

CNSM Academic Advising Center

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

BACHELOR OF SCIENCE IN MARINE BIOLOGY 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)	passing score on the CPT; <i>Corequisite</i> : MATH 109 or higher	
	MATH 119A	Survey of Calculus I (3)	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 MATH 119A or 122	
	BIOL 153	Introduction to Marine Biology (3)	Pre/Corequisite: GE Written Communication (A1), MATH 119A or 122	
	BIOL 211	Intro. to Evolution and Diversity (4)	CHEM 111A	
	GE (area A3)	Critical Thinking (3)		

Year 2

Semester	Course #	Course Title (Units)	Prerequisites	Notes
3	CHEM 227; <i>OR</i>	Fundamentals of Organic (3); OR	CHEM 111A; Recommended 111B; OR	227 usually
	CHEM 220A	Organic Chemistry I (3)	CHEM 111B. Corequisite: CHEM 223A	recom- mended
	CHEM 223A (if 220A taken)	Organic Chemistry Laboratory I (1)	CHEM 111B. Corequisite: 220A	
	BIOL 212	Intro. to Cell and Molecular Bio. (4)	BIOL 211 and CHEM 111A	
	BIOL 260	Biostatistics (3)	BIOL 211 and MATH 119A or 122	
	GE (area A2)	Oral Communication (3)		
	GE (area C,D,E)	Other Exploration (3)	Other Exploration (3)	
4	BIOL 213	Intro. to Ecology and Physiology (4)	BIOL 211, 212 and CHEM 111B	
	PHYS 100A;	General Physics (4);	MATH 109 or 113 or 119A or 122;	
	OR	OR	OR	
	PHYS 151	Mechanics and Heat (4)	Pre/Corequisite: MATH 122	
	BIOL 340	Molecular Cell Biology (3)	BIOL 211, 212	
	GE (area C,D,E)	Other Exploration (3)		
	CHEM 220B (if 220A taken)	Organic Chemistry II (3)	CHEM 220A. Corequisite: CHEM 223B	
	CHEM 223B (if 223A taken)	Organic Chemistry Laboratory II (1)	Corequisite: CHEM 220B	

Year 3

Semester	Course #	Course Title (Units)	Prerequisites	Notes
5	BIOL 312	Evolutionary Biology (3)	BIOL 211, 212, 213, 260	
	BIOL 345 & BIOL 345L	Comparative Animal Physio. (3) & Comparative Animal Physio. Lab (1)	BIOL 211, 212, 213 & Pre/Corequisite: BIO 345	
	BIOL 353	Marine Biology (3)	BIOL 153, 211, 212, 213, and 260	
	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)	_

Semester	Course #	Course Title (Units)	Prerequisites	Notes
6	BIOL 370	General Genetics (4)	BIOL 211, 212, 260 and MATH 119A or 122 (B2); GE Written Communication (A1), GE Critical Thinking (A3), and GE Oral Communication (A2)	
	BIOL 350	General Ecology (3)	BIOL 211, 212, 213, 260 and MATH 119A or 122	
	BIOL 419	Ichthyology (3)	BIOL 211, 212, 213, and 260	
	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)	
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	

Year 4

Semester	Course #	Course Title (Units)	Prerequisites	Notes
7	BIOL 313	Invertebrate Zoology (4)	BIOL 211, 212, and 213	Fall only
	Elective	Marine Biology Elective (3)		
	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)	
	GE (area C,D,E)	Other Exploration (3)	GE (area C, D, and E)	
8	BIOL 425	Phycology (4)	BIOL 353	Spring only
	Elective	Marine Biology Elective (3)		
	Elective	Marine Biology Elective (3)		
	BIOL 480	Seminars (1)	Must be taken in final semester	
	Elective	Elective (3)		
	Elective	Elective (1)		