

#### **CNSM Academic Advising Center**

College of Natural Sciences and Mathematics California State University Long Beach www.csulb.edu/cnsm/advising

# BACHELOR OF SCIENCE IN EARTH SCIENCE 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	GEOL 102	General Geology (3)		
	GEOL 104	General Geology Lab (1)		
	MATH 122	Calculus I (4)	MATH 111 and 113	
	GE (area A1)	Written Communication (3)		
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	
	NSCI 190A	Experience Success Program 1 (1)		Fall only
2	CHEM 111A	General Chemistry (5)	passing score on the CPT; <i>Corequisite</i> : MATH 109 or higher	
	MATH 123	Calculus II (4)	MATH 122	
	GE (area A2)	Oral Communication (3)		
	GE (area A3)	Critical Thinking (3)		

## Year 2

Semester	Course #	Course Title (Units)	Prerequisites	Notes
3	GEOL 240	Historical Geology (4)	GEOL 102 and 104	Fall only
	CHEM 111B	General Chemistry (5)	CHEM 111A and MATH 113 or 115 or 119A or 122	
	PHYS 151	Mechanics and Heat (4)	MATH 122	
	GE (area C,D,E)	Other Exploration (3)		
4	GEOL 250	Introduction to Field Petrology and Geological Field Techniques (3)	GEOL 102, 104, and 240	Spring only
	GE (area B1a)	Life Science (3-4)		Okay to take B1aNL
	PHYS 152	Electricity and Magnetism (3)	PHYS 151	
	GE (area C,D,E)	Other Exploration (3)		
	Elective	Elective Requirement (1-3)		

## Year 3

Semester	Course #	Course Title (Units)	Prerequisites	Notes
5	GEOL 474	Physical Hydrology (3)	GEOL 102, MATH 122, and PHYS 151	Fall only
	GEOL 322	Crystallography and Mineralogy (3)	GEOL 250 and CHEM 111A	Fall only
	GEOL 339	Geomorphology (3)	GEOL 102 and 104	Fall only
	Elective	Earth Science Approved (3)		
	GE (area C,D,E)	Other Exploration (3)		
6	GEOL 428	Igneous and Metamorphic Petrology and Petrography (3)	GEOL 322 and CHEM 111A and 111B	Spring only
	GEOL 420	Geological Writing (3)	GE Written Communication (A1), GE Critical Thinking (A3), and GE Oral Communication (A2) and MATH 122 (B2) and GEOL 102, 104, 240 and 250	Spring only
	GEOL 433	Structural Geology (4)	GEOL 250, 322, and PHYS 151	Spring only
	Elective	Earth Science Approved Elective (3)		
	GE (area C,D,E)	Other Exploration (3)		

## Year 4

Semester	Course #	Course Title (Units)	Prerequisites	Notes
7	GEOL 443	Stratigraphy/Sedimentology (4)	GEOL 240 and 322	Fall only
	Elective	Earth Science Approved Elective (3)		
	GEOL 461	Introduction to Geochemistry (3)	CHEM 111A and 111B, MATH 123	Fall only
	GE (area C,D,E)	Other Exploration (3)		
8	GEOL 350	Spring Field Geology (2)	GEOL 250 and 443	Spring only
	GEOL 477;	Hydrogeology (3);	GEOL 102, 104; CHEM 111B; PHYS 152; MATH 123;	477 is
	OR	OR	OR	Spring only
	MATH 370A	Applied Mathematics (3)	MATH 123	Omy
	GE (area C,D,E)	Other Exploration (3)		
	GE Capstone (area F)	General Education & Foundation (3)	GE Written Communication (A1), GE Critical Thinking (A3), and GE Oral Communication (A2) and MATH 122 (B2)	
	GEOL 460	Introduction to Geophysics (3)	PHYS 151 and 152, and MATH 123	Spring only
	GEOL 450	Summer Field Geology (4)	GEOL 428, 433, 443 and GE Written Communication (A1), GE Critical Thinking (A3), and GE Oral Communication (A2) and MATH 122 (B2)	Summer only