

BACHELOR OF SCIENCE IN MICROBIOLOGY FOUR YEAR DEGREE WORKSHEET 2017-2018 Catalog

This degree worksheet is intended to help you develop a balanced course schedule while completing your degree within 4 years. The same sequence of courses (with fewer courses each semester) is also recommended for students completing their degree in 5 or 6 years. This worksheet is not intended to replace academic advising with your assigned advisor. Students should consult with their assigned advisor to determine the appropriate sequence of required courses and electives based on their academic goals.

CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification.

Year 1

Semester	Course #	Course Title (Units)	Prerequisites	Notes
1	CHEM 111A	General Chemistry (5)	<i>Corequisite:</i> MATH 119A or MATH 122	
	MATH 119A; OR MATH 122	Survey of Calculus I (3); OR Calculus I (3)	MDPT placement or MATH 113; OR MATH 111 and 113	
	GE (area A1)	Written Communication (3)		
	GE (area C,D,E)	Other Exploration (3)		
	NSCI 190A	Experience Success Program 1 (1)		Fall only
2	CHEM 111B	General Chemistry (5)	CHEM 111A and either MATH 119A or 122	
	BIOL 211	Intro. to Evolution and Diversity (4)	<i>Pre/Corequisite:</i> CHEM 111A	
	GE (area A2)	Oral Communication (3)		
	GE (area A3)	Critical Thinking (3)		
	Elective	Elective Requirement (1)		

Year 2

Semester	Course #	Course Title (Units)	Prerequisites	Notes
3	CHEM 220A	Organic Chemistry I (3)	CHEM 111B. <i>Corequisite:</i> CHEM 223A	
	CHEM 223A	Organic Chemistry Laboratory I (1)	CHEM 111B. <i>Corequisite:</i> CHEM 220A	
	BIOL 212	Intro. to Cell and Molecular Biology (4)	BIOL 211 and CHEM 111A	
	BIOL 260	Biostatistics (3)	BIOL 211 and either MATH 119A or 122	
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	
	Elective	Elective Requirement (1)		
4	CHEM 220B	Organic Chemistry II (3)	CHEM 220A. <i>Corequisite:</i> CHEM 223B or 320L	
	CHEM 223B	Organic Chemistry Laboratory II (1)	CHEM 220A and CHEM 223A. <i>Corequisite:</i> CHEM 220B	
	BIOL 311	General Microbiology (4)	BIOL 211, 212, and CHEM 111B	
	BIOL 340	Molecular Cell Biology (3)	BIOL 211, 212	
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	

Year 3

Semester	Course #	Course Title (Units)	Prerequisites	Notes
5	BIOL 320	Bacterial Pathogenesis (3)	BIOL 311	Fall only
	BIOL 371	Microbial Genetics (3)	BIOL 311	Fall only
	CHEM 448; OR CHEM 441A	Fund. of Biological Chemistry (3); OR Biological Chemistry (3)	CHEM 220B or 227; OR CHEM 220B and 223B	
	GE Capstone (area F)	General Education & Foundation (3)	GE Written Communication (A1), GE Critical Thinking (A3), and GE Oral Communication (A2) and MATH 119A or 122 (B2)	
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	

Semester	Course #	Course Title (Units)	Prerequisites	Notes
6	BIOL 355	Microbial Ecology (3)	BIOL 260 and 311 and MATH 119A or 122 (B2), GE Written Communication (A1), GE Critical Thinking (A3), and GE Oral Communication (A2)	Spring only
	Upper Division Elective	Microbiology (3)		
	Upper Division Elective	Microbiology (3)		
	PHYS 100A; OR PHYS 151	General Physics (4); OR Mechanics and Heat (4)	MATH 109 or 113 or 119A or 122; OR <i>Pre/Corequisite:</i> MATH 122	
	GE Capstone (area F)	General Education & Foundation (3)	MATH 119A or 122 (B2) and GE Written Communication (A1), GE Critical Thinking (A3), and GE Oral Communication (A2)	

Year 4

Semester	Course #	Course Title (Units)	Prerequisites	Notes
7	BIOL 372	Methods in Microbial Genetics (2)	BIOL 311	Fall
	BIOL 471	Bacterial Physiology (3)	BIOL 320 and either CHEM 441A or 448	Spring
	Upper Division Elective	Microbiology (3)		
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	
8	Upper Division Elective	Microbiology (3)		
	PHYS 100B; OR PHYS 152	General Physics (4); OR Electricity and Magnetism (4)	PHYS 100A; OR PHYS 151. <i>Pre/Corequisite:</i> MATH 123	
	BIOL 480	Seminars (1)	Take in final semester	
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	
	Elective	Elective (3)		
	Elective	Elective (1)		