University document, key, or identification instrument.
- (D) Misrepresenting one's self to be an authorized agent of

the University or one of its auxiliaries.

- (2) Unauthorized entry into, presence in, use of, or misuse of University property.
 - (3) Willful, material and substantial disruption or obstruction of a University related activity, or any on-campus activity.
 - (4) Participating in an activity that substantially and materially disrupts the normal operations of the University, or infringes on the rights of members of the University community.
 - (5) Willful, material and substantial obstruction of the free flow of pedestrian or other traffic, on or leading to campus property or an off-campus University related activity.
 - (6) Disorderly, lewd, indecent, or obscene behavior at a University related activity, or directed toward a member of the University community.
 - (7) Conduct that threatens or endangers the health or safety of any person within or related to the University community, including physical abuse, threats, intimidation, harassment, or sexual misconduct.
 - (8) Hazing, or conspiracy to haze. Hazing is defined as any method of initiation or pre-initiation into a student organization or student body, whether or not the organization or body is officially recognized by an educational institution, which is likely to cause serious bodily injury to any former, current, or prospective student of any school, community college, college, university or other educational institution in this state (Penal Code 245.6), and in addition, any act likely to cause physical harm, personal degradation or disgrace resulting in physical or mental harm, to any former, current, or prospective student of any school, community college, college, university or other educational institution. The term "hazing" does not include customary athletic events or school sanctioned events. Neither the express or implied consent of a victim of hazing, nor the lack of active participation in a particular hazing incident is a defense. Apathy or acquiescence in the presence of hazing is not a neutral act, and is also a violation of this section.
 - (9) Use, possession, manufacture, or distribution of illegal drugs or drug-related paraphernalia, (except as expressly permitted by law and University regulations) or the misuse of legal pharmaceutical drugs.
 - (10) Use, possession, manufacture, or distribution of alcoholic beverages (except as expressly permitted by law and University regulations), or public intoxication while on campus or at a University related activity.
 - (11) Theft of property or services from the University community, or misappropriation of University resources.
 - (12) Unauthorized destruction, or damage to University property or other property in the University community.
 - (13) Possession or misuse of firearms or guns, replicas, ammunition, explosives, fireworks, knives, other weapons, or dangerous chemicals (without the prior authorization of the campus president) on campus or at a University related activity.
 - (14) Unauthorized recording, dissemination, or publication of academic presentations (including handwritten notes) for a commercial purpose.
 - (15) Misuse of computer facilities or resources, including:
 - (A) Unauthorized entry into a file, for any purpose.
 - (B) Unauthorized transfer of a file.
 - (C) Use of another's identification or password.
 - (D) Use of computing facilities, campus network, or other resources to interfere with the work of another member of the University community.
 - (E) Use of computing facilities and resources to send obscene or intimidating and abusive messages.
 - (F) Use of computing facilities and resources to interfere with normal University operations.
 - (G) Use of computing facilities and resources in violation of copyright laws.
 - (H) Violation of a campus computer use policy.
 - (16) Violation of any published University policy, rule, regulation or presidential order.
 - (17) Failure to comply with directions or, or interference with, any University official or any public safety officer while acting in the performance of his/her duties.
 - (18) Any act chargeable as a violation of a federal, state, or local law that poses a substantial threat to the safety or well being of members of the University community, to property within the University community or poses a significant threat of disruption or interference with University operations.
 - (19) Violation of the Student Conduct Procedures, including:
 - (A) Falsification, distortion, or misrepresentation of information related to a student discipline matter.
 - (B) Disruption or interference with the orderly progress of a student discipline proceeding.
 - (C) Initiation of a student discipline proceeding in bad faith.
 - (D) Attempting to discourage another from participating in the student discipline matter.
 - (E) Attempting to influence the impartiality of any participant in a student discipline matter.
 - (F) Verbal or physical harassment or intimidation of any participant in a student discipline matter.
 - (G) Failure to comply with the sanction(s) imposed under a student discipline proceeding.
 - (20) Encouraging, permitting, or assisting another to do any act that could subject him or her to discipline.
- (c) Procedures for Enforcing This Code
The Chancellor shall adopt procedures to ensure students are afforded appropriate notice and an opportunity to be heard before the University imposes any sanction for a violation of the Student Conduct Code.
- (d) Application of This Code
Sanctions for the conduct listed above can be imposed on applicants, enrolled students, students between academic terms, graduates awaiting degrees, and students who withdraw from school while a disciplinary matter is pending. Conduct that threatens the safety or security of the campus community, or substantially disrupts the functions or operation of the University is within the jurisdiction of this Article regardless of whether it occurs on or off campus. Nothing in this Code may conflict with Education Code Section 66301 that prohibits disciplinary action against students based on behavior protected by the First Amendment.
- (e) Summary of Civil and Criminal Penalties for Violation of

Federal Copyright Laws

As referenced earlier in Section XXI, Student Conduct (15) (G) the penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or “statutory” damages affixed at not less than \$750 and not more than \$30,000 per work infringed. For “willful” infringement, a court may award up to \$150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys’ fees. For details, see Title 17, United States Code, Sections 504, 505. Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to \$250,000 per offense.

41302. Disposition of Fees; Campus Emergency; Interim Suspension

The President of the campus may place on probation, suspend or expel students for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such students for the semester, quarter, or summer session in which they are suspended or expelled will be refunded. If the students are readmitted before the close of the quarter, or summer session in which they are suspended, no additional tuition or fees will be required on account of the suspension.

During periods of campus emergency, as determined by the President of the individual campus, the President may, after consultation with the Chancellor, place into immediate effect any emergency regulations, procedures, or measures deemed necessary or appropriate to meet the emergency, to safeguard persons and property, and to maintain educational activities.

The President may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension will be given prompt notice of charges and the opportunity for a hearing within ten days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the President or designated representative, enter any campus of The California State University other than to attend the hearing. Violation of any condition of interim suspension will be grounds for expulsion.

41303. Conduct by Applicants for Admission

Notwithstanding any provision to the contrary, admission or readmission may be qualified or denied to any persons who, while not enrolled as students, commit acts which, were they enrolled as students, would be the basis for disciplinary proceedings pursuant to Sections 41301 or 41302. Admission or readmission may be qualified or denied to any persons who, while students, commit acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases will be determined under procedures adopted pursuant to Section 41304.

41304. Student Disciplinary Procedures for The California State University

The Chancellor will prescribe, and may from time to time revise, a code of student disciplinary procedures for The California State University. Subject to other applicable law,

this code will provide for determinations of fact and sanctions to be applied for conduct which is a ground of discipline under Sections 41301 or 41302, and for qualified admissions or denial of admission under Section 41303; the authority of the campus President in such matters; conduct-related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a Hearing Officer; time limitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The Chancellor will report to the Board actions taken under this section.

The current University regulation on alcoholic beverages is stated in the CSULB Policies, Information and Regulations Handbook published by the Office of Student Affairs.

Additional detailed information relating to student discipline is available in the Office of Student Affairs, and from the Office of the Vice President for Student Services.

Administrative Action

Procedures and sanctions of the Office of Judicial Affairs are under the administration of the Vice President for Student Services and are conducted pursuant to the authority provided in Section 41301 of Title 5 of the California Code of Regulations. Copies of Section 41301 of Title 5 may be found in the University *Catalog* and the Campus Regulations available in the Office of Judicial Affairs. Copies of Chancellor’s Executive Order 970, “Student Conduct Procedures” are also available upon request.

The Vice President for Student Services will report annually to the President and the Chair of the Academic Senate a summary of the charges concerning cheating and plagiarism brought before the Office of Judicial Affairs.

Judicial Affairs

The Office of Judicial Affairs (Brotman Hall - 377) provides assistance with the interpretation and enforcement of campus regulations. Complete copies of the CSULB “Campus Regs,” including a listing of infractions which may result in student disciplinary action under Title 5, Section 41301, of the California Code of Regulations, “Probation, Suspension and Expulsion of Students,” are available in this office; also available are copies of Executive Order 970, “Student Conduct Procedures.” General assistance and aid in directing individuals to the proper procedures, departments and personnel may be obtained in this office.

Alleged violations are investigated primarily through informal office conferences with the involved students. The conferences which are held as a result of impending disciplinary action are:

1. To clarify the referral, the charges, or the circumstances involved;
2. To prevent the incidence of, or further occurrences of, violations; and

3. To educate as a preventive experience and to indicate the possible consequences as a result of committing a violation. Discussion is centered on the cause-and-effect relationship of various courses of action and, when possible, alternate paths or solutions are explored.

Fee Establishment and Policies

Average Support Cost per Full-Time Equivalent Student and Sources of Funds

The total support cost per full-time equivalent student (FTES) includes the expenditures for current operations, including payments made to students in the form of financial aid, and all fully reimbursed programs contained in state appropriations. The average support cost is determined by dividing the total cost by the number of FTES. The total CSU 2011-12 budget amounts were \$2,141,273,000 from state General Fund (GF) appropriations (not including capital outlay funding) and before minus \$38.5 million CalPERS retirement adjustment, \$1,530,946,000 from tuition fee revenue net of financial aid (forgone revenue), and \$340,440,000 from other fee revenues for a total of \$4,012,659,000. The number of 2011-12 budgeted FTES is 331,716 resident and 13,572 non-resident students. The GF appropriation is applicable to resident students only whereas fee revenues are collected from resident and nonresident students. FTES is determined by dividing the total academic student load by 15 units per term (the figure used here to define a full-time student's academic load).

The 2011-12 average support cost per FTES based on GF appropriation and net tuition fee revenue only is \$10,889 and when including all sources as indicated below is \$11,875. Of this amount, the average net tuition fee revenue and other income per FTES is \$5,420, which includes all fee revenue in the CSU Operating Fund (e.g. tuition fees, application fees, and other campus mandatory fees).

2011-12	Amount	Avg Cost per	
		FTE Student	%
Total Support Cost	\$4,012,659,000	\$11,875	100%
• State Appropriation ¹	2,141,273,000	6,455	55%
• Net Basic Tuition Fee Revenue ²	1,530,946,000	4,434	37%
• Other Income and Reimbursements ²	340,440,000	986	8%

¹Represents state GF appropriation in the Budget Act of 2011-12; GF is divisible by resident students only (331,317 FTES).

²Represents CSU Operating Fund, Tuition Fee and other fees revenue amounts (net of foregone revenue) submitted in campus 2011-12 final budgets. Revenues are divisible by resident and nonresident students (345,288 FTES).

The average CSU 2011-12 academic year, resident, undergraduate student basic tuition fee and other mandatory fees required to apply to, enroll in, or attend the university is \$6,519 (\$5,472 tuition fee plus \$1,047 average campus-based fees). However, the costs paid by individual students will vary depending on campus, program, and whether a student is part-time, full-time, resident, or nonresident.

Procedure for the Establishment or Abolishment of Campus-Based Fees

The law governing the California State University provides that fees defined as mandatory, such as a student body association fee and a student body center fee, may be established. A student body association fee must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (Education Code, Section 89300). The campus President may adjust the student body association fee only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose. The required fee shall be subject to referendum at any time upon the presentation of a petition to the campus President containing the signatures of 10 percent of the regularly enrolled students at the University. Student body association fees support a variety of cultural and recreational programs, childcare centers, and special student support programs. A student body center fee may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (Education Code, Section 89304). Once bonds are issued, authority to set and adjust student body center fees is governed by provisions of the State University Revenue Bond Act of 1947, including, but not limited to, Education Code sections 90012, 90027, and 90068.

A student body center fee may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (Education Code, Section 89304). The student body fee was established at CSULB by student referendum in April 7, 2000. The campus President may adjust the student body association fee only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose (Education Code, Section 89300). The required fee shall be subject to referendum at any time upon the presentation of a petition to the campus President containing the signatures of 10 percent of the regularly enrolled students at the University. Once bonds are issued, authority to set and adjust student body center fees is governed by provisions of the State University Revenue Bond Act of 1947, including, but not limited to, Education Code, sections 90012, 90027, and 90068. Student body association fees support a variety of cultural and recreational programs, childcare centers, and special student support programs.

The process to establish and adjust other campus-based mandatory fees requires consideration by the campus fee advisory committee and a student referendum. The campus President may use alternate consultation mechanisms if he/she determines that a referendum is not the best mechanism to achieve appropriate and meaningful consultation. Results of the referendum and the fee committee review are advisory to the campus President. The President may adjust campus-based mandatory fees, but must request the Chancellor establish a new mandatory fee. The President shall provide to the fee advisory committee a report of all campus-based mandatory fees. The campus shall report annually to the Chancellor a complete inventory of all campus-based mandatory fees.

For more information or questions, please contact the Budget Office in the CSU Chancellor's Office at (562) 951-4560.

Tax Credits for Higher Education

The Taxpayer Relief Act of 1997 encourages postsecondary and continuing education by providing tax benefits to students and their families. Taxpayers can claim one, or in some cases, two of these new tax credits for expenses they pay for postsecondary education for themselves and their dependent children. These tax credits can directly reduce the amount of federal income tax for returns filed.

The Hope Scholarship Credit is available on a per-student basis for the first two years of postsecondary education. The maximum credit is \$1,500 per student. It will be offered to students or parents who pay tuition and related expenses for attendance at least half-time in a degree-granting program.

The Lifetime Learning Credit provides a tax credit to parents and/or students of up to \$2,000 of total annual educational expenses, per return.

Education expenses that are paid with tax-free grants, scholarships, are not eligible for either tax credit. Education expenses paid with loans are eligible for these tax credits. Interest paid on qualified student loans may also be deductible from taxpayer income. Interest can be taken as a deduction during the first 60 months (5 years) of repayment on student loan.

To assist you in taking advantage of these tax credits, the University will provide you with the following information:

- Form 1098T (Tuition Payments Statement) - This form must be submitted along with your federal tax return to claim these credits.
- Form W-9S (Request for Student's or Borrower's Social Security Number and Certification). This form should be completed and returned to the University, if your social security number is incorrect.
- Telephone inquiries at (562)985-4169
- Online at MyCSULB.edu
- In-person inquiries at Brotman Hall 155
- IRS Publication 970, Tax Benefits for Education www.irs.gov

Either your lender or loan servicer will provide interest deduction information to you. Those eligible will be provided with a 1098E form, which must be submitted along with your federal tax return to claim this deduction.

NOTE: The information described above, and the information available via mysculb or phone regarding the new tax benefits, is in general terms. Your ability to claim these tax benefits depends on your individual circumstances. We recommend that you consult a tax advisor to determine your personal eligibility.

Emeriti Faculty

(Number in parentheses indicates year of appointment)

- Ingrid Aall (1969)** Professor Emerita, 2002
Art
- Herbert L. Aarons (1965)** Associate Professor Emeritus, 1991
Sociology
- Paul Abels (1986)** Professor Emeritus, 2000
Social Work
- Rifaat Ali Abou-El-Haj (1964)** Professor Emerita, 1995
History
- Dorothy Z. Abrahamse (1967)** Professor Emeritus, 2007
History
- Eugene Albert (1967)** Associate Professor Emeritus, 1992
Mathematics
- Leonard O. Albright (1984)** Professor Emeritus, 2000
Occupational Studies
- Kamal T. Al-Chalabi (1966)** Professor Emeritus, 1990
Civil Engineering
- Robert L. Alexander (1964)** Professor Emeritus, 1991
Civil Engineering
- Frank J. Alfieri (1967)** Professor Emeritus, 1994
Biological Sciences
- M. Shafiqat Ali (1967)** Professor Emeritus, 2001
Mathematics
- Barbara S. Allen (1970)** Professor Emerita, 1995
Music
- Judith N. Allen (1996)** Professor Emerita, 2008
Dance
- Rajen S. Anand (1970)** Professor Emeritus, 2003
Biological Sciences
- Karl W. E. Anatol (1969)** Provost Emeritus, 2002
Academic Affairs
- Robert E. Anderson (1964)** Professor Emeritus, 1988
Music
- Roy C. Anderson (1965)** Professor Emeritus, 1996
Economics
- Shane Andre (1967)** Professor Emeritus, 1994
Philosophy
- Dennis M. Anjo (1984)** Professor Emeritus, 2011
Chemistry and Biochemistry
- Carl R. Anselmo (1964)** Professor Emeritus, 1994
Biological Sciences
- Mohammad Z. Anwar (1965)** Professor Emeritus 2010
Physics and Astronomy
- Alfonso L. Archuleta (1965)** Associate Professor Emeritus, 1983
Spanish/Portuguese
- John J. Attinasi (1993)** Professor Emeritus, 2006
Teacher Education/Linguistics
- Charles W. Austin (1966)** Professor Emeritus, 1994
Mathematics
- Arthur M. Axelrad (1964)** Professor Emeritus, 1996
English
- R. Dean Ayers (1967)** Professor Emeritus, 2003
Physics and Astronomy
- John M. Bachar, Jr. (1969)** Professor Emeritus, 2000
Mathematics
- Patricia A. Bachelor (1985)** Professor Emerita, 2005
Psychology
- Jerry Bailor (1968)** Associate Professor Emeritus, 1990
Theatre Arts
- Peter Baine (1968)** Professor Emeritus, 2001
Chemistry and Biochemistry
- Dan F. Baker (1961)** Professor Emeritus, 1986
Radio, Television, and Film
- Dorothy W. Baker (1961)** Assistant Professor Emerita, 1983
Home Economics
- Philip C. Baker (1969)** Associate Professor Emeritus, 2003
Biological Sciences
- Daniel M. Barber (1975)** Professor Emeritus, 2000
Public Policy and Administration
- R. Conrad Barrett (1988)** Professor Emeritus, 2005
Comparative World Literature and Classics
- Irmgard F. Bartenbach (1964)** Professor Emeritus, 1988
German, Russians and Classics
- Eleanor H. Bates (1970)** Professor Emerita, 1988
Anthropology
- Donald L. Bates (1974)** Professor Emeritus, 1995
Management and Human Resources Management
- Anthony Battaglia (1974)** Professor Emeritus, 2003
Religious Studies
- Alwin L. Baum (1989)** Professor Emeritus, 2010
Comparative World Literature and Classics
- Randall C. Beattie (1972)** Professor Emeritus, 2010
Communicative Disorders
- Marion S. Beaumont (1967)** Professor Emerita, 1996
Economics
- Louis L. Beck (1970)** Professor Emeritus, 1989
Teacher Education
- Harold K. Becker (1963)** Professor Emeritus, 2000
Criminal Justice
- Alexander L. Beckman (1986)** Professor Emeritus, 2006
Psychology
- Howard B. Beckwith (1969)** Professor Emeritus, 2000
Mathematics
- Earl S. Beecher (1961)** Professor Emeritus, 1994
Finance, Real Estate and Law
- Donald A. Beegle (1963)** Professor Emeritus, 1988
Health Science
- Virginia M. Belt (1963)** Professor Emerita, 1983
Finance
- Robert H. Berdan (1985)** Professor Emeritus, 2003
Educational Psychology, Administration, and Counseling
- Marilyn J. Bergin (1971)** Senior Assistant Librarian Emerita, 1997
- Stephen E. Berk (1970)** Professor Emeritus, 2004
History
- Stewart Berkshire (1974)** Associate Professor Emeritus, 1988
Accountancy
- Michael E. Bernard (1995)** Professor Emeritus, 2005
Educational Psychology, Administration, and Counseling
- Robert M. Bersi (1987)** Professor Emeritus, 2004
Public Policy and Administration
- David A. Bernstein (1967)** Professor Emeritus, 1999
History
- Arnold J. Berry (1973)** Professor Emeritus, 1992
Chemistry and Biochemistry
- George V. Betar (1963)** Professor Emeritus, 1981
English
- Jutta G. Birmele (1990)** Professor Emerita, 2006
Romance, German, Russian Languages and Literatures
- Mark C. Biedebach (1967)** Professor Emeritus, 1996
Biological Sciences
- Hamdi Billici (1988)** Professor Emeritus, 2011
Finance
- Virginia L. Binder (1967)** Professor Emerita, 2004
Psychology
- Albert G. Black (1962)** Associate Professor Emeritus, 1988
English
- Janet E. Black (1990)** Professor Emerita, 1998
Social Work
- Paul V. Black (1969)** Professor Emeritus, 2005
History
- Stuart E. Black (1962)** Associate Professor Emeritus, 1991
Computer Engineering and Computer Science
- Enid V. Blaylock (1966)** Professor Emeritus, 1983
Educational Psychology and Administration
- Stephen K. Blumberg (1975)** Professor Emeritus, 1998
Public Policy and Administration
- William D. Bonis (1963)** Professor Emeritus, 1991
Philosophy
- David C. Borders (1962)** Professor Emeritus, 1990
Art
- Edward J. Borowiec (1969)** Professor Emeritus, 2000
English
- Archie Boston (1977)** Professor Emeritus, 2005
Art
- James A. Bourret (1968)** Professor Emeritus, 1992
Biological Sciences
- Angela Bowen (1996)** Assistant Professor Emerita, 2008
Women's Studies
- Alice M. Brekke (1970)** Professor Emerita, 1991
English
- Nancy E. Briggs (1970)** Professor Emerita, 2004
Communication Studies
- Alexander L. Britton (1965)** Professor Emeritus, 1980
Educational Psychology
- Helen H. Britton (1981)** Librarian Emerita, 1991
- Robert J. Brophy (1968)** Professor Emeritus, 1993
English
- Lee M. Brown (1998)** Professor Emeritus, 2001
Journalism
- Steven M. Buck (1961)** Professor Emeritus, 1990
Speech Communication
- William E. Buckner (1970)** Professor Emeritus, 1990
Home Economics and Gerontology
- Howard V. Burman (1988)** Professor Emeritus, 2004
Theatre Arts
- Ella G. Burnett (1997)** Professor Emerita, 2008
Teacher Education
- Roland E. Bush (1969)** Professor Emeritus, 2005
Comparative World Literature and Classics
- Jerry D. Byrd (1982)** Lecturer Emeritus, 1992
Recreation and Leisure Studies
- Guy H. Cain, Jr. (1960)** Associate Professor Emeritus, 1980
Electrical Engineering
- Luis Ma. R. Calingo (2000)** Dean Emeritus, 2006
College of Business Administration
- Linda Callahan (2000)** Professor Emerita, 2010
School of Nursing
- Daniel A. Campbell (1962)** Professor Emeritus, 1990
Physical Education
- Janet Campbell (1965)** Senior Assistant Librarian, Emerita, 1998
- Herbert L. Camburn (1960)** Professor Emeritus, 1996
Theatre Arts
- Filemon C. Campo-Flores (1972)** Professor Emeritus, 1996
Management/Human Resources Management
- Harold L. Cannon (1968)** Professor Emeritus, 2002
Romance, German, Russian Languages and Literatures
- Richard E. Cantey (1972)** Psychologist Emeritus, 2003
Counseling and Psychological Services

Joel W. Carissimo (1969) Professor Emeritus, 2004
Computer Engineering and Computer Science

David Carlberg (1966) Professor Emeritus, 1999
Biological Sciences

Earl R. Carlson (1961) Professor Emeritus, 1990
Psychology

Ashley B. Carr (1984) Professor Emerita, 2002
Theatre Arts

Charles L. Carter (1985) Professor Emeritus, 2006
Physical Therapy

Jean Marie Casey (1987) Professor Emerita, 2003
Teacher Education

Robert W. Cash (1970) Professor Emeritus, 1995
Educational Psychology and Administration

Richard L. Celsi (1989) Professor Emeritus, 2010
Marketing

Augustus Cerillo Jr. (1967) Professor Emeritus, 2000
History

Kwan M. Chan (1969) Professor Emeritus, 1998
Geological Sciences

Michael D. Chase (1983) Professor Emeritus, 2005
Accountancy

Chunduri V. Chelapati (1965) Professor Emeritus, 1996
Civil Engineering

Carlo Chiarenza (1999) Professor Emeritus, 2010
Italian Studies

Francis L. Christ (1972) Counselor Emeritus, 1989

Hsiao-Ling Chu (1972) Professor Emeritus, 2006
Civil Engineering and Construction Engineering Management

David C. Church (1968) Associate Professor Emeritus, 1986
Industrial Education

Cheryl Clark (1969) Associate Professor Emerita, 2000
Philosophy

Patricia J. Clark (1990) Professor Emerita, 2002
Art

Marguerite A. Clifton (1978) Professor Emerita, 1987
Physical Education

Robert B. Clyde (1967) Counselor Emeritus, 1978

Joan Cobin (1973) Professor Emerita, 1988
Nursing

Floyd A. Cohen (1965) Professor Emeritus, 1992
Mathematics

Jeffrey A. Cohlberg (1975) Professor Emeritus, 2011
Chemistry and Biochemistry

Charles L. Cole (1967) Professor Emeritus, 1996
Economics

Charles T. Collins (1968) Professor Emeritus, 2001
Biological Sciences

Keith E. Collins (1969) Professor Emeritus, 2006
History

Keith R. Colman (1970) Professor Emeritus, 2004
Psychology

James L. Comer (1971) Professor Emeritus, 1981
Physical Education

Michael E. Connor (1971) Professor Emeritus, 2004
Psychology

Jean L. Conroy (1961) Associate Professor Emerita, 1994
Mathematics

Gene R. Cooper (1969) Professor Emeritus, 2000
Art

Peter A. Cortese (1973) Associate Dean, Professor Emeritus, 1991
School of Applied Arts and Sciences, Health Science

Margaret D. Costa (1974) Professor Emerita, 2010
Kinesiology

Samuel G. Councilman (1968) Professor Emeritus, 2004
Mathematics and Statistics

Peter A. Cowan (1981) Professor Emeritus, 2004
Civil Engineering and Construction Engineering Management

Carole Cox (1988) Professor Emerita, 2006
Teacher Education

Duane C. Craven (1967) Associate Professor Emeritus, 1996
Communicative Disorders

Walter B. Crawford (1963) Professor Emeritus, 1985
English

Lyle R. Creamer (1962) Professor Emeritus, 1992
Psychology

Clyde A. Crego (1983) Director Emeritus, 2005
Counseling and Psychological Services

Domenic Cretara (1986) Professor Emeritus, 2010
Art

Simeon J. Crowther (1968) Professor Emeritus, 2003
Economics

Wendy A. Culotta (1973) Librarian Emerita, 2004

Larry G. Curtis (1969) Professor Emeritus, 1994
Music

Sandra J. Cynar (1986) Professor Emerita, 2005
Computer Engineering and Computer Science

Murray D. Dailey (1966) Professor Emeritus, 1992
Biological Sciences

Donald L. Dame (1965) Professor Emeritus, 1992
Art

Richard Danay (1985) Professor Emeritus, 2005
American Indian Studies

Barry M. Dank (1968) Professor Emeritus, 2000
Sociology

Carl M. Danson (1965) Professor Emeritus, 2000
Psychology

Mihir K. Das (1981) Professor Emeritus, 2008
Mechanical and Aerospace Engineering

Radhe Das (1982) Professor Emeritus, 2003
Electrical Engineering

James A. Davis (1985) Professor Emeritus, 2011
Kinesiology

Molly Debysingh (1972) Professor Emerita, 1997
Geography

Martha J. Dede (1999) Associate Professor Emerita, 2010
Graduate Center for Public Policy and Administration

Sigrid G. Deeds (1988) Professor Emerita, 1994
Health Science and Gerontology

Linda J. DeGuire (1990) Professor Emerita, 2010
Mathematics and Statistics

Doris C. DeHardt (1961) Professor Emerita, 1988
Psychology

John de Heras (1967) Professor Emeritus, 1997
Art

Kathryn V. Deitch (1997) Associate Professor Emerita, 2010
School of Nursing

Beverly DeLong-Tonelli (1966) Professor Emerita, 1993
Romance, German, Russian Languages and Literature

Robert L. Delorme (1966) Professor Emeritus, 1994
Political Science

Zohrab Demirdjian (1979) Professor Emeritus, 2005
Marketing

George D. Demos (1962) Professor Emeritus, 1983
Educational Psychology

Simon DeSoto (1969) Professor Emeritus, 2002
Mechanical and Aerospace Engineering

Robert J. DeVoe (1968) Associate Professor Emeritus, 1992
Management/Human Resources Management

Jerald A. Devore (1969) Professor Emeritus, 2000
Chemistry and Biochemistry

Wayne E. Dick (1981) Professor Emeritus, 2009
Computer Engineering and Computer Science

Harold R. Dilbeck (1969) Professor Emeritus, 1991
Finance, Real Estate and Law

Grace E. Dinerstein (1967) Professor Emerita, 1981
Home Economics

Gene L. Dinielli (1968) Professor Emeritus, 2010
English

Keith A. Dixon (1958) Professor Emeritus, 1992
Anthropology

William R. Doud (1971) Professor Emeritus, 1989
Information Systems

Henry J. DuBois Jr. (1967) Associate Dean Emeritus, 2006
University Library

Stacy E. Dukes (1964) Associate Professor Emerita, 1988
Design

Eldon J. Dvorak (1961) Professor Emeritus, 1991
Economics

Stephanie L. Eatmon (1998) Associate Professor Emerita, 2010
Health Science

Jana Echevarria (1993) Professor Emerita, 2006
Educational Psychology, Administration, and Counseling

Betty V. Edmondson (1964) Professor Emerita, 1999
Kinesiology and Physical Education

Robert F. Eggers (1964) Professor Emeritus, 1994
Theatre Arts

Robert H. Eisenman (1973) Professor Emeritus, 2002
Religious Studies

Lowell J. Eliason (1965) Professor Emeritus, 2002
Physics and Astronomy

Timothy D. Emmons (1980) Psychologist Emeritus, 2003
Counseling and Psychological Services

Ali Eshett (1966) Professor Emeritus, 1998
Civil Engineering

Dale W. Evans (1988) Professor Emeritus, 2006
Health Science

Edward N. Evans (1970) Professor Emeritus, 2004
Computer Engineering and Computer Science

Connie J. Evashwick (1993) Professor Emeritus, 2006
Health Care Administration

Stuart Farber (1960) Assistant Dean of Students and Professor Emeritus, 2003
Student Services

Michael J. Farrell (1969) Professor Emeritus, 2002
Economics

Frank J. Fata (1986) Associate Dean Emeritus and Professor Emeritus, 2004
College of Liberal Arts/Comparative World Literature and Classics

Mamdouh M. Fayek (1989) Professor Emeritus, 2005
Design

David M. Fine (1968) Professor Emeritus, 1998
English

Robert G. Finney (1977) Professor Emeritus, 2000
Film and Electronic Arts

Brian H. Finney (2003) Professor Emeritus, 2010
English

Patricia Finot (1977) Professor Emerita, 1999
Dance

Janet M. Fisher (1989) Professor Emerita, 2010
Kinesiology

Stephen H. Fleck (1993) Associate Professor Emeritus, 2010
Romance, German, Russian Languages and Literatures

Gerald Ford (1969) Associate Professor Emeritus, 1994
Management/Human Resources Management

Dorothy L. Forna (1965) Professor Emerita, 1992
Physical Education and Gerontology

L. Sheila Foster (1967) Professor Emerita, 2001
Computer Engineering and Computer Science

Barbara Franklin (1967) Professor Emerita, 2000
Kinesiology and Physical Education

Janice E. Frates (1997) Professor Emerita, 2011
Health Care Administration

Elliot Fried (1970) Emeritus, 2004
English

Robert H. Friis (1988) Emeritus, 2011
Health Science

Charlotte D. Furth (1966) Professor Emerita, 1990
History

Alice A. Gabrielson (1961) Senior Assistant Librarian Emerita, 1987

Charles P. Galt (1973) Professor Emeritus, 2004
Biological Sciences

John J. Garhammer (1985) Professor Emeritus, 2005
Kinesiology

Daniel E. Garvey (1976) Professor Emeritus, 1998
Journalism

Barbara C. George (1961) Professor Emerita, 2001
Finance, Real Estate and Law

Simon George (1961) Professor Emeritus, 1998
Physics and Astronomy

John E. Gessford (1990) Professor Emeritus, 1997
Information Systems

Norma B. Gibbs (1966) Associate Professor Emerita, 1992
Educational Psychology and Administration

Paul R. Gilon (1969) Professor Emeritus, 1992
Information Systems

C. Barclay Gilpin (1966) Professor Emeritus, 1998
Mechanical and Aerospace Engineering

Jeanette W. Gilsdorf (1989) Professor Emerita, 2004
Information Systems

Arthur P. Gittleman (1966) Professor Emeritus, 2010
Computer Engineering and Computer Science

Constance W. Glenn (1973) Professor Emerita, 2004
Art

Constantine Glezakos (1968) Professor Emeritus, 2003
Economics

Kathryn E. Goddard (1969) Director Emeritus, 2004
Center for Collaboration in Education

R. Michael Godfrey (1989) Professor Emeritus, 2005
Information Systems

Yvonne V. Gold (1972) Professor Emerita, 1998
Teacher Education

Dorothy M. Goldish (1958) Professor Emerita, 2003
Chemistry and Biochemistry

John Gonsalves, Jr. (1969) Professor Emeritus, 2003
Kinesiology and Physical Education

Catherine C. Goodman (1985) Professor Emerita, 2011
School of Social Work

Leo Goodman-Malamuth (1956) Professor Emeritus, 1993
Speech Communication

Edward A. Gosselin (1969) Professor Emeritus, 2003
History

Franklin E. Gossette (1987) Professor Emeritus, 2005
Geography

Jean M. Granger (1972) Professor Emerita, 2002
Social Work

James N. Green (1996) Associate Professor Emeritus, 2006
History

James R. Gregory (1970) Professor Emeritus, 1997
Anthropology

Kenneth M. Gregory (1973) Professor Emeritus, 2001
Biological Sciences

Jennifer Jen Grey (1975) Professor Emerita, 2011
Art

Wendy Griffin (1991) Professor Emerita, 2006
Women's Studies

Betty Rose Griffith (1968) Professor Emerita, 1988
Physical Education

Dixie A. Grimmitt (1965) Professor Emerita, 2006
Kinesiology

Calvin D. Gross (1962) Professor Emeritus, 1992
Art

Mark W. Gross (1988) Professor Emeritus, 2008
Physics and Astronomy

Karl-Heinrich Grote (1984-1986, 1990) Professor Emeritus, 2006
Mechanical and Aerospace Engineering

Daniel Guerriere (1969) Professor Emeritus, 2002
Philosophy

Nezih Gunal (1989) Assistant Professor Emeritus, 2005
Civil Engineering and Construction Engineering Management

Emma Jean Gunderson (1971) Professor Emerita, 1997
Information Systems

Albert F. Gunns (1967) Professor Emeritus, 2001
History

Serafina Q. Gunter (1964) Professor Emerita, 1980
Accounting

David A. Hadlock (1985) Professor Emeritus, 2010
Art

Elaine J. Haglund (1972) Professor Emerita, 2004
Educational Psychology, Administration, and Counseling

Judith A. Hails (1972) Professor Emeritus, 2008
Criminal Justice

Kathleen J. Halberg (1988) Associate Professor Emerita, 2001
Recreation and Leisure Studies

Darwin C. Hall (1986) Professor Emeritus, 2010
Economics

Thomas E. Hall (1981) Professor Emeritus, 2005
Art

Michael J. Halliwell (1968) Professor Emeritus, 2004
Sociology

Arlene D. Hamilton (1966) Associate Professor Emerita, 1983
Home Economics

Eric L. Hansen (1989) Associate Professor Emeritus, 2007
Management/Human Resources Management

Forrest E. Harding (1971) Professor Emeritus, 2000
Marketing

Charles V. Harlow (1968) Professor Emeritus, 1994
Finance, Real Estate and Law

Marsha S. Harman (1966) Professor Emerita, 2003
Sociology

Robert C. Harman (1969) Professor Emeritus, 2000
Anthropology

Alice M. Harris (1969) Professor Emerita, 1998
Educational Psychology, Administration, and Counseling

Edwin R. Harris (1959) Professor Emeritus, 1997
Chemistry and Biochemistry

Joellen T. Hartley (1981) Professor Emerita, 2003
Psychology

Elisabeth S. Hartung (1988) Professor Emerita, 2009
Art

Michael Hassul (1981) Professor Emeritus, 2004
Computer Engineering and Computer Science

Luster E. Hauth (1964) Professor Emeritus, 1992
Speech Communication

Robert E. Hayes (1961) Professor Emeritus, 2001
Political Science

Stephen S. Heineman (1969) Professor Emeritus, 1992
Engineering Technology

Alan C. Henderson (1987) Professor Emeritus, 2006
Health Science

John F. Herrmann (1980) Professor Emeritus, 2001
Management/Human Resources Management

Robert M. Hertz (1969) Professor Emeritus, 2009
Linguistics/English

Truman O. Hickerson, Jr. (1965) Professor Emeritus, 1992
Accountancy

William J. Hickman (1989) Associate Professor Emeritus, 2011
Theatre Arts

John E. Higgins (1964) Professor Emeritus, 1980
History

Lloyd R. Hile (1968) Professor Emeritus, 2004
Chemical Engineering

Robert A. Hipkiss (1966) Professor Emeritus, 1997
English

Howard G. Hitchcock (1958) Professor Emeritus, 1990
Art

Ju-Shey Ho (1970) Professor Emeritus, 1999
Biological Sciences

Joan C. Hoff-Templeton (1957) Professor Emerita, 1994
Design and Gerontology

Rose Marie Hoffman (1997) Professor Emerita, 2010
Advanced Studies in Education and Counseling

Robert T. Holmes (1961) Professor Emeritus, 1986
Marketing

Jean Houck (1990) Professor Emerita, 2008
Advanced Studies in Education and Counseling

Adelore L. Houde (1965) Professor Emeritus, 1985
Electrical Engineering

Chi-yu Yang Hu (1963) Professor Emerita, 2005
Physics and Astronomy

Harold G. Hubbard (1970) Professor Emeritus, 1999
Sociology

Carol A. Hunter (1969) Professor Emerita, 1983
Educational Psychology and Administration

Harold R. Hunter (1987) Professor Emeritus, 2004
Health Care Administration

Ralph B. Hupka (1969) Professor Emeritus, 2005
Psychology

Lloyd T. Inui (1965) Professor Emeritus, 1992
Asian and Asian American Studies

Tomotaka Ishimine (1967) Professor Emeritus, 2006
Economics

Cathern M. Irwin (1961) Associate Professor Emerita, 1983
Health Science

Carol A. Itatani (1975) Professor Emerita, 2006.
Biological Sciences

Hazel O. Jackson (1994) Professor Emerita, 2004
Family and Consumer Sciences

Mary Jacob (1980) Professor Emerita, 2004
Family and Consumer Sciences

Min-Ten Jahn (1986) Professor Emeritus, 2010
Mechanical and Aerospace Engineering

Willard D. James (1967) Professor Emeritus, 1987
Mathematics and Computer Science

Emanuel Jarasunas (1976) Professor Emeritus, 2002
Engineering Technology

Kenneth D. Jenkins (1970) Professor Emeritus, 1997
Biological Sciences

Marilyn Jensen (1965) Associate Vice President, Dean of University Academic

Programs and Professor Emerita, 2000
Recreation and Leisure Studies

Owen O. Jenson (1966) Professor Emeritus, 1994
Speech Communication

John C. Jernigan (1970) Professor Emeritus, 2007
Comparative World Literature and Classics

Patricia E. Jersin (1965) Professor Emerita, 1991
Teacher Education

Alan W. Johnson (1968) Associate Director Emeritus, 1980
International Education Center

Gretchen A. Johnson (1969) Librarian Emerita, 2002
University Library and Learning Resources

Leayn Johnson (1981) Professor Emerita, 2005
Nursing

Richard J. Johnson (1959) Professor Emeritus, 1992
Instructional Systems Technology

William M. Johnson (1965) Associate Professor Emeritus, 2004
Philosophy

Irene Jones (1990) Professor Emerita, 2004
Romance, German, Russian Language and Literatures

Kristi S. Jones (1968) Professor Emerita, 2001
Art

Rita H. Jones (1964) Professor Emerita, 1996
Teacher Education

Thimios J. Jordanides (1964) Professor Emeritus, 2004
Electrical Engineering

Dale O. Jorgenson (1972) Professor Emeritus, 2009
Psychology

John R. Jung (1968) Professor Emeritus, 2002
Psychology

George V. Kacewicz (1966) Professor Emeritus, 1986
Political Science

Stanley Kahan (1961) Professor Emeritus, 1994
Theatre Arts

Gene E. Kalbus (1957) Professor Emeritus, 1994
Chemistry and Biochemistry

Thomas J. Kampwirth (1971) Professor Emeritus, 1999
Educational Psychology, Administration, and Counseling

Hsin-Sheng C. Kao (1989) Professor Emerita, 2010
Asian and Asian American Studies

Edward Karabenick (1959) Professor Emeritus, 1998
Geography

Elizabeth S. Kaufman (1963) Professor Emerita, 1989
Nursing

Hamid R. Kavianian (1984) Professor Emeritus, 2005
Chemical Engineering

Michael L. Kearney (1960) Professor Emeritus, 1996
Finance, Real Estate and Law

Maxine K. Keenan (1971) Associate Professor Emerita, 1981
Home Economics

Kathleen L. Keller (1983) Professor Emerita, 2000
Nursing

Bonnie E. Kellogg (1989) Professor Emerita, 2007
Nursing

Wayne F. Kelly (1976) Professor Emeritus, 2000
Journalism

L. Boyd Kendall (1969) Professor Emeritus, 1979
Electrical Engineering

Harvey L. Kendall (1966) Professor Emeritus, 1990
German, Russian and Classics

Patrick F. Kenealy (1988) Professor Emeritus, 2011
Physics and Astronomy/Science Education

Elizabeth Kenneday (2000) Associate Professor Emerita, 2006
Art

Celeste K. Kennedy (1970) Associate Professor Emerita, 1992
Dance

Rowland E. Kerr (1968) Director Emeritus, 1995
Student Life and Development

Eugene E. Kessler (1969) Associate Professor Emeritus, 1986
French-Italian

Khan, Mohammed B. (1984) Professor Emeritus, 2008
Information Systems

Farideh Khoiny (1990) Associate Professor Emerita, 2008
Nursing

Juhee Kim (1966) Professor Emeritus, 1997
Biological Sciences

John C. Kimura (1967) Professor Emeritus, 1991
Geography

Ronald L. King (1964) Professor Emeritus, 1991
Information Systems

James J. Kirkpatrick (1967) Professor Emeritus, 1986
Management/Human Resources Management

Byron C. Kluss (1959) Professor Emeritus, 1991
Biological Sciences and Gerontology

Stephen R. Knafel (1962) Professor Emeritus, 1999
English

Ruth E. Knudson (1995) Professor Emerita, 2008
Teacher Education

Margaret L. Koehler (1970) Professor Emerita, 1988
Nursing

Charles J. Kokaska (1969) Professor Emeritus, 1999
Educational Psychology, Administration, and Counseling

Albert H. Koppenhaver (1969) Professor Emeritus, 1994
Teacher Education

Marilyn Korostoff (1996) Professor Emerita, 2010
Advanced Studies in Education and Counseling

Lloyd Kramer (1973) Associate Director Library Emeritus, 1986

Joseph H. Krause (1955) Professor Emeritus, 1996
Art

Henry J. Krauser (1970) Associate Professor Emeritus, 1992
Engineering Technology

Ronald A. Kroman (1959) Professor Emeritus, 1990
Biological Sciences

Lorraine E. Kumpf (1987) Professor Emerita, 2011
Linguistics

Robert J. Kunst (1969) Professor Emeritus, 2001
Art

Hans Lampl (1965) Professor Emeritus, 1983
Music

H. John Lane (1963) Professor Emeritus, 1999
Computer Engineering and Computer Science

Mary J. Lass (1966) Professor Emerita, 1994
Teacher Education

Ann Lathrop (1989) Professor Emerita, 1999
Educational Psychology, Administration, and Counseling

Beth Lau (1990) Professor Emerita, 2010
English

Donald P. Lauda (1983) Dean, Professor Emeritus, 2002
College of Health and Human Services, Occupational Studies

Joseph A. Lea (1968) Associate Professor Emeritus, 1997
College of Education

Dorothy Leach (1968) Counselor Emerita, 1987

Mary Ellen Leach (1968) Associate Professor Emerita, 2002
Kinesiology and Physical Education

Isaiah C. Lee (1972) Professor Emeritus, 1997
Social Work

Oliver C. Leinbach (1996) Professor Emeritus, 2006
Design

Gordon Leis (1966) Professor Emeritus, 1988
Sociology

William M. Leiter (1966) Professor Emeritus, 2010
Political Science

Alfred F. Leung (1989) Professor Emeritus, 2010
Physics and Astronomy

John M. Lenoir (1974) Professor Emeritus, 1984
Chemical Engineering

Lawrence S. Lerner (1969) Professor Emeritus, 1999
Physics and Astronomy

Arthur M. Levine (1974) Professor Emeritus, 2007
College of Business Administration

San Pao Li (1976) Professor Emeritus, 2001
Asian and Asian American Studies

Dorothy Libby (1967) Associate Professor Emerita, 1988
Anthropology

Neil Lieberman (1975) Professor Emeritus, 1998
Art

Van T. Lieu (1967) Professor Emeritus, 1996
Chemistry and Biochemistry

Paulino M. Lim, Jr. (1967) Professor Emeritus, 2000
English

John R. Lincoln (1968) Professor Emeritus, 1994
Art

James I. Linden (1968) Professor Emeritus, 1998
Psychology

Rhoda C. Lindner (1969) Professor Emerita, 1998
Psychology

John R. Lindquist (1966) Career Counselor Emeritus, 1987

Gerald I. Locklin (1965) Professor Emeritus, 2003
English

Dar-Biau Liu (1986) Professor Emeritus, 2009.
Computer Engineering and Computer Science

Slawomir M. Lobodzinski (1983) Professor Emeritus, 2011.
Electrical Engineering

Robert L. Loesch (1969) Professor Emeritus, 2006
Chemistry and Biochemistry

Donna Longstreet (1968) Senior Assistant Librarian Emerita, 1991

Jose Lopez (1970) Professor Emeritus, 2001
Chicano Latino Studies

Carol Lord (1999) Professor Emerita, 2010
Teacher Education / Linguistics

Alan S. Lowenthal (1969) Professor Emeritus, 2004
Psychology

Kau Un Lu (1968) Professor Emeritus, 2000
Mathematics

Keung P. Luke (1966) Professor Emeritus, 1998
Physics and Astronomy

M. Joan Lyon (1958) Professor Emerita, 1992
Physical Education

Kevin B. MacDonald (1985) Professor Emeritus, 2010
Psychology

Dan L. Madison (1983) Associate Professor Emeritus, 2000
Management/Human Resources Management

Joseph P. Magaddino (1973) Professor Emeritus, 2010
Economics

Sitikantha Mahapatra (1983) Professor Emeritus, 2009
Accountancy

Ernest R. Mijares (1965) Professor Emeritus, 2003
Mechanical and Aerospace Engineering

Carl Maltz (1986) Professor Emeritus, 2002
Computer Engineering and Computer Science

Peter Manarino (1984) Softball Head Coach Emeritus, 2007
Athletics

Whitney S. Mandel (1989) Professor Emerita, 2003
Journalism

Shirley Mangini (1987) Professor Emerita, 2004
Romance, German, Russian Languages and Literatures

Greayer Mansfield-Jones (1962) Professor Emeritus, 1992
Biological Sciences

Tom J. Maricich (1975) Professor Emeritus, 2006.
Chemistry and Biochemistry

Richard F. Marrs (1968) Associate Professor Emeritus, 2000
Teacher Education

Alain-Gerard Marsot (1968) Professor Emeritus, 1998
Political Science

Howard S. Martin (1965) Professor Emeritus, 1991
Radio, Television and Film

Frederic J. Masback (1964) Professor Emeritus, 1989
English

Phyllis F. Maslow (1975) Professor Emerita, 1990
Educational Psychology and Administration

Charles F. Mason (1964) Professor Emeritus, 1979
Psychology

Joseph A. Mastropaolo (1968) Professor Emeritus, 1994
Physical Education

Ralph E. Matkin (1987) Professor Emeritus, 2009
Advanced Studies in Education and Counseling

Justus F. Matthews (1971) Professor Emeritus, 2006
Music

Donald L. Maurer (1981) Professor Emeritus, 2000
Biological Sciences

Robert C. Maxson (1994) President Emeritus, 2005
Educational Psychology, Administration, and Counseling

Sylvia P. Maxson (1995) Associate Professor Emerita, 2005
English/Liberal Studies

Kenneth E. Maxwell (1963) Professor Emeritus, 1973
Biological Sciences

Charles E. May (1967) Professor Emeritus, 2001
English

M. Adrienne Mayberry (1975) Professor Emerita, 1998
Nursing

Darwin L. Mayfield (1956) Professor Emeritus, 1990
Chemistry

Joan E. McCauley (1969) Librarian Emerita, 2003

Wendell H. McCulloch (1974) Professor Emeritus, 1997
Finance, Real Estate and Law

Gloria McCullough May (1969) Professor Emerita, 1992
English

Sandra McMillan (1972) Professor Emerita, 2001
Film and Electronic Arts

R. Clyde McCone (1961) Professor Emeritus, 1980
Anthropology

Thomas A. McCullough (1969) Professor Emeritus, 2001
Mathematics

Patrick McDonough (1997) Professor Emeritus, 2005.
Theatre Arts

John M. McFaul (1963) Professor Emeritus, 1988
History

William H. McGowan (1967) Professor Emeritus, 1996
Philosophy

Edward B. McLeod, Jr. (1965) Professor Emeritus, 1986
Mathematics and Computer Science

Marshall H. Medoff (1979) Professor Emeritus, 2011
Economics

Flora Meisenheimer (1973) Associate Professor Emerita, 1991
Nursing

Peter J. Mendez (1976) Associate Professor Emeritus, 2001
Art

Larry L. Meyer (1978) Professor Emeritus, 1992
Journalism

Alan C. Miller (1974) Professor Emeritus, 2005
Biological Sciences

Edward Miller (1968) Professor Emeritus, 1998
Mechanical Engineering

John Minar (1968) Professor Emeritus, 1989
Recreation and Leisure Studies

Julia I. Miller (1988) Professor Emerita, 2010
Art

Leslie B. Mittleman (1957) Professor Emeritus, 1998
English

Akira Miyazaki (1969) Associate Professor Emerita, 2003
Asian and Asian American Studies

Alosi J.M. Moloi (1994) Professor Emeritus, 2011
Africana Studies / English

Genevieve Monahan (1998) Associate Professor Emeritus, 2005
Nursing

Jonathan S. Monat (1978) Professor Emeritus, 2006
Management and Human Resources Management

Tom D. Morgan (1967) Professor Emeritus, 1995
Physical Education

Walter H. Moore Jr. (1979) Professor Emeritus, 2004
Communicative Disorders

Frank S. Morris (1969) Associate Professor Emeritus, 1992
Teacher Education

Raymond J. Morris (1969) Professor Emeritus, 2003
Physical Therapy

M. Gamal Mostafa (1968) Professor Emeritus, 1987
Civil Engineering

Dieter Muller-Stach (1968) Professor Emeritus, 1998
Art

William A. Mulligan (1986) Professor Emeritus, 2011
Journalism

Ruth G. Mullins (1973) Professor Emerita, 2005
Nursing

Jack H. Munsee (1968) Professor Emeritus, 1998
Physics and Astronomy

Everett E. Murdock (1988) Professor Emeritus, 1998
Educational Psychology, Administration, and Counseling

Greta K. Nagel (1999) Professor Emerita, 2006
Teacher Education

Doris Nelson (1967) Professor Emerita, 1987
English

John A. Nelson, Jr. (1971) Dean, Professor Emeritus, 1983
School of Education, Educational Psychology and Administration

Helen P. Newcastle (1969) Professor Emerita, 2000
Teacher Education

Loc T. Nguyen (1989) Associate Professor Emeritus, 2001
Accountancy

Thinh V. Nguyen (1986) Professor Emeritus, 2011
Computer Engineering and Computer Science

Jerome A. Nielsen (1968) Associate Professor Emeritus, 1988
Physical Therapy

Alan T. Nishio (1972) Associate Vice President Emeritus, 2006
Student Services

Vicente N. Noble (1974) Professor Emeritus, 2004
Educational Psychology, Administration, and Counseling

Frank Noffke (1964) Counselor Emeritus, 1981

Susan G. Nummedal (1972) Professor Emerita, 2002
Psychology

John E. Nygaard (1963) Professor Emeritus, 1990
Psychology

Ortwin A. Ohtmer (1986) Professor Emeritus, 2006
Mechanical and Aerospace Engineering

Leonard Olguin (1974) Professor Emeritus, 1996
Teacher Education

Hazel A. Oliver (1960) Senior Assistant Librarian Emerita, 1980

John Oliver (1988) Professor Emeritus, 2010
Social Work

Nancy Rainville Oliver (1988) Associate Professor Emerita, 2006
Nursing

R. Warner Olsen, Jr. (1960) Senior Assistant Librarian Emeritus, 1992

Russel E. Orpet (1959) Professor Emeritus, 1992
Educational Psychology and Administration

Elizabeth T. Ortiz (1983) Professor Emerita, 2001
Social Work

Cynthia A. Osborne (1975) Professor Emerita, 2004
Art

Richard A. Outwater (1969) Professor Emeritus, 2003
Geography

Carolyn M. Owen (1970) Professor Emerita, 1986
Educational Psychology and Administration

Frank F. Paal (1968) Professor Emeritus, 1992
Electrical Engineering

Feliksas Palubinskas (1965) Professor Emeritus, 1988
Marketing

Nick D. Panagiotacopoulos (1980) Professor Emeritus, 2004
Electrical Engineering

Douglas A. Parker (1968) Professor Emeritus, 2005
Sociology

Anna M. Parmley (1969) Associate Professor Emerita, 1988
Biological Sciences

David E. Pastrana (1973) Professor Emeritus, 2004
Finance and Law

Carl Payne (1968) Professor Emeritus, 1990
Information Systems

David R. Peck (1967) Professor Emeritus, 1999
English

Fernando Peñalosa (1970) Professor Emeritus, 1990
Sociology

Wanda L. Pentecost (1963) Professor Emerita, 1987
Nursing and Gerontology

Leland M. Perry (1956) Professor Emeritus, 1990
Teacher Education

Paul G. Petersen (1962) Professor Emeritus, 1985
Psychology

Clayre K. Petray (1987) Professor Emerita, 2010
Kinesiology

Kenneth L. Pickard (1971) Associate Professor Emeritus, 2002
Information Systems

Alvin A. Pine (1962) Professor Emeritus, 1996
Art

Joseph M. Plecnik (1985) Professor Emeritus, 2008
Civil Engineering and Construction Engineering Management

Ferinand J. Plourde, Jr. (1966) Associate Professor Emeritus, 1994
English

Henry N. Po (1968) Professor Emeritus, 2003
Chemistry and Biochemistry

Keith Ian Polakoff (1969) Associate Vice President for Academic Affairs and Professor Emeritus, 2004
History

Dora Beale Polk (1968) Professor Emerita, 1987
English

Charles W. Pomeroy (1970) Associate Professor Emeritus, 2000
English

Richard E. Porter (1970) Professor Emeritus, 1996
Speech Communication

Richard C. Potter (1967) Dean, Professor Emeritus, 1983
School of Engineering, Mechanical Engineering

James G. Powell (1961) Professor Emeritus, 1991
Speech Communication

Melchior D. Powell (1973) Professor Emeritus, 1992
Public Policy and Administration

Yoko S. Pusavat (1972) Professor Emerita, 2002
Asian and Asian American Studies

Charles E. Quest (1966) Professor Emeritus, 2001
Philosophy

Elisabeth M. Quillen (1964) Professor Emerita, 1985
French-Italian

Michael T. Quinn (1970) Professor Emeritus, 1994
Management/Human Resources Management

Louis E. Quinones (1965) Associate Professor Emeritus, 1992
Technology Education

Bonnie J. Rader (1970) Professor Emerita, 1990
Home Economics

Amen Rahh (1970) Associate Professor Emeritus, 2004
Black Studies

Walter J. Raine (1968) Professor Emeritus, 1983
Psychology

J. David Ramirez (1993) Professor Emeritus, 2004
Educational Psychology, Administration, and Counseling/Teacher Education

Robert W. Ramsey (1957) Professor Emeritus, 1990
Art

Karen Rasmussen (1989) Professor Emerita, 2010
Communication Studies

Harnatha C. Reddy (1987) Professor Emeritus, 2006
Electrical Engineering

Jo A. Redmon (1964) Professor Emerita, 1997
Kinesiology and Physical Education

Gary Reichard (1994) Professor Emeritus, 2009
History

Richard L. Resurreccion (1978) Professor Emeritus, 1999
Occupational Studies

Henry Reyna (1970) Counselor Emeritus, 1987

Thomas J. Rhoads (1976) Professor Emeritus, 2010
College of Business Administration

Fan Rhodes (1967) Professor Emeritus, 2000
Psychology

Susan Rice-Quint (1987) Professor Emerita, 2005
Social Work

Hans P. Ridder (1964) Associate Professor Emeritus, 1991
Political Science

William C. Ritz (1977) Professor Emeritus, 2000
Science Education

Sharon L. Roberts (1974) Professor Emerita, 2005
Nursing

James C. Robinson (1972) Professor Emeritus, 2003
Black Studies

Thomas L. Robinson (1989) Professor Emeritus, 2005
Mechanical and Aerospace Engineering

Johanna W. Roden (1962) Professor Emerita, 1991
German and Russian

Mildred S. Rodriguez (1974) Professor Emerita, 1988
Home Economics

Fred Rogers (1959) Associate Professor Emeritus, 1992
Speech Communication

Robert F. Rooney (1970) Professor Emeritus, 1998
Economics

Kay L. Roskam (1974) Professor Emerita, 1994
Music

Ruth A. Ross (1980) Associate Professor Emerita, 1998
Public Policy and Administration

Stephen B. Ross (1968) Professor Emeritus, 1999
Linguistics

Robert D. Routh (1967) Professor Emeritus, 1983
Industrial Education

Patricia D. Rozee (1987) Professor Emerita, 2010
Psychology/Women's, Gender, and Sexuality Studies

Alfonso Rueda (1989) Professor Emeritus, 2010
Electrical Engineering

Kenneth W. Rugg (1964) Professor Emeritus, 1989
Theatre Arts

Lowell R. Runyon (1968) Professor Emeritus, 2008
Finance

George E. Rush (1973) Professor Emeritus, 2002
Criminal Justice

Ruth L. Russell (1963) Professor Emerita, 1994
Biological Sciences

Eugene E. Ruyle (1976) Professor Emeritus, 2002
Anthropology

Bruce Ryan (1978) Professor Emeritus, 1997
Communicative Disorders

Eva Sakamoto (1967) Assistant Professor Emerita, 1982
Nursing

David N. Samuelson (1966) Professor Emeritus, 2002
English

Federico A. Sanchez (1969) Professor Emeritus, 1999
Chicano Latino Studies

Charles R. Sandefur (1964) Professor Emeritus, 2000
Kinesiology and Physical Education

William F. Sater (1967) Professor Emeritus, 1995
History

Paul C. Schmidt (1968) Associate Professor Emeritus, 2004
Political Science

Ronald J. Schmidt (1972) Professor Emeritus, 2006.
Political Science

Rosemary T. Schmidt (1969) Assistant Vice President Emerita, 2001
Division of Student Services

John H. Schmitt (1974) Professor Emeritus, 1989
Spanish/Portuguese

Doris D. Tabor Schroeder (1967) Professor Emerita, 1987
Teacher Education

James W. Schultz (1963) Associate Professor Emeritus, 1980
Physical Education

Arnold T. Schwab (1961) Professor Emeritus, 1980
English

Donald Schwartz (1987) Professor Emeritus, 2005
History

Howard J. Schwartz (1969) Professor Emeritus, 2001
Mathematics

Morton D. Schwartz (1970) Professor Emeritus, 2002
Computer Engineering and Computer Science

Bruce L. Scott (1965) Professor Emeritus, 1996
Physics and Astronomy

George M. Scott (1990) Associate Professor Emeritus, 2011
Anthropology

Joseph F. Seewerker (1967) Professor Emeritus, 1992
Computer Engineering and Computer Science

Elbert W. Segelhorst (1964) Professor Emeritus, 1992
Economics

Nail M. Senozan (1968) Professor Emeritus, 2002
Chemistry and Biochemistry

Thomas M. Serrett (1963) Assistant Librarian Emeritus, 1980

Norman E. Sexauer (1967) Professor Emeritus, 1992
Mathematics

John W. Shainline (1966) Vice President for Student Services Emeritus, 1990

Tyntje Shapli (1983) Professor Emerita, 2000
Dance

John J. Shaak (1963) Professor Emeritus, 1998
Art

Peter L. Shaw (1974) Professor Emeritus, 1994
Public Policy and Administration

Carol Shaw-Sutton (1989) Professor Emerita, 2010
Art

Kwang Y. Shen (1961) Professor Emeritus, 1998
Physics and Astronomy

Jae K. Shim (1981) Professor Emeritus, 2008
Accountancy

Gail Shoup (1969) Professor Emeritus, 1989
Theatre Arts

Martha A. Siegel (1975) Professor Emerita, 1994
Nursing

Gene R. Simonsen (1958) Professor Emeritus, 1990
Economics

Sidney B. Sims, Jr. (1960) Senior Assistant Librarian Emeritus, 1994
University Library

Lorelei P. Sinclair (1966) Assistant Librarian Emerita, 1991
University Library

William A. Sinclair (1970) Professor Emeritus, 2002
Kinesiology and Physical Education

Davinder Singh (1983) Professor Emeritus, 2009
Economics

Bernard J. Skalka (1967) Professor Emeritus, 1998
Theatre Arts

Iva L. Skov (1972) Professor Emerita, 1998
Economics

Carl J. Slawski (1970) Professor Emeritus, 2001
Sociology

Elbert L. Sleeper (1957) Professor Emeritus, 1992
Biological Sciences

Sara B. Sluss (1995) Librarian Emerita, 2009
University Library

Alton H. Smith (1957) Professor Emeritus, 1992
Mathematics

Craig R. Smith (1988) Professor Emeritus, 2010
Communication Studies/Film and Electronic Arts

Judy E. Smith (1980) Professor Emerita, 2010
School of Nursing

Donald H. Smith (1960) Professor Emeritus, 1986
Industrial Education

Earl M. Smith (1968) Professor Emeritus, 1991
Technology Education

Peggy J. Smith (1968) Professor Emerita, 1992
Sociology

Robert J. Smith (1966) Professor Emeritus, 1992
Management/Human Resources Management

Sara W. Smith (1969) Professor Emerita, 2004
Psychology/Linguistics

Larry C. Snider (1970) Librarian Emeritus, 2000
University Library

John C. Snidecor (1969) Professor Emeritus, 2005
Art

Lynn S. Snyder (1988) Professor Emerita, 1998
Communicative Disorders

Christian Soe (1967) Professor Emeritus, 2001
Political Science

Lydia Sondhi (1985) Associate Professor Emerita, 2009
Family and Consumer Sciences

George A. Spangler (1971) Professor Emeritus, 2004
Philosophy

Colleen Sparks (1978) Professor Emerita, 1997
Nursing

Richard D. Spiese (1967) Associate Professor Emeritus, 1997
English

Richard Spiller (1969) Professor Emeritus, 1997
Marketing

Joel B. Splansky (1969) Professor Emeritus, 2001
Geography

Arnold R. Springer (1968) Professor Emeritus, 2001
History

Bede Ssensalo (1977) Professor Emeritus, 2010
Africana Studies

Roger R. Stanton (1966) Professor Emeritus, 2011
Management and Human Resources Management

Raymond T. Stefani (1971) Professor Emeritus, 2004
Electrical Engineering

James D. Stein (1989) Professor Emeritus, 2009
Mathematics and Statistics

Meyer L. Stein (1974) Professor Emeritus, 1989
Journalism

A. Jay Stevens (1968) Professor Emeritus, 2002
Political Science

Thomas G. Stevens (1973) Psychologist Emeritus, 2004
Counseling and Psychological Services

Perri J. Stinson (1969) Professor Emerita, 1988
Information Systems

Harry E. Stiver, Jr. (1964) Professor Emeritus, 1983
Theatre Arts

Herbert Stone (1958) Professor Emeritus, 1995
Management/Human Resources Management

Jack M. Stuart (1967) Professor Emeritus, 2000
History

Roy A. Sugimoto (1969) Associate Professor Emeritus, 1988
Teacher Education

Gerald L. Sullivan (1968) Professor Emeritus, 1998
English

Dee Bruce Sun (1990) Professor Emeritus, 2007
Information Systems

Sabri Sunku (1961) Professor Emeritus, 1983
Mechanical Engineering

Robert J. Swan (1964) Professor Emeritus, 1986
Educational Psychology and Administration

Frank E. Swatek (1956) Professor Emeritus, 1992
Biological Sciences

Frederick M. Swensen (1961) Professor Emeritus, 1990
French/Italian

Mary Christine Talmadge (1993) Professor Emerita, 2001
Nursing

Paul C. L. Tang (1986) Professor Emeritus, 2008
Philosophy

Norma Bernstein Tarrow (1968) Professor Emeritus, 1997
Teacher Education

Kenneth S. Teel (1969) Professor Emeritus, 1988
Management/Human Resources Management

Richard J. Teweles (1967) Professor Emeritus, 1991
Finance, Real Estate and Law

Cher Thomas (1982) Professor Emerita, 2007
Psychology

Joy E. Thomas (1981) Librarian Emerita, 2003

Lindsay Thomas, Jr. (1961) Professor Emeritus, 1992
French and Italian

Talmadge C. Tillman, Jr. (1968) Professor Emeritus, 1991
Accountancy

Djoe T. Tjioe (1970) Associate Professor Emeritus, 2000
Biological Sciences

Dale P. Toohey (1972) Professor Emeritus, 2001
Kinesiology and Physical Education

Bruce J. Torby (1961) Professor Emeritus, 2000
Mechanical Engineering

Sam M. Torres (1995) Professor Emeritus, 2009
Criminal Justice

William J. Traynor (1973) Professor Emeritus, 1992
Management/Human Resources Management

Thomas Trombetas (1961) Professor Emeritus, 1989
Political Science

Robert G. Trout (1961) Professor Emeritus, 1991
Technology Education

Chan-Feng Tsai (1982) Professor Emeritus, 2009
Civil Engineering and Construction Engineering Management

Shirley C. Tsai (1983) Professor Emerita, 2007
Chemical Engineering

Ching H. Tsao (1965) Professor Emeritus, 1986
Mechanical Engineering

Robert E. Tumelty (1974) Professor Emeritus, 1992
Health Care Administration

Efraim Turban (1991) Professor Emeritus, 1999
Information Systems

Theresa G. Turk (1970) Professor Emerita, 1995
Sociology

Steve H. Turley (1995) Associate Dean and Professor Emeritus, 2011
College of Education / Teacher Education

M. Barbara Turner (1966) Professor Emerita, 1999
Mathematics

Judith A. Tyner (1970) Professor Emerita, 2000
Geography

Paul S. Ullman (1958) Professor Emeritus, 1994
Sociology

Julie Van Camp (1990) Professor Emerita, 2010
Philosophy

Hans H. Vander Meyden (1961) Associate Professor Emeritus, 1983
Mechanical Engineering

James J. Van Eimeren (1961) Professor Emeritus, 1994
Art

Katherine Van Giffen (1987) Associate Professor Emerita, 2010
Human Development/Advanced Studies in Education and Counseling

Maria L. Viera (1989) Professor Emerita, 2010
Theatre Arts

Mary Ellen Vogt (1989) Professor Emerita, 2004
Teacher Education

Charles T. Walker (1964) Professor Emeritus, 1991
Geological Sciences

(Milton) Glenn Walker (1964) Professor Emeritus, 1988
Sociology

William J. Wallace (1963) Professor Emeritus, 1970
Anthropology

Eugene C. Wallin (1956) Professor Emeritus, 1990
Art

Carolyn A. Wardrip (1981) Professor Emerita, 2001
Communicative Disorders/Linguistics

Kenneth K. Warner (1968) Professor Emeritus, 2001
Mathematics

Stuart L. Warter (1965) Professor Emeritus, 1997
Biological Sciences

Arthur K. Wayman (1976) Professor Emeritus, 2005
Mathematics and Statistics

William A. Weber (1968) Professor Emeritus, 2003
History

Donald J. Weinstock (1969) Professor Emeritus, 2000
English

Robert G. Wells (1963) Professor Emeritus, 1985
Journalism

Kaye E. West (1989) Associate Professor Emerita, 2000
Teacher Education

Jean D. Wheeler (1966) Professor Emerita, 2000
Geography

Paul M. Whisenand (1965) Professor Emeritus, 2000
Criminal Justice

David B. Whitcomb (1967) Counselor Emeritus, 1987
Counseling and Psychological Services

Susanne Whitcomb (1973) Professor Emerita, 1987
School of Business Administration

Elaine E. White (1974) Professor Emerita, 2002
Nursing

Juniper Wiley (1990) Professor Emerita, 2011
Sociology

Betty Williams (1989) Professor Emerita, 1996
Nursing

R. Ora Williams (1968) Professor Emeritus, 1988
English

Robert R. Wilson (1966) Professor Emeritus, 2001
Computer Engineering and Computer Science/Mathematics

Robert E. Winchell (1966) Professor Emeritus, 1995
Geological Sciences

Robert W. Winchell (1961) Professor Emeritus, 1980
Electrical Engineering

William V. Wittich (1967) Professor Emeritus, 1998
Occupational Studies

Stanley Wolf (1979) Professor Emeritus, 1997
Electrical Engineering

Richard D. Wollmer (1970) Professor Emeritus, 2004
Information Systems

Marjorie E. Wood (1968) Professor Emerita, 1991
Biological Sciences

Edwin L. Woollett (1966) Professor Emeritus, 1999
Physics and Astronomy

Claudia R. Wright (1988) Professor Emerita, 2004
Educational Psychology, Administration, and Counseling

David J. Wurzer (1972) Professor Emeritus, 2001
Kinesiology and Physical Education

Frank W. Wylie (1988) Professor Emeritus, 1992
Journalism

Leslie K. Wynston (1965) Professor Emeritus, 1998
Chemistry and Biochemistry

Alva F. Yano (1963) Professor Emeritus, 1992
Physics and Astronomy

Jerry W. Yates (1974) Professor Emeritus, 2003
Design

Jo Ann R. Yates (1968) Professor Emerita, 1986
Communicative Disorders

Hsien-Yang Yeh (1988) Professor Emeritus, 2010
Mechanical and Aerospace Engineering

Bing C. Yen (1964) Professor Emeritus, 1992
Civil Engineering

William H. Ying (1964) Professor Emeritus, 1998
Civil Engineering

Fathi S. Yousef (1972) Professor Emeritus, 1997
Speech Communication

Pierre Yperman (1963) Associate Professor Emeritus, 1992
French and Italian

George J. Zebot (2005) Professor Emeritus, 2010
Art

Faculty and Administration

- Abarca, Cesar G. (2011)** **Assistant Professor**
School of Social Work
B.S.W., M.S.W., San Francisco State University; Ph.D., Boston University, Massachusetts.
- Abate, Yohannes (2009)** **Assistant Professor**
Physics and Astronomy
B.S., Addis Ababa University, Ethiopia; M.S., University of the Philippines, Quezon City, Philippines; Ph.D., University of Iowa.
- Abbuhl, Rebekha (2005)** **Assistant Professor**
Linguistics
B.A., Beloit College, Wisconsin; M.A., Ohio State University; Ph.D., Georgetown University.
- Abramis, David J. (1985)** **Professor**
Management/Human Resources Management
B.A., University of California, Santa Cruz; M.A., Ph.D. University of Michigan.
- Abrams, Jessica (2006)** **Associate Professor**
Communication Studies
B.A., M.A., California State University, Long Beach; Ph.D., University of California, Santa Barbara.
- Acey, Roger A. (1983)** **Professor**
Chemistry and Biochemistry
B.S., Ph.D., Wayne State University.
- Acosta-Deprez, Veronica M. (1996)** **Professor**
Health Science
B.S., St. Louis University, Philippines; M.S., Ph.D., University of Wisconsin, Madison.
- Adams, Stephen T. (2000)** **Assistant Professor**
Advanced Studies in Education and Counseling
B.A., Grinnell College; M.A., Ph.D., University of California, Berkeley.
- Aghekyan, Marine (2009)** **Assistant Professor**
Family and Consumer Sciences
B.S., Yerevan State Engineering University, Armenia; M.A., Ph.D., Auburn University.
- Ahrens, Courtney E. (2002)** **Associate Professor**
Psychology
B.A., Smith College; M.A., Ph.D., University of Illinois at Chicago.
- Ai, Ruixi (2009)** **Assistant Professor**
Asian and Asian American Studies
B.A., M.A., Guangzhou Institute of Foreign Languages, Guangzhou, China; Ph.D., Harvard University.
- Alexander, F. King (2006)** **President**
California State University, Long Beach
- **Professor**
Advanced Studies in Education and Counseling
B.A., St. Lawrence University; M.S., University of Oxford; Ph.D. University of Wisconsin-Madison.
- Allen, Bengt (2007)** **Assistant Professor**
Biological Sciences
B.A., Pomona College; M.S., San Diego State University; Ph.D., Stony Brook University.
- Allen, Terre (1990)** **Director**
Faculty Center for Professional Development
- **Professor**
Communication Studies
B.A., Louisiana Technical University; M.A., Ph.D., Louisiana State University, Baton Rouge.
- Amirkhan, James H. (1988)** **Professor**
Psychology
B.A., Reed College; M.A., California State University, Northridge; Ph.D., University of California, Los Angeles.
- Ammermann, Peter A. (1999)** **Associate Professor**
Finance
B.B.A., Roanoke College; M.B.A., Virginia Polytechnic Institute and State University; Ph.D., Virginia Polytechnic Institute and State University.
- An, Shuhua (2000)** **Professor**
Teacher Education
B.A., Nanjing Normal University, Nanjing, China; M.B.A., Texas A&M International University; Ph.D., Texas A&M University.
- Andersen, Leslie N. (2002)** **Librarian**
University Library
B.M., University of Southern California; M.M., M.L.S., Florida State University, Tallahassee.
- Anderson, John (2006)** **Associate Professor**
Film and Electronic Arts
B.A., M.A., Cornell University.
- Anglin, David I. (2005)** **Associate Professor**
Music - Bob Cole Conservatory of Music
B.A., San Francisco Conservatory of Music; M.A., University of California, Los Angeles; Ph.D., University of Southern California.
- Anglin, Judith C. (2008)** **Assistant Professor**
Family and Consumer Sciences
B.S., M.S., Ph.D., Howard University.
- Anjo, Dennis M. (1984)** **Professor**
Chemistry and Biochemistry
B.A., M.S., San Francisco State University; Ph.D., Arizona State University, Tempe. Emeritus, 2011.
- Anwar, Mohammad Z. (1965)** **Professor**
Physics and Astronomy
B.S., M.S., Dacca University, Pakistan; Ph.D., University of British Columbia. Emeritus, 2010.
- Archie, James W. (1989)** **Professor**
Biological Sciences
B.S., Michigan State; Ph.D., State University of New York, Stony Brook.
- Arcinue, Ferdinand A. (2005)** **Psychologist**
Counseling and Psychological Services
B.A., Georgetown University; M.A., New York University; Ph.D., University of Southern California.
- Armento, Greg (1988)** **Librarian**
B.A., M.A., California State University, Chico; M.A.L.S., University of Wisconsin.
- Arnold, Josh A. (1996)** **Professor**
Management and Human Resources Management
B.A., Point Loma Nazarene College; M.A., Ph.D., University of Illinois at Urbana-Champaign.
- Arora, Tina (2008)** **Assistant Professor**
Advanced Studies in Education and Counseling
B.S., M.S., University of Madras; M.Ed., Kent State University; Ph.D., University of California, Los Angeles.
- Arroyo, Luis L. (1995)** **Professor**
Chicano and Latino Studies
B.A., M.A., University of California, Santa Barbara; Ph.D., University of California, Los Angeles.
- Arroyo, Sarah J. (2003)** **Associate Professor**
English
B.S., New Mexico State University, Las Cruces; M.A., California State University, Long Beach; Ph.D., University of Texas at Arlington.
- Ary, James P. (1983)** **Professor**
Electrical Engineering
B.S., St. Mary's College, California; Ph.D., Ohio State University.
- Asenas, Jennifer N. (2008)** **Assistant Professor**
Communication Studies
B.A., M.A., California State University, Long Beach; Ph.D., University of Texas, Austin.
- Asher, Abraham (2003)** **Assistant Professor**
Information Systems
B.A., California State University, Fullerton; M.S., University of Southern California; Ph.D., Claremont Graduate School.
- Ashe, Pamela E. (1994)** **Psychologist**
Counseling and Psychological Services
B.A., California State University, Long Beach; M.A., California State University, Dominguez Hills; Ph.D., Howard University.
- Aslanian, Sebouh D. (2010)** **Assistant Professor**
History
B.A., McGill University, Canada; M.A., New School for Social Research; Ph.D., Columbia University.
- Atherton, Jeffrey D. (2011)** **Assistant Professor**
Art
B.F.A., M.F.A., Art Center College of Design, Pasadena.
- Baber, Walter F. (2001)** **Professor**
Public Policy and Administration
B.A., California State University, Long Beach; M.A., Ph.D., University of North Carolina, Chapel Hill.
- Bachman, Guy F. (2002)** **Associate Professor**
Communication Studies
B.A., University of Hawaii, Manoa; M.A., New Mexico State University, Las Cruces; Ph.D., Arizona State University, Tempe.
- Bahr, Behnam (2009)** **Professor**
Mechanical and Aerospace Engineering
B.S., M.S., Ph.D., University of Wisconsin.
- Ban, Hyowon (2009)** **Assistant Professor**
Geography
B.A., M.A., Ewha Woman's University, Seoul, Korea; Ph.D., Ohio State University.
- Bandyopadhyay, Paramita (2006)** **Assistant Professor**
Finance
B.S., University of Calcutta; M.A., Institute of Business Management & Research, India; Ph.D., University of Texas, San Antonio.
- Banuett, Flora (2002)** **Professor**
Biological Sciences
B.A., Ph.D., University of Oregon.

Baralt, Lori B. (2009)Assistant Professor Women's, Gender, and Sexuality Studies B.A., University of Florida, Gainesville; Ph.D., Michigan State University.	Bill, Andreas (2005) Professor Physics and Astronomy Conservatoire Populaire de Musique de Geneve, Switzerland; Swiss Federal Institute of Technology Lausanne; Ph.D., University of Stuttgart.
Barcelona, John (1989) Professor Music - Bob Cole Conservatory of Music B.M., University of Hartford; M.A., California State University, Long Beach; D.M.A., University of Southern California.	Bippus, Amy Marie (1999) Professor Communication Studies B.A., Pennsylvania State University; M.A., Wake Forest University; Ph.D., University of Texas, Austin.
Barker, Heather R. (2012)Assistant Professor Design B.Arch, University of Cincinnati; M.Arch, Southern California Institute of Architecture, Los Angeles.	Birkemeier, Richard P. (1985) Director California Institute for the Preservation of Jazz Professor
Barnes, Nielan (2005)Assistant Professor Sociology B.A., San Diego State University; M.A., Ph.D., University of California, San Diego.	Black, Margaret (2006) Associate Professor Art B.A., Otis/Parsons School of Art; M.F.A., Yale University School of Art.
Baruah, Bipasha (2006) Associate Professor International Studies B.S., Delhi University, India; M.S., University of Northern British Columbia, Canada; Ph.D., York University.	Blankley, Elyse M. (1986) Professor Women's, Gender, and Sexuality Studies/English B.A., Rutgers University; M.A., Ph.D., University of California, Davis.
Baum, Alwin L. (1989) Professor Comparative World Literature and Classics B.A., Indiana University, Bloomington; Ph.D., University of California, San Diego. Emeritus, 2010.	Blazey, Michael A. (1990) Professor Recreation and Leisure Studies B.A., University of Oregon; M.S., South Dakota State University; Ph.D., Pennsylvania State University.
Beattie, Randall C. (1972) Professor Communicative Disorders B.S., Northern Illinois University; M.S., University of Illinois; Ph.D., University of Southern California. Emeritus, 2010.	Blecher, Lee (2001) Professor Family and Consumer Sciences B.A., University of California, Santa Barbara; M.S., Oregon State University; M.B.A., California State University, Long Beach; Ph.D., University of Southern California.
Becker, Matthew W. (2008) Professor Geological Sciences B.S., Michigan State; M.S., Ph.D., University of Texas, Austin.	Blomquist, Thomas (2007) Associate Professor Film and Electronic Arts B.S., Southern Illinois University.
Behl, Richard J. (1995) Associate Professor Geological Sciences B.A., University of California, San Diego; Ph.D., University of California, Santa Cruz.	Blumenthal, Sharyn C. (1988) Professor Film and Electronic Arts B.A., M.F.A., Temple University.
Beneck, George J. (2011) Associate Professor Physical Therapy B.S., Temple University, Philadelphia; M.S., Michigan State University, East Lansing; Ph.D., University of Southern California.	Blutinger, Jeffrey C. (2004) Associate Professor History B.A., M.A., Ph.D., University of California, Los Angeles; J.D., University of California, Los Angeles, School of Law.
Benitez, Juan M. (2001) Director Center for Community Engagement (CCE) Associate Professor Chicano and Latino Studies B.A., M.A., Ph.D., University of California, Los Angeles.	Bolkan, San Steven (2009) Assistant Professor Communication Studies B.A., University of San Diego; M.A., San Diego State University; M.B.A., Bloomsburg University; Ph.D., University of Texas, Austin.
Benken, Babette (2006) Associate Professor Mathematics and Statistics B.A., Occidental College; M.S., Tufts University; Ph.D., University of Michigan.	Bojarsky, David (1983) Professor Accountancy B.S., California State University, Los Angeles; M.A., Ph.D., University of Northern Colorado.
Benli, Omer S. (2001) Associate Dean College of Business Administration Professor Information Systems B.S., Purdue University; M.S., University of Missouri, Columbia; M.S.E., University of Michigan, Ann Arbor; Ph.D., Syracuse University.	Booker, Beverly L. (2011) Assistant Professor Advanced Studies and in Education and Counseling B.S., M.A., Hampton University, Hampton; Ph.D., University of Louisville.
Bennish, Joseph (1988) Professor Mathematics and Statistics B.A., University of Michigan; M.S., Ph.D., University of California, Los Angeles.	Bordeaux, Valerie (1986) Director University Outreach/School Relations B.A., California State University, Fullerton.
Berberian, Hourii (1998) Professor History B.A., University of California, Berkeley; M.A., Ph.D., University of California, Los Angeles.	Bosch, Eileen (2007) Senior Assistant Librarian University Library B.S., Universidade Estacio de Sa, Brazil; M.Ed., Bowling Green State University; M.L.I.S., Kent State University.
Berkman, Susan (2004) Associate Vice President Estate and Gift Planning B.A., University of California, Irvine; M.A., University of California, Los Angeles M.A., California State University, Los Angeles; J.D., Western State University, Fullerton.	Boyd-Batstone, Paul S. (2000) Professor Teacher Education B.A., M.A., California State University, Long Beach; Ph.D., Claremont Graduate University.
Beron, Toni (1988) Associate Vice President University Relations B.A., California State University, Long Beach.	Brady, Margaret A. (1976) Professor School of Nursing B.S.N., Marquette University; M.S., University of Colorado; Ph.D. University of California, Los Angeles.
Berquist, Emily (2007) Assistant Professor History B.A., Vassar College, Poughkeepsie, New York; M.A., Ph.D., University of Texas, Austin.	Brazier, Christopher R. (2001) Associate Professor Chemistry and Biochemistry B.S., Ph.D., University of Southampton.
Berryhill, Stuart R. (1979) Professor Chemistry and Biochemistry B.A., Williams College, Massachusetts; Ph.D., University of California, Berkeley.	Bremer, Carolyn R. (2003) Professor Music - Bob Cole Conservatory of Music B.F.A., California Institute of the Arts; M.A., Ph.D., University of California, Santa Barbara.
Besnard, Eric G. (2003) Professor Mechanical and Aerospace Engineering B.S., Ecole Des Mines, Paris, France; M.S., California State University, Long Beach; Ph.D., Claremont Graduate University.	Brevik, John (2006) Assistant Professor Mathematics and Statistics B.S., Michigan State University; M.S., University of Washington; Ph.D., University of California, Berkeley.
Beyer, Christiane (2010) Associate Professor Mechanical and Aerospace Engineering M.S.E., Ph.D., University of Magdeburg, Germany.	Briggs, Ray A. (2003) Associate Professor Music - Bob Cole Conservatory of Music B.A., University of Memphis, TN; M.A. University of Redlands, CA; Ph.D., University of California, Los Angeles.
Bilici, Hamdi (1988) Professor Finance B.S., Istanbul University, Turkey; M.B.A., Louisiana State University; D.B.A., Louisiana Tech University. Emeritus, 2011.	Brocato, Jolae (2008) Assistant Professor School of Social Work B.A., M.S.W., Ph.D., Florida International.

- Brooks, Catherine F. (2008)** **Assistant Professor**
Communication Studies
B.A., M.A., California State University, Long Beach; Ph.D. University of California, Riverside.
- Broughton, Jeffrey L. (1976)** **Professor**
Religious Studies
B.A., M.A., Ph.D., Columbia University.
- Perruso-Brown, Carol (2008)** **Senior Assistant Librarian**
University Library
B.S., M.A., University of Maryland; MLIS, University of California, Los Angeles.
- Brown, Kendall H. (1999)** **Professor**
Art
B.A., M.A., University of California, Berkeley; Ph.D., Yale University.
- Brown, Lori (2007)** **Assistant Professor**
Information Systems
B.A., California State University, Long Beach; M.A., Ph.D., Northwestern University, Evanston, Illinois.
- Brusslan, Judith A. (1994)** **Professor**
Biological Sciences
B.A., Middlebury College, Vermont; Ph.D., University of Chicago.
- Bu, Xianhui (2003)** **Associate Professor**
Chemistry and Biochemistry
B.S., Fudan University, Shanghai, P.R. China; Ph.D., State University of New York, Buffalo.
- Buckingham, Stephan L. (2009)** **Assistant Professor**
School of Social Work
B.A., Murray State University; M.S.W., Ph.D., University of Louisville.
- Buonora, Paul T. (2000)** **Professor**
Chemistry and Biochemistry
B.S., M.S., Indiana University of Pennsylvania; Ph.D., University of Virginia.
- Burnett, Ella G. (1997)** **Professor**
Teacher Education
B.S., M.S., Pittsburg State University; Ed.D., University of California, Los Angeles. Emerita, 2008.
- Burnett, Raymond C. (2001)** **Associate Professor**
Journalism
B.A., Ohio Wesleyan University; M.A., Ohio State University; M.A., George Washington University; Ph.D. Colorado State University, Fort Collins.
- Byrom, Andrew (2006)** **Professor**
Art
Btec., Cumbria College of Art and Design, England; B.F.A., University of East London.
- Byun, Linda H. (1984)** **Professor**
Mathematics and Statistics
B.A., University of Hawaii; M.A., Ph.D., University of Wisconsin, Madison.
- Callahan, Linda (2000)** **Professor**
School of Nursing
B.S. Biology, Guilford College; M.A., M.S.N., California State University, Long Beach; Ph.D., Florida State University. Emerita, 2010.
- Campbell, Carole A. (1989)** **Professor**
Sociology
B.A., University of Albuquerque; M.A., Ph.D., University of Colorado.
- Campbell, Joyce M. (1988)** **Professor**
Physical Therapy
B.S., M.S., Ph.D., University of Southern California; Registered Physical Therapist.
- Canizales, Claudia (2007)** **Assistant Professor**
Advanced Studies in Education and Counseling
B.A., University of California, Berkeley; M.A., Ph.D., University of San Francisco.
- Caputi, Mary A. (1995)** **Associate Professor**
Political Science
B.A., Cornell University; M.A., University of Chicago; Ph.D., Cornell University.
- Carbuto, Michael N. (2001)** **Chief of Medical Staff**
..... **Associate Director**
Student Health Services
B.S., New Mexico State University; M. P. H., University of Southern California; D.O., Western University.
- Cargile, Aaron C. (1996)** **Professor**
Communication Studies
B.A., University of California, Santa Barbara; M.A., Purdue University; Ph.D., University of California, Santa Barbara.
- Carlile, Susan L. (2001)** **Professor**
English
B.A., Taylor University; M.A., Ph.D., Arizona State University.
- Carnahan, John A. (1990)** **Professor**
Music - Bob Cole Conservatory of Music
B.S., Duquesne University, Pittsburgh; M.A., University of San Francisco.
- Carney, Michael R. (1981)** **Professor**
Music - Bob Cole Conservatory of Music
B.M., East Carolina University; M.M., Eastman School of Music; D.M.A., North Texas State University.
- Caron, Timothy P. (1998)** **Professor**
English
B.A., Louisiana College; M.A., Ph.D., Louisiana State University.
- Carreira, Maria M. (1995)** **Professor**
Romance, German, Russian Languages and Literatures
B.S., Loyola University of Chicago; Ph.D., University of Illinois.
- Carter, Ashley (2008)** **Assistant Professor**
Biological Sciences
B.S., University of Wisconsin; M.S., Ph.D., Yale University.
- Caveness, Jeane Rellve (1981)** **Assistant Dean of Students**
Division of Student Services
B.A., Scripps College; M.A. and Ph.D., Claremont Graduate School.
- Ceia-Minjares, Laura (2006)** **Assistant Professor**
Romance, German Russian Languages and Literatures
M.A., University of Timisoara, Romania; Ph.D., University of California, Davis.
- Cerny, Kay (1982)** **Professor**
Physical Therapy
B.S., Miami University, Ohio; M.S., Ph.D., University of Southern California, Registered Physical Therapist.
- Chaderjian, Bruce J. (1989)** **Professor**
Mathematics and Statistics
B.S., Cal Poly San Luis Obispo; M.S., Ph.D., University of California, Los Angeles.
- Chambers, Ruth (2006)** **Assistant Professor**
School of Social Work
B.A., California State University, Chico; M.S.W., San Diego State University; Ph.D., University of Denver.
- Chang, Chin (2007)** **Professor**
Electrical Engineering
B.S., Soochow University, China; M.S., National Tsing Hua University, Taiwan; Ph.D., Carnegie Mellon University.
- Chang, Jen-Mei (2008)** **Assistant Professor**
Mathematics and Statistics
B.A., California State University, Sacramento; M.S., Ph.D., Colorado State University.
- Chassiakos, Anastassios G. (1989)** **Professor**
Computer Engineering and Computer Science / Electrical Engineering
Engineering Diploma, National Technical University, Greece; M.S., Ph.D., University of Southern California.
- Cheffer, Natalie D. (2001)** **Associate Professor**
School of Nursing
B.S.N., B.H.S., California State University, Long Beach; M.N., University of California, Los Angeles.
- Chelilan, Michael Singh (1988)** **Professor**
Electrical Engineering
B.S., University of Madras, India; M.S., University of Calcutta, India; Ph.D., University of Southampton, England.
- Chen, Cheng-Hui (2000)** **Associate Professor**
Advanced Studies in Education and Counseling
B.A., National Cheng-Chi University, Taiwan, Ed.M., Ph.D., University of Illinois at Urbana-Champaign.
- Chen, Hsin-Piao (1986)** **Professor**
Mechanical and Aerospace Engineering
B.S., National Cheng Kung University, Taiwan; M.S., National Tsing Hua University, Taiwan; Ph.D., Georgia Institute of Technology.
- Chen, Hsun-Hu (1985)** **Professor**
Mechanical and Aerospace Engineering
B.S., National Cheng Kung University, Taiwan; M.S., National Tsing Hua University, Taiwan; Ph.D., Georgia Institute of Technology.
- Chen, Ming (2011)** **Assistant Professor**
Management and Human Resources Management
B.S., M.S., Tsinghua University, Beijing, China; M.S., Ph.D., University of Maryland, College Park.
- Chen, Xiaoying (2006)** **Assistant Professor**
Finance
B.A., Jilin University, China; M.A., Ph.D., Kent State University.
- Chen, Yutian (2007)** **Assistant Professor**
Economics
B.A., Renmin University, China; M.A., Ph.D., State University of New York at Stony Brook.
- Chesler, Joshua D. (2009)** **Assistant Professor**
Mathematics and Statistics
B.S., University of Virginia; M.S., Ph.D., University of Arizona.
- Chew, Kathryn S. (2003)** **Professor**
Comparative World Literature and Classics
B.A., University of California, Irvine; M.A., Ph.D., University of California, Los Angeles.
- Chi, Robert H. (1991)** **Professor**
Information Systems
B.S., National Chiao Tung University, Taiwan; M.S., University of Wisconsin, Madison; Ph.D., University of Texas, Austin.
- Chiappe, Dan (2001)** **Professor**
Psychology
B.S., M.S., Ph.D., University of Toronto.

- Chinchilla, Norma S. (1983)** **Professor**
Women's, Gender, and Sexuality Studies/Sociology
B.A., University of Pacific; M.A., Ph.D., University of Wisconsin, Madison.
- Chinen, Kiyomi (2009)** **Assistant Professor**
Asian and Asian American Studies
B.A., California State University, Dominguez Hills; M.A., California State University, Long Beach; Ph.D., Carnegie Mellon University.
- Cho, Young-Hee (1998)** **Associate Professor**
Psychology
B.A., Pusan National University, Korea; M.A., Ph.D., University of California, Irvine.
- Chong, Philip S. (1986)** **Professor**
Management/Human Resources Management
B.E., University of Singapore; M.S., Ph.D., University of Massachusetts, Amherst.
- Cooley, Mason (2009)** **Assistant Professor**
Art
B.F.A., Art Center College of Design; M.F.A., Art Center College of Design.
- Chou, Shun-Lin (2003)** **Professor**
Music - Bob Cole Conservatory of Music
B.A., Wheaton College, Illinois; M.M., University of Michigan, Ann Arbor; D.M.A., Eastman School of Music, Rochester, NY.
- Chun, Chi-Ah (2000)** **Associate Professor**
Psychology
B.A., University of California, Berkeley; M.A., Korea University, Seoul, Korea; Ph.D., University of California, Los Angeles.
- Chun, Kirstyn Yuk Sim (2005)** **Psychologist**
Counseling and Psychological Services
B.A., University of California, Davis; M.A., Psy.D. Indiana University of Pennsylvania.
- Chung, H. Michael (1995)** **Director**
Center for Information Strategies and Technologies
..... **Professor**
Information Systems
B.S., Seoul University; M.B.A., Ph.D., University of California, Los Angeles.
- Claver, Maria (2007)** **Assistant Professor**
Family and Consumer Sciences
B.A., M.S.W., Ph.D., University of California, Los Angeles.
- Cleary, Patricia Ann (1989)** **Professor**
History
B.A., Rice University; Ph.D., Northwestern.
- Clippinger, Karen (2002)** **Professor**
Dance
B.A., Sonoma State College, CA; M.A., University of Washington.
- Coffey-Love, Melody (2006)** **Assistant Professor**
School of Nursing
B.S., M.S., California State University, Long Beach.
- Cohlberg, Jeffrey A. (1975)** **Professor**
Chemistry and Biochemistry
B.A., Cornell University; Ph.D., University of California, Berkeley. Emeritus, 2011.
- Colburn, Alan (1995)** **Professor**
Science Education
B.S., Carnegie Mellon University; M.S., University of Illinois; M.S., University of Pennsylvania; Ph.D., University of Iowa.
- Collins, Keith E. (1969)** **Professor**
History
B.A., M.S., Indiana University; Ph.D., University of California, San Diego. Emeritus, 2006.
- Compliment, Brad K. (2008)** **Director**
Counseling and Psychological Services
B.A., College of Santa Fe; M.A., University of New Mexico; Ph.D., Wright Institute.
- Constas, Michael (1995)** **Professor**
Accountancy
B.A., J.D., Ph.D., University of California, Los Angeles.
- Cooley, Mason (2009)** **Assistant Professor**
Art
B.F.A., Art Center College of Design; M.F.A., Art Center College of Design.
- Cooper, Stephen P. (1997)** **Professor**
English
B.A., University of California, Los Angeles; M.F.A., University of California, Irvine; Ph.D., University of Southern California.
- Coots, Jennifer (1997)** **Professor**
Advanced Studies in Education and Counseling
B.A., Occidental College; M.A., California State University, Los Angeles; Ph.D., University of California, Los Angeles, and California State University, Los Angeles.
- Cormack, Jody C. (2003)** **Associate Professor**
Physical Therapy
B.S., California State University, Long Beach; M.S., Ph.D., University of Southern California.
- Costa, D. Margaret (1974)** **Professor**
Kinesiology
B.S., M.Ed., University of Massachusetts; Ph.D., Ohio State University. Emerita, 2010.
- Crass, Scott W. (2001)** **Professor**
Mathematics and Statistics
B.A., Evangel College; B.A., California State University, Long Beach; M.A., University of Notre Dame; Ph.D., University of California, San Diego.
- Cretara, Domenic (1986)** **Professor**
Art
B.F.A., M.F.A., Boston University. Emeritus, 2010.
- Crockett, Bryan (2007)** **Associate Professor**
Art
B.F.A., Cooper Union, New York; M.F.A., Yale University.
- Croke, Eileen M. (1999)** **Assistant Professor**
School of Nursing
B.S.N., Northeastern University; M.S.N., California State University, Long Beach; Ed.D., Pepperdine University.
- Crusemeyer, Jill A. (1998)** **Assistant Professor**
Kinesiology
B.S., Long Island University; M.S., University of Massachusetts; Ph.D., University of Oregon.
- Cummings, Tanya R. (2000)** **Professor**
Art
B.F.A., California State University, Long Beach; M.F.A., California State University, Fullerton.
- Cummings, Chailin (2009)** **Assistant Professor**
Management and Human Resource Management
B.A., Sichuan University; B.S., M.B.A., University of Utah; Ph.D., University of Southern California.
- Cummins-Vigneron, Catherine A. (2009)** **Assistant Professor**
Nursing
B.S., Regis University; M.S.N., California State University, Long Beach; M.D., University of Sydney, Australia.
- Curtis, James R. (1995)** **Professor**
Geography
B.A., M.A., San Jose State University; Ph.D., University of California, Los Angeles.
- Curtis, Kenneth R. (1990)** **Professor**
History/Liberal Studies
B.A., Lawrence University; M.A., Ph.D., University of Wisconsin.
- Dabel, Jane E. (2001)** **Associate Professor**
History
B.A., University of California, Berkeley; M.A., Ph.D., University of California, Los Angeles.
- Dahab, F. Elizabeth (2001)** **Professor**
Comparative World Literature and Classics
B.A., McGill University; M.Ed., University of Alberta; D.E.A., Ph.D., L'Universite de Paris-Sorbonne.
- Dahlen, Rebecca D. (1996)** **Associate Professor**
School of Nursing
R.N., Los Angeles County Medical Center School of Nursing; B.S.N., University of Phoenix; M.S.N., California State University, Los Angeles; Ed.D., University of Southern California.
- Dallman, Suzanne (2007)** **Assistant Professor**
Geography
B.A., San Francisco Art Institute; M.A., California State University, Long Beach; Ph.D., University of California, Los Angeles.
- Das, Mihir K. (1981)** **Professor**
Mechanical and Aerospace Engineering
B.S., Bihar Institute of Technology, India; Ph.D., University of Birmingham, England. Emeritus, 2008.
- Daugherty, Emma L. (1997)** **Professor**
Journalism
B.S., West Virginia University; M.A., Michigan State University.
- Davis, James A. (1985)** **Professor**
Kinesiology
B.A., M.A., San Diego State University; Ph.D., University of California, Davis. Emeritus, 2011.
- Davis, Jeffrey P. (1997)** **Associate Professor**
Sociology/Human Development
B.A., M.A., North Carolina Central University; Ph.D., North Carolina State University.
- DeGuire, Linda J. (1990)** **Professor**
Mathematics and Statistics
B.A., Fontbonne College, St. Louis; A.M., Stanford University; M.A., Ed.D., University of Georgia, Athens. Emerita, 2010.
- Deitch, Kathryn V. (1997)** **Associate Professor**
School of Nursing
B.S., University of Maryland; M.S., Texas Woman's University; M.A., Ph.D., Claremont Graduate School. Emerita, 2010.
- Del Campo, Alicia (2000)** **Associate Professor**
Romance, German, Russian Languages and Literatures
M.A., University of Chile, Santiago, Chile; M.A., University of Minnesota, Minneapolis; Ph.D., University of California, Irvine.
- Dennis, Christopher D. (1985)** **Professor**
Political Science
B.A., M.A., California State University, Long Beach; Ph.D. University of Georgia.
- Derakhshan, Shahab (2009)** **Assistant Professor**
Chemistry and Biochemistry
B.S., University of Mazandaran, Iran; M.S., Zanjan University, Iran; Ph.D., University of Waterloo, Ontario, Canada.

- Dieveney, Patrick (2007)** **Assistant Professor**
Philosophy
B.A., Carleton College, Northfield, Minnesota; Ph.D., University of Arizona, Tucson.
- Dillon, Jesse G. (2004)** **Associate Professor**
Biological Sciences
B.A., Wesleyan University, Middletown, CT; Ph.D., University of Oregon, Eugene.
- Ding, Yu (2006)** **Assistant Professor**
Mathematics and Statistics
B.A., Fudan University, China; M.A., Ph.D., New York University.
- Dinielli, Gene L. (1968)** **Professor**
English
B.A., M.A., University of Connecticut. Emeritus, 2010.
- Domingo-Foraste, Douglas (1990)** **Professor**
Comparative World Literature and Classics
B.A., University of California, Davis; M.A., Ph.D., University of California, Santa Barbara.
- Donato, Clorinda (1989)** **Professor**
Romance, German, Russian Languages and Literatures
B.A., University of California, Berkeley; M.A., Ph.D., University of California, Los Angeles.
- Dorn, Carl H. (1968)** **Professor**
Mathematics and Statistics
B.A., University of California, Berkeley; Ph.D., University of California, Los Angeles.
- Douglas, Masako O. (2001)** **Associate Professor**
Asian and Asian American Studies
B.A., M.A., Kobe City University of Foreign Studies; M.A., Australian National University; Ph.D., University of Southern California.
- Dowell, David A. (1977)** **Vice Provost, Planning and Budget**
Academic Affairs
..... **Director of Strategic Planning**
Office of the President
..... **Professor**
Psychology
B.S., Middle Tennessee State University; M.A., Ph.D., University of Tennessee.
- Downey, Sharon D. (1987)** **Professor**
Communication Studies
B.A., Florida State University, Tallahassee; M.A., University of Nevada, Las Vegas; Ph.D., University of Colorado.
- Doyle, Alicia M. (2003)** **Associate Professor**
Music - Bob Cole Conservatory of Music
B.M., University of Southern California; M.A., Ph.D., University of California, Santa Barbara.
- Druzgalski, Christopher (1970)** **Professor**
Electrical Engineering
B.S., M.S., Technical University, Poland; M.S., Ph.D., Ohio State University, Columbus.
- Ducharme, Catherine C. (1990)** **Professor**
Teacher Education
B.A., California Polytechnic University, San Luis Obispo; M.S., California State University, Fullerton; Ph.D., Claremont Graduate School.
- Dunagan, Colleen T. (2002)** **Associate Professor**
Dance
B.A., Hamilton College, Clinton, NY; Ph.D., University of California, Riverside.
- Duong, Khue (2009)** **Senior Assistant Librarian**
University Library
B.S., University of California, Los Angeles; M.A., University of California, Santa Cruz; M.L.I.S., University of Washington.
- Dyo, Melissa (2011)** **Assistant Professor**
School of Nursing
B.S., M.S., California State University, Long Beach; Ph.D., Azusa Pacific University.
- D'Zmura, Anne (2007)** **Professor**
Theatre Arts
B.A., Hampshire College; M.F.A., Yale University, Connecticut.
- Eatmon, Stephanie L. (1998)** **Associate Professor**
Health Science
B.S., Idaho State University; M.Ed., Loma Linda University; Ed.D., University of La Verne. Emerita, 2010.
- Ebert, Todd (2001)** **Associate Professor**
Computer Engineering and Computer Science
B.S., California State University, Long Beach; M.A., Ph.D., University of California, Santa Barbara.
- Ebneshahrashoob, Morteza (1990)** **Professor**
Mathematics and Statistics
B.S., University of Tehran; M.S., Ph.D., Oklahoma State University.
- Edwards, Alejandra C. (1986)** **Professor**
Economics
Licenciado En Economía, Ingeniero Comercial, Universidad Católica de Chile; M.A., Ph.D., University of Chicago.
- Edwards, Dave (2004)** **Director**
University Student Union
B.S., University of Evansville, Indiana; M.S., Southern Illinois University, Carbondale, Illinois; Ed.D., California State University, Long Beach.
- Eldon, Elizabeth D. (2000)** **Associate Professor**
Biological Sciences
B.A., Connecticut College, New London, Connecticut; Ph.D., Indiana University, Bloomington, Indiana.
- Enders, Thomas (1996)** **Associate Vice President**
Enrollment Services
B.M., College Conservatory of Music, Cincinnati; M.M., University of Southern California.
- Englert, Burkhard (2003)** **Professor**
Computer Engineering and Computer Science
B.S., University of Tübingen, Germany; M.S., Ph.D., University of Connecticut.
- Eriksen, Shelley J. (1999)** **Associate Professor**
Human Development
B.A., Southern Oregon State College; M.A., Ph.D., University of Massachusetts at Amherst.
- Eryana, Eryana (2009)** **Assistant Professor**
Health Care Administration
M.P.P.M., Ph.D., University of Southern California; M.D., Atmajaya Catholic University, Indonesia.
- Esfandiari, Ramin S. (1991)** **Professor**
Mechanical and Aerospace Engineering
B.S., M.A., Ph.D., University of California, Santa Barbara.
- Esparza, Araceli (2011)** **Assistant Professor**
English
B.S., M.A., Ph.D., University of Southern California, Los Angeles; M.A., California State University, Northridge.
- Espinoza, Andrew J. (1998)** **Director**
Educational Opportunity Program
B.A., University of California, Los Angeles; M.P.A., California State University, Long Beach.
- Estrada, Gabriel S. (2005)** **Assistant Professor**
American Indian Studies/Chicano and Latino Studies
B.A., University of California, Berkeley; M.A., Ph.D., University of Arizona.
- Eveland, Vern K. (1984)** **Professor**
Biological Sciences
B.S., State University of Iowa, Iowa City; M.S., Ph.D., University of Iowa, Iowa City.
- Faraji, Sedigheh (2010)** **Assistant Professor**
Chemical Engineering
B.S., M.S., University of Tehran, Iran; Ph.D., University of Kansas.
- Farmer, Gail (1985)** **Associate Dean**
College of Health and Human Services
..... **Professor**
Health Science/Sociology
B.A., M.A., California State University, Long Beach; D.P.H. University of California, Los Angeles.
- Farmer, Lesley S. (1999)** **Professor**
Advanced Studies in Education and Counseling
B.A., Whitman College; M.L.S., University of North Carolina at Chapel Hill; Ed.D., Temple University.
- Fender, Michael J. (2003)** **Associate Professor**
Linguistics
B.A., Kent State University, OH; M.A., Ohio State University, Athens; Ph.D., University of Pittsburgh.
- Fiebert, Martin S. (1965)** **Professor**
Psychology
B.S., Queens College, Flushing, New York; Ph.D., University of Rochester.
- Finney, Brian H. (2003)** **Professor**
English
B.A., University of Reading, England; Ph.D., University of London, England. Emeritus, 2010.
- Finney, Malcolm A. (2000)** **Professor**
Linguistics
B.A., University of Sierra Leone, Freetown, Sierra Leone; M.A., Ph.D., University of Ottawa, Ottawa, Canada.
- Finney, Stanley C. (1986)** **Professor**
Geological Sciences
B.S., M.S., University of California, Riverside; Ph.D., Ohio State University.
- Fisher, Carl H. (2000)** **Professor**
Comparative World Literature and Classics
B.A., Ohio Wesleyan University; M.A., Ph.D., University of California, Los Angeles.
- Fisher, Dennis G. (2000)** **Director**
Center for Behavioral Research and Services
..... **Professor**
Psychology
B.A., University of California, Riverside; M.S., University of Alaska, Anchorage; Ph.D., University of Illinois, Urbana-Campaign.
- Fisher, Steven A. (1990)** **Professor**
Accountancy
B.S., M.S., University of Akron; D.B.A., Kent State University; CPA Certificate, Colorado.
- Fleck, Stephen H. (1993)** **Associate Professor**
Romance, German, Russian Languages and Literatures
B.A., Sonoma State University; Ph.D., University of California, Davis. Emeritus, 2010.
- Fleming, Craig (2006)** **Assistant Professor**
Theatre Arts
M.F.A., California State University, Long Beach.

- Fleming, Jennifer J. (2002)** **Associate Professor**
Journalism
B.A., Simon Fraser University, Canada; M.A., University of Western Ontario.
- Forney, Kristine K. (1978)** **Professor**
Music - Bob Cole Conservatory of Music
B.M., Southern Illinois University; M.A., Ph.D., University of Kentucky, Lexington.
- Forouzes, Mohammed R. (1987)** **Professor**
Health Science
B.S., University of Oregon, Eugene; M.P.H., University of Tennessee, Knoxville; Ph.D., University of Tennessee, Knoxville.
- Forrest, Laura U. (1999)** **Associate Professor**
Advanced Studies in Education and Counseling
B.A., M.C., Arizona State University.
- Foster, Janet (2000)** **Associate Vice President**
Information Technology Services
B.S., California State University, Long Beach; M.B.A., Pepperdine University.
- Fox, Ragan (2006)** **Assistant Professor**
Communication Studies
B.S., M.A., University of Texas, Austin; Ph.D., Arizona State University.
- Fradella, Henry (2007)** **Professor**
Criminal Justice
B.A., Clark University, Worcester, Massachusetts; M.F.S., J.D., George Washington University; Ph.D., Arizona State University.
- Francis, Robert D. (1987)** **Professor**
Geological Sciences
B.A., University of California, San Diego; Ph.D., University of California, San Diego.
- Frank, Gail C. (1989)** **Professor**
Family and Consumer Sciences
B.S., Texas Tech University; M.A., Ph.D., Tulane University.
- Fraser, Deborah A. (2011)** **Assistant Professor**
Biological Sciences
B.Sc., Bristol University, Bristol, United Kingdom; Ph.D., University of Wales College of Medicine, United Kingdom.
- Frates, Janice E. (1997)** **Professor**
Health Care Administration
B.A., University of California, Los Angeles; M.S.W., University of California, Berkeley; Ph.D., University of Southern California. Emerita, 2011.
- Frear, Robert (2006)** **Associate Professor**
Music - Bob Cole Conservatory of Music
B.A., California State University, Long Beach; M.A., University of Southern California.
- Freeseemann, Keith W. (1979)** **Associate Professor**
Kinesiology
B.S., Upper Iowa University; M.A., University of Northern Iowa; Ed.D., University of Southern California.
- Freshman, Brenda (2007)** **Assistant Professor**
Health Care Administration
B.S., University of California, Los Angeles; M.A., University of Santa Monica; Ph.D., Alliant International University.
- Frey, Elaine F. (2008)** **Assistant Professor**
Economics
B.A., Salisbury University; M.A., Ph.D., George Washington University.
- Friis, Robert H. (1988)** **Professor**
Health Science
B.A., University of California, Berkeley; M.A., Ph.D., Columbia University. Emeritus, 2011.
- Fung, Henry C., Jr. (1966)** **Associate Dean**
College of Natural Sciences and Mathematics
..... **Professor**
Biological Sciences
B.A., University of California, Berkeley; M.T., University of California, Medical School at San Francisco; M.A., San Francisco State University; Ph.D., Washington State University.
- Funkhouser, Edward (2003)** **Associate Professor**
Economics
B.A., Princeton University; Ph.D., Harvard University.
- Galvan, Christine (2007)** **Assistant Professor**
Kinesiology
B.S., M.A., California State University, Los Angeles; Ph.D., University of Northern Colorado.
- Gamble, Brandon (2007)** **Assistant Professor**
Advanced Studies in Education and Counseling
B.A., Oakwood College; M.S., San Diego State University; Ph.D., University of Southern California.
- Gao, Tangan (1999)** **Professor**
Mathematics and Statistics
B.S., M.S., Zhongshan University, China; Ph.D., Michigan State University.
- Garcia-Orozco, Antonia (2007)** **Assistant Professor**
Chicano Latino Studies
B.A., M.S., California State University, Northridge; Ph.D., Claremont Graduate University.
- Gasior, Bonnie L. (2001)** **Associate Professor**
Romance, German, Russian Languages and Literatures
B.A., Saint Joseph's University; M.A., Ph.D., Purdue University.
- Gatlin, Laurie (2010)** **Assistant Professor**
Art
B.A.E., M.A.E., Indiana University.
- Gau, Yihnan D. (1988)** **Professor**
Mathematics and Statistics
B.S., National Taiwan University; Ph.D., Purdue University.
- George, Larry N. (1989)** **Professor**
Political Science
B.A., University of California, Irvine; M.A., Ph.D., Princeton.
- Genovese, Nicki (2010)** **Assistant Professor**
Theatre Arts
B.A., Temple University; M.F.A., Columbia University.
- Ghafoori, Bitu (2005)** **Professor**
Advanced Studies in Education and Counseling
B.S., University of California, Irvine; M.A., Pepperdine University; M.A., Ph.D., Alliant International University.
- Gharakhanian, Editte (1990)** **Professor**
Biological Sciences
B.A., George Mason University; Ph.D., University of California, Los Angeles.
- Gibson, J. William (1991)** **Professor**
Sociology
B.A., University of Texas, Austin; M.A., Ph.D., Yale University.
- Gibson, Katie L. (2004)** **Associate Professor**
Communication Studies
B.A., Loyola Marymount University, Los Angeles, CA; M.A., California State University, Northridge; Ph.D., Pennsylvania State University, University Park.
- Gilmore, Paul D. (2002)** **Professor**
English
B.A., University of Mississippi, Oxford; M.A., Ph.D., University of Chicago.
- Gittleman, Arthur P. (1966)** **Professor**
Computer Engineering and Computer Science
B.A., M.A., Ph.D., University of California, Los Angeles. Emeritus, 2010.
- Glatt, Lisa (2006)** **Associate Professor**
English
B.A., California State University, Long Beach; M.A., Sarah Lawrence College
- Goebel, Joy (2006)** **Assistant Professor**
School of Nursing
B.S., Kent State University; M.S., University of California, Los Angeles
- Goitom, Tesfai (1983)** **Director**
Center for Excellence in Construction
..... **Professor**
Civil Engineering and Construction Engineering Management
B.S., National University, Ethiopia; B.S., University of Wisconsin, Platteville; M.S., Ph.D., Michigan State University.
- Goldstein, Avery E. (1990)** **Associate Professor**
Family and Consumer Sciences
B.A., University of California, Los Angeles; M.A., University of the Pacific; Ph.D., Purdue University.
- Goldstein, Cheryl (2006)** **Assistant Professor**
Comparative World Literature and Classics
B.A., University of California, Berkeley; M.A., University of Judaism; Ph.D., University of California, Los Angeles
- Goldstein, Cora S. (2002)** **Associate Professor**
Political Science
B.A., University of California, Berkeley; M.A., Ph.D., University of Chicago.
- Goldstein, Darin A. (2002)** **Professor**
Computer Engineering and Computer Science
B.S.E., Princeton University; Ph.D., University of California, Berkeley.
- Golez, Felipe V. (1997)** **Professor**
Teacher Education
B.A., University of California, Santa Barbara; M.A., California State University, Los Angeles; Ph.D., University of New Mexico.
- Golshani, Forouzan (2007)** **Dean**
College of Engineering
..... **Professor**
Computer Engineering and Computer Science
B.S., Arya Mehr University of Technology, Tehran, Iran; M.S., Ph.D., Warwick University, England.
- Gordon, Joanne L. (1989)** **Professor**
Theatre Arts
B.A., M.A., University of Witwatersrand, South Africa; Ph.D., University of California, Los Angeles.
- Grace, Debra M. (2001)** **Professor**
Accountancy
B.F.A., M.B.A., Ohio University; Ph.D., Oklahoma State University
- Grannell, Roswitha B. (1967)** **Professor**
Geological Sciences
B.A., Pomona College; Ph.D., University of California, Riverside.

Gray, Todd (1997) Professor Art B.F.A., M.F.A., California Institute of the Arts.	Professor Kinesiology B.S., Slippery Rock State College, PA; M.A., Columbia State Teachers College; Ed.D., University of North Carolina.
Gredig, Thomas (2007) Assistant Professor Physics and Astronomy Vordiplom, University of Basl Switzerland; M.S., Ph.D., University of Minnesota, Twin Cities.	Hall, Darwin C. (1986) Professor Economics B.A., University of California, Santa Barbara; M.S., M.A., Ph.D., University of California, Berkeley. Emeritus, 2010.
Green, Jack (1970) Professor Geological Sciences B.S., Virginia Polytechnic Institute; Ph.D., Columbia University.	Hall, Nancy (2007) Assistant Professor Linguistics B.A., Johns Hopkins University; Ph.D., University of Massachusetts, Amherst.
Green, Kenneth F. (1968) Professor Psychology B.A., Brown University; M.S., Ph.D., University of Massachusetts.	Haller, Richard (1983) Executive Director Associated Students Inc. B.A., California State University, Long Beach.
Greenberg, Suzanne A. (1995) Professor English B.A., Hampshire College; M.F.A., University of Maryland.	Hamano, Fumio (1989) Professor Electrical Engineering B.E., M.S.E., Tokyo Institute of Technology; Ph.D., University of Florida.
Greene, Gary M. (1993) Professor Advanced Studies in Education and Counseling B.A., University of California, Los Angeles; M.A., University of Southern California; Ph.D., University of California, Riverside.	Hamel, Joshua M. (2010) Assistant Professor Mechanical and Aerospace Engineering B.S., University Naval Academy; M.S.E., University of Michigan; Ph.D., University of Maryland.
Grenot-Scheyer, Marquita (1988) Dean College of Education	Hansen, Eric L. (1989) Associate Professor Management/Human Resources Management B.A., Rutgers University; M.B.A., University of Chicago; Ph.D., University of Tennessee. Emeritus, 2007.
..... Professor Advanced Studies in Education and Counseling B.A., M.A., California State University, Los Angeles; Ph.D., University of California, Los Angeles/California State University, Los Angeles.	Hansuvadha, Nat (2006) Assistant Professor Advanced Studies in Education and Counseling / Liberal Studies B.A., University of California, San Diego; M.A., California State University, Los Angeles; Ph.D., University of Washington, Seattle.
Grey, Jennifer Jen (1975) Professor Art B.F.A., Bradley University; M.F.A., Hoffberger School of Painting of the Maryland Institute. Emerita, 2011.	Harbinger, Holly (1986) Associate Vice President Academic Affairs, Faculty Affairs
Griffin, Karin (2007) Senior Assistant Librarian University Library B.A., University of California, San Diego; M.Ed., Tuskegee University; MLS, Clark Atlanta University. Professor Theatre Arts B.A., University of California, Santa Cruz; M.F.A., New York University.
Griswold, W. Gary (2003) Associate Professor English B.A., M.A., California State University, Long Beach; Ph.D., Claremont Graduate University.	Hart, George L. (2002) Professor English B.A., Kent State University; M.A., Ph.D., Stanford University.
Grobar, Lisa M. (1989) Professor Economics B.A., Smith; Ph.D., University of Michigan, Ann Arbor.	Hatanaka, Janice (1984) Associate Vice President Alumni Relations and Annual Giving B.A., California State University, Long Beach.
Gu, Jiyeong (2004) Associate Professor Physics and Astronomy B.S., M.S., Ph.D., Seoul National University, South Korea.	Haviland, Donald (2007) Assesment Coordinator College of Education
Gunatilake, Sarath (1987) Professor Health Science B., Medicine and Surgery, University of Colombo, Sri Lanka; M.P.H., University of Hawaii, Manoa; D.P.H., University of Hawaii, Manoa. Assistant Professor Advanced Studies in Education and Counseling B.A., St. Lawrence University; M.S., Ph.D., Syracuse University.
Gurrola, Maria A. (2009) Assistant Professor School of Social Work B.A., M.S.W., Ph.D., Arizona State University.	Hayashino, Diane S. (2006) Psychologist Counseling and Psychological Services B.A., University of California, Davis; M.A., University of Colorado; Ph.D., University of Oregon.
Gustin, Mary E. (2009) Assistant Professor Family and Consumer Sciences B.A., University of Alabama; M.A., Ph.D., Virginia Tech.	He, Min (2004) Associate Professor Computer Engineering and Computer Science B.S., M.S., Hunan University, P.R. China; Ph.D., Louisiana State University, Baton Rouge.
Guthrie, Sharon R. (1990) Professor Kinesiology B.A., University of California, Los Angeles; B.A., M.A., California State University, Northridge; M.A., California State University, Long Beach; Ph.D., Ohio State University.	Hefazi-Torghabeh, Hamid (1985) Director Center for Advanced Technology Support for Aerospace Industry
Haas, Liesl (2001) Associate Professor Political Science B.A., University of Notre Dame; M.A., Ph.D., University of North Carolina at Chapel Hill. Professor Mechanical and Aerospace Engineering B.S., University of Tehran, Iran; M.S., California State University, Long Beach; Ph.D., University of Southern California.
Haas-Stapleton, Eric (2007) Assistant Professor Biological Sciences B.A., Ph.D., University of California, Berkeley.	Hemalatha Ramachandran (2007) Associate Librarian University Library B.A., University of North London, England; MLS, Florida State University.
Hadlock, David A. (1985) Professor Art B.F.A., California State University, Long Beach; M.F.A., California Institute of the Arts. Emeritus, 2010.	Hempel-Lamer, Nele (2006) Associate Professor Romance, German, Russian Languages and Literatures B.A., Rheinische Friedrich-Wilhelms-Universität Bonn, Germany; M.A., Washington University, St. Louis; Ph.D., University of Massachusetts.
Haesly, Richard P. (2002) Associate Professor Political Science B.A., University of Illinois, Urbana-Champaign; M.A., Duke University; Ph.D., University of North Carolina, Chapel Hill.	Henriques, Laura (1998) Professor Science Education B.A., Williams College; Ph.D., University of Iowa.
Hagans-Murillo, Kristi (2004) Associate Professor Advanced Studies in Education and Counseling B.A., M.A., Pepperdine University; Ph.D., University of Oregon, Eugene.	Herman, Martin (1989) Professor Music - Bob Cole Conservatory of Music B.A., Duke University; M.A., University of Pennsylvania; Ph.D., University of California, Berkeley.
Hails, Judith A. (1972) Professor Criminal Justice B.S., Loma Linda University; M.S., California State University, Long Beach; J.D., Southwestern University; LL.M., New York University. Emeritus, 2008.	Herscovitz, Heloiza (2006) Associate Professor Journalism B.A., Pontifical Catholic University of São Paulo; M.A., University of Montevallo, Alabama; Ph.D., University of Florida.
Hakim-Butt, Karen L. (1994) Associate Dean College of Education	Hertz, Robert M. (1969) Professor Linguistics/English B.A., Rutgers University; M.A., Syracuse University; Ph.D., University of Southern California. Emeritus, 2009.

- Heyse, Amy (2006)** **Assistant Professor**
Communication Studies
B.A., University of Rhode Island; M.A., Ph.D., University of Maryland.
- Hickman, Roger C. (1988)** **Professor**
Music - Bob Cole Conservatory of Music
B.A., University of California, Irvine; M.A., Ph.D., University of California, Berkeley.
- Hickman, William J. (1989)** **Associate Professor**
Theatre Arts
B.A., Bucknell University; M.A., San Jose State University; M.F.A., University of New Orleans.
Emeritus, 2011.
- High, Jeffrey L. (2002)** **Professor**
Romance, German, Russian Languages and Literatures
B.A., University of Massachusetts, Boston; M.A., Ph.D., University of Massachusetts,
Amherst.
- Hill, Grant M. (2001)** **Professor**
Kinesiology
B.A., Northwest College of the Assemblies of God; B.A., M.Ed., Seattle Pacific University;
Ph.D., University of Iowa.
- Hintzen, Paul M. N. (1992)** **Professor**
Physics/Astronomy
B.S., University of Minnesota, Minneapolis; Ph.D., University of Arizona.
- Hipolito-Delgado, Carlos P. (2009)** **Assistant Professor**
Educational Psychology, Administration and Counseling
B.A., M.Ed., University of California, Los Angeles; Ph.D., University of Maryland.
- Hlousek, Zvonimir (1990)** **Professor**
Physics and Astronomy
B.Sc., University of Zagreb, Yugoslavia; M.S., Ph.D., Brown University.
- Hoffman, Michael A. (2002)** **Associate Professor**
Computer Engineering and Computer Science
B.A., University of New Orleans; M.S., University of Southern Mississippi; Ph.D., Louisiana
State University, Baton Rouge.
- Hoffman, Rose Marie (1997)** **Professor**
Advanced Studies in Education and Counseling
B.A., State University of New York at Albany; M.S., Canisius College; Ph.D., University of
North Carolina at Greensboro. Emerita, 2010.
- Holliday, Peter J. (1998)** **Professor**
Art
B.A., Columbia University; M.Phil., Ph.D., Yale University.
- Holk, Gregory (2000)** **Associate Professor**
Geological Sciences
B.S., Arizona State University; M.S., Ph.D., California Institute of Technology.
- Homer, Pamela M. (1991)** **Professor**
Marketing
B.A., Michigan State University; M.A., M.B.A., University of Colorado, Boulder; Ph.D.,
University of Oregon.
- Hood, David C. (1966)** **Professor**
History
B.A., University of California, Santa Barbara; Ph.D., University of Southern California.
- Horne, David A. (1988)** **Professor**
Marketing
B.S., M.B.A., Ph.D., University of Michigan, Ann Arbor.
- Hotchkiss, Wilhelmina L. (1990)** **Associate Professor**
English
B.A., California State University, Fullerton; Ph.D., University of California, Los Angeles.
- Hou, Jack W. (1989)** **Professor**
Economics
B.A., National Taiwan University; M.A., Ph.D., Yale.
- Houck, Jean (1990)** **Professor**
Advanced Studies in Education and Counseling
B.A., Kentucky Wesleyan College; M.A., Western Kentucky University, Bowling Green; Ed.D.,
Indiana University. Emerita, 2008.
- Hough, Melissa S. (2010)** **Assistant Professor**
Recreation and Leisure Studies
B.A., Ohio University; M.A., Ph.D., University of Utah.
- Hovind, Tor A. (1995)** **Professor**
Art/Design
B.F.A., California State University, Long Beach; M.F.A., Syracuse University.
- Howell, Jayne (1994)** **Professor**
Anthropology
B.A., State University of New York, Geneseo; M.A., Ph.D., State University of New York,
Stony Brook.
- Hu, Helen Chau (1994)** **Professor**
English
B.A., Berea College, KY; M.A., University of Wisconsin; Ph.D., University of London.
- Huang, Xuan (2011)** **Assistant Professor**
Accountancy
B.A., Soochow University, China; MA, University of Wisconsin, Milwaukee; Ph.D., University
of California, Irvine.
- Hubbard, LaRese (2005)** **Assistant Professor**
Africana Studies
B.S., M.S., California State University, Los Angeles; M.A., Ph.D., Temple University,
Pennsylvania.
- Huckabay, Loucine (1984)** **Professor**
School of Nursing
B.S., M.S., Ph.D., University of California, Los Angeles.
- Huckaby, David G. (1973)** **Associate Professor**
Biological Sciences
B.S., M.S., Louisiana State University; Ph.D., University of Michigan.
- Hughes, Edward J. (1990)** **Associate Professor**
Religious Studies
B.A., Manhattan College, New York City; M.Div., Pittsburgh Theological Seminary; M.A.,
Ph.D., Claremont Graduate School.
- Hultgren, Neil (2007)** **Assistant Professor**
English
B.A., Augustana College, Illinois; M.A., Ph.D., University of Virginia.
- Hunt, Herbert G., III (2002)** **Professor**
Accountancy
B.A., University of Vermont; M.B.A., University of Vermont; Ph.D., University of Colorado at
Boulder.
- Hytrek, Gary (2002)** **Professor**
Sociology
B.A., California State University, Bakersfield, M.A., Ph.D., University of California, Los
Angeles.
- Igmen, Ali (2006)** **Assistant Professor**
History
B.A., Uludag University, Turkey; M.A., University of Pittsburgh; Ph.D., University of
Washington, Seattle.
- Ireland, Connie M. S. (2003)** **Associate Professor**
Criminal Justice
B.A., M.A., Ph.D., University of California, Irvine.
- Ishimine, Tomotaka (1967)** **Professor**
Economics
B.A., Kobe University, Japan; M.A., M.S., Ph.D., University of Wisconsin. Emeritus, 2006.
- Itatani, Carol A. (1975)** **Professor**
Biological Sciences
B.A., University of California, Los Angeles; M.S., California State University, Long Beach;
Ph.D., University of Southern California. Emerita, 2006.
- Jacques, David Martin (1998)** **Associate Professor**
Theatre Arts
B.F.A., University of Miami; M.F.A., Southern Methodist University.
- Jadalla, Ahlam A. (2008)** **Assistant Professor**
School of Nursing
B.S.N., University of Jordan, Amman; M.S.N., Georgetown University; Ph.D., Loma Linda
University.
- Jaffe, Alexandra M. (2001)** **Professor**
Linguistics / Anthropology
B.A., University of Delaware; M.A., Ph.D., Indiana University at Bloomington.
- Jahn, Min-Ten (1986)** **Professor**
Mechanical and Aerospace Engineering
B.S., Taiwan Normal University; M.A., Ph.D., State University of New York, Stony Brook.
Emeritus, 2010.
- Jaikumar, Prashanth (2009)** **Assistant Professor**
Physics and Astronomy
B.S., Delhi University, India; M.S., Indian Institute of Technology, India; Ph.D., Stony Brook
University.
- James, Katherine (1993)** **Professor**
Recreation and Leisure Studies
B.A., Carleton College, Minnesota; M.A., Ph.D., University of Minnesota.
- James, Kenneth (1982)** **Professor**
Electrical Engineering/Computer Engineering and Computer Science
B.S., Case Institute of Technology; M.S., California State University, Fullerton; Ph.D.,
University of California, Irvine.
- Jang, Long-Kuan (1984)** **Professor**
Chemical Engineering
B.S., M.S., National Taiwan University; Ph.D., University of Southern California.
- Janousek, Kelly S. (1988)** **Librarian**
B.A., Western Michigan University; M.L.S., University of Pittsburgh.
- Janssen, Maridith A. (1999)** **Professor**
Recreation and Leisure Studies
B.S., California State University, Sacramento; M.A., California State University, Chico;
Ed.D., Oklahoma State University.
- Jarvis, Jeffrey (2005)** **Associate Professor**
Music - Bob Cole Conservatory of Music
- Jenks, Andrew (2006)** **Associate Professor**
History
B.A., Bucknell University; M.A., University of Michigan; Ph.D., Stanford University.
- Jennings, Lisa K. (2009)** **Assistant Professor**
School of Social Work
B.A., Faulkner University; M.S.W., Ph.D., University of Alabama.
- Jeynes, William H. (2001)** **Professor**
Teacher Education
B.A., University of Wisconsin, Madison; M.Ed., Harvard University; Ph.D., University of
Chicago.

- Ji, Hongyu (1999)**..... **Professor**
Art
B.F.A., Central Academy of Fine Arts, Beijing, China; M.F.A., State University of New York, New Paltz.
- Jocoy, Christine (2004)** **Associate Professor**
Geography
B.A., Vassar College, NY; M.S., Ph.D., Pennsylvania State University, University Park.
- Johnson, Ann M. (2003)** **Associate Professor**
Communication Studies
B.S., University of Utah; M.A., University of New Mexico; Ph.D., University of Massachusetts.
- Johnson, Keith R. (1997)**..... **Professor**
Dance
B.S., Brigham Young University; M.F.A., University of Utah.
- Johnson, Lorin (2005)** **Assistant Professor**
Dance
B.A., University of Southern California; M.A., University of Southern California.
- Johnson, Thomas G. (1989)** **Professor**
Computer Engineering and Computer Science
B.A., Oberlin College; M.S., Youngstown State University; Ph.D., University of California, Davis.
- Johnson, Troy R. (1994)** **Professor**
History/American Indian Studies Program
B.A., San Diego State University; M.A., Ph.D., University of California, Los Angeles.
- Johnston, Michael W. (1987)**..... **Psychologist**
Counseling and Psychological Services
B.A., Missouri Southern State College; M.S., University of Kansas; Ed.D., Indiana University, Bloomington.
- Jones, F. Stanley (1988)** **Professor**
Religious Studies
B.A., Yale University; B.A., M.A., Oxford University; Dr.Theology, Universitaet Goettingen, Federal Republic of Germany.
- Jorgenson, Dale O. (1972)** **Professor**
Psychology
B.A., Ph.D., University of Minnesota. Emeritus, 2009.
- Joshee, Jeet (2008)** **Dean**
College of Continuing and Professional Education
Ed.D., University of Massachusetts, Amherst.
- Jura, Jean-Jacques (2005)** **Associate Professor**
Romance, German, Russian Languages and Literatures
B.A., University of California, Riverside; M.A., California State University, Long Beach; Ph.D., University of California, Irvine.
- Kaminsky, Arnold P. (1986)**..... **Professor**
Asian and Asian American Studies/History
B.A., M.A., Ph.D., University of California, Los Angeles.
- Karadjov, Christopher (2005)** **Associate Professor**
Journalism
M.A., Sofia University, Bulgaria; Ph.D., University of Florida.
- Karenga, Maulana N. (1989)** **Professor**
Africana Studies
B.A., M.A., University of California, Los Angeles; Ph.D., United States International University; Ph.D., University of Southern California.
- Kataoka, Hiroko C. (1998)** **Professor**
Asian and Asian American Studies
B.A., Kobe College, Japan; M.A., Ph.D., University of Illinois, Urbana-Champaign
- Kauer, Kerrie (2007)** **Assistant Professor**
Kinesiology
B.A., Saint Vincent College; M.Ed., Bowling Green State University; Ph.D., University of Tennessee.
- Kawar, Lina (2007)** **Assistant Professor**
School of Nursing
B.S.N., University of Jordan, Amman, Jordan; M.S.N., George Mason University; Ph.D., University of Rochester.
- Kearney, Patricia (1987)** **Professor**
Communication Studies
B.S., Illinois State University; M.A., University of Oklahoma, Norman; Ed.D., West Virginia University.
- Keely, Beth R. (1995)** **Professor**
School of Nursing
B.A., M.S., California State University, Los Angeles; M.A., Ph.D., Claremont Graduate School.
- Kelemen, William L. (2001)** **Professor**
Psychology
B.A., University of California, Irvine; M.A., Ph.D., Baylor University.
- Kelleher, Marie A. (2003)** **Associate Professor**
History
B.A., Lewis and Clark College, Portland; M.A., Ph.D., University of Kansas, Lawrence.
- Kelley, Kevin M. (1995)** **Associate Professor**
Biological Sciences
B.A., M.A., Ph.D., University of California, Berkeley.
- Kelly, Kenneth T. (2001)**..... **Director**
Student Transition and Retention Services
B.S., Westfield State College; M.S., University of Southern California.
- Kelty, Thomas K. (2003)** **Associate Professor**
Geological Sciences/Science Education
B.S., San Jose State University; M.S., University of Southern California; Ph.D., University of California, Los Angeles.
- Kenealy, Patrick F. (1988)** **Professor**
Physics and Astronomy/Science Education
B.S., Loyola University, Chicago; Ph.D., University of Notre Dame. Emeritus, 2011.
- Kermode, Lloyd E. (2000)** **Professor**
English
B.A., Sheffield University, Sheffield, England; M.Phil., Shakespeare Institute, University of Birmingham, England; M.A. Johns Hopkins University; Ph.D., Rice University.
- Ketola, Jarline (2006)** **Assistant Professor**
School of Nursing
B.S., California State University, Los Angeles; M.S., California State University, Long Beach; Ph.D., Wright Institute of Los Angeles.
- Khan, Mohammed B. (1984)** **Professor**
Information Systems
B.S., Bangladesh University of Engineering and Technology; M.E., Ph.D., Texas A&M University. Emeritus, 2008.
- Khatra, Balwant S. (1987)** **Professor**
Biological Sciences
B.V. Sc., Veterinary College, Hissar, India; B.S., Punjab University, India; M.S., Punjab University, India; Ph.D., University of Leeds, England.
- Khoiny, Farideh (1990)** **Associate Professor**
School of Nursing
B.S., Boston University; M.P.A., California State University, Long Beach; M.N., University of California, Los Angeles; Ph.D., University of Southern California. Emerita, 2008.
- Kho, I-Hung (2006)** **Assistant Professor**
Electrical Engineering
B.S., M.S., California State University, Long Beach; Ph.D., University of California, Irvine.
- Kiang, Melody (1999)** **Professor**
Information Systems
B.B.A., National Chengchi University, Taiwan; M.S., University of Wisconsin at Madison; Ph.D., The University of Texas at Austin.
- Kim, Barbara W. (2002)** **Associate Professor**
Asian and Asian American Studies
B.A., Pomona College; M.A., Ph.D., University of Michigan, Ann Arbor.
- Kim, Dong-Eun (2009)** **Assistant Professor**
Family and Consumer Sciences
B.A., Ewha Womans University, Korea; M.A., Drexel University; Ph.D., University of Minnesota.
- Kim, Eun Heui (2001)** **Professor**
Mathematics and Statistics
B.S., Chung-Ang University; M.A., Indiana University at Bloomington; Ph.D., University of Connecticut.
- Kim, Jin-Lee (2009)** **Assistant Professor**
Civil Engineering and Construction Engineering Management
B.S., Chungbuk National University, Korea; M.E., Ph.D., University of Florida, Gainesville.
- Kim, Namhee (2011)** **Assistant Professor**
Communicative Disorders
B.A., M.A., Yonsei University, Korea; Ph.D., University of Texas, Austin.
- Kim, Simon S. (2000)** **Professor**
Advanced Studies in Education and Counseling
B.A., Westminster College, Fulton, Missouri; M.S., University of Kentucky, Lexington; Ph.D., University of Southern California.
- Kim, Sung Eun (2005)** **Associate Professor**
Mathematics and Statistics
B.A., Inha University, Korea; M.S., Western Illinois University; Ph.D., University of California, Davis.
- Kim, Yong Hee (1998)** **Professor**
Mathematics and Statistics
B.S., University of Alaska; M.S., University of California, Irvine; Ph.D., University of California, Riverside.
- Kingsford, Laura (1980)** **Dean**
College of Natural Sciences and Mathematics
..... **Professor**
Biological Sciences
B.S., Boise State University; Ph.D., University of Utah.
- Kisiel, James F. (2003)** **Associate Professor**
Science Education
B.S., Case Western Reserve University, OH; M.S., University of California, Los Angeles; Ph.D., University of Southern California.
- Klaus, Jeffrey J. (1997)** **Associate Vice President**
..... **Dean of Students**
Division of Student Services
B.A., Boise State University, Idaho; M.P.A., California State University, Long Beach.
- Klein, Alexander M. (2009)** **Assistant Professor**
Philosophy
B.A., Wesleyan University; M.A., Ph.D., Indiana University; Ed.D., University of LaVerne.

- Klein, Wendy L. (2009)** **Assistant Professor**
Linguistics
B.A., Middlebury College; M.A., Stanford University; Ph.D., University of California, Los Angeles.
- Kleinfelder, Karen L. (1993)** **Professor**
Art
B.A., M.A., Ph.D., University of Michigan.
- Kleinpeter, Christine B. (1999)** **Associate Professor**
School of Social Work
B.A., University of California, Irvine; M.S.W., University of Southern California; Psy.D., Pepperdine University.
- Kleinpeter, John (2009)** **Assistant Professor**
Design
B.A., Louisiana Tech University; M.F.A., California State University, Fullerton.
- Klig, Lisa S. (1990)** **Professor**
Biological Sciences
B.A., University of Massachusetts, Amherst; M.S., Oberlin College; Ph.D., Albert Einstein College of Medicine.
- Klink, Eileen S. (1990)** **Professor**
English
B.A., University of California, Los Angeles; M.A., California State University, Long Beach; Ph.D., University of Southern California.
- Knudson, Ruth E. (1995)** **Professor**
Teacher Education
B.A., Bryn Mawr College; M.S., University of Wisconsin; Ph.D., University of California, Riverside. Emerita, 2008.
- Ko, Yu-Fu (2009)** **Assistant Professor**
Civil Engineering and Construction Engineering Management
B.S., National Taipei University of Technology, Taiwan; M.S., Ph.D., University of California, Los Angeles.
- Kochan, Roman V. (1969)** **Dean**
Library Services
..... **Librarian**
B.A., M.A., University of Manitoba; M.L.S., University of British Columbia.
- Koob, Jeffrey J. (2001)** **Associate Professor**
School of Social Work
B.S., University of Wisconsin, Oshkosh; M.S., University of Wisconsin, Milwaukee; Ph.D., Marquette University.
- Korogodsky, Danila Z. (1996)** **Associate Professor**
Theatre Arts
M.F.A., Leningrad Institute of Theatre.
- Korosteleva, Olga (2002)** **Associate Professor**
Mathematics and Statistics
B.S., Wayne State University, Detroit; M.S., Ph.D., Purdue University.
- Korostoff, Marilyn (1996)** **Professor**
Advanced Studies in Education and Counseling
B.A., University of California, Los Angeles; M.A., California State University, Long Beach; M.S., Pepperdine University, Irvine; Ed.D., University of California, Los Angeles. Emerita, 2010.
- Koval, James E. (1985)** **Professor**
Family and Consumer Sciences
B.S., Creighton University, Nebraska; M.S., Texas Technological University; Ph.D., Oregon State University.
- Krause, Marina C. (1968)** **Professor**
Teacher Education
B.A., University of Arizona; M.A., Ed.D., Arizona State University.
- Kress, Jeffrey L. (2001)** **Associate Professor**
Kinesiology
B.S., M.S., California State University, Fullerton; Ph.D., University of Kansas.
- Kreysa, Peter G. (2002)** **Associate Professor**
Family and Consumer Sciences
B.S., M.A., University of Maryland, College Park; Ph.D., University of Southern California.
- Krishnan, Sudha (2007)** **Professor**
Accountancy
B.Com., M.Comm., Bombay University, India; Ph.D., University of Southern California.
- Krumpak, Thomas J. (1986)** **Professor**
Art
B.F.A., San Francisco Art Institute; M.F.A., California State University, Long Beach.
- Kukalis, Salah M. (1986)** **Professor**
Management and Human Resources Management
B.S., M.B.A., The American University, Cairo; Ph.D., University of Arizona.
- Kumar, Rajendra (1983)** **Professor**
Electrical Engineering
B. Tech., M. Tech., Indian Institute of Technology; Ph.D., University of Newcastle, Australia.
- Kumpf, Lorraine E. (1987)** **Professor**
Linguistics
B.A., Syracuse University; M.A., University of Colorado, Boulder; Ph.D., University of California, Los Angeles. Emerita, 2011.
- Kumrow, David E. (2000)** **Associate Professor**
School of Nursing
B.Sc., Gannon University, Erie, Pennsylvania; B.S.N., Niagara University, Niagara Falls, New York; M.S.N., State University of New York, Buffalo; Ed.D., University of Southern California.
- Kuo, Margaret (2007)** **Assistant Professor**
History
B.A., M.A., Ph.D., University of California, Los Angeles; J.D., Georgetown University, Washington, D.C.
- Kvapil, James A. (1988)** **Interim Dean**
College of the Arts
..... **Professor**
Art
B.A., University of the Pacific; M.A., M.F.A., San Jose State University.
- Kwon, Chuhee (1999)** **Professor**
Physics and Astronomy
B.S., Seoul National University, Korea; M.S., Pohang Institute of Science and Technology, Korea; Ph.D., University of Maryland at College Park.
- Lacey, John M. (1989)** **Professor**
Accountancy
B.S., M.B.A., University of Southern California; Ph.D., University of California, Los Angeles.
- Lacey, Kathleen A. (2000)** **Professor**
College of Business Administration
B.A., San Diego State University; M.B.A., J.D., University of Southern California.
- Lam, Brian T. (2003)** **Associate Professor**
School of Social Work
B.A., California State University, Fullerton; M.S.W., California State University, Long Beach; Ph.D., Columbia University, New York.
- Lam, Shui F. (1985)** **Professor**
Computer Engineering and Computer Science
B.S., Chinese University of Hong Kong; M.S., Ph.D., Pennsylvania State University.
- Landon, Lora R. (2005)** **Assistant Professor**
Geological Sciences
B.A., Pomona College, Claremont, CA; Ph.D., University of Minnesota, Twin Cities.
- Lane, Brian A. (2002)** **Professor**
Film and Electronic Arts
B.A., University of California, Los Angeles; M.F.A., University of California, Los Angeles; J.D., University of Southern California.
- Laris, Paul S. (2002)** **Professor**
Geography
B.S., University of California, Los Angeles; M.S., San Jose State University; M.A., Ph.D., Clark University.
- Larson, Daniel O. (1988)** **Professor**
Anthropology
B.A., M.A., University of Nevada, Las Vegas; Ph.D., University of California, Santa Barbara.
- Lascano, Marcy (2006)** **Assistant Professor**
Philosophy
B.A., University of Washington; M.A., Ph.D., University of Massachusetts, Amherst
- Lau, Beth (1990)** **Professor**
English
B.A., M.A., Ph.D., University of Illinois, Urbana. Emerita, 2010.
- Lavay, Barry (1989)** **Associate Professor**
Kinesiology
B.S., Plymouth State College; M.S., Eastern Illinois University; Ph.D., University of New Mexico.
- Lax, Melvin (1977)** **Professor**
Mathematics and Statistics
B.S., M.S., Ph.D., Rensselaer Polytechnic Institute.
- Lazarowitz, Arlene (2004)** **Professor**
History
B.A., M.A., California State University, Long Beach; Ph.D., University of California, Los Angeles.
- Le, Son V. (1986)** **Professor**
Finance
B.S., M.S., Ph.D., Iowa State University.
- LeBank, Ezra (2011)** **Assistant Professor**
Theatre Arts
B.A., State University of New York; M.F.A., Smith College, Massachusetts.
- Lee, Cheryl D. (2000)** **Professor**
School of Social Work
B.A., George Washington University; M.S.W., Arizona State University; Ph.D., Arizona State University.
- Lee, Chia-Hsiu Sophie (1998)** **Professor**
Information Systems
B.S., National Chiao-Tung University, Taiwan; M.B.A., Ph.D., University of Texas, Austin.
- Lee, Christopher T. (2000)** **Professor**
Geography
B.S., Northern Arizona State University, Flagstaff; M.A., California State University, Fullerton; Ph.D., University of Arizona.

- Lee, Chung-min (2007)** **Assistant Professor**
 Mathematics and Statistics
 B.S., M.S., National Taiwan University; Ph.D., Indiana University.
- Lee, Diane W. (1999)** **Professor**
 Psychology
 B.A., California State University, Long Beach; Ph.D., University of California, Berkeley.
- Lee, Jacqueline D. (1989)** **Associate Professor**
 Family and Consumer Sciences
 B.A., San Diego State University; M.S., California State University Los Angeles; Ph.D., University of California, Los Angeles.
- Lee-Fruman, Kay K. (1999)** **Professor**
 Biological Sciences
 B.A., University of California, Berkeley; Ph.D., Harvard University.
- Leiter, William M. (1966)** **Professor**
 Political Science
 B.A., University of Massachusetts; M.A., Ph.D., University of Chicago. Emeritus, 2010.
- LeMaster, Barbara C. (1997)** **Professor**
 Anthropology/Linguistics
 B.A., University of California, Berkeley; M.A., Ph.D., University of California, Los Angeles.
- Leung, Alfred F. (1989)** **Professor**
 Physics and Astronomy
 B.A., M.S., Ph.D., University of California, Los Angeles. Emeritus, 2010.
- Levine, Arthur M. (1974)** **Professor**
 College of Business Administration
 B.A., Princeton University; L.L.B., Yale University. Emeritus, 2007.
- Lewis, Trinidad J. (2003)** **Associate Professor**
 Teacher Education
 B.A., University of California, Los Angeles; M.Ed., Bridgewater State College, MA; Ed.D., Boston University.
- Li, Guotong (2007)** **Assistant Professor**
 History
 B.A., Peking University, China; M.A., National University of Singapore; Ph.D., University of California, Davis.
- Li, Lijuan (1998)** **Professor**
 Chemistry and Biochemistry
 B.Sc., Jilin University, P.R. China; Ms.Sc./Ph.D., Jilin University, P.R. China; Ph.D., McMaster University, Ontario, Canada.
- Li, Xin (2001)** **Professor**
 Teacher Education
 B.A., Southwest China Teacher's University; M.A., Ph.D., University of Toronto.
- Li, Xuhui (2007)** **Assistant Professor**
 Mathematics and Statistics
 B.S., M.S., East China Normal University; Ph.D., University of Texas, Austin.
- Liang, Xiaoping (2000)** **Associate Professor**
 Linguistics
 B.A., Nanjing University, Nanjing, China; M.A., Exeter University, Exeter, United Kingdom; Ph.D., University of British Columbia, Vancouver, Canada.
- Lichty, Margaret E. (2000)** **Associate Professor**
 Family and Consumer Sciences
 B.S., M.S., University of Nebraska, Lincoln; Ph.D., Virginia Tech.
- Lin, Ping (2006)** **Associate Professor**
 Accountancy
 B.S., Beijing Institute of Technology; M.S., Central University of Banking and Finance; Ph.D., University of California, Irvine.
- Lindsay, Cecile (2004)** **Vice Provost and Dean of Graduate Studies**
 Academic Affairs
 **Professor**
 Romance, German, Russian Languages and Literatures
 B.A., California State University, Fullerton; M.A., Ph.D., University of California, Irvine.
- Lipo, Carl P. (2002)** **Professor**
 Anthropology
 B.S., M.A., University of Wisconsin, Madison; Ph.D., University of Washington, Seattle.
- Liu, Dar-Biau (1986)** **Professor**
 Computer Engineering and Computer Science
 B.S., Taiwan Normal University; M.A., Wayne State University; Ph.D., University of Wisconsin, Madison. Emeritus, 2009.
- Liu, Ping (1999)** **Associate Professor**
 Teacher Education
 B.A., Qufu Teachers University, China; M.A., University of International Relations, China; Ph.D., Texas A&M University.
- Liu, Xuemei (2003)** **Associate Professor**
 Economics
 B.A., Central University of Finance and Banking, Beijing; M.A., California State University, Long Beach; Ph.D., University of California, Berkeley.
- Liu, Ying (2007)** **Assistant Professor**
 Information Systems
 B.S., XiAn JiaoTong University, China; M.S., South China University of Technology; M.S., University of Southern California; Ph.D., University of Arizona.
- Livingston, Brian T. (2008)** **Professor**
 Biological Sciences
 B.S., University of California, Santa Barbara; Ph.D., University of California, Berkeley.
- Lo, Chih-Cheng (2009)** **Assistant Professor**
 Chemical Engineering
 B.S., National Chung Hsing University, Taiwan; M.E., Ph.D., Texas A&M University.
- Locks, Angela M. (2008)** **Assistant Professor**
 Advanced Studies in Education and Counseling
 B.A., M.A., Ph.D., University of Michigan, Ann Arbor.
- Loewe, Ronald (2006)** **Professor**
 Anthropology
 B.A., Earlham College; M.A., University of Illinois, Chicago; Ph.D., University of Chicago.
- Lopez, Dennis (2011)** **Assistant Professor**
 English
 B.A., California State University, Fullerton; M.A., California State University, Northridge; Ph.D., University of California, Irvine.
- Lopez, Marco A. (1987)** **Professor**
 Chemistry and Biochemistry
 B.S., California State University, Los Angeles; M.S., Ph.D., University of California, San Diego.
- Lopez, Rebecca A. (1990)** **Professor**
 School of Social Work
 B.A., University of California, Santa Cruz; M.S.W., Ph.D., Brandeis University.
- Lopez-Zetina, Javier (2000)** **Associate Professor**
 Health Science
 B.A., University of Veracruz, Veracruz, Mexico; M.A., University of Houston; Ph.D., University of Texas, Houston.
- Lord, Carol (1999)** **Professor**
 Teacher Education / Linguistics
 B.A., M.A., Stanford University; Ph.D., University of California, Los Angeles. Emerita, 2010.
- Losquadro, Michael (2006) Associate Vice President**
 Development and Campaign Operations
 B.A., California State University, Fullerton.
- Lowe, Christopher G. (1998)** **Professor**
 Biological Sciences
 B.A., Barrington College; M.S., California State University, Long Beach; Ph.D., University of Hawaii, Manoa.
- Lowentrou, Peter M. (1984)** **Professor**
 Religious Studies
 B.A., University of California, Riverside; Ph.D., University of Southern California.
- Lu, Bei (2005)** **Associate Professor**
 Mechanical and Aerospace Engineering
 B.S., M.S., Shanghai Jiatong University, China; Ph.D., North Carolina State University.
- Luévano, Susan C. (1995)** **Librarian**
 University Library
 B.A., California State College, Stanislaus; M.L.S., University of Oregon.
- Luhr, Eileen (2006)** **Assistant Professor**
 History
 B.A., M.A., Williams College; Ph.D., University of California, Irvine.
- Ma, Yulong (1997)** **Associate Professor**
 Finance
 B.S., Xi'an University of Electronic Science and Technology, China; M.B.A., University of Hawaii; Ph.D., University of Houston.
- MacDonald, Kevin B. (1985)** **Professor**
 Psychology
 B.A., University of Wisconsin, Madison; M.S., Ph.D., University of Connecticut. Emeritus, 2010.
- MacDonald, Susan Peck (1999)** **Associate Professor**
 English
 B.A., University of Michigan, Ann Arbor; M.A., Ph.D., University of Wisconsin, Madison.
- Macias, Elena (1997)** **Assistant Vice**
 Governmental and Community Relations
 Administration and Finance
 **Professor**
 School of Social Work
 B.A., Sacramento State College; M.S.W., Ohio State University; Ph.D., Brandeis University.
- Madding, Carolyn Conway (1989)** **Professor**
 Communication Disorders
 B.S., Ohio State University; M.A., California State University, Fullerton; Ph.D., Claremont Graduate University.
- Maeda, Eriko (2006)** **Assistant Professor**
 Communication Studies
 B.A., Konan University, Japan; M.S., Portland State University; Ph.D., Pennsylvania State University
- Magaddino, Joseph P. (1973)** **Professor**
 Economics
 B.A., Canisius College, New York; M.A., University of Connecticut; Ph.D., Virginia Polytechnic Institute and State University. Emeritus, 2010.
- Mahapatra, Sitikantha (1983)** **Professor**
 Accountancy
 B.S., Regional Engineering College, India; M.B.A., Indian Institute of Management, India; Ph.D., Case Western Reserve University. Emeritus, 2009.

Mahoney, Lynn (2008) Associate Vice President Academic Affairs, Undergraduate Studies	Martinez, Larry F. (1989) Professor Political Science B.A., M.A., Ph.D., University of California, Santa Barbara.
..... Associate Professor	Mason, Andrew Z. (1989) Associate Dean College of Natural Sciences and Mathematics
History B.A., Stanford University; Ph.D., Rutgers University. Professor
Malizia, Thomas W. (2005) Director Judicial Affairs B.A., California State University, Long Beach; J.D., Western State University, College of Law.	Biological Sciences B.S., Ph.D., University of Wales.
Malcomber, Simon (2006) Assistant Professor Biological Sciences B.S., University of Reading, United Kingdom; Ph.D., Washington University, Missouri.	Masunaga, Hiromi (2002) Professor Advanced Studies in Education and Counseling B.A., Saitama University, Japan; M.S., Ph.D., University of Southern California.
Malm, Aili (2006) Assistant Professor Criminal Justice B.A., M.A., Ph.D., Simon Fraser University, Canada.	Maxfield, Lisa M. (1995) Professor Psychology B.S., M.S., Ph.D., Syracuse University.
Malotte, C. Kevin (1999) Professor Health Science B.A., Chapman College; M.A., Claremont Graduate School; Dr.P.H., University of California, Los Angeles.	Mayfield, Tracey L. (1999) Associate Dean University Library
Mangir, Tulin E. (1994) Professor Electrical Engineering M.S., University of Southern California; B.S., Ph.D., University of California, Los Angeles. Librarian University Library B.A., M.L.I.S., University of California, Los Angeles.
Manke, Beth (2002) Professor Human Development B.S., University of Arizona; M.S., Ph.D., Pennsylvania State University .	McAbee, Douglas (1997) Associate Professor Chemistry and Biochemistry B.A., Point Loma College; Ph.D., University of Texas Southwestern Medical School.
Manley, Steven L. (1988) Professor Biological Sciences B.A., California State University, Northridge; Ph.D., University of California, Los Angeles.	McClain, Brian (2005) Assistant Professor Chemistry and Biochemistry B.S., California State University, Chico; Ph.D., Purdue University.
Maples, Tracy B. (1992) Professor Computer Engineering and Computer Science B.S. and M.S., University of California, Riverside; Ph.D., University of California, Irvine.	McCroskey, Lynda L. (1999) Associate Professor Communication Studies B.A., West Virginia University; M.A., Arizona State University; Ph.D., University of Oklahoma.
Maram, Linda N. (1997) Professor Asian and Asian American Studies B.A., M.A., California State University, Fullerton; M.A., Ph.D., University of California, Los Angeles.	McDaniel, Dana M. (2011) Assistant Professor Management and Human Resources Management B.S., M.S., University of Illinois, Champaign; Ph.D., University of California, Irvine.
Marayong, Panadda (2007) Assistant Professor Mechanical and Aerospace Engineering B.S., Florida Institute of Technology; M.S., Ph.D., Johns Hopkins University.	McGuire, Anthony W. (2011) Assistant Professor School of Nursing B.S.N., California State University, Long Beach; M.S.N., Ph.D., University of California, Los Angeles.
Marcus, Richard (2006) Assistant Professor International Studies B.A., New York University; M.A., University of California, Los Angeles; Ph.D., University of Florida.	McKay, Valerie C. (1988) Professor Communication Studies B.A., Humboldt State University; M.A., West Virginia University; Ph.D., University of Oklahoma.
Marikos, Rhonda (1976) Director Isabel Patterson Child Development Center B.A., California State University, Long Beach.	McMicken, Betty (2006) Assistant Professor Communicative Disorders B.A., M.A., Ph.D., University of Southern California.
Margulies, William G. (1969) Professor Mathematics and Statistics B.S., State University College, Long Island; M.A., Ph.D., Brandeis University.	McPherson, Mary Beth (2001) Associate Professor Communication Studies B.A., M.A., California State University, Long Beach; Ph.D., Ohio University.
Marinez, Eric R. (2003) Associate Professor Chemistry and Biochemistry B.S., M.S., California State University, Los Angeles; Ph.D., University of Southern California.	Mendez, Sergio (2009) Assistant Professor Chemical Engineering B.S., University of California, Berkeley; Ph.D., University of New Mexico.
Marsh, Anthony (1989) Professor Art B.F.A., California State University, Long Beach; M.F.A., Alfred University.	Medoff, Marshall H. (1979) Professor Economics B.S., Illinois Institute of Technology; M.S., University of Illinois, Champaign; Ph.D., University of California, Berkeley, Emeritus, 2011.
Marshall, Suzanne G. (1999) Associate Professor Family and Consumer Sciences B.S.H.E., University of Georgia; M.S., Oklahoma State University; M.A., Ph.D., University of California, Los Angeles.	Medora, Nilufer P. (1989) Professor Family and Consumer Sciences B.A., St. Xavier's College, India; M.S., Maharaja Sayajirao University, India; M.S., University of Arkansas; Ph.D., University of Nebraska.
Martin, Claire E. (1988) Professor Romance, German, Russian Languages and Literatures B.A., M.A., University of Massachusetts, Amherst; Ph.D., Yale University.	Mena, Robert A. (1988) Professor Mathematics and Statistics B.S., M.S., Ph.D., University of Houston.
Martin, Edward (2005) Associate Professor Public Policy and Administration B.A., Loyola Marymount University; M.A., University of San Francisco; Ph.D., Arizona State University.	Merryfield, Kent G. (1988) Professor Mathematics and Statistics B.A., Rice University; M.S., Ph.D., University of Chicago.
Martin, Ingrid M. (2001) Associate Professor Marketing B.S., University of New Mexico; M.S., Michigan State University; Ph.D., University of Southern California.	Meyer-Adams, Nancy (2005) Associate Professor School of Social Work B.S.W., M.S.W., Florida International University, Miami; Ph.D., University of Tennessee.
Martin, Nancy (2007) Assistant Professor Sociology B.S., Cornell University; M.A., University of Nevada, Las Vegas; Ph.D., University of Arizona.	Mezyk, Stephen P. (2001) Professor Chemistry and Biochemistry B.Sc., Ph.D., University of Melbourne.
Martin, Wade E. (2002) Professor Economics B.S., Southern Oregon State College; Ph.D., University of New Mexico, Albuquerque.	Michelon, Mark (2006) Associate Professor Art B.A., M.A., California State University, Long Beach.
Martinez, Corinne (2006) Associate Professor Teacher Education B.A., M.A., Ph.D., University of California, Los Angeles.	Miles, Christopher N. (2003) Professor Art B.A., University of California, Santa Barbara; M.F.A., University of Southern California.

- Millar, Kenneth I. (2010)** **Dean**
College of Health and Human Services
- **Professor**
School of Social Work
B.A., Sir George Williams University, Montreal; M.S.W., University of British Columbia, Vancouver; Ph.D., University of Texas, Arlington..
- Miller, Julia I. (1988)** **Professor**
Art
B.A., Barnard College; M.A., University of Virginia; Ph.D., Columbia University. Emerita, 2010.
- Miller, Kathleen A. (2001)** **Assistant Professor**
Mathematics and Statistics
B.A., Boston College; M.Ed., Towson State University; Ph.D., University of Maryland, College Park.
- Mills, Jacqueline W. (2009)** **Assistant Professor**
Geography
B.A., M.A., University of Memphis; Ph.D., Louisiana State University.
- Min, Sungwook (2001)** **Associate Professor**
Marketing
B.B.A., Korea University; M.B.A., Korea University; Ph.D., Purdue University.
- Ming, Feng-ying (2002)** **Associate Professor**
Asian and Asian American Studies
B.A., Tamkang University, Taiwan; M.A., California State University, Los Angeles; M.A., Ph.D., University of California, Los Angeles.
- Mintz, Aubry (2007)** **Associate Professor**
Art
Technical Degree, Sheridan College Institute of Technology, Ontario, Canada.
- Mitchell, Deborah, H. (1994)** **Professor**
Music - Bob Cole Conservatory of Music
B.M. Ed., M.M. Ed., Hartt College of Music; D.M.A., University of Southern California.
- Mitchell-Smith, Ilan (2009)** **Assistant Professor**
English
B.A., University of California, Davis; M.A., Fordham University; Ph.D., Texas A&M University.
- Miyoshi, Kimiko (2005)** **Associate Professor**
Art
B.A., California State University, Long Beach; MFA, University of New Mexico.
- Mizelle, D. Brett (2001)** **Professor**
History
B.A., Georgetown University; M.A., Ph.D., University of Minnesota.
- Mohamed, Olfat S. (1998)** **Professor**
Physical Therapy
B.S., M.S., Cairo University; Ph.D., University of Southern California.
- Mohamed-Nour, Hassan I. (1988)** **Professor**
Electrical Engineering
B.S., M.S., Assiut University, Egypt; Ph.D., University of Southern California.
- Mohr, William (2006)** **Associate Professor**
English
B.A., University of California, Los Angeles; M.A., Ph.D., University of California, San Diego.
- Moisio, Risto (2007)** **Assistant Professor**
Marketing
B.A., Satakunta Polytechnic, Finland; M.S., University of Southern Denmark; Ph.D., University of Nebraska.
- Moldor, Christian E. (2011)** **Professor Professor**
School of Social Work
B.A., University of Dallas, Irving; M.S.W., Loyola University, Chicago; Ph.D., University of Illinois, Chicago.
- Moloi, Alosi J.M. (1994)** **Professor**
Africana Studies / English
B.A., M.A., University of South Africa; Ph.D., University of North, Republic of South Africa. Emeritus, 2011.
- Monaco, Kristen (2001)** **Professor**
Economics
B.A., Michigan State University; M.A., Ph.D., University of Wisconsin, Milwaukee.
- Monge, Alvaro E. (1999)** **Professor**
Computer Engineering and Computer Science
B.S., University of California, Riverside; M.S., Ph.D., University of California, San Diego.
- Moon, Hojin (2007)** **Associate Professor**
Mathematics and Statistics
B.S., M.S., HanYang University, Korea; M.S., Florida Institute of Technology; Ph.D., State University of New York, Stony Brook.
- Moore, William S. (2000)** **Associate Professor**
Graduate Center for Public Policy and Administration
B.A., Washington and Jefferson College; M.P.A., University of Pittsburgh; M.A., Ph.D., Syracuse University.
- Moreno, Jose F. (2004)** **Associate Professor**
Chicano and Latino Studies
B.A., University of California, Irvine; M.Ed., Ed.D., Harvard University.
- Moreno-Alcaraz, Rosa O. (1998)**..... **Psychologist**
Counseling and Psychological Services
B.A., Loyola Marymount University; M.A., Ph.D., California School of Professional Psychology.
- Morley, Harvey N. (1989)** **Professor**
Criminal Justice
B.S., California State University, Northridge; M.S., Austin Peay State University; M.P.H., California State University, Northridge; Ed.D., University of Alabama.
- Mosher, Jerry (2006)** **Associate Professor**
Film and Electronic Arts
B.A., M.A., Ph.D., University of California, Los Angeles.
- Moshirvaziri, Khosrow (1990)** **Professor**
Information Systems
B.S., Arya Mehr Technical University, Iran; M.S., Stanford University; Ph.D., University of California, Los Angeles.
- Müller-Stosch, Johannes (2007)** **Assistant Professor**
Music - Bob Cole Conservatory of Music
B.M., Columbus State University; M.M., University of Cincinnati; DMA, University of Rochester.
- Mukherjee, Sayantani (2007)** **Assistant Professor**
Marketing
B.S., M.A., University of Calcutta, India; Ph.D., University of California, Irvine.
- Müller, Markus E. (2001)**..... **Associate Professor**
Romance, German, Russian Languages and Literatures
B.A., University of Tübingen; M.A., University of Kansas; Ph.D., University of California, Los Angeles.
- Mulligan, William A. (1986)** **Professor**
Journalism
B.S., Brescia College; M.S., T.S.C.T., Murray State University; Ph.D., University of Missouri, Columbia. Emeritus, 2011.
- Murdock, Caitlin E. (2003)**..... **Associate Professor**
History
B.A., Swarthmore College, PA; M.A., Emory University, Atlanta; Ph.D., Stanford University.
- Murgolo, Frank D. (2003)** **Professor**
Computer Engineering and Computer Science
B.A., California State University, Fullerton; M.S., Ph.D., University of California, Irvine.
- Murray, John (2007)** **Professor**
Advanced Studies in Education and Counseling
B.A., State University of New York, Brockport; M.A., Arizona State University; Ed.S., Wright State University; Ph.D., Ohio State University.
- Murray, William L. (2001)** **Associate Professor**
Mathematics and Statistics
B.S., Georgetown University; Ph.D., University of California, Berkeley.
- Nagai, Chikako (2007)** **Assistant Professor**
School of Social Work
B.A., Seattle Pacific University; M.S.W., University of Washington; Ph.D., Smith College, School for Social Work.
- Nakai, Karen Kawai (1999)**..... **Executive Assistant to the President**
Office of the President
- **Professor**
Advanced Studies in Education and Counseling
B.A., M.S., University of California, Los Angeles; Ed.D., Pepperdine University.
- Nakajima, Mikiko (2009)** **Assistant Professor**
Kinesiology
B.S., International Christian University, Tokyo; M.S., California State University, Long Beach; Ed.D., University of Southern California.
- Nakayama, Kensaku (1987)** **Professor**
Chemistry and Biochemistry
B.S., Ph.D., University of California, Los Angeles.
- Narayanawami, Vasanthy (2008)** **Assistant Professor**
Chemistry and Biochemistry
B.S., University of Madras, India; M.S., University of Mysore, India; Ph.D., Indian Institute of Technology.
- Nasr, Elhami B. (2002)**..... **Professor**
Civil Engineering and Construction Engineering Management
B.S., M.S., California State University, Long Beach, Ph.D., University of Colorado.
- Nayak-Guercio, Aparna (2006)** **Assistant Professor**
Romance, German, Russian Languages and Literatures
B.A., University of Bombay, India; M.A., Ph.D., University of Pittsburgh.
- Neff, Hector (2002)** **Professor**
Anthropology
B.A., Stanford University; M.A., Ph.D., University of California, Santa Barbara.
- Nelms, Barbara J. (1974)** **Professor**
School of Nursing
B.S.N., University of Iowa; M.N., Ph.D., University of California, Los Angeles.
B.S., Rutgers University; M.S., Ph.D., University of Miami.
- Newberger, Florence A. (2001)** **Associate Professor**
Mathematics and Statistics
B.A., B.S., University of California, Santa Cruz; Ph.D., University of Maryland College Park.
- Ng, Chen Feng (2008)** **Assistant Professor**
Economics
B.A., Princeton University, M.A., Ph.D., University of California, Irvine.

- Nguyen, Hannah-Hanh (2006)** **Assistant Professor**
Psychology
B.A., California State University, Long Beach; M.A., Ph.D., Michigan State University.
- Nguyen, Hieu (2007)** **Assistant Professor**
Marketing
B.A., Hanoi Foreign Studies University, Vietnam; M.A., Texas Christian University; Ph.D., University of Texas at Arlington.
- Nguyen, Huong Tran (2005)** **Associate Professor**
Teacher Education
B.A., San Diego State University; M.A., Point Loma college; Ph.D., University of California, Riverside.
- Nguyen, Richard P. (1984)** **Professor**
Civil Engineering and Construction Engineering Management
B.S., National Institute of Technology, Taiwan; M.S., Ph.D., University of Missouri-Rolla.
- Nguyen, T. Hung (2006)** **Associate Professor**
Civil Engineering and Construction Engineering Management
B.S., M.S., Concordia University, Canada; Ph.D., Pennsylvania State University.
- Nguyen, Thang N. (1999)** **Associate Professor**
Information Systems
B.S., Lavel University, Quebec; M.S., Georgia Institute of Technology; Ph.D., George Mason University.
- Nguyen, Thinh V. (1986)** **Professor**
Computer Engineering and Computer Science
B.S., Ph.D., University of California, Irvine; M.S., University of Southern California. Emeritus, 2011.
- Nguyen, Thuc-Doan (2008)** **Assistant Professor**
Marketing
B.E., Ho Chi Minh University, M.B.A., Asian Institute of Technology, Thailand; Ph.D., University of Utah.
- Nicholls, Walter J. (2004)** **Assistant Professor**
Sociology
B.S., University of California, Santa Cruz; M.S., Ph.D., University of California, Los Angeles.
- Noble, Charles (1987)** **Professor**
Political Science
B.A., Cornell University; M.A., University of California, Los Angeles; Ph.D., University of California, Berkeley.
- Noguera, Norma A. (2001)** **Associate Professor**
Mathematics and Statistics
B.A., Universidad Nacional, Heredia; M.Ed., Ph.D., Ohio University.
- Nolan, Lawrence P. (1997)** **Professor**
Philosophy
B.A., M.A., Ph.D., University of California, Irvine.
- Noquez, Alice E. (2009)** **Assistant Professor**
Nursing
B.S., University of Alberta, Edmonton, Alberta; M.S., M.S.N., Ph.D., University of San Diego.
- Nou, Leakhena (2005)** **Assistant Professor**
Sociology
B.A., California State University, Fullerton; M.A., University of Hawaii at Manoa; M.S.W., Columbia University, NYPh.D., University of Hawaii at Manoa.
- O'Connor, Daniel (1999)** **Associate Professor**
Political Science/Liberal Studies
B.A., University of California, Berkeley; M.A., Ph.D., University of California, Los Angeles.
- O'Donnell, Julie A. (1994)** **Professor**
School of Social Work
B.A., University of Wyoming; M.A., Eastern Washington College; Ph.D., University of Washington.
- O'Gorman, Hugh (2002)** **Associate Professor**
Theatre Arts
B.A., Cornell University; M.F.A., University of Washington, Seattle.
- Ojede, Andrew (2009)** **Assistant Professor**
Economics
B.A., Makerere University, Kampala, Uganda; M.A., University of North Texas; Ph.D., Kansas State University.
- O'Lawrence, Henry (2001)** **Associate Professor**
Health Care Administration
B.S., Winston-Salem State University; M.S., University of North Carolina at Greensboro; Ph.D., Pennsylvania State University.
- Onderdonk, Nathan (2007)** **Assistant Professor**
Geological Sciences
B.S., Principia College; M.S., Ph.D., University of California, Santa Barbara.
- Ortiz, Anna M. (2003)** **Professor**
Advanced Studies in Education and Counseling
B.S., University of California, Davis; M.A. The Ohio State University, Columbus; Ph.D., University of California, Los Angeles.
- O'Rourke, Patrick (2008)** **Director**
Veterans University and Veterans Affairs Services
B.A., Valparaiso University; M.A., Naval Post-graduate School, Monterey.
- Ostergren, Jennifer A. (2009)** **Assistant Professor**
Communicative Disorders
B.S., M.S., California State University, Long Beach; Ph.D., Claremont Graduate University.
- Ostrowski, John W. (1988)** **Professor**
Public Policy and Administration
B.A., Youngstown State University; M.A., Ph.D., Kent State University.
- Ottolia, Dorothy J. (2001)** **Professor**
Design
B.F.A., California State University, Long Beach; M.Arch., California Polytechnic State University, Pomona.
- Palacios, Rita M. (2009)** **Assistant Professor**
Romance, German, and Russian Languages and Literatures
B.A., University of Waterloo, Ontario, Canada; M.A., Ph.D., University of Toronto, Ontario, Canada.
- Pandya, Jessica Z. (2005)** **Associate Professor**
Teacher Education/Liberal Studies
B.A., University of Chicago; M.A., Ph.D., University of California, Berkeley.
- Pandya, Sophia (2006)** **Assistant Professor**
Religious Studies
B.A., University of California, Berkeley; Ph.D., University of California, Santa Barbara.
- Papp, Zoltan (2003)** **Professor**
Physics and Astronomy
M.S., Ph.D., University of Debrecen, Hungary.
- Paquette, Catha (2003)** **Associate Professor**
Art
B.A., Wheaton College, MA; M.A., Ph.D., University of California, Santa Barbara.
- Para, Donald J. (1988)** **Provost and Senior Vice President**
Academic Affairs
- **Professor**
Music - Bob Cole Conservatory of Music
B.M., M.M., Western Michigan University; Ph.D., Michigan State University.
- Parentela, Emelinda M. (1996)** **Professor**
Civil Engineering and Construction Engineering Management
B.S., Luzonian University Foundation, Philippines; M.S., Ph.D., University of Nevada, Las Vegas.
- Park, Sunook (2006)** **Associate Professor**
Art
B.A., M.F.A., Art Center College of Design.
- Parker-Jeannette, Cyrus (2006)** **Interim Associate Dean**
College of the Arts
- **Professor**
Dance
B.A., California State University, Fullerton; M.F.A., University of California, Irvine.
- Paskin, Daniel (2008)** **Assistant Professor**
Journalism
B.A., Helio Alonso College, Rio de Janeiro, Brazil; M.A., Ph.D., University of Miami.
- Pasztor, Eileen Mayers (1999)** **Professor**
School of Social Work
B.A., Stanford University; M.S.W., Ohio State University; D.S.W., Catholic University of America, Washington, D.C.
- Pattnaik, Jyotsna (2000)** **Professor**
Teacher Education
M.Ed., Dr. Parsuram Institute of Advanced Studies in Education, Orissa, India; M. Phil., Jamia Millia Islamia University, New Delhi, India; Ph.D., Indiana University of Pennsylvania.
- Pavri, Shireen C. (1999)** **Associate Dean**
College of Education
- **Professor**
Advanced Studies in Education and Counseling
B.A., St. Xavier's College, Bombay, India; B.Ed., M.Ed., SNDT Women's University, Bombay, India; M.S., Ed.S., Miami University, Ohio; Ph.D., University of Illinois at Urbana-Champaign.
- Pedersen, William (2002)** **Professor**
Psychology
B.A., Seattle University; M.A., Ph.D., University of Southern California.
- Perez, Eduardo L. (2007)** **Assistant Professor**
Design
B.Arch., California State Polytechnic University, Pomona; M.Arch., Southern California Institute of Architecture.
- Pérez, Manuel (2005)** **Director**
Career Development Center
B.A., San Jose State University; M.A., San Jose State University.
- Pernet, Bruno (2004)** **Associate Professor**
Biological Sciences
B.A., University of California, Santa Cruz; Ph.D., University of Washington, Seattle.
- Perrone, Dina M. (2010)** **Assistant Professor**
Criminal Justice
B.A., State University of New York; M.A., Ph.D., Rutgers University.
- Peterson, Michael R. (2011)** **Assistant Professor**
Physics and Astronomy
B.Sc., University of Utah, Salt Lake City; Ph.D., Pennsylvania State University, University Park.

- Petray, Clayre K. (1987)** **Professor**
Kinesiology
B.A., M.A., Ph.D., Arizona State University, Tempe. Emerita, 2010.
- Phengpis, Chanwit (2006)** **Associate Professor**
Finance
B.A., Chulalongkorn University, Thailand; M.A., San Francisco State University; Ph.D., University of Texas, Arlington.
- Phillipose, Elizabeth (2002)** **Associate Professor**
Women's, Gender, and Sexuality Studies
B.A., University of Victoria; M.A., York University; Ph.D., York University, Toronto.
- Piar, Carlos (1990)** **Professor**
Religious Studies
B.S., Biola College; M.Div., Th.M., Talbot Theological Seminary; Ph.D., University of Southern California.
- Pickett, Galen T. (1999)** **Professor**
Physics and Astronomy
B.S., Massachusetts Institute of Technology; Ph.D., University of Chicago.
- Piker, Ruth (2006)** **Assistant Professor**
Teacher Education
B.A., M.A., San Jose State University; Ph.D., University of Michigan.
- Platt, Susan (1997)** **Director**
Testing and Evaluation Services
B.A., Radford College; M.A., University of Southern California; Ph.D., University of California, Los Angeles.
- Plax, Timothy G. (1987)** **Professor**
Communication Studies
B.A., M.A., California State University, Long Beach; Ph.D., University of Southern California.
- Plecnik, Joseph M. (1985)** **Professor**
Civil Engineering and Construction Engineering Management
B.E., Youngstown State University; M.S., Ph.D., Ohio State University. Emeritus, 2008.
- Ponce de Leon, Charles L. (2009)** **Associate Professor**
History
B.A., University of California, Santa Barbara; Ph.D., Rutgers University.
- Portnoi, Laura (2007)** **Associate Professor**
Advanced Studies in Education and Counseling
B.A., University of Michigan, Ann Arbor; M.A., Indiana University; M.A., University of the Western Cape, South Africa; Ph.D., University of California, Los Angeles.
- Potts, Marilyn K. (1989)** **Professor**
School of Social Work
B.S., Purdue University; M.S.W., Indiana University, Indianapolis; Ph.D., Purdue University.
- Pounds, Micheal C. (1989)** **Professor**
Film and Electronic Arts
B.A., University of Maryland, Baltimore; M.A., Ph.D., New York University.
- Powell, David C. (2001)** **Professor**
Public Policy and Administration
B.A., Baldwin-Wallace College; M.A., Ohio University; Ph.D., Miami University.
- Powers, Kristin M. (2000)** **Professor**
Advanced Studies in Education and Counseling
B.S., University of Wisconsin, Madison; M.A., Ph.D., University of Minnesota, Minneapolis.
- Prince, Judy L. (2002)** **Psychologist**
Counseling and Psychological Services
B.A., University of California, Los Angeles; M.A., Loyola Marymount University; M.A., Psy.D., California School of Professional Psychology, Alhambra.
- Qiu, Tianjiano (2007)** **Assistant Professor**
Marketing
B.A., Zhejiang University, China; M.Ed, Ph.D., University of Illinois at Urbana-Champaign.
- Quam-Wickham, Nancy L. (1994)** **Professor**
History
B.A., San Francisco State University; M.A., Ph.D., University of California, Berkeley.
- Quintiliani, Karen (2003)** **Associate Professor**
Anthropology
B.A., Loyola Marymount University; M.A., California State University, Long Beach; Ph.D., University of California, Los Angeles.
- Rae-Espinoza, Heather (2007)** **Assistant Professor**
Human Development
B.A., Hamilton College; M.A., Ph.D., University of California, San Diego.
- Rahai, Hamid R. (1989)** **Director**
Center for Energy and Environmental Research and Services
..... **Professor**
Mechanical and Aerospace Engineering
B.S., M.S., California State University, Long Beach; Ph.D., University of California, Irvine.
- Raibley, Jason (2007)** **Assistant Professor**
Philosophy
B.A., DePauw University; M.A., Ph.D., University of Massachusetts, Amherst.
- Rainof, Alexander (1998)** **Associate Professor**
Romance, German, Russian Languages and Literatures
B.A., Boston University; M.A., Ph.D., University of Michigan-Ann Arbor.
- Rajpoot, Subhash (1990)** **Professor**
Physics and Astronomy
B.Sc., Ph.D., Imperial College, London.
- Ramachandran, Hemalatha (2007)** **Librarian**
University Library
B.A., University of North London, England; M.L.S., Florida State University.
- Ramirez, Genevieve M. (1974)** **Director**
Learning Assistance Center
..... **Professor**
Chicano and Latino Studies
B.A., M.A., Rosary College, Illinois; Ph.D., University of California, Los Angeles.
- Ranney, Martha J. (2001)** **Associate Professor**
School of Social Work
B.S., M.S.W., California State University, Long Beach; Ph.D., University of Southern California.
- Rasmussen, Amy Cabrera (2006)** **Assistant Professor**
Political Science
B.A., M.A., California State University, Long Beach; Ph.D., Yale University.
- Rasmussen, Karen (1989)** **Professor**
Communication Studies
B.A., Dakota Wesleyan; M.A., University of Wyoming; Ph.D., University of Colorado, Boulder. Emerita, 2010.
- Ratanasiripong, Paul (2008)** **Professor**
Advanced Studies in Education and Counseling
B.A., University of California, Berkeley; M.A., Ph.D., Wright Institute, Graduate School of Psychology.
- Rauscher, M. Lauren (2006)** **Assistant Professor**
Human Development
B.A., M.A., University of Memphis; Ph.D., Emory University.
- Reddy, Sabine B. (2001)** **Associate Professor**
Management and Human Resources Management
M.A., Western Michigan University; Ph.D., University of Illinois at Urbana-Champaign.
- Redouane, Najib (1999)** **Professor**
Romance, German, Russian Languages and Literatures
B.A., FACLIP, Paris, France; M.A., Université Laval, Quebec, Canada; M.A., Ph.D., University of Toronto, Canada.
- Reed, Jennifer (2006)** **Associate Professor**
Women's, Gender, and Sexuality Studies
B.A., Loyola Marymount University; M.A., Ph.D., University of California, Irvine.
- Reese, Leslie (2001)** **Executive Director**
Center for Language Minority Education and Research (CLMER)
..... **Professor**
Teacher Education
B.A., Stanford University; M.A., California State University, Long Beach; Ph.D., University of California, Los Angeles.
- Reiboldt, Wendy L. (1992)** **Professor**
Family and Consumer Sciences
B.S., Miami University, Ohio; M.S. and Ph.D., Ohio State University.
- Reis, Raul F. (2000)** **Professor**
Journalism
B.A., Universidade Federal do Para, Belem, Brazil; M.S., Kansas State University, Manhattan, Kansas; Ph.D., University of Oregon, Eugene.
- Reynolds, Grace (2007)** **Assistant Professor**
Health Care Administration
B.A., Macalester College; M.A., University of Alaska Anchorage; Ph.D., University of Southern California.
- Rezaei, Ali (2002)** **Associate Professor**
Advanced Studies in Education and Counseling
B.S., M.S., Shiraz University, Iran; Ph.D., University of Calgary, Canada.
- Rhee, Thomas A. (1988)** **Professor**
Finance
B.A., Hankuk University of Foreign Seoul, Korea; M.A., Kent State University; M.A., University of Chicago; Ph.D., Wayne State University.
- Rhoads, Thomas J. (1976)** **Professor**
College of Business Administration
B.S., M.B.A., University of Southern California; J.D., Western State University. Emeritus, 2010.
- Rich, Marc D. (2001)** **Professor**
Communication Studies
B.A., M.A., California State University, Northridge; Ph.D., Southern Illinois University, Carbondale.
- Richards, Catherine R. (2004)** **Associate Professor**
Advanced Studies in Education and Counseling
B.A., M.A., University of California, Riverside; Ph.D., University of California, Santa Barbara.
- Richesson, Robin A. (2002)** **Associate Professor**
Art
B.A., M.F.A., California State University, Long Beach.
- Riedel, Kyle (2003)** **Associate Professor**
Art
B.S., Portland State University, Oregon; M.F.A., University of Texas, Austin.

Rios-Ellis, Britt K. (1994) Professor Health Science B.A., M.S., Ph.D., University of Oregon.	Saint-Germain, Michelle A. (1995) Professor Public Policy and Administration B.A., University of California Berkeley; M.S., M.P.A., California State University, Hayward; Ph.D., University of Southern California.
Riposa, Gerry (1989) Dean College of Liberal Arts	Saltzman, William R. (2001) Professor Advanced Studies in Education and Counseling M.A., Ph.D., University of Maryland, College Park.
..... Professor Political Science B.A., Old Dominion University; Ph.D., University of California, Riverside.	Sanchez-H., Jose (1988) Professor Film and Electronic Arts B.A., Universidad Autonoma de Guadalajara, Mexico; M.A., Ph.D., University of Michigan.
Rivera-Chang, Jose L. (2001) Associate Professor Design B.F.A., Catholic University; M.A., Ohio State University.	Sandoval, Anna M. (1998) Professor Chicano and Latino Studies B.A., University of California, Santa Barbara; M.A., Ph.D., University of California, Santa Cruz.
Roberts, Pamela K. (1989) Professor Human Development B.A., University of California, San Diego; M.A., Notre Dame; M.A., Western Michigan; Ph.D., University of Wisconsin.	Sanfilippo, David (1978) Director Disabled Student Services B.A., San Jose State University.
Roberts-Corb, Carol (2009) Director Housing and Residential Life B.A., University of California, Santa Barbara; M.A., University of Vermont, Burlington.	Santhiveeran, Janaki (1999) Professor School of Social Work B.S., M.S.W., Madurai Kamaraj University, Madurai, India; Ph.D., Barry University, Miami, Florida.
Robinson, Douglas W. (1989) Vice President Student Services B.S., M.S., Iowa State University, Ames; Ph.D. Claremont Graduate University.	Sathanathan, Dhushy (2009) Associate Dean Academic Programs College of Engineering B.S., Oklahoma State University; M.S., Ph.D., Penn State University.
Rodrigue, Christine M. (1999) Professor Geography B.A., M.A., California State University, Northridge; Ph.D., Clark University, Massachusetts.	Sauceda, James S. (1988) Director Multicultural Center
Rodriguez, Jose I. (1995) Professor Communication Studies B.A., M.A., California State University, Long Beach; Ph.D., Michigan State University. Professor Communication Studies B.A., M.A., California State University, Long Beach; Ph.D., University of Southern California.
Rodriguez, Victor M. (2000) Associate Professor Chicano and Latino Studies B.A., University of Puerto Rico, Rio Piedras, Puerto Rico; M.A., Ph.D., University of California, Irvine.	Schefski, Harold K. (1986) Professor Romance, German, Russian Languages and Literatures B.A., University of California, Davis; M.A., Ph.D., Stanford University.
Rojas, Clarissa (2008) Assistant Professor Chicano and Latino Studies B.A., University of California, Santa Cruz; M.A., San Francisco State University; Ph.D., University of California, San Francisco.	Scherwin, Vicki M. (2009) Assistant Professor Management and Human Resources Management B.A., University of California, Berkeley; Ph.D., University of California, Los Angeles.
Rojas, Maythee G. (2001) Associate Professor Women's, Gender, and Sexuality Studies B.A., Pomona College; Ph.D., Arizona State University.	Schramm, Michael (2007) Assistant Professor Chemistry and Biochemistry B.S., State University of New York, Syracuse; M.S., Ph.D., University of Chicago.
Rosenkrantz, Max Langan (2003) Associate Professor Philosophy B.A., Johns Hopkins University; Ph.D., University of Texas, Austin.	Schrank, Sarah L. (2002) Associate Professor History Baccalaureate de Francais, Lycee Marcelin Berthelot, France; B.A., McGill University, Canada; Ph.D., University of California, San Diego.
Rourke, Bryan C. (2004) Associate Professor Biological Sciences B.S., College of William and Mary, VA; Ph.D., University of California, Irvine.	Schrock, Rebecca (2007) Associate Professor Art B.A., University of Nebraska-Lincoln; M.F.A., Massachusetts College of Art.
Rouso-Schindler, Steven N. (2008) Assistant Professor Anthropology B.A., University of Maryland; M.A., Ph.D., University of Southern California.	Schroeder, Jan M. (1999) Professor Kinesiology B.A., Chapman College, Orange, California; M.S., California State University, Fullerton; Ph.D., University of Kansas.
Roze, Patricia D. (1987) Professor Psychology/Women's, Gender, and Sexuality Studies B.A., California State University, Long Beach; M.A., Ph.D., University of California, Davis. Emerita, 2010.	Schug, Robert A. (2010) Assistant Professor Criminal Justice B.A., M.S., California State University, Los Angeles; M.A., Ph.D., University of Southern California.
Rozenek, Ralph (1988) Professor Kinesiology B.S., M.S., University of California, Los Angeles, Ph.D., Auburn University.	Schürer, Norbert E. (2003) Associate Professor English B.A., Hochschule der Künste, Berlin; M.A., Freie Universität, Berlin; Ph.D., Duke University.
Rubio, Olga G. (1997) Professor Teacher Education B.S., Texas A & I University; M.S., University of Texas at San Antonio; Ph.D., University of Pennsylvania.	Sciortino, Antonella (2004) Associate Professor Civil Engineering and Construction Engineering Management B.S., Politecnico di Bari, Italy; M.S., Ph.D., University of California, Los Angeles.
Rueda, Alfonso (1989) Professor Electrical Engineering B.S., M.S., Massachusetts Institute of Technology; M.A., Ph.D., Cornell University. Emeritus, 2010.	Scott, George M. (1990) Associate Professor Anthropology B.A., University of Texas, Austin; M.A., Ph.D., University of California, San Diego. Emeritus, 2011.
Russo, Albert C. (1988) Professor Physical Therapy B.S., M.S., Ph.D., Louisiana State University, Baton Rouge.	Scotton, Paul (2005) Professor Comparative World Literature and Classics M.A., University of California Santa Barbara; B.A., University of Illinois, Urbana; Ph.D., University of Pennsylvania.
Ruwedel, Mark A. (2002) Professor Art B.F.A., Kutztown University of Pennsylvania; M.F.A., Université Concordia.	Segalla, Angelo (2001) Professor Mathematics and Statistics B.A., Kean College of New Jersey; M.A., University of California, Los Angeles; M.A., University of Florida; Ph.D., University of California, Los Angeles.
Saadeh, Shadi (2007) Assistant Professor Civil Engineering and Construction Engineering Management B.S., University of Jordan, Amman, Jordan; M.S., Washington State University; Ph.D., Texas A&M University.	Serrano, Nhora (2006) Assistant Professor Comparative World Literature and Classics B.A., Amherst College; M.A., New York University; Ph.D., University of Wisconsin-Madison.
Sachdeva, Darshan (1973) Professor Finance B.A., Panjab University; M.S., Florida State University; Ph.D., University of California.	Sexauer, Roxanne D. (1990) Professor Art B.F.A., University of Iowa; M.F.A., State University of New York.
Safer, Alan M. (2000) Professor Mathematics and Statistics B.S., Syracuse University; M.S., Ohio State University; M.S., Southern Illinois University; Ph.D., University of Wyoming.	Seyburn, Patricia (2006) Associate Professor English B.S., M.S., Northwestern University; Ph.D., University of Houston

- Shafer, David A. (2002)** **Associate Professor**
History
B.A., University of California, Los Angeles; J.D., Loyola Law School; Ph.D., University of London, England.
- Shaffer, Gwen L. (2012)** **Assistant Professor**
Journalism
B.A., University of Michigan, Ann Arbor; M.A., Ph.D., Temple University, Philadelphia.
- Shahian, Bahram (1983)** **Professor**
Electrical Engineering
B.S., University of Texas, Austin; M.S., Stanford University, Ph.D., University of California, Los Angeles.
- Shaked, Nizan (2006)** **Assistant Professor**
Art
P.P.C., Beit Berl College, Midrasha School of Art, Israel; M.A., University of California, Los Angeles; M.F.A., Otis College of Art and Design.
- Shankar, Praveen (2011)** **Assistant Professor**
Mechanical and Aerospace Engineering
B.S.M.E., Bangalore University, India; M.S., Ph.D., Ohio State University, Columbus.
- Shaw-Sutton, Carol (1989)** **Professor**
Art
B.A., M.A., San Diego State University, Emerita, 2010.
- Shehab-Eldeen, Tariq (2004)** **Associate Professor**
Civil Engineering and Construction Engineering Management
B.A., M.S., King Fahd University of Petroleum and Minerals, Saudi Arabia; Ph.D., Concordia University, Quebec, Canada.
- Sheley, Nancy S. (2001)** **Associate Professor**
English
B.A., Murray State University; M.A., University of Illinois at Urbana-Champaign; Ph.D., University of Kansas.
- Shim, Jae K. (1981)** **Professor**
Accountancy
B.S., Seoul National University, Korea; M.B.A., Ph.D., University of California, Berkeley. Emeritus, 2008.
- Shin, Fay H. (2001)** **Professor**
Teacher Education
B.A., University of California, Los Angeles; M.S., Ph.D., University of Southern California.
- Shockley, Alan F. (2008)** **Assistant Professor**
Music - Bob Cole Conservatory of Music
B.M., University of Georgia, Athens; M.M., Ohio State University; MFA, Ph.D., Princeton University.
- Shrader, John W. (2011)** **Assistant Professor**
Journalism
B.A., University of Nebraska, Lincoln; M.S., San Jose State University.
- Shon, Young-Seok (2006)** **Professor**
Chemistry and Biochemistry
B.S., M.S., Sogang University, Korea; Ph.D., University of Houston.
- Sidorov, Dmitrii (2002)** **Associate Professor**
Geography
B.S., M.A., Moscow State University, Moscow; Ph.D., University of Minnesota, Minneapolis.
- Siegel, Fran (2002)** **Professor**
Art
B.F.A., Tyler School of Art, Temple University; M.F.A., Yale University.
- Silveira, Carlos A. (1997)** **Professor**
Art
B.S., Universidade Federal do Rio Grande do Sul; M.F.A., Northern Illinois University; Ph.D., Texas Tech University.
- Simms, Matthew T. (2003)** **Associate Professor**
Art
B.A., University of California, Santa Cruz; M.A., University of Rochester, NY; Ph.D., Harvard University.
- Sinay, Tony (2003)** **Professor**
Health Care Administration
B.S., M.S., Istanbul Technical University, Turkey; Ph.D., Saint Louis University.
- Sinchak, Kevin (2006)** **Assistant Professor**
Biological Sciences
B.S., Ph.D., Michigan State University.
- Singh, Davinder (1983)** **Professor**
Economics
B.S., Benedict College; M.A., Duke University; Ph.D., University of South Carolina. Emeritus, 2009.
- Singh-Carlson, Savitri (2007)** **Assistant Professor**
School of Nursing
B.S.N., M.S.N., University of British Columbia, Canada; Ph.D., University of Alberta, Canada.
- Sinha, Praveen (2009)** **Associate Professor**
Accountancy
B.A., M.A., Lucknow University, India; Ph.D., Carnegie Mellon University.
- Slater, Charles (2006)** **Professor**
Advanced Studies in Education and Counseling
B.A., University of Minnesota; M.A., Occidental College; Ph.D., University of Wisconsin-Madison.
- Slowinska, Katarzyna (2004)** **Professor**
Chemistry and Biochemistry
M.S., Warsaw University, Poland; Ph.D., University of California, Berkeley.
- Slowinski, Krzysztof (2001)** **Associate Professor**
Chemistry and Biochemistry
M.Sc., Ph.D., Warsaw University, Warsaw, Poland.
- Sluss, Sara B. (1995)** **Librarian**
University Library
B. of General Studies, Wichita State University; M.L.S., Emporia State University; M.S., Pace University, Emerita, 2009.
- Smith, Craig R. (1988)** **Director**
Center for First Amendment Studies
..... **Professor**
Communication Studies/Film and Electronic Arts
B.A., University of California, Santa Barbara; M.A., City University of New York, Queens; Ph.D., Pennsylvania State University, Emeritus, 2010.
- Smith, Judy E. (1980)** **Professor**
School of Nursing
B.A., M.A., University of California, Los Angeles; Ph.D., Claremont Graduate School. Emerita, 2010.
- Smith, Nancy Jo (1987)** **Professor**
Theatre Arts
B.A., Midwestern State University; M.A., M.F.A., University of Michigan.
- Smith, Rodney (2006)** **Professor**
Accountancy
B.S., University of Oregon; M.S., Naval Postgraduate School; Ph.D., University of California, Irvine.
- Soit, Michael (2008)** **Dean**
College of Business Administration
..... **Professor**
Finance
B.S., Ohio State University; M.B.A., D.B.A., Indiana University.
- Sondhi, Lydia E. (1985)** **Associate Professor**
Family and Consumer Sciences
B.S., Ph.D., University of Missouri, Columbia; M.S., Oklahoma State University, Emerita, 2009.
- Soni, Praveen K. (1991)** **Professor**
Marketing
B.T., Indian Institute of Technology; M.B.A., Indian Institute of Management; Ph.D., Pennsylvania State University.
- Sorin, Eric J. (2007)** **Assistant Professor**
Chemistry and Biochemistry
B.S., University of California, Riverside; Ph.D., Stanford University, California.
- Span, Sherry A. (2000)** **Professor**
Psychology
B.A., Tufts University; M.A., California State University, Long Beach; M.A., Ph.D., University of Southern California.
- Speirs, Susanna B. (2004)** **Associate Professor**
Art
B.F.A., Syracuse University, NY; M.F.A., University of Washington.
- Ssensalo, Bede (1977)** **Professor**
Africana Studies
B.A., Makerere University, Uganda; M.A., Ph.D., University of California, Los Angeles. Emeritus, 2010.
- Stallones, Jared R. (2011)** **Professor Professor**
Single-Subject (Secondary) Credential Program Coordinator
B.A., M.A., Ph.D., University of Texas, Austin.
- Stanley, M. Sue (1986)** **Associate Dean**
College of Health and Human Services
..... **Associate Professor**
Family and Consumer Sciences
B.A., California State University, Chico; M.S., University of Arizona; Ph.D., Oklahoma State University.
- Stanton, Roger R. (1966)** **Professor**
Management and Human Resources Management
B.S., San Jose State University; M.B.A., California State University, Long Beach; M.P.A., Harvard University; D.B.A., University of Southern California. Emeritus, 2011.
- Stanton, Toni L. (1987)** **Professor**
Biological Sciences/Women's, Gender, and Sexuality Studies
B.S., M.S., University of Maryland; Ph.D., Thomas Jefferson University, Pennsylvania.
- Star, Lisa M. (2011)** **Assistant Professor**
Civil Engineering and Construction Engineering Management
B.S., M.S., Ph.D., University of California, Los Angeles.

- Steimetz, Seiji (2005)** **Associate Professor**
Economics
B.S., M.A., San Jose State University; Ph.D., University of California, Irvine.
- Stein, James D. (1989)** **Professor**
Mathematics and Statistics
B.A., Yale; M.A., Ph.D., University of California, Berkeley. Emeritus, 2009.
- Stein, Jeanne (2006)** **Assistant Professor**
School of Nursing
B.S., St. Louis University; M.S., Southern Illinois University at Edwardsville; Ph.D., University of Colorado at Denver.
- Steiner, Barry H. (1968)** **Professor**
Political Science
B.A., University of Southern California; Ph.D., Columbia University.
- Stevenson, Judith (2007)** **Assistant Professor**
Human Development
B.A., University of California, Berkeley; M.A., University of the Witwatersrand, South Africa; Ph.D., University of California, Los Angeles.
- Stewart, David (2007)** **Assistant Professor**
Religious Studies
B.S., University of Oregon; M.A., University of Utah; Ph.D., University of California, Berkeley.
- Stewart, Marian (2007)** **Assistant Professor**
Art
B.F.A., M.F.A., California State University, Long Beach.
- Stone, Craig (1994)** **Associate Professor**
American Indian Studies/Art
B.A., M.A., M.F.A., California State University, Long Beach.
- Stone, Jon R. (2004)** **Professor**
Religious Studies
B.A., Jessup University, San Jose, CA; M.A., Pacific Christian College; M.A., Ph.D., University of California, Santa Barbara.
- Strahl, Ronald J. (1986)** **Professor**
English
B.A., DePauw University; M.A., Ph.D., Indiana University, Bloomington.
- Straits, William (2005)** **Associate Professor**
Science Education
B.S., University of California, Irvine; M.A., California State University, Fullerton; M.Ed., Ph.D., University of Texas, Austin.
- Strauss, Judith P. (2000)** **Professor**
Management and Human Resources Management
B.A., Ph.D., University of Iowa.
- Strybel, Thomas Z. (1986)** **Professor**
Psychology
B.A., Wayne State University; M.A., California State University, Los Angeles; Ph.D., University of Arizona, Tucson.
- Su, Xuemei (2007)** **Assistant Professor**
Management and Human Resources Management
B.A., Dongbei University of Finance and Economics, China; Ph.D., University of Wisconsin.
- Suaray, Kagba (2005)** **Associate Professor**
Mathematics and Statistics
B.S., California State University, Long Beach; Ph.D., University of California, San Diego.
- Sultana, Rebeka (2011)** **Assistant Professor**
Civil Engineering and Construction Engineering Management
B.S., Bangladesh University of Engineering and Technology, India; M.C.E., Purdue University, Lafayette; Ph.D., University of California, Irvine.
- Sum, Tiffany (2008)** **Assistant Professor**
Art
B.A., City University of Hong Kong; M.F.A., Carnegie Mellon University.
- Sun, Lei (2011)** **Assistant Professor**
Communicative Disorders
B.A., National Taipei University, Taiwan; M.A., Shih Hsin University, Taiwan; M.S., Ph.D., University of Oregon, Eugene.
- Swigart, Leslie K. (1971)** **Librarian**
B.A., University of Southern California; M.L.S., University of California, Los Angeles; M.A., California State University, Long Beach.
- Symcox, Linda S. (2000)** **Professor**
Teacher Education
B.A., University of California, Los Angeles; M.A., University of California, Santa Barbara; Ph.D., University of California, Los Angeles.
- Takemoto, Mary Ann M. (2005)** **Associate Vice President**
Student Services
B.A., Columbia University; Ph.D., Indiana University.
- Takeuchi, Michiko (2009)** **Assistant Professor**
History
B.A., M.A., California State University, Long Beach; Ph.D., University of California, Los Angeles.
- Talberg, Jonathan (2000)** **Professor**
Music - Bob Cole Conservatory of Music
B.M., Chapman University, Orange, California; M.M., D.M.A., University of Cincinnati.
- Tan, Peng-Hock Philip (2001)** **Associate Professor**
School of Social Work
B.A., College of Wooster; M.A., M.S.W., Ph.D., Ohio State University.
- Tarrant, Shira (2006)** **Associate Professor**
Women's, Gender, and Sexuality Studies
B.A., California State University, Long Beach; M.A., Ph.D., University of California, Los Angeles.
- Tartre, Lindsay A. (1985)** **Professor**
Mathematics and Statistics
B.A., M.A., San Diego State University; Ph.D., University of Wisconsin, Madison.
- Taylor, Andrea (2006)** **Vice President**
University Relations and Development
B.A., University of Kansas, Lawrence; M.S., California State University, Long Beach.
- Teng, Robert K. F. (1989)** **Professor**
Electrical Engineering
B.S., Mississippi State University; M.S., Ph.D., Purdue.
- Teubner, David C. (2005)** **Assistant Professor**
Design
B.A., California State University, Long Beach; M.A., California State University, Fullerton.
- Thayer, Robert E. (1963)** **Professor**
Psychology
B.A., University of Redlands; Ph.D., University of Rochester.
- Theurer, Joan L. (2001)** **Professor**
Teacher Education
B.S., Concordia Teachers College; M.A., Concordia University; Ph.D., University of Arizona.
- Thibeault, Marie C. (1989)** **Professor**
Art
B.F.A., Rhode Island School of Design; M.A., San Francisco State University; M.F.A., University of California, Berkeley.
- Thien, Deborah (2006)** **Associate Professor**
Geography
B.A., University of Victoria, Canada; M.S. University of Northern British Columbia, Canada; Ph.D., University of Edinburgh, United Kingdom.
- Thoman, Dustin B. (2008)** **Assistant Professor**
Psychology
B.A., Middle Tennessee State University; M.A., Ph.D., University of Utah.
- Thomas, Marshall W. (2001)** **Director**
Veteran Affairs Services
B.A., M.A., Ed.D., California State University, Long Beach.
- Toji, Dean S. (1999)** **Assistant Professor**
Asian and Asian American Studies
B.A., California State University, Los Angeles; M.A., Ph.D., University of California, Los Angeles.
- Toossi, Reza (1991)** **Professor**
Mechanical and Aerospace Engineering
B.S., University of Technology, Iran; M.S., Ph.D., University of California, Berkeley.
- Torabzadeh, Jalal (1986)** **Professor**
Mechanical and Aerospace Engineering
B.S., Abadan Institute of Technology, Iran; M.S., Ph.D., University of Southern California.
- Raymond Torres-Santos (2011)** **Dean**
College of the Arts
- **Professor**
Bob Cole Conservatory of Music
B.A., Puerto Rico Conservatory of Music; M.A., Ph.D., University of California, Los Angeles.
- Tortorici-Luna, Joanne (2000)** **Professor**
Advanced Studies in Education and Counseling
B.A., California State University, Los Angeles; M.A., University of California, Los Angeles; Ph.D., University of Southern California.
- Travis, Tiffini A. (1999)** **Librarian**
University Library
B.A., University of California, Berkeley; M.L.I.S., University of California, Los Angeles.
- Tsai, Chan-Feng (1982)** **Professor**
Civil Engineering and Construction Engineering Management
B.S., Cheng Kung University, Taiwan; M.S., University of Rhode Island, Kingston; Ph.D., University of California, Berkeley. Emeritus, 2009.
- Tsai, Hsiung-Wei (2009)** **Assistant Professor**
Biological Sciences
B.S., M.S., National Taiwan University, Taiwan; M.S., University of California, Los Angeles; Ph.D., University of Kentucky.
- Tsang, Chit-Sang (1988)** **Professor**
Electrical Engineering
B.S., Louisiana State University; M.S., Ohio State University; Ph.D., University of Southern California.
- Tsuchida, John N. (1995)** **Director**
Center for Asian Pacific American Studies
- **Professor**
Asian and Asian American Studies
B.A., International Christian University; M.A., Ph.D., University of California, Los Angeles; J.D., William Mitchell College of Law.

- Tuveson, Richard V. (1983)** **Associate Professor**
Family and Consumer Sciences
B.A., St. Cloud State University; M.S., Ph.D., Iowa State University, Ames.
- Uku-Wertimer, Skyne R. (1970)** **Professor**
Africana Studies
B.A., Livingstone College; M.A., Ph.D., Howard University.
- Underwood, Dessie L. (1999)** **Associate Professor**
Biological Sciences
B.A., California State University, Fresno; M.S., Ph.D., University of California, Davis.
- Urizar, Jr., Guido (2006)** **Associate Professor**
Psychology
B.S., University of Miami; Ph.D., University of Florida.
- Utley, Ebony (2006)** **Assistant Professor**
Communication Studies
B.A., Indiana University; M.A., Ph.D., Northwestern University.
- Vaca, Andrew B. (2002)** **Associate Professor**
Dance
B.A., California State University, Sacramento; M.F.A., University of California, Los Angeles.
- Vail, Leland S. (1995)** **Associate Professor**
Music - Bob Cole Conservatory of Music
B.M., M.A., California State University, Long Beach; D.M.A., Claremont Graduate School.
- Valentini, Robert C. (1989)** **Professor**
Mathematics and Statistics
B.A., Carnegie-Mellon; M.S., Ph.D., Ohio State University.
- van Elk, Marie A. (2000)** **Associate Professor**
English
M.A., University of Amsterdam; M.A., Ph.D., Rice University.
- Van Giffen, Katherine (1987)** **Associate Professor**
Human Development/Advanced Studies in Education and Counseling
B.A., University of Puget Sound, Washington; M.A., Ph.D., University of Denver. Emerita, 2010.
- van Lent, Colleen E. (2003)** **Associate Professor**
Computer Engineering and Computer Science
B.S., Kent State University Honor College; M.S., Ph.D., University of Pittsburgh.
- Velcic, Vlatka (2001)** **Associate Professor**
Comparative World Literature and Classics
B.A., University of Zagreb; M.A., Ph.D., University of California, Los Angeles.
- Vettore, Enrico (2007)** **Assistant Professor**
Romance, German, Russian Languages and Literatures
B.A., University of Padua, Padua, Italy; M.A., Ph.D., University of Oregon.
- Viera, Maria L. (1989)** **Professor**
Theatre Arts
B.A., University of Illinois, Chicago; M.A., Sangamon State University; Ph.D., University of Southern California. Emerita, 2010.
- Viet, Ngo N. P. (1989)** **Professor**
Mathematics and Statistics
B.S., University of Minnesota; Ph.D., University of California, Berkeley.
- Vipond, Dianne L. (1988)** **Professor**
English
B.S., McGill University, Montreal; M.A., Concordia University, Montreal; Ph.D., York University, Toronto.
- Vogel, Brenda L. (2001)** **Associate Professor**
Criminal Justice
B.S., M.S., University of North Carolina at Charlotte; Ph.D., University of California, Irvine.
- Vollendorf, Lisa (2005)** **Professor**
Romance, German, Russian Languages and Literatures
B.A., Colorado State University; M.A., Ph.D., University of Pennsylvania.
- Volper, Dennis J. (1988)** **Professor**
Computer Engineering and Computer Science
B.A., University of California, San Diego; M.S., San Diego State University; Ph.D., University of California, San Diego.
- Vu, Hung Viet (1988)** **Professor**
Mechanical and Aerospace Engineering
B.S., University of Washington, Seattle; M.S., Massachusetts Institute of Technology; Ph.D. University of Michigan.
- Vu, Kim-Phuong (2005)** **Professor**
Psychology
B.A., California State University, Long Beach; M.S., Ph.D., Purdue University.
- Wagdy, Mahmoud F. (1989)** **Professor**
Electrical Engineering
B.S., M.S., Cairo University; Ph.D., Kansas State University.
- Wakiji, Eileen (1991)** **Librarian**
University Library
B.A., University of California, Los Angeles; M.S.L.S., University of Southern California.
- Wallach, Geraldine P. (2000)** **Professor**
Communicative Disorders
B.A., Long Island University, Brooklyn, New York; M.A., New York University; Ph.D., Graduate School and University Center of the City University of New York.
- Wallis, Charles (2000)** **Professor**
Philosophy
B.A., Metropolitan State College, Denver, Colorado; Ph.D., University of Minnesota.
- Wallsten, Kevin (2008)** **Assistant Professor**
Political Science
B.A., University of California, Irvine; M.A., Ph.D., University of California, Berkeley.
- Walter, C.J. (1993)** **Professor**
Information Systems
B.A., M.S., Ph.D., University of Iowa.
- Wang, Chunxue (Victor) (2005)** **Associate Professor**
Teacher Education
B.A., Dalian University of Foreign Languages; M.S., Pittsburg State University; Ed.D., University of Arkansas.
- Wang, Derming (1983)** **Professor**
Mathematics and Statistics
B.A., National Chung Hsing University, Taiwan; M.A., Ph.D., University of Georgia, Athens.
- Wang, Fei (2007)** **Associate Professor**
Electrical Engineering
B.S., Peking University; M.S., Ph.D., University of Cincinnati.
- Wang, John Z. (1999)** **Professor**
Criminal Justice
B.A., Liaoning Teachers' University, China; M.A., Liaoning Provincial University, China; M.P.A., Northern Michigan University; Ph.D., Indiana University of Pennsylvania.
- Wang, Oliver (2006)** **Assistant Professor**
Sociology
B.A., M.A., Ph.D., University of California, Berkeley.
- Wang, Rei-Tung (1985)** **Professor**
Electrical Engineering
B.Ed., National Taiwan Normal University; M.Ed., University of Wisconsin-Stout/ National Taiwan Normal University; Ed.S., University of Wisconsin-Stout; Ph.D., University of Tennessee, Knoxville.
- Wang, Yu-Ming (1999)** **Professor**
Information Systems
B.S., National Taiwan University; M.B.A., National Chengchi University, Taiwan; Ph.D., New York University.
- Warren, Christopher (2006)** **Assistant Professor**
Psychology
B.A., University of South Florida; M.S., Ph.D., Tulane University.
- Washburn, Mark W. (2009)** **Assistant Professor**
Management and Human Resources Management
B.A., University of California, Los Angeles; M.B.A., California State University, Long Beach; Ph.D., University of California, Irvine.
- Washington, Thomas Alex (2008)** **Associate Professor**
School of Social Work
B.A., LeMoyné-Owen College; M.A., University of Memphis; M.S.S.W., Ph.D., University of Tennessee.
- Waterfield, Brett L. (1992)** **Director**
Student Life and Development
B.S., California State University, Long Beach.
- Watson, Saleem H. (1986)** **Professor**
Mathematics and Statistics
B.S., Andrews University; M.S., Ph.D., McMaster University, Canada.
- Webb, Charles H. (1987)** **Professor**
English
B.A., Rice University; M.A., University of Washington, Seattle; M.F.A., Ph.D., University of Southern California.
- Wechsler, Suzanne P. (2000)** **Associate Professor**
Geography
B.A., Tufts University; M.S., State University of New York at Syracuse; Ph.D., State University of New York.
- Weers, Paul M. M. (2003)** **Associate Professor**
Chemistry and Biochemistry
M.S., Ph.D., Utrecht University, Netherlands.
- Wegener, Frederick (1998)** **Professor**
English
B.A., Columbia University; M.A., Ph.D., Harvard University.
- Weise, Julie M. (2009)** **Assistant Professor**
International Studies Program
B.A., M.A., Ph.D., Yale University.
- Whitcraft, Christine (2007)** **Assistant Professor**
Biological Sciences
B.A., M.A., Williams College, Williamstown, Massachusetts; Ph.D., University of California, San Diego.
- White, Barbara (1990)** **Director**
Center for Successful Aging
..... **Associate Professor**
School of Nursing
B.S.N., Loyola University, Chicago; M.S., California State University, Long Beach.
- Whitehead, Jason (2007)** **Assistant Professor**
Political Science
B.A., California State University, Long Beach; M.A., Ph.D., University of Southern California; J.D., Willamette University.

- Whitlow, Michael L. (2002)** **Associate Professor**
Art
B.S., MS, University of Illinois, Urbana-Champaign.
- Whitney David J. (1995)** **Professor**
Psychology
B.S., Union College; M.A., Ph.D., Michigan State University.
- Whitney, Linda (1996)** **Professor**
Teacher Education
B.A., M.A., California State University, Los Angeles; Ph.D. Claremont Graduate School.
- Widstrom, Amy M. (2009)** **Assistant Professor**
Political Science
B.A., Oberlin College; M.A., Ph.D., Syracuse University.
- Wieland, Nellie (2007)** **Assistant Professor**
Philosophy
B.A., California State University, Humboldt; M.A., Ph.D., University of California, San Diego.
- Wiley, Mark L. (1994)** **Associate Dean**
College of Liberal Arts
- **Professor**
English
B.A., M.A., California State University, Long Beach; Ph.D., University of Southern California.
- Wilford, Francis Hugh (2006)** **Professor**
History
B.A., Bristol University, United Kingdom; Ph.D., Exeter University, United Kingdom.
- Williams, Emry W. (1996)** **Professor**
Kinesiology
B.A., Cardiff Institute of Higher Education, Wales, UK; M.A., California State University, Long Beach; Ph.D., Ohio State University.
- Williams, Mark T. (1999)** **Associate Professor**
English
B.S., Utah State University; M.A., University of Texas at El Paso; Ph.D., University of Arizona.
- Wilson, Aaron (2006)** **Assistant Professor**
Africana Studies
B.A., M.A., Rhode Island School of Design; Ph.D., Temple University.
- Wilson, Bianca (2006)** **Assistant Professor**
Psychology
B.A., Clark Atlanta University; M.A., Ph.D., University of Illinois at Chicago.
- Wilson, Jake B. (2008)** **Assistant Professor**
Sociology
B.S., University of California, Berkeley; M.A., Ph.D., University of California, Riverside.
- Wilson, Raymond R. Jr. (1999)** **Professor**
Biological Sciences
B.A., Ph.D., University of California, San Diego.
- Wilson, Robert Scott (2003)** **Associate Professor**
Anthropology
B.A., University of North Carolina, Charlotte; M.A., Ph.D., Stanford University.
- Wilson, Steve R. (2004)** **Associate Professor**
School of Social Work
B.A., M.S.W., California State University, Long Beach; Ph.D., University of Southern California.
- Witkowski, Terrence H. (1982)** **Professor**
Marketing
B.A., Northwestern University, Illinois; M.S., University of California, Los Angeles; Ph.D., University of California, Berkeley.
- Woelfel, Wesley (2009)** **Assistant Professor**
Design
B.S., M.A., California State University, Long Beach.
- Wolfenbarger, Mary F. (1990)** **Professor**
Marketing
B.S., Vanderbilt University; M.B.P.A., Ph.D., University of California, Irvine.
- Woodward, Kerry C. (2009)** **Assistant Professor**
Sociology
B.A., Smith College; M.A., New School for Social Research, New York; Ph.D., University of California, Berkeley.
- Wray, Howard E. (1998)** **Executive Director**
Educational Equity Services
B.S., M.A., Indiana University of Pennsylvania; J.D., Georgetown University.
- Wright, Cory D. (2008)** **Assistant Professor**
Philosophy
B.A., Wabash College; M.A., University of Mississippi; Ph.D., University of California, San Diego.
- Wright, Teresa A. (1996)** **Professor**
Political Science
B.A., Santa Clara University; M.A., Ph.D., University of California, Berkeley.
- Wright, Wayne (2005)** **Associate Professor**
Philosophy
B.A., Hofstra University; M.A., University of Florida; Ph.D., Temple University.
- Wrynn, Alison M. (2000)** **Professor**
Kinesiology
B.S., Springfield College, Springfield, Massachusetts; M.A., California State University, Long Beach; Ph.D., University of California, Berkeley.
- Wu, Tao (2007)** **Assistant Professor**
Marketing
B.S., Tianjin University, China; Ph.D., University of Utah.
- Wu, Wilbur F.W. (2009)** **Assistant Professor**
Kinesiology
B.S., University of California, Los Angeles; Ph.D., Louisiana State University.
- Wu, Xiaolong (2007)** **Assistant Professor**
Computer Engineering and Computer Science
B.S., Nanjing University of Aeronautics & Astronautics; M.S., Ph.D., University of Nevada, Las Vegas.
- Xie, Tianwei (1999)** **Professor**
Asian and Asian American Studies
B.A., M.A., Shanghai International Studies University, China; Ph.D., University of Pittsburgh, Pennsylvania.
- Xu, Shelley Hong (2002)** **Professor**
Teacher Education
B.A., East China Normal University; M.Ed., Ph.D., University of Nevada, Las Vegas.
- Xu, Wen-Qing (2002)** **Professor**
Mathematics and Statistics
B.S., University of Science and Technology of China; M.S., Institute of Mathematics, Chinese Academy of Sciences; Ph.D., Courant Institute, New York University.
- Yamada, Teri A. (1995)** **Professor**
Comparative World Literature and Classics
B.A., University of California, Santa Barbara; M.A., Ph.D., University of California, Berkeley.
- Yamarik, Steve (2005)** **Professor**
Economics
B.A., Ph.D., University of North Carolina.
- Yamashiro, Guy M. (2001)** **Associate Professor**
Economics
B.A., Washington University; Ph.D., University of California, San Diego.
- Yan, Jun (2001)** **Associate Professor**
Management and Human Resources Management
B.S., East China Institute of Technology; B.S., Nanjing University of Science and Technology; Ph.D., Texas Tech University.
- Yavari, Parviz (1994)** **Professor**
Mechanical and Aerospace Engineering
B.S., Shiraz University; M.S., Ph.D., University of Southern California.
- Yeh, Hen-Geul (1983)** **Professor**
Electrical Engineering
B.S., Cheng-Kung University, Taiwan; M.S., Ph.D., University of California, Irvine.
- Yeh, Hsien-Yang (1988)** **Professor**
Mechanical and Aerospace Engineering
B.S., Cheng-Kung University, Taiwan; M.S., Brown University; M.S., Columbia University; Ph.D., University of Southern California. Emeritus, 2010.
- Yeh, Jung-Mao (2003)** **Associate Professor**
Family and Consumer Sciences
B.S., Oklahoma City University; M.S., San Diego State University; Ph.D., Oklahoma State University.
- Yih, Tachung** **Associate Vice President**
Academic Affairs, Office of Research and Sponsored Programs
B.S., National Ocean University, Taiwan; M.S., Ph.D., Catholic University of America, Washington, D.C.
- Yin, Yuan (2008)** **Assistant Professor**
Accountancy
B.A., Shanghai University, China; M.A., Ph.D., Lancaster University, United Kingdom.
- Young, Douglas E. (1988)** **Professor**
Kinesiology
B.A., M.S., Ph.D., University of California, Los Angeles.
- Young, Kelly A. (2003)** **Associate Professor**
Biological Sciences
B.S., California Polytechnic State University, San Luis Obispo; M.A., Johns Hopkins University; Ph.D., Johns Hopkins School of Public Health.
- Young, Stacy L. (2000)** **Professor**
Communication Studies
B.A., University of Southern California; M.A., San Diego State University; Ph.D. University of Texas at Austin.
- Young Owl, Marcus (1989)** **Professor**
Anthropology
B.A., California State University, Long Beach; M.A., Ph.D., University of California, Los Angeles.
- Yur-Austin, Jasmine T. (1995)** **Professor**
Finance
B.A., National Taiwan University; M.B.A., University of Missouri; Ph.D., University of California, Irvine.
- Zanutto, Daniel R. (2000)** **Professor**
Music - Bob Cole Conservatory of Music
B.A., M.A., California State University, Fresno; Ed.D., University of California, Davis and California State University, Fresno.

Zavala, Arturo (2007) **Assistant Professor**
 Psychology
 B.A., M.A., California State University, San Bernardino; Ph.D., Arizona State University.

Zebot, George J. (2005) **Professor**
 Art
 B.A., M.A., California State University, Long Beach; M.F.A., California State University, Fullerton. Emeritus, 2010.

Zentgraf, Kristine M. (1998) **Professor**
 Sociology
 B.A., California State University, Long Beach; M.A., Ph.D., University of California, Los Angeles.

Zepeda, Rafael J. (1987) **Professor**
 English
 B.A., California State University, Long Beach; M.F.A., University of Oregon, Eugene.

Zhang, Mason X. (2000) **Professor**
 Biological Sciences
 B.S., Zhejiang Agricultural University, China; M.S., University of Minnesota, Twin Cities; Ph.D., University of Wisconsin, Madison.

Zhou, Tianni (2011) **Assistant Professor**
 Mathematics and Statistics
 B.S., M.S., Ph.D., University of California, Davis.

Ziemer, William K. (1989) **Professor**
 Mathematics and Statistics
 B.S., Purdue; M.S., Ph.D., Carnegie Mellon.

Zitzer-Comfort, Carol R. (2005) **Associate Professor**
 English/Liberal Studies
 B.A., California State University, Fullerton; M.A., CS Polytechnic University, Pomona; Ph.D., Claremont Graduate University.

Zwiep, Susan (2006) **Associate Professor**
 Science Education
 B.A., University of California, Berkeley; M.A., Whittier College; Ph.D., University of Southern California.

INDEX

Symbols

3-D Media
Option in ... 144
7 Year Rule ... 81
9/11 ... 37

A

AA Degree
GE Certified ... 68
ABET Accreditation
Chemical Engineering ... 230
Civil Engineering ... 262
Abroad
Credit Earned ... 80
ABSOC ... 219
Academic Action ... 49
Academic Appeal of Disqualification ... 66
Academic Appeals ... 67
Academic Calendar ... 45
Academic Credit ... 84
Academic Disqualification ... 65
Academic Information and Regulations ... 45–67
Academic Integrity Committee ... 49
Academic Load ... 18, 85
Academic Probation and Disqualification ... 65
Graduate Students ... 84
Academic Renewal ... 66
Academic Services ... 38–43
Freshman Workshops ... 38
Academy of Nutrition and Dietetics ... 419
Accountancy ... 86–87
ACCT Courses ... 87
Undergraduate Programs ... 86
Accreditation ... 830–831
ACCT Courses ... 87, 226
ACEND ... 419
ACT ... 24
Acting
Option in ... 809
Activity Courses ... 69
Acts of Violence ... 832
Adapted Physical Education Specialist Credential ... 544
Adapted Physical Education Teacher Education
Option in ... 542
ADED Courses ... 798
Administrative Academic Disqualification ... 66
Administrative Action ... 844
Admission Decision, Appeal ... 27
Admissions
Admission to CSULB ... 17–26
Adult Students ... 24
Advanced Placement Credit ... 25
AP Credit ... 25
Application Acknowledgment ... 18
Application Filing Periods ... 18
Application Procedures ... 17
Application to Credential Programs ... 23
Auditors ... 23
Choosing CSULB ... 17
Concurrent Enrollment ... 18
Deadlines ... 17
Eligibility Index ... 19
ELM ... 25
English Language Requirement ... 25
English Placement Test (EPT) ... 25
Enrollment of Non-matriculated Students ... 19
Entry-Level Mathematics (ELM) Examination ... 25
EPT ... 25
Estimated Expenses ... 26
Filing Period Duration ... 18
Graduate and Post-Baccalaureate Applications ... 22–23
Graduate Student ... 79
Hardship Petitions ... 24
Homeland Security, Department of ... 22
Housing ... 26
Immigration Requirements for Licensure ... 26
Immunization Requirements ... 26–27

Impacted Programs ... 17
Intensive English Language Program ... 22
International Baccalaureate Credit ... 26
International Student Applicants ... 21–22
Intrasystem and Intersystem Enrollment Programs ... 18
Non-matriculated Students ... 19
Post-Baccalaureate and Graduate Applications ... 22–23
Procedures and Policies ... 17–19
Readmission ... 17
Returning and Transfer Students ... 23
Second Baccalaureate ... 22
Senior Citizen Education Program ... 24
Student Selection and Denial ... 26
Summer, May, and Winter Session Students ... 19
Supplementary Admission Criteria ... 18
Systemwide Placement Test Requirements ... 25
Test Requirements ... 24
Undergraduate Requirement Deadlines ... 18
Visitor Enrollment ... 18
Admissions Procedures and Policies ... 17–19
Adult Education ... 798
Adult Education Track (AE) ... 797
Adult-Geriatric Nurse Practitioner ... 662
Adult Students ... 24
Advanced Media Production Center (AMP) ... 318
Advanced Placement Credit ... 25, 52–53
Advanced Studies in Education and Counseling ... 89–119
Administrative Services Credentials ... 103
Preliminary Administrative Services Credential ... 103
Professional Administrative Services Credential ... 104
Teacher Librarian Services Credential ... 105
Credential Programs ... 98–105
School Counseling ... 98
School Psychology ... 99–100
Graduate Certificates ... 106–107
Master of Arts in Education
Option in Educational Administration ... 89
Option in Educational Psychology ... 90
Option in Educational Technology ... 91
Option in Librarianship ... 92
Option in Social and Cultural Analysis of Education ... 93–94
Master of Science
Special Education ... 97
Master of Science in Counseling ... 94–96
Option in Marriage and Family Therapy ... 95
Option in School Counseling ... 96
Option in Student Development in Higher Education (SDHE) ... 96
Master of Science in Education ... 94
Programs ... 89–103
Special Education Credentials ... 100
Preliminary Level I ... 100–102
Advisement Centers ... 38–39
Bickerstaff Academic Center for Student-Athlete Services ... 38
College of Engineering Recruitment and Retention Center ... 38
College of Health and Human Services Academic Advising and Resource Center ... 39
Engineering Student Success Center (ESSC) ... 38
ESSC ... 38
Prebaccalaureate Advising Support Services ... 38
Student Access to Sciences and Mathematics Center ... 39
University Center for Undergraduate Advising ... 38–39
University Honors Program ... 39
Advising ... 38
Advising for Freshmen ... 46
AE ... 797
Aerospace Engineering Program ... 606
Africana Studies ... 121–125
African Student Resource Center ... 43
AFRS Courses ... 122–125
AH Courses ... 169–176
AIS Courses ... 126–127
Alcohol and Drugs ... 837
Alexander, F. King ... 6
ALI ... 317
ALI Courses ... 413
Allegations of Cheating and Plagiarism ... 48
ALP Courses ... 406, 413
Alternative Means of Assessment ... 52
Alumni Association ... 75–76
American Indian Student Study Center ... 43
American Indian Studies ... 126–127
American Language Institute
Courses ... 413

- American Language Institute (ALI) ... 317
 - American Language Program
 - Courses ... 406, 413
 - American Studies ... 129–130
 - AMST Courses ... 130
 - AND, Academy of Nutrition and Dietetics ... 419
 - ANTH Courses ... 133–138
 - Anthropology ... 131–138
 - Graduate Programs ... 132
 - Undergraduate Programs ... 131
 - AP Credit ... 25
 - APDS ... 650
 - Appeal of Admission Decision ... 27
 - Application Acknowledgment ... 18
 - Application Filing Periods ... 18
 - Application Procedures
 - Undergraduate ... 17
 - Application to Credential Programs ... 23
 - Applied Anthropology
 - Option in ... 132
 - Applied Mathematics
 - Option in ... 589, 593
 - Applied Sociology ... 774
 - ARAB Courses ... 745
 - Arabic
 - Courses ... 745
 - ART Courses ... 152–168
 - Art Department ... 139–172
 - Courses ... 152–175
 - Foundation Courses ... 152
 - Graduate Programs ... 147–151
 - Undergraduate Programs ... 140–145
 - Art Education
 - Option in ... 141
 - Art History
 - Courses ... 169–176
 - Option in ... 140
 - Art Photography
 - Option in ... 141
 - Arts, College of the
 - Information ... 177
 - ASAM Courses ... 182
 - Asian and Asian American Studies ... 178–183
 - Graduate Programs ... 179–180
 - Undergraduate Programs ... 178–180
 - Asian Languages ... 185–186
 - Asian Pacific Student Resource Center ... 43
 - Assignment of Course Grades ... 59
 - Associated Business Students Organization Council ... 219
 - Associated Students Government ... 43
 - Association of Pre-Dental Students ... 650
 - A/ST Courses ... 180–181
 - ASTR Courses ... 705
 - Astronomy
 - Courses ... 705
 - ATHL Courses ... 187
 - Athletics ... 187
 - Athletic Training ... 548
 - Attendance ... 46–47
 - Illness ... 46
 - Injury ... 46
 - Jury Duty ... 46
 - Audio Engineering
 - Option in ... 377–378
 - Auditing Courses ... 23
 - Auditors ... 23
- B**
- Baccalaureate Credit Based on Alternative Means of Assessment ... 52
 - Baccalaureate Degree
 - Frequently Asked Questions ... 68
 - Requirements ... 68
 - Baccalaureate Degree Information ... 68–76
 - Certificate Programs ... 71
 - Dean's List ... 73
 - Enrollment in Graduate Courses ... 72
 - General Education ... 69
 - Graduation ... 73
 - Graduation Writing Assessment Requirement (GWAR) ... 72–73
 - Honors ... 73
 - Majors ... 71
 - Minors ... 71
 - President's List ... 73
 - Timely Graduation ... 74
 - Bachelor of Arts
 - Africana Studies ... 121
 - American Studies ... 129
 - Art ... 140–143
 - Option in Art Education ... 141
 - Option in Art History ... 140
 - Option in Studio Art ... 140
 - Asian American Studies ... 179
 - Asian Studies ... 178
 - Business Economics ... 345
 - Chemistry ... 238–239
 - Chicano and Latino Studies ... 249
 - Chinese Studies ... 258
 - Classics
 - Option in Greek Civilization ... 275
 - Option in Roman Civilization ... 275
 - Communication Studies ... 280
 - Option in Communication, Culture and Public Affairs ... 280–281
 - Option in Interpersonal and Organizational Communication ... 281
 - Communicative Disorders ... 287
 - Comparative World Literature ... 293
 - Dance ... 327–328
 - Option in Dance Science ... 328
 - Design ... 337
 - Economics ... 344
 - Option in Mathematical Economics and Economic Theory ... 344
 - Engineering Systems ... 379–380
 - English ... 400
 - Option in Creative Writing ... 400
 - Option in English Education ... 400–401
 - Option in Literature ... 402
 - Option in Rhetoric and Composition ... 402
 - Option in Special Emphasis ... 402
 - Environmental Science and Policy ... 414
 - Family and Consumer Sciences ... 253, 313, 417, 424, 427, 443, 673
 - Option in Child Development and Family Studies ... 253
 - Option in Family and Consumer Sciences Education ... 424–425
 - Option in Family Life Education ... 255
 - Option in Fashion Merchandising ... 427
 - Option in Textiles and Clothing ... 428
 - Film and Electronic Arts ... 432
 - Option in Narrative Production ... 433
 - Option in Theory and Practice of Cinema ... 432–433
 - French ... 446
 - Geography ... 452
 - German ... 472
 - History ... 499–500
 - Human Development ... 518
 - International Studies ... 526–527
 - Italian Studies ... 529
 - Japanese ... 532
 - Journalism ... 538
 - Kinesiology ... 542
 - Option in Adapted Physical Education Teacher Education ... 542
 - Option in K-12 Physical Education Teacher Education ... 543
 - Liberal Arts ... 566
 - Liberal Studies ... 569–571
 - Linguistics ... 575
 - Option in Teaching English to Speakers of Other Languages ... 577
 - Modern Jewish Studies ... 537
 - Music ... 627
 - Philosophy ... 680
 - Physics ... 698
 - Political Science ... 706
 - Psychology ... 714
 - Recreation ... 731
 - Religious Studies ... 739
 - Social Work ... 761–762
 - Sociology ... 773
 - Spanish ... 779
 - Theatre Arts ... 807
 - Option in Performance: Acting ... 808
 - Option in Technical Theatre: Scenery/Costume/Lighting Design ... 808
 - Women's, Gender and Sexuality Studies ... 824

- Bachelor of Fine Arts
 - Art ... 141–142
 - Option in 3-D Media ... 144
 - Option in Art Photography ... 141
 - Option in Ceramics ... 142–143
 - Option in Drawing and Painting ... 142
 - Option in Graphic Design ... 146
 - Option in Illustration ... 143
 - Option in Printmaking ... 145
 - Option in Sculpture ... 145
 - Dance ... 329
 - Design ... 338–339
 - Bachelor of Music ... 628
 - Option in Choral-Vocal Music ... 629
 - Option in Composition ... 631
 - Option in History and Literature ... 631
 - Option in Instrumental Music ... 629
 - Option in Performance ... 630
 - Options in Performance, Composition and History and Literature ... 630
 - Bachelor of Science
 - Aerospace Engineering ... 606
 - Athletic Training ... 548
 - Biochemistry ... 238
 - Biology ... 189
 - Option in Biology Education ... 190
 - Option in Botany ... 192
 - Option in Cell and Molecular Biology ... 193–194
 - Option in Ecology ... 194
 - Option in Physiology ... 195
 - Option in Zoology ... 196
 - Business Administration ... 86, 440, 521, 524, 581, 585
 - Option in Accountancy ... 86
 - Option in Finance ... 440–441
 - Option in Human Resources Management ... 582
 - Option in International Business ... 524
 - Option in Management ... 582
 - Option in Management Information Systems ... 522
 - Option in Marketing ... 586
 - Option in Operations and Supply Chain Management ... 582
 - Chemical Engineering ... 231
 - Chemistry ... 237
 - Civil Engineering ... 262
 - Computer Engineering ... 299–300
 - Computer Engineering Technology ... 390–391
 - Computer Science ... 300–301
 - Construction Engineering Management ... 263
 - Criminal Justice ... 319
 - Dietetics and Food Administration ... 673
 - Option in Food Science ... 443
 - Option in Nutrition and Dietetics ... 673
 - Earth Science ... 464
 - Electrical Engineering ... 360–361
 - Electronics Engineering Technology ... 392–393
 - Engineering ... 377–380, 607
 - Option in Audio Engineering ... 377–378
 - Option in Biomedical and Clinical Engineering ... 361–362
 - Option in Industrial Management Engineering ... 608
 - Option in Materials Engineering ... 607
 - Engineering Technology ... 388
 - Option in Environmental Technology ... 389
 - Option in Technology and Engineering Education ... 388–389
 - Environmental Science and Policy ... 415–416
 - Geology ... 462–463
 - Health Care Administrator ... 484
 - Health Science ... 490
 - Option in Community Health Education ... 490
 - Option in Health Care ... 491
 - Option in Radiation Therapy ... 490, 490–491
 - Option in School Health Education ... 491, 491–492
 - Hospitality Management ... 514–515
 - Industrial Design ... 338
 - Kinesiology ... 544
 - Option in Exercise Science ... 545
 - Option in Fitness ... 545
 - Option in Kinesiotherapy ... 546
 - Manufacturing Engineering Technology ... 609
 - Marine Biology ... 197
 - Mathematics ... 588–589
 - Option in Applied Mathematics ... 589
 - Option in Mathematics Education ... 590
 - Option in Statistics ... 590
 - Mechanical Engineering ... 605
 - Microbiology ... 198
 - Nursing ... 653
 - Basic ... 653
 - Registered Nurse ... 654
 - Physics ... 697–698
 - Basic Tuition Fees ... 28, 29
 - Beach Fund ... 76
 - Beckman Scholars Program ... 649
 - BIA Grants ... 37
 - Bickerstaff Academic Center for Student-Athlete Services ... 38
 - Biochemistry and Chemistry ... 236–245
 - Honors ... 240
 - BIOL Courses ... 205–215
 - Biological Sciences ... 188–212
 - Courses ... 205–217
 - Graduate Programs ... 201–205
 - Honors ... 199
 - Undergraduate Programs ... 189–196
 - Biology Education
 - Option in ... 190
 - Preliminary Credential ... 190
 - Biomedical and Clinical Engineering ... 361–362
 - Biomedical Art
 - Certificate ... 146, 201
 - Biotechnology
 - Certificate ... 201
 - Bisexual Student Resource Center ... 43
 - BLAW Courses ... 226
 - Bob Cole Conservatory of Music ... 627–645
 - Botany
 - Option in ... 192
 - Bridges to the Baccalaureate Program ... 649
 - Buildings ... 836
 - Bureau of Indian Affairs (BIA) Grants ... 37
 - Business Administration
 - Graduate Courses ... 224, 225
 - Master of ... 222–225
 - Business Administration, College of ... 218–229
 - Business Economics ... 345
 - Business Law
 - Courses ... 226
- ## C
- CAFF Courses ... 314
 - Cal Grant A ... 36
 - Cal Grant B ... 36
 - California Desert Studies Consortium ... 650
 - California National Guard ... 36
 - California Social Work Education Center ... 762
 - California State University
 - Chancellor ... 4
 - Information ... 4
 - Trustees ... 4
 - CalSWEC ... 762
 - Cambodian ... 185
 - CAMP ... 39
 - Campus Emergency ... 844
 - Campus Financial Aid Programs ... 35
 - Campus Life ... 38–43
 - Campus Security Act ... 836
 - Campus Services ... 41–43
 - Child Development Center, Isabel Patterson ... 41
 - Counseling and Psychological Services ... 41
 - Immunization Requirement Clearance ... 42
 - Isabel Patterson, Child Development Center ... 41
 - Library ... 42
 - Medical Insurance ... 42
 - Psychological Services ... 41
 - Student Health Services (SHS) ... 42
 - University Ombuds ... 42
 - University Library ... 42
 - U.S. Passport Application Acceptance Office ... 42
 - Veterans Affairs Services ... 42
 - Cancellation of Registration or Withdrawal From CSULB ... 67
 - Cap and Gown ... 74
 - Careers Development Center ... 39
 - Careers and Disabilities ... 39
 - Career Technical Education
 - Courses ... 798–799

- Career Technical Education Track (CTE) ... 796
 Catalog Rights ... 85, 829
 CBA Courses ... 224
 CBEST ... 24
 CCM ... 650
 CCPE ... 316–318
 CD Courses ... 290–292
 CDFS Courses ... 255–257
 CE Courses ... 266–270
 Cell and Molecular Biology
 Option in ... 193–194
 CEM Courses ... 272–274, 274
 Center for Community Engagement ... 40
 Center for Education in Proteomics Analysis (CEPA) ... 651
 Center for International Education ... 317
 Center for International Trade and Transportation (CITT) ... 318
 CEPA ... 651
 Ceramics
 Option in ... 142–143
 Certificate
 Administration of Campus Recreation and Student Service Programs
 ... 732
 Administration of Outdoor Recreation Resources ... 733
 Administration of Travel and Tourism ... 733
 Aerospace Manufacturing ... 611
 Africana Studies ... 121
 American Indian Studies ... 126
 Asian American Studies ... 180
 Asian Studies ... 178
 Biomedical Art ... 146, 201
 Biotechnology ... 201
 Chicano and Latino Studies ... 250
 Community College ... 105
 Energy Conversion and Power Systems Engineering ... 612
 Geographic Information ... 453
 Gerontology ... 477
 Health Care Administration ... 485
 Heating, Ventilating and Air-Conditioning Engineering ... 611
 Industrial Plastics Processing and Design ... 612
 International Business ... 525
 Japanese ... 534–535
 Latin American Studies ... 563
 Legal Studies ... 564
 Leisure Counseling ... 734
 Management of Nonprofit and Volunteer Services ... 733
 Medieval and Renaissance Studies ... 623
 Museum Studies ... 151
 Nurse Practitioner ... 661
 Peace and Social Justice Studies ... 679
 Public Management Analysis ... 727
 Public Sector Employer-Employee Relations and Personnel Management ... 727
 Public Sector Financial Management ... 728
 Reading ... 789
 Religious Studies ... 739
 Russian and East European Studies ... 747
 Safety Operations ... 232
 Systems Engineering ... 381
 Teaching English to Speakers of Other Languages ... 577
 Technical and Professional Communication ... 403
 Therapeutic Recreation ... 732
 Transportation ... 220
 Transportation Policy and Planning ... 728
 Urban Executive Management ... 727
 Urban Studies ... 453
 Waste Engineering and Management ... 266
 Web and Technology Literacy ... 302
 Wilderness Studies ... 549
 Certificate Programs ... 71
 Certificates ... 78
 Table ... 7–14
 Chancellor ... 4
 Change of Final Course Grades ... 60
 Change of Major ... 71
 Cheating
 Definition ... 48
 Cheating and Plagiarism ... 47–49
 Academic Action ... 49
 Academic Integrity Committee ... 49
 Definition ... 47
 Disciplinary Sanctions ... 49
 Faculty Responsibilities ... 48
 Checks as Payment ... 33
 CHE Courses ... 232–234
 CHEM Courses ... 244–247
 Chemical Engineering ... 230–233
 ABET Accreditation ... 230
 Chemistry and Biochemistry ... 236–245
 Courses ... 244–247
 Graduate Programs ... 241–244
 Honors ... 240
 Undergraduate Programs ... 237–239
 Chicano and Latino Studies ... 249–252
 Chicanos/Latinos for Community Medicine ... 650
 Child Development and Family Studies ... 253–256
 Courses ... 255–257
 Child Development Center, Isabel Patterson ... 41
 Children, Youth and Families Concentration (CYF) ... 765
 Child Welfare ... 767
 CHIN Courses ... 258–261
 Chinese Studies ... 258–261
 Courses ... 258–261
 CHLS Courses ... 250–252
 Choosing CSULB ... 17
 Choral-Vocal
 Option ... 628
 CITT ... 318
 Civil Engineering Advisory and Development Council ... 262
 Civil Engineering and Construction Engineering Management ... 262–273
 Civility and Acts of Violence ... 832
 Civil Service Employees ... 32
 C/LA Courses ... 567
 Class Attendance ... 46–47
 Classical Studies
 Minor ... 275
 Classics ... 275–279
 Classrooms, Opening ... 836
 Clear Credential ... 786
 CLEP Credit ... 55
 Clinical Engineering ... 361–362
 Clinical Nurse Specialist
 Option in ... 661
 Clothing and Textiles
 Option in ... 428
 CLSC Courses ... 276–277
 College Assistance Migrant Program (CAMP) ... 39
 College-Level Examination Program ... 55
 College of Business Administration ... 218–229
 College of Continuing and Professional Education ... 316–318
 Open University ... 317
 Winter Session ... 317
 College of Education ... 351–358
 College of Engineering ... 376–386
 Recruitment and Retention Center ... 38
 College of Health and Human Services ... 482–483
 College of Health and Human Services Academic Advising and Resource Center ... 39
 College of Liberal Arts ... 565–567
 Courses ... 567
 College of Natural Sciences and Mathematics ... 648
 College of the Arts
 Information ... 177
 College Organizations ... 43
 COMM Courses ... 282–286
 Commencement
 Fees ... 28
 Communication, Culture and Public Affairs
 Option in ... 280–281
 Communication Studies ... 280–286
 Courses ... 282–286
 Communicative Disorders ... 287–292
 Courses ... 290–292
 Community College Transfer Units ... 68
 Community Health Education ... 490
 Option in ... 490
 Comparative World Literature ... 293–297
 Courses ... 294–297
 Complaint Resolution Procedures ... 833
 Composition
 Option in ... 631
 Compulsory Military Service ... 30
 Computer Engineering
 Option in ... 303

- Computer Engineering and Computer Science ... 299–310
 - Courses ... 304–311
 - Computer Engineering Technology ... 390–391
 - Computer Science
 - Minor ... 302
 - Option in ... 304
 - Computer Science Applications
 - Minor ... 302
 - Concurrent Enrollment ... 18, 69
 - Confidentiality ... 833
 - Construction Engineering Management Advisory and Development Council ... 262
 - Construction Engineering Management and Civil Engineering ... 262–273
 - Consumer Affairs ... 313–314
 - Courses ... 314
 - Continuing Education ... 316–318
 - Graduate ... 85
 - Contributions ... 76
 - Copyright Laws ... 844
 - Correspondence Courses ... 85
 - Costs to Students ... 26
 - COTA Courses ... 177
 - COUN Courses ... 108–112, 110–114
 - Counseling and Psychological Services ... 41
 - Course Credit Units and Modes of Instruction ... 51
 - Course Grading Options ... 59
 - Course Numbers ... 51
 - Course Prefixes and Definitions ... 15–16
 - Course Requirement
 - Waiver ... 84
 - Courses
 - Correspondence ... 85
 - Double-Numbered ... 51
 - Prefixes Table ... 15–16
 - Repetition ... 60
 - Writing Proficiency ... 820
 - Courses Taken First at Another Institution ... 60
 - Courses Taken First at CSULB ... 60
 - Creative Writing ... 405
 - Option in ... 400
 - Credential
 - Adapted Physical Education Specialist ... 544
 - Art Education ... 141
 - Biology ... 190
 - Geoscience ... 465
 - German ... 472, 543, 544
 - Health Science ... 491
 - Italian ... 530
 - Japanese ... 533
 - Latin ... 275, 446
 - Mathematics ... 590
 - Multiple Subject ... 569–571, 786–788
 - Physics ... 699–700
 - Pupil Personnel Services ... 768
 - Reading and Language Arts Specialist ... 790
 - School Nurse ... 663
 - Service in Public Education Speech-Language Pathology ... 289
 - Social Science ... 500
 - Spanish ... 779
 - Credential Programs ... 352–355
 - School Counseling ... 98
 - School Psychology ... 99–100
 - Credentials
 - Table ... 7–14
 - Credit
 - Earned Abroad ... 80
 - Credit Card ... 29
 - Disputed Charge ... 33
 - Credit for Cross-Listed Courses ... 52
 - Credit for Independent Study Courses ... 52
 - Credit for Noncollegiate Instruction ... 56
 - Credit Hour ... 67
 - Credit/No Credit Grading ... 84
 - Crimes ... 836, 837
 - Criminal Justice ... 319–326
 - Courses ... 322–326
 - Minor ... 320
 - CRJU Courses ... 322–326
 - Cross-Listed Courses ... 52
 - CSET ... 24
 - CSU International Programs (IP) System-wide ... 41
 - CSULB Alumni Association ... 75–76
 - CSUPERB Core Facility for Micro-Chemical Elemental Analysis (FEMCA) ... 651
 - CTE ... 796
 - CTED Courses ... 798–799
 - Curriculum and Instruction
 - Courses ... 799–800, 800–801
 - Curriculum and Instruction, Elementary Education
 - Option in ... 790
 - Curriculum and Instruction, Secondary Education
 - Option in ... 791
 - CWL Courses ... 294–297
 - CYF ... 765
- ## D
- Daily Forty-Niner ... 538
 - DANC Courses ... 331–336
 - Dance ... 327–336
 - Courses ... 331–336
 - Dance Science
 - Option in ... 328
 - Deadlines ... 17
 - Dean's List ... 73
 - Graduate Students ... 85
 - Death in Family ... 46
 - Attendance ... 46
 - Death of Student ... 30
 - Debts Owed ... 33
 - Declaration of Major ... 71
 - Degree Clearing ... 73
 - degrees. *See also* specific degree
 - Degrees, Options, Minors, Certificates, and Credentials ... 7–14
 - Table ... 7–14
 - Departmental Graduate Student Honors ... 85
 - Departmental Honors ... 73
 - Desert Studies ... 650
 - Desert Studies Consortium ... 188
 - Design ... 337–342
 - Courses ... 339
 - DESN Courses ... 339–342
 - Determination of Residence for Nonresident ... 31–33
 - Dietetics ... 673–675
 - Dig Online ... 538
 - Diploma Fee ... 28
 - Disabilities, Students with
 - Minimum Unit Requirements ... 50
 - Disabled Student Services ... 39
 - Disciplinary Procedures ... 844
 - Disciplinary Sanctions ... 49
 - Disclosure of Campus Security Policy and Campus Crime Statistics Act ... 838
 - Discrimination ... 832
 - Dishonored Checks / EChecks ... 33
 - Disposition of Fees ... 844
 - Disputed Credit Card Charge ... 33
 - Disqualification
 - Graduate Students ... 84
 - Disqualification From Impacted Programs ... 65
 - Distance Education Classes ... 51
 - Doctoral Tuition Fee ... 28, 29
 - Doctorate ... 77
 - Educational Leadership ... 355–356
 - Engineering and Industrial Applied Mathematics ... 381–384
 - Physical Therapy ... 689
 - Doctor of Physical Therapy Courses ... 693
 - Domestic Volunteer Service Act ... 34
 - Dorms ... 26
 - Double-Counted ... 68
 - Double Major ... 71
 - Double-Numbered Courses ... 51
 - DPT Courses ... 693
 - Dramatic Writing
 - Option in ... 811
 - Drawing and Painting
 - Option in ... 142
 - Drugs and Alcohol ... 837
 - Dual Language Development
 - Option in ... 792

E

- Early Childhood Education
 - Courses ... 800
- Early Start Program ... 24
- Early Start Writing Courses ... 406
- Earth Science ... 464
- EChecks ... 33
- Ecology
 - Option in ... 194
- ECON Courses ... 346–349
- Economics ... 344–349
 - Courses ... 346–349
- Economic Theory and Mathematical Economics
 - Option in ... 344
- EDAD Courses ... 111–112
- EDCI Courses ... 799–800, 800–801
- Ed.D. ... 77
- EDEC Courses ... 800
- EDEL Courses ... 801–803, 802–804
- EDLD Courses ... 357–358
- EDME Courses ... 803–804, 804–805
- EDMS Courses ... 804
- EDP Courses ... 113–117
- EDRG Courses ... 804–805
- EDSE Courses ... 759, 760, 805–806, 806
- EDSS Courses ... 758–760
- Educational Administration ... 89
 - Courses ... 111–112
- Educational Equity Services ... 40
- Educational Leadership
 - Courses ... 357
- Educational Leadership Doctorate ... 355–356
- Educational Leave ... 67
- Educational Library
 - Courses ... 119–120
- Educational Opportunity ... 833
- Educational Opportunity Center ... 39
- Educational Opportunity Program (EOP) ... 40
 - Courses ... 820
- Educational Opportunity Program Grants ... 35
- Educational Psychology
 - Courses ... 113–116
 - Option in ... 90
- Educational Talent Search ... 39
- Educational Technology
 - Courses ... 118
 - Option in ... 91
- Education, College of ... 351–358
- Education Middle School
 - Courses ... 804
- Education Specialist ... 572
 - Courses ... 116–118
- Education Specialist Credential and Intern Option
 - Mild/Moderate Disabilities ... 100–102
 - Moderate/Severe Disabilities ... 100–102
- EE Courses ... 363–370
- Election of Regulations
 - Graduate Students ... 83
- Election of Regulations for Degree Requirements ... 829
- Electives
 - Subject Requirements ... 19
- Electrical Engineering ... 360–370
 - Courses ... 363–368
- Electronics Engineering Technology ... 392–393
- Electron Microscopy Facility ... 650
- Elementary Education
 - Courses ... 801–803, 802–804
- Eligibility Index ... 19
- ELM ... 25
- EMER Courses ... 374–375
- Emergencies ... 836
- Emergency Management ... 373–375
 - Courses ... 374–375
- Emeriti Faculty ... 847–848
- Employment Opportunities ... 39
- Energy Conversion and Power Systems Engineering ... 612
 - Engineering
 - Courses ... 384–385, 386–387
 - Engineering and Industrial Applied Mathematics
 - Ph.D. ... 381–384
 - Engineering, College of ... 376–386
 - Engineering Student Success Center (ESSC) ... 38
 - Engineering Technology Courses (E T)
 - Courses ... 393–398, 394–399, 396–399, 398–399
 - Engineering Technology Programs ... 388–396
 - ENGL Courses ... 406–413, 408–413, 410–413, 412–413
 - English ... 400–413
 - Courses ... 406, 408, 410, 412
 - Subject Requirements ... 19
 - English Education
 - Option in ... 400–401
 - English Language Requirement ... 25
 - English Placement Test (EPT) ... 25
 - ENGR Courses ... 384–385, 386–387
 - Enrolling in Classes ... 45
 - Enrollment
 - Concurrent ... 69
 - Enrollment of Non-matriculated Students ... 19
 - Entry-Level Mathematics (ELM) Examination ... 25
 - Environmental Engineering ... 380
 - Environmental Science and Policy ... 414–415
 - Courses ... 416
 - Environmental Technology
 - Option in ... 389
 - EOP ... 35, 40
 - EOP Courses ... 820
 - EPT ... 25
 - Equal Access ... 833
 - Equal Employment ... 833
 - eRefund ... 34
 - Escort Services ... 837
 - ESP Courses ... 416
 - ESSC ... 38
 - Estimated Expenses ... 26
 - ESW Courses ... 406
 - ETEC Courses ... 393–398, 394–399, 396–399, 398–399
 - Event Planning Management ... 732, 515
 - Exercise Science
 - Option in ... 545
 - Extension ... 316–318
 - Graduate Transfer Units ... 85
 - Extenuating Circumstances
 - Withdrawal ... 58
- F**
 - faculty
 - emeriti ... 847–848
 - list of ... 848–849
 - Faculty Advisors
 - Graduate ... 79
 - Faculty Office Hours ... 47
 - Faculty-Student Interaction ... 47
 - FAFSA ... 34
 - F.A.I.R. ... 30
 - Family and Consumer Sciences ... 417–422
 - Courses ... 420–422
 - Family and Consumer Sciences Education ... 424–425
 - Courses ... 425
 - Family Death
 - Attendance ... 46
 - Family Educational Rights and Privacy Act ... 840
 - Family Life Education ... 254
 - Family Nurse Practitioner ... 661, 662
 - Family Studies ... 253–256
 - Fashion Merchandising and Design ... 427–430
 - Courses ... 429–430
 - FCS Courses ... 420–422
 - FCSE Courses ... 425
 - FEA Courses ... 434–438
 - Federal Copyright Laws ... 844
 - Federal Military Selective Service Act ... 829
 - Federal Pell Grant Program ... 36
 - Federal Perkins Loans ... 35
 - Federal PLUS Loan ... 36
 - Federal Stafford Loan ... 36
 - Federal/State Regulations ... 37
 - Federal Supplemental Educational Opportunity Grant (SEOG) ... 35
 - Federal Work-Study (FWS) ... 35

- Fee Establishment and Policies ... 845
 - Fees ... 28–36
 - Auditors ... 29
 - Collected in Error ... 30
 - Commencement ... 28
 - Diploma ... 28
 - Doctoral Tuition Fee ... 28, 29
 - Graduate Business Professional Fee ... 28, 29
 - Late Payment Fee ... 28
 - Missed Deadline Fee ... 28
 - Nonresident Students ... 28, 29
 - Optional Fees ... 28
 - Other Fees and Charges ... 28
 - Parking Fee ... 29
 - Payments ... 29
 - Installment Payment Plan ... 30
 - Short Term Loans ... 30
 - Refund of Mandatory Fees ... 30
 - Schedule of Fees ... 28
 - Tuition Fees ... 28, 29
 - Fee Waivers ... 36
 - FEMCA ... 651
 - Fiber, Metal, Wood - 3-D Media
 - Option in ... 144
 - Filing Period Duration ... 18
 - Filipino ... 186
 - Film and Electronic Arts ... 432–438
 - Courses ... 434–438
 - Final Assessments ... 56–60
 - Final Course Grades, Grading Procedures, and Final Assessments ... 56–60
 - Finance ... 440–442
 - Courses ... 226, 441–442
 - Financial Aid ... 28–36
 - Academic Responsibilities ... 35
 - Application ... 34
 - Eligibility ... 34
 - FAFSA ... 34
 - Free Application for Federal Student Aid (FAFSA) ... 34
 - Notification of Awards ... 35
 - Responsibilities ... 35
 - Financial Aid Programs
 - Educational Opportunity Program Grants ... 35
 - Federal Perkins Loans ... 35
 - Federal Supplemental Educational Opportunity Grant (SEOG) ... 35
 - Federal Work-Study (FWS) ... 35
 - Graduate Research Fellowships ... 35
 - President's Scholars Program ... 35
 - Scholarship Information ... 35
 - SEOG ... 35
 - State University Grant ... 35
 - Financial Appeals Independent Review Committee ... 30
 - Financial Assistance ... 34–37
 - Graduate Assistantships ... 37
 - Internship Program ... 37
 - Student Part-Time Employment ... 37
 - Teaching Associateships ... 37
 - Financial Holds ... 33–34, 46
 - Financial Obligations and Holds ... 33–34
 - Checks as Payment ... 33
 - Library ... 33
 - FIN Courses ... 226, 441–442
 - Firearms ... 837
 - Fire Suppression Dependents ... 37
 - Fitness
 - Option in ... 545
 - F. King Alexander ... 6
 - FMD Courses ... 429–430
 - Food Science ... 443–444
 - Courses ... 444
 - Foreign Language
 - Subject Requirements ... 19
 - Foreign Language Waiver ... 20
 - Forensic Studies
 - Minor ... 320
 - Franchise Tax Board ... 33
 - Frank Schatzlein Scholarship Award ... 188
 - Fraternities ... 74–75
 - Free Application for Federal Student Aid (FAFSA) ... 34
 - French ... 446–450
 - Courses ... 448–450
 - Interdisciplinary Option ... 447–448
 - FREN Courses ... 448–450
 - Freshman Applicants ... 19–20
 - Eligibility Index ... 19
 - Foreign Language Waiver ... 20
 - High School Students ... 20
 - Honors Courses ... 20
 - Lower Division Transfer Requirements ... 20
 - Provisional Admission ... 20
 - Special Admission Consideration for Students with Disabilities ... 20
 - Subject Requirements ... 19
 - Transfer Policies ... 20
 - Upper Division Transfer Requirements ... 21
 - Young Scholars Program ... 20
 - Freshman Level
 - Definition ... 69
 - Freshman Workshops ... 38
 - FSCI Courses ... 444
 - FWS ... 35
- ## G
- Gay Student Resource Center ... 43
 - GBA Courses ... 224, 225
 - G-DEP Program ... 649
 - General Education ... 69
 - Capstone ... 70
 - Certification ... 68
 - Partial Certification ... 68
 - Policies ... 70–71
 - Requirements ... 70
 - Returning and Transfer Students ... 70
 - General Policies and Regulations ... 829–845
 - GEOG Courses ... 455–460, 456–461, 458–461, 460–461
 - Geographic Information
 - Certificate ... 453
 - Geographic Information Science ... 461
 - Geography ... 452–460
 - Courses ... 455–458, 456–459, 458–461, 460–461
 - GEOLOG Courses ... 467–471
 - Geological Sciences ... 462–470
 - Geology
 - Courses ... 467–471
 - Geoscience ... 465
 - Geriatric Nurse Practitioner ... 662
 - German ... 472–475
 - Courses ... 473–475
 - Credential ... 472, 543, 544
 - GERM Courses ... 473–475
 - GERN Courses ... 478–479
 - Gerontology ... 476–479
 - Courses ... 478
 - Gifts to the University ... 76
 - GISC Courses ... 461
 - Giving at the Beach ... 76
 - GK Courses ... 278–279
 - GLG Courses ... 481
 - Global Logistics ... 480–481
 - Courses ... 481
 - GPA ... 21
 - Grade Appeals ... 61–65
 - Committees ... 61
 - Preliminary Informal Phase ... 62
 - Grade Point Average ... 21
 - Grades
 - Assignment of ... 59
 - Change Final ... 60
 - definitions ... 56
 - Grading Options ... 59
 - Grading Procedures ... 56–60
 - Graduate
 - Faculty Advisors ... 79
 - Graduate and Post-Baccalaureate
 - Admission Requirements ... 78
 - Graduate and Post-Baccalaureate Applications ... 22–23
 - Graduate Assistant (GA) ... 37
 - Graduate Assistantships ... 37, 83
 - Graduate Business Administration
 - Courses ... 224, 225

- Graduate Business Professional Fee ... 28, 29
 Graduate Center for Public Policy and Administration ... 725–729
 Graduate Certificate
 Career Guidance Specialist ... 106
 Community College ... 105
 Leisure Counseling ... 734
 Museum Studies ... 151
 Nurse Practitioner ... 661
 Public Management Analysis ... 727
 Public Sector Employer-Employee Relations and Personnel Management ... 727
 Public Sector Financial Management ... 728
 Systems Engineering ... 381
 Teaching English to Speakers of Other Languages ... 577
 Transportation Policy and Planning ... 728
 Urban Executive Management ... 727
 Waste Engineering and Management ... 266
 Graduate Credit ... 72
 Graduate Dean's List ... 85
 Graduate Degree Information ... 77–85
 Academic Credit ... 84
 Academic Load ... 85
 Admission Requirements ... 78
 Advancement to Candidacy ... 82
 Certificates ... 78
 Comprehensive Examination ... 83
 Credit/No Credit Grading ... 84
 Degrees List ... 77–78
 Election of Regulations ... 83
 Graduation Writing Assessment Requirement (GWAR) ... 79
 Request to Graduate ... 82
 Second Degree ... 81
 Special Action ... 79
 Theses and Projects ... 83
 Thesis and Dissertation Office ... 84
 Thesis Committees ... 83
 Waivers ... 84
 Withdrawal ... 81
 Graduate Program
 Health Education ... 493
 Graduate Research Fellowship ... 80
 Graduate Research Fellowships ... 35
 Graduate Standing ... 78–79
 Graduate Students
 Honors ... 85
 Minimum Unit Requirements ... 50
 Graduate Studies 700 ... 85
 Graduate Study
 International Programs ... 80
 Graduate Transfer Units by Extension ... 85
 Graduation ... 73
 Degree Clearing ... 73
 Fees ... 28
 Honors ... 73
 Timely Graduation ... 74
 Graduation Rates ... 830
 Graduation Writing Assessment Requirement (GWAR) ... 72–73, 79
 Graham Medical Technology Scholarship ... 188
 Grants
 BIA ... 37
 Bureau of Indian Affairs ... 37
 Pell Grant ... 34
 TEACH Grant ... 37
 Graphic Design
 Option in ... 146
 GRE ... 24
 Greek
 Courses ... 278–279
 Minor ... 276
 Greek Civilization
 Option in ... 275
 Grievance Policy ... 841
 Guests ... 17
 GWAR ... 72–73, 79
 Gym ... 43
- H**
- Handloser Graduate Student Tuition Grant ... 188
 Hardship Petitions ... 24
 HCA Courses ... 486–488
 HDEV Courses ... 519–520
 Health ... 835
 Health and Human Services, College of ... 482–483
 Health Care
 Option in ... 491
 Health Care Administration ... 484–488
 Courses ... 486–488
 Health & Human Services, College of
 Courses ... 483
 Health Professional Preparation ... 189
 Health Professions Advising Office (HPAO) ... 650
 Health Science ... 490–498
 Courses ... 495–498
 Preliminary Single Subject Credential ... 491
 Heating, Ventilating and Air-Conditioning Engineering ... 611
 Hebrew
 Courses ... 537
 HEBW Courses ... 537
 HFHM Courses ... 515–517
 HHS Courses ... 483
 High School Students ... 20
 HIST Courses ... 503–513
 History ... 499–513
 Courses ... 503–513
 History and Literature - Music
 Option in ... 631
 Holds
 Financial ... 33–34
 Library ... 33
 Homeland Security, Department of ... 22
 Honors
 Biochemistry and Chemistry ... 240
 Biological Sciences ... 649
 Dean's List ... 73
 History ... 501
 List ... 73
 Mathematics ... 591
 Philosophy ... 680
 Political Science ... 706
 President's List ... 73
 Psychology ... 715
 Sociology ... 773
 Undergraduate Students ... 73
 Honors for Graduate Students ... 85
 Honor Societies ... 74–75
 Hope Scholarship Credit ... 846
 Hospitality Management ... 514–517
 Courses ... 515–517
 Hotel Management ... 514–517
 Hours of Instruction
 Defined ... 51
 Housing ... 26
 HPAO ... 650
 HRM Courses ... 227, 583–584
 HSC Courses ... 495–498
 Human Development ... 518–520
 Courses ... 519
 Human Factors
 Option in ... 716
 Human Resources Management ... 581–584
 Courses ... 227
 Option in ... 582
 Hybrid Classes and Distance Education Classes ... 51
- I**
- IIRMES ... 650
 Illness
 Class Attendance ... 46
 Illustration
 Option in ... 143
 Immigration Requirements for Licensure ... 26
 Immunization Requirement Clearance ... 42
 Immunization Requirements ... 26–27
 Impacted Programs ... 17
 Incomplete Grades
 Graduate Studies 700 ... 81
 Independent Study Courses ... 52
 Industrial and Organizational Psychology
 Option in ... 717
 Industrial Applied Mathematics ... 381–384

Industrial Design ... 338
 Industrial Management Engineering
 Option in ... 608
 Informal Science Education
 Option in ... 750
 Information Systems ... 521–523
 Courses ... 227, 228
 Injury
 Class Attendance ... 46
 Installment Payment Plan ... 30
 Institute for Integrated Research in Materials, Environment, and Society
 (IIRMES) ... 650
 Instruction Hours
 Defined ... 51
 Instrumental Music
 Option ... 628
 Integrated Teacher Education Program ... 569–570
 Intensive English Language Program ... 22
 Interaction
 Student-Faculty ... 47
 Interdisciplinary Minor in Public Policy ... 707
 Interdisciplinary Option
 French ... 447
 Interfaith Center ... 43
 Interim Suspension ... 844
 International Baccalaureate Credit ... 26, 54–55
 International Business ... 524–525
 International Education Center ... 317
 International Education (INTL)
 Courses ... 820
 International Program Credit ... 56
 International Programs ... 80
 International Programs (IP) ... 41
 International Student Applicants ... 21–22
 Insurance Requirement ... 22
 Intensive English Language Program ... 22
 TOEFL Requirement ... 22–23
 International Students
 Minimum Unit Requirements ... 50
 International Student Services ... 40
 International Studies ... 526–528
 Courses ... 527
 International Training Programs ... 317
 Internship
 Single Subject ... 755
 Internship Program ... 37, 39, 820
 Interpersonal and Organizational Communication
 Option in ... 281
 Intersystem Enrollment Programs ... 18
 Inter-University Consortium ... 768
 INTL Courses ... 820
 Intrasystem and Intersystem Enrollment Programs ... 18
 Isabel Patterson, Child Development Center ... 41
 IS Courses ... 522–523
 I/ST Courses ... 527–528
 ITAL Courses ... 530–531
 Italian ... 529–531
 Courses ... 530–531
 ITEP ... 569–570
 IUC ... 768

J

Japanese ... 532–535
 Courses ... 534
 JAPN Courses ... 534–536
 Jeanne Clery ... 838
 Jensen Student Access to Science and Mathematics (SAS) ... 649
 Jewish Studies ... 537
 Courses ... 537
 JOUR Courses ... 539–541
 Journalism
 Courses ... 539–541
 Journalism and Mass Communication ... 538–541
 Judicial Affairs ... 844
 Junior Level ... 69
 Jury Duty
 Class Attendance ... 46

K

K-12 Physical Education Teacher Education
 Option in ... 543
 KHMR Courses ... 185
 KIN Courses ... 552–561, 554–562, 556–562, 560–562
 Kinesiology ... 542–559
 Courses ... 552–561, 554–562, 556–562, 560–562
 Kinesiotherapy
 Option in ... 546
 KOR Courses ... 185
 Korean ... 185

L

LAS Courses ... 563
 LAT Courses ... 278–279
 Late Payment Fee ... 28
 Latin
 Courses ... 278–279
 Credential ... 275, 446
 Minor ... 276
 Latin American Studies ... 563
 Courses ... 563
 Latin Honors ... 73
 Latino and Chicano Studies ... 249–252
 Law Enforcement ... 836
 Leadership Academy ... 43
 Leadership Resource Center, Lois J. Swanson ... 43
 Learning Assistance Center ... 40
 Legal Studies ... 564
 Leisure Counseling ... 734
 Liberal Arts, College of ... 565–567
 Liberal Studies ... 569–573
 Courses ... 574
 Librarianship
 Option in ... 92
 Library ... 42
 Charges ... 33
 Licensure of Immigrants ... 26
 Lifetime Learning ... 841
 Linda Warren Graham Medical Technology Scholarship ... 188
 LING Courses ... 578–580
 Linguistics ... 575–580
 Courses ... 578–580
 Literature
 Option in ... 402
 Lois J. Swanson, Leadership Resource Center ... 43
 Loomis
 Research Award ... 188
 Lower Division Transfer Requirements ... 20
 LS-AMP Program ... 649
 LSAT ... 24
 L/ST Courses ... 574

M

MAE Courses ... 614–621
 Major
 Change of ... 71
 Declaration ... 71
 Double ... 71
 Majors ... 71
 Declaration of ... 71
 Management
 Courses ... 228, 582–584, 583–584
 Option in ... 582
 Management and Human Resources Management ... 581–584
 Management Information Systems
 Option in ... 522
 Mandatory Fees
 Refund of ... 30
 MAPB Courses ... 595
 MARC/MBRS Programs ... 649–650
 Marine Biology
 Bachelor of Science ... 197
 Marketing ... 585–586
 Courses ... 229, 586
 Option in ... 586
 Marriage and Family Therapy
 Option in ... 95

- Married Person
Residence of ... 32
- Mass Communication ... 538–541
- Master of Arts
Anthropology
Option in Applied Anthropology ... 132
Applied Sociology ... 774
Art ... 152–155, 244–247, 406–409, 420–423, 448–451, 467–470, 473–475
Asian Studies ... 179–180
Communication Studies ... 281–282
Communicative Disorders ... 288
Dance ... 330–331
Degrees List ... 77
Education ... 790
Option in Curriculum and Instruction, Elementary Education ... 790
Option in Curriculum and Instruction, Secondary Education ... 791
Option in Dual Language Development ... 792
Option in Early Childhood Education ... 793
Option in Mathematics Education ... 795
Option in Reading/Language Arts ... 794
English ... 404
Family and Consumer Sciences ... 417–418
French and Francophone Studies ... 447
Geography ... 453
German ... 473
Global Logistics ... 480
History ... 502–503
Kinesiology ... 550
Option in Adapted Physical Education ... 550
Option in Coaching and Student-Athlete Development ... 550
Option in Individualized Studies ... 551
Option in Pedagogical Studies ... 550
Option in Sport Management ... 550
Linguistics ... 576
Option in General Linguistics ... 576
Option in Language and Culture ... 577
Music ... 632–633
Philosophy ... 681
Political Science ... 707
Psychology ... 715
Option in Psychological Research ... 715
Religious Studies ... 739
Spanish ... 780
- Master of Arts in Education ... 89–93
- Master of Business Administration ... 222
Degrees List ... 77
- Master of Business Administration/Master of Fine Arts in Theatre Management ... 811
Degrees List ... 77
- Master of Fine Arts
Art ... 152–155, 244–247, 406–409, 420–423, 448–451, 467–470, 473–475
Creative Writing ... 405
Dance ... 330–331
Degrees List ... 77
Theatre Arts ... 809
Option in Acting ... 809
Option in Dramatic Writing ... 811
Option in Technical Theatre/Design ... 810
Option in Theatre Management ... 810
- Master of Fine Arts in Theatre Management
Degrees List ... 77
- Master of Fine Arts in Theatre Management/Master of Business Administration ... 811
- Master of Music ... 633–634
Degrees List ... 77
- Master of Physical Therapy ... 687
Degrees List ... 77
- Master of Public Administration ... 725
Degrees List ... 77
Option in Public Works Administration ... 726
Option in Urban Affairs ... 726
- Master of Public Health ... 493
Degrees List ... 77
Option in Community Health Education ... 493
- Master of Science
Aerospace Engineering ... 613
Applied Statistics ... 594
Biochemistry ... 243–244
Biology ... 201–203
Chemistry ... 241–242
Civil Engineering ... 265
Computer Science ... 303
Option in Computer Engineering ... 303
Option in Computer Science ... 304–305
Criminal Justice ... 321–322
Degrees List ... 77
Electrical Engineering ... 363–364
Emergency Services Administration ... 373
Engineering ... 380–381, 614
Geology ... 466–468
Gerontology ... 476–477
Health Care Administration ... 485
Health Care Administration ... 660
Health Science ... 493
Kinesiology ... 551
Option in Exercise Physiology and Nutrition ... 552
Option in Exercise Science ... 551
Option in Sport and Exercise Psychology ... 551
Option in Sports Medicine and Injury Studies ... 551
Mathematics ... 593
Option in Applied Mathematics ... 593
Option in Mathematics Education for Secondary School Teachers ... 593
Mechanical Engineering ... 613
Microbiology ... 203–205
Nursing ... 655
Option in Clinical Nurse Specialist ... 661
Nutritional Science ... 418
Physics ... 700
Option in Applied Physics ... 700
Psychology ... 716
Option in Human Factors ... 716
Option in Industrial and Organizational Psychology ... 717
Recreation Administration ... 733–734
Science Education ... 749
Option in Informal Science Education ... 750
Option in Secondary Science Education ... 750
Special Education ... 97
- Master of Science in Counseling ... 94–96
Option in Marriage and Family Therapy ... 95
Option in School Counseling ... 96
Option in Student Development in Higher Education (SDHE) ... 96
- Master of Science in Education ... 94
- Master of Science in Nursing/Master of Public Health ... 659
- Master of Social Nursing/Master of Public Health
Degrees List ... 77
- Master of Social Work ... 763–764
Degrees List ... 77
- Master's Degree
Second Degree ... 81
- Masters List ... 77, 77–78
- Materials Engineering
Option in ... 607
- MATH Courses ... 595–599
- Mathematical Economics and Economic Theory
Option in ... 344
- Mathematics
Courses ... 595–599
Credential ... 590
Subject Requirements ... 19
- Mathematics and Statistics ... 588–602
- Mathematics Education
Courses ... 600–602, 803–804, 804–805
Option in ... 590, 795
- Mathematics Education for Secondary School Teachers
Option in ... 593
- Mathematics Prebaccalaureate
Courses ... 595
- May Session Students ... 19
- MBA ... 222–225
- MCAT ... 24
- McNair Scholars Program ... 40
- Mechanical and Aerospace Engineering ... 604–619
Courses ... 614–619
- Mechanical Engineering Program ... 605
- Medical Insurance ... 42
- Medieval and Renaissance Studies ... 623
- Mental Health Program ... 767
- Message from the President ... 6
- Metal, Fiber, Wood - 3-D Media
Option in ... 144
- MGMT Courses ... 582–583, 583–584

- MICR Courses ... 215–217, 216–217
- Microbiology
 Bachelor of Science ... 198
- Military Science ... 625–626
 Courses ... 625–626
- Military Service
 Graduate Students ... 82
- Minimum Unit Requirements
 Graduate Students ... 50
 International Students ... 50
 Students in Special Classifications ... 50
 Students with Disabilities ... 50
 Veterans ... 50
- Minor
- Africana Studies ... 122
 American Indian Studies ... 126
 American Studies ... 130
 Anthropology ... 131
 Applied Mathematics ... 592
 Asian American Studies ... 179
 Biology ... 200
 Business Economics ... 345, 346
 Chemistry ... 241
 Chicano and Latino Studies ... 250
 Child Development and Family Studies ... 254
 Classical Studies ... 275
 Communication Studies ... 281
 Comparative World Literature ... 294
 Computer Science ... 302
 Computer Science Applications ... 302
 Consumer Affairs ... 314
 Criminal Justice ... 320
 Crosscultural Language ... 132
 Dance ... 329
 Economics ... 345
 English
 Creative Writing ... 403
 Literature ... 403
 Rhetoric and Composition ... 403
 Special Emphasis ... 403
 Entrepreneurship ... 582
 Environmental Engineering ... 380
 Environmental Science and Policy ... 416
 Event Planning Management ... 732, 515
 Film and Electronic Arts ... 434
 Finance ... 441
 Food Science ... 444
 Forensic Studies ... 320
 French and Francophone Studies ... 447
 Geography ... 453
 Geology ... 463
 German ... 473
 Greek ... 276
 Health Science ... 492
 History ... 502
 Hospitality Foodservice and Hotel Management ... 515
 Human Development ... 519–520
 Human Resources Management ... 582
 Interdisciplinary Public Policy ... 707
 International Economics ... 346
 International Studies ... 527
 Italian ... 530
 Jewish Studies ... 537
 Journalism ... 539
 Latin ... 276
 Latin American Studies ... 563
 Linguistics ... 575
 Management Information Systems ... 522
 Marketing ... 586
 Mathematics ... 592
 Medieval and Renaissance Studies ... 623
 Microbiology ... 200
 Middle Eastern Studies ... 502
 Music ... 632
 Philosophy ... 680
 Physics ... 700
 Physiology ... 200
 Political Science ... 707
 Psychology ... 715
 Public Administration in Political Science ... 707
 Recreation ... , 732, 515
 Religious Studies ... 739
 Russian ... 747
 Sociology ... 774
 Spanish ... 779
 Statistics ... 592
 Textiles ... 429
 Theatre Arts ... 808
 Web and Technology Literacy ... 302
 Women's, Gender, and Sexuality Studies ... 825
- Minor Person
 Residence of ... 32
- Minors ... 71
 Table ... 7–14
- Missed Deadline Fee ... 28
- MKTG Courses ... 586
- Modes of Instruction ... 51
- Molecular and Cell Biology
 Option in ... 193–194
- Mortar Board ... 74
- MS Courses ... 625–626
- MSEM Courses ... 386
- MSW ... 763
- MTED Courses ... 600–602
- Multicultural Center ... 43
- Multiple Subject Credential ... 569–571
- Multiple Subject Credential Program ... 786–788
- MUS Courses ... 636–647
- Museum Studies
 Graduate Certificate ... 151
- Music ... 627–645
 Courses ... 636–646
- N**
- Narrative Production
 Option in ... 433
- National Council on Family Relations ... 254
- National Guard, California ... 36
- Natural Science
 Courses ... 651–652
- Natural Sciences and Mathematics, College of ... 648
- NCFR ... 254
- Newspaper ... 538
- Nondiscrimination Policy ... 832
- Non-harassment ... 833
- Non-matriculated Students ... 19
- Non-Matriculate Students ... 69
- Noyce Program ... 649
- NRSO Courses ... 663–670
- NSCI Courses ... 651–652
- Numbers, Courses ... 51
- Nursing ... 653–667
 Courses ... 663–670
- NUTR Courses ... 675–676
- Nutrition
 Courses ... 675–676
- Nutritional Science ... 418–419
- Nutrition and Dietetics ... 673–675
 Option in ... 673
- O**
- OAF ... 766
- Obligations
 Financial ... 33–34
- Ocean Studies
 Courses ... 677–678
- Ocean Studies Institute ... 677–678
- Office
 of the Chancellor ... 4
- Office Hours, Faculty ... 47
- Office of Judicial Affairs ... 844
- Older Adults and Families (OAF) Concentration ... 766
- Opening Classrooms ... 836
- Open University ... 52, 69
- Operations and Supply Chain Management
 Option in ... 582
- Options
 Table ... 7–14
- Oral History ... 501
- Organization of PreProfessional Students ... 650

Orientation ... 38
 Parent Orientation Program ... 38
 SOAR ... 38
 Student Orientation, Advising and Registration ... 38
 Student Transition and Retention Services ... 38
 Transfer Workshops ... 38
 OSI Courses ... 677–678
 Outdoor Recreation Resources ... 733
 Outside Student Aid Programs ... 36

P

Parent Orientation Program ... 38
 Parking
 Enforcement ... 836
 Parking Fee ... 29
 Partners for Success ... 40
 Passport Application ... 42
 Payments ... 29
 Credit Card ... 29
 Installment Payment Plan ... 30
 Short Term Loans ... 30
 Peace Corps ... 34
 Peace Studies ... 679
 Pediatric Nurse Practitioner ... 662
 Pell Grant ... 34
 Performance: Acting
 Option in ... 808
 Perkins Loan ... 35
 Personal Responsibility and Work Opportunity Reconciliation Act ... 26
 Ph.D. ... 77
 Engineering and Industrial Applied Mathematics (code COE_PH01) ...
 381–384
 PHIL Courses ... 682–686
 Philosophy ... 680–686
 Courses ... 682–686
 PHSC Courses ... 705
 PHYS Courses ... 701–703
 Physical Science
 Courses ... 705
 Physical Therapy ... 687–690
 Courses ... 691–693, 692–694, 693–695, 694–696, 696
 Doctor of ... 689
 Physics
 Courses ... 701
 Credential ... 699–700
 Physics and Astronomy ... 697–704
 Physiology
 Option in ... 195
 Plagiarism ... 842
 Definition ... 47
 Police ... 836
 Policy on Sexual Assault ... 837
 Policy Prohibiting Discrimination and Harassment ... 833
 Political Science ... 706–713
 Courses ... 708–712
 PORT Courses ... 745
 Portuguese
 Courses ... 745
 POSC Courses ... 708–712
 Postbaccalaureate
 Level Definition ... 69
 Post-Baccalaureate
 Admission Requirements ... 78
 Post-Baccalaureate and Graduate Applications ... 22–23
 PPA Courses ... 728–729
 PPSC ... 768
 Prebaccalaureate Advising Support Services ... 38
 Prefix
 Definitions ... 15–16
 Pre-Law Program ... 706
 Preparatory ... 22
 Prerequisites
 Defined ... 51
 President ... 6, 844
 President's List ... 73
 President's Scholars Program ... 35
 Prevent Crime ... 837
 Principles of Shared Community ... 832
 Printmaking
 Option in ... 145

Privacy Rights ... 840
 Probation
 Academic ... 65
 Academic Disqualification ... 65
 Administrative Academic ... 65
 Probation and Disqualification ... 65–66
 Procedures and Policies
 Admissions ... 17–19
 Professional Administrative Services Credential ... 104
 Programs
 Impacted ... 17
 Provisional Admission ... 20
 Psychiatric-Mental Health Nurse Practitioner ... 662
 Psychological Research
 Option in ... 715
 Psychological Services ... 41
 Psychology ... 714–723
 Courses ... 717–723
 PSY Courses ... 717–723
 PT Courses ... 691–693, 692–694, 693–695, 694–696, 696
 Public Affairs ... 280–281
 Public Education Speech-Language Pathology ... 289
 Public Management Analysis ... 727
 Public Policy
 Interdisciplinary Minor ... 707
 Public Policy & Administration
 Courses ... 728–729
 Public Policy and Administration ... 725–729
 Public Relations ... 539
 Public Sector Employer-Employee Relations and Personnel Management ...
 727
 Public Sector Financial Management ... 728
 Pupil Personnel Services Credential: Specialization in School Social Work
 and Child Welfare and Attendance ... 768

R

Reading and Language Arts Specialist
 Credential ... 790
 Reading Certificate ... 789
 Reading Education
 Courses ... 804
 Reading/Language Arts
 Option in ... 794
 Readmission ... 17, 83
 REC Courses ... 735
 Recreation
 Courses ... 735–737
 Recreation and Leisure Studies ... 731–736
 Refund
 Student Fees ... 67
 Refunds
 Compulsory Military Service ... 30
 Death of Student ... 30
 eRefund ... 34
 F.A.I.R. ... 30
 Fees Collected in Error ... 30
 Financial Appeals Independent Review Committee ... 30
 Mandatory Fees ... 30–31
 Registration and Tuition Fees ... 30
 Special Circumstances ... 30
 Registration
 Cancellation ... 67
 Registration and Tuition Fees
 Refunds ... 30
 Registration Holds ... 46
 Regulations
 Master's Degree ... 81
 Reinstatement ... 66
 Religious Studies ... 739–743
 Courses ... 740–743
 Repetition of Courses ... 60
 Replacement of Student ID Card ... 28
 Reporting Crimes ... 836
 Reporting Emergencies ... 836
 Request to Graduate ... 82
 Research Award
 Richard B. Loomis ... 188
 Residence of
 Married Person ... 32
 Minor Person ... 32

Returning and Transfer Students ... 23
 General Education ... 70
 RGR Courses ... 744–745
 RGRLL ... 744–745
 Rhetoric and Composition
 Option in ... 402
 RICA ... 24
 Richard B. Loomis Research Award ... 188
 Romance, German, Russian Lang. & Lit. Dept.
 Courses ... 744
 Romance, German, Russian Languages and Literatures ... 744
 Roman Civilization
 Option in ... 275
 ROTC ... 625
 R/ST Courses ... 740
 RUSS Courses ... 747–748
 Russian ... 747–748
 Courses ... 747–748

S

Safari to Success ... 188, 236, 462, 588, 697
 Safety Operations
 Certificate ... 232
 SAS ... 649
 SAT ... 24
 SCED Courses ... 751–752
 Schedule of Fees ... 28
 Scholarship
 Graham Medical ... 188
 Target Speciality Products ... 189
 Scholarship Award
 Frank Schatzlein ... 188
 Scholarship Information ... 35
 School Counseling
 Credential ... 98
 Option in ... 96
 School Counseling Internship ... 99
 School Health Education ... 491
 Option in ... 491–492
 School Nurse Credential ... 663
 School Psychology
 Credential ... 99–100
 School Psychology Internship ... 100
 Science
 Subject Requirements ... 19
 Science Education ... 749–751
 Courses ... 751–752
 Science Enrichment and Peer Mentor Programs ... 649
 SCM Courses ... 584
 SCMI ... 650
 Sculpture
 Option in ... 145
 SDHE ... 96
 Secondary Education
 Courses ... 759, 760, 805–806, 806
 Secondary School Teachers
 Option in ... 593
 Secondary Science Education
 Option in ... 750
 Second Baccalaureate ... 22
 Second Master's Degree ... 81
 Security ... 836
 Selective Service Act ... 829
 Self Support Courses ... 52, 69
 Senior Citizen Education Program ... 24
 Senior Gift Campaign ... 76
 Senior Level ... 69
 Seniors
 Enrollment in Graduate Courses ... 72
 SEOG ... 35
 September 11, 2001 ... 37
 Service in Public Education Speech-Language Pathology ... 289
 Seven Year Rule ... 81
 Sexual Assault ... 837
 Shared Community ... 832
 Short Term Loans ... 30
 SHS ... 42
 S/I Courses ... 820

Single Subject Credential
 Art Education ... 141
 Biology ... 190
 Geoscience ... 465
 German ... 472, 543, 544
 Health Science ... 152, 205, 244, 406, 420, 448, 467, 473, 491, 494,
 503, 552, 594, 636, 701, 780
 Italian ... 530
 Japanese ... 533
 Latin ... 275, 446
 Mathematics ... 590
 Physics ... 699–700
 Social Science ... 500
 Spanish ... 779
 Single Subject Credential Program ... 753–755
 Single Subject Education
 Courses ... 758–760
 Single Subject Internship ... 755
 Single Subject Teacher Education Program ... 753–759
 SLD ... 43
 SOAR ... 38
 Freshman Workshops ... 38
 Transfer Workshops ... 38
 SOC Courses ... 775–778
 Social and Cultural Analysis of Education
 Courses ... 120
 Option in ... 93–94
 Social Justice Studies ... 679
 Social Science
 Subject Requirements ... 19
 Social Science Teaching ... 500
 Social Security Number ... 841
 Social Work ... 761–771
 Courses ... 769–772
 Sociology ... 773–778
 Courses ... 775–778
 Sophomore Level ... 69
 Sororities ... 74–75
 Southern California Marine Institute (SCMI) ... 650
 SPAN Courses ... 780–784
 Spanish ... 779–784
 Courses ... 780–784
 Credential ... 779
 Speakers of Other Languages
 Option in ... 577
 Special Action ... 79
 Special Admission Consideration for Students with Disabilities ... 20
 Special Circumstances
 Refunds ... 30
 Special Education
 Master of Science ... 97
 Special Education Credentials ... 100
 Preliminary Level I ... 100–102
 Specialization in History ... 500
 Speech-Language Pathology
 Credential ... 289
 Sport Psychology and Leadership
 Option in ... 547
 SRL Courses ... 785
 SRWC ... 43
 Stafford Loan ... 36
 Standards for Student Conduct ... 842
 STAT Courses ... 602–603
 State Appropriation ... 845
 State/Federal Regulations ... 37
 Statement on Civility and Acts of Violence ... 832
 State University Grant ... 35
 Statistics ... 588–602
 Courses ... 602–603
 Option in ... 590
 Student
 Success and Graduation ... 68
 Student Academic Support Services ... 39–41
 CAMP ... 39
 Career Development Center ... 39
 Careers and Disabilities ... 39
 Center for Community Engagement ... 40
 College Assistance Migrant Program (CAMP) ... 39
 Disabled Student Services ... 39
 Educational Opportunity Center ... 39

- Educational Equity Services ... 40
- Educational Opportunity Program (EOP) ... 40
- Educational Talent Search ... 39
- Eliternship Program ... 39
- Employment Opportunities ... 39
- International Student Services ... 40
- Learning Assistance Center ... 40
- McNair Scholars Program ... 40
- Partners for Success ... 40
- Student Support Services Program ... 40
- Study Abroad Programs ... 40
- Summer Bridge Program ... 40
- Upward Bound Program ... 40
- Writer's Resource Lab ... 40
- Student Access to Science and Mathematics Center ... 39
- Student Aid Programs
 - Cal Grant A ... 36
 - Cal Grant B ... 36
 - Federal Pell Grant Program ... 36
 - Federal PLUS Loan ... 36
 - Federal Stafford Loan ... 36
 - Fee Waivers ... 36
 - Outside ... 36
 - Teacher Education Assistance for College and Higher Education (TEACH) ... 36
 - TEACH Grant ... 36
- Student Development in Higher Education
 - Option in ... 96
- Student Disciplinary Procedures ... 844
- Student Educational Records ... 840
- Student-Faculty Interaction ... 47
- Student Government ... 43
- Student Grade Record ... 60
- Student Grievance Policy ... 841
- Student Health Services ... 42
- Student Levels
 - Definition ... 69
- Student Life and Development ... 43
- Student Life and Resources ... 43–44
 - College Organizations ... 43
 - Leadership Academy ... 43
 - Leadership Resource Center, Lois J. Swanson ... 43
 - Lois J. Swanson, Leadership Resource Center ... 43
 - Multicultural Center ... 43
 - Student Government ... 43
 - Student Life and Development (SLD) ... 43
 - Student Recreation and Wellness Center ... 43
 - Student Resource Centers ... 43
 - University Interfaith Center ... 43
 - Women's Resource Center ... 43
- Student Load Regulations ... 50
- Student Orientation, Advising and Registration ... 38
- Student Part-Time Employment ... 37
- Student Recreation and Leadership ... 785
 - Courses ... 785
- Student Recreation and Wellness Center ... 43
- Student Rights
 - Relative to Course Instructional Mode ... 51
- Student Selection and Denial ... 26
- Students with Disabilities
 - Admissions ... 20
 - Minimum Unit Requirements ... 50
- Student Teaching ... 787
- Student Transition and Retention Services ... 38
- Student Unit Load ... 49–50
 - Student Load Regulations ... 50
- Studio Art
 - Option in ... 140–143
- Study Abroad Programs ... 40
- Subject Requirements ... 19
- Substance Abuse ... 835
- Substitution of Courses ... 56
- Summer Bridge Program ... 40
- Summer, May, and Winter Session Students ... 19
- Summer Session Students ... 19
- Supplemental Instruction (S/I)
 - Courses ... 820
- Supplementary Admission Criteria ... 18
- Supply Chain Management
 - Courses ... 584

- Option in ... 582
- Support Services ... 839
- Suspension ... 844
- Swahili ... 122
- SW Courses ... 769–772
- Systems Engineering ... 381
- Systemwide Placement Test Requirements ... 25

T

- Tagalog ... 186
- Target Speciality Products Scholarship ... 189
- Tax Credits ... 841, 846
- Teacher Education ... 786–803
- Teacher Education Assistance for College and Higher Education Grant (TEACH) ... 36
- Teacher Librarian Services Credential ... 105
- TEACH Grant ... 36
- Teaching Assistantships ... 744
- Teaching Associateships
 - Graduate ... 83
- Teaching Associateships and Graduate Assistantships ... 37
- Teaching Associate (TA) ... 37
- Teaching English to Speakers of Other Languages
 - Option in ... 577
- Technical and Professional Communication
 - Certificate ... 403
- Technical Theatre/Design
 - Option in ... 810
- Technical Theatre: Scenery/Costume/Lighting Design
 - Option in ... 808
- Technology and Engineering Education
 - Option in ... 388–389
- Technology Literacy ... 302
- Technology Scholarship
 - Graham Medical ... 188
- Test Requirements ... 24
- Textiles and Clothing
 - Option in ... 428
- TGLG Courses ... 186
- THEA Courses ... 812–818
- Theatre Arts ... 807–817
 - Courses ... 812–818
- Theatre Management
 - Option in ... 810
- Theory and Practice of Cinema
 - Option in ... 432–433
- Therapeutic Recreation ... 732
- Theses and Projects ... 83
- Thesis and Dissertation Office ... 84
- Thesis Committees ... 83
- Threats ... 832
- Timely Graduation ... 74
- Title IV ... 34
- TOEFL Requirement ... 22–23
 - Intensive English Language Program ... 22
- TOPPS ... 650
- Total Support Cost ... 845
- Track I ... 572
- Transfer Courses ... 69
- Transfer Credit ... 52
- Transfer Policies ... 20
- Transfer Students
 - General Education ... 70
 - Transfer Units by Extension ... 85
 - Transfer Workshops ... 38
- Transgender Student Resource Center ... 43
- Transportation
 - Certificate ... 220
- Transportation Policy and Planning ... 728
- Travel and Tourism ... 733
- Trustees of the CSU ... 4
- Tuition
 - Determination of Residence for Nonresident ... 31–33
 - Tuition Fee ... 845
 - Tuition Fees ... 28, 29
 - Tuition Grant
 - Handloser Graduate Student ... 188

U

- UHP Courses ... 822
- Unauthorized Withdrawal ... 58
- Undergraduate
 - Application Procedures ... 17
- Undergraduate Requirement Deadlines ... 18
- Undergraduate Students
 - Timely Graduation ... 74
- UNIV Courses ... 820
- University
 - Message from the President ... 6
- University Center for Undergraduate Advising ... 38
- University Courses ... 820
- University Honors Program ... 39, 821–822
 - Courses ... 822
- University Interfaith Center ... 43
- University Jurisdiction ... 838
- University Ombuds ... 42
- University Regulations
 - Governing the Master's Degree ... 81
- Upper Division Transfer Requirements ... 21
- Upward Bound Program ... 40
- Urban Affairs
 - Option in ... 726
- Urban and Regional Studies
 - Courses ... 461
- Urban Executive Management ... 727
- Urban Studies ... 453
- U/ST Courses ... 461

V

- Vaccinations ... 26
- Veterans
 - Minimum Unit Requirements ... 50
- Veterans Affairs Services ... 42
- VIET Courses ... 186
- Vietnamese ... 186
- Violence ... 832
- Visitor Enrollment ... 18
- Visitors to Classes ... 47
- Visual and Performing Arts
 - Subject Requirements ... 19

W

- Waiver of Course Requirement ... 56, 84
- Waste Engineering and Management
 - Graduate Certificate ... 266
- WE
 - Meaning of ... 58
- Web and Technology Literacy ... 302
 - Certificate ... 302
- Welfare Reform Act ... 26
- Wellness Center ... 43
- WGSS Courses ... 825–828
- Wilderness Studies ... 549
- Winter Session Students ... 19
- Withdrawal
 - Cancellation ... 67
 - Graduate Degree Program ... 81
 - Limits ... 58
- Women's, Gender and Sexuality Studies ... 824–828
 - Courses ... 825–828
- Women's Health Care Nurse Practitioner ... 662
- Women's Resource Center ... 43
- Wood, Metal, Fiber - 3-D Media
 - Option in ... 144
- Work Opportunity and Personal Responsibility Reconciliation Act ... 26
- Writer's Resource Lab ... 40
- Writing Proficiency
 - Courses ... 820
- WU
 - Meaning of ... 58

Y

- Young Scholars Program ... 20

Z

- Zoology
 - Option in ... 196

Acknowledgments

The *CSULB Catalog* is produced by:

Dr. Cecile Lindsay, Vice Provost for Academic Affairs and Dean of Graduate Studies

Janice P. Jackson, University Curriculum Coordinator

Robert Ryan Moushon, Curriculum Information Technology Developer

Photography Credits:

David Nelson / University Publications

Victoria Sanchez / University Publications