

BACHELOR OF SCIENCE IN EARTH SCIENCE (IMPACTED)

Major Requirements Worksheet

2015-2016 Catalog

Name: _____

Student ID: _____

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.

*NOTE: This checklist is not intended to replace advising from the major department. Students should consult with the major advisor to determine the appropriate sequence of courses. This checklist is to inform students of major requirements and course prerequisites only. CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification. **Pre-Earth Science** majors must complete their GE Foundation courses, and the highlighted areas below all with a "C" or better and a cumulative GPA of 2.5, by 60 units to be considered for the major.*

Semester	Grade	Course #	Course Title	Prerequisites
		MATH 122	Calculus I (4)	Appropriate MDPT placement; or MATH 111 and 113
		MATH 123	Calculus II (4)	MATH 122
		CHEM 111A	General Chemistry (5)	A passing score on the CPT. Corequisite: MATH 109 or higher CHEM 111A and MATH 113 or 115 or 119A or 122
		CHEM 111B	General Chemistry (5)	
		PHYS 151	Mechanics and Heat (4)	Pre/Corequisite: MATH 122
		PHYS 152	Electricity and Magnetism (4)	PHYS 151; Pre/Corequisite: MATH 123
		GEOL 102	General Geology (3)	Pre/Corequisite: A course that fulfills the A.1 GE Requirement and High School Math**
		GEOL 104	Geology Laboratory (1)	Pre/Corequisite: A course that fulfills the A.1 GE Req., HS math**, Concurrent or prior enrollment in GEOL 102
		GEOL 240	Historical Geology (4)	GEOL 106 or both GEOL 102, 104
		GEOL 250	Introduction to Field Petrology and Geological Field Techniques (3)	GEOL 102 with 104 or 105; or GEOL 106; Corequisite: GEOL 240

UPPER DIVISION COURSES (See major faculty advisor)

Take ALL of the following courses:

		GEOL 322	Crystallography, Mineralogy and Optical Methods (3)	GEOL 250; CHEM 101 or 111A
		GEOL 339	Geomorphology (3)	GEOL 102 with 104 or 105 or 106 or 140
		GEOL 350	Spring Field Geology (2)	GEOL 250 and 443. Pre/Corequisite GEOL 433
		GEOL 420	Geological Writing (3)	GE Foundation completed, upper division standing, GEOL 102, 104, 240, 250; and at least 6 units of Geology courses at 300-level or above. Additional GWAR requirements**

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		GEOL 428	Igneous and Metamorphic Petrology and Petrography (3)	GEOL 322; CHEM 111A, 111B
		GEOL 433	Structural Geology (4)	GEOL 250, 322; PHYS 151
		GEOL 443	Stratigraphy/Sedimentology (4)	GEOL 240, 322
		GEOL 450	Summer Field Geology (4)	GEOL 350, 428, 433, 443
		GEOL 460	Introduction to Geophysics (3)	PHYS 151, 152; and MATH 123
		GEOL 461	Introduction to Geochemistry (3)	CHEM 111A,B and MATH 123
		GEOL 474	Physical Hydrology (3)	GEOL 102, MATH 122, PHYS 151

Take **ONE** of the following courses:

		GEOL 477 OR	Hydrogeology (4)	GEOL 102, 104; CHEM 111B; PHYS 152; MATH 123
		MATH 370A	Applied Mathematics (3)	MATH 123

In addition, **nine units** of electives (normally at upper division) approved in advance by the undergraduate advisor.
