

Biology, B.S. Marine Sciences Concentration

2024–25 Catalog

This example plan is designed to provide a blueprint for students to complete their degrees within four years. It includes recommended sequences of courses. Individual plans will vary based on previously earned credit, such as Dual Enrollment and AP credit, as well as the student’s academic goals. Students will work with an academic advisor to develop a more individualized plan to complete their degree.

This example four-year plan is applicable to students admitted during the 2024–25 academic year.

Total Credits Required: 120 credits

Required GPA for Graduation: 2.0 (institutional)

Courses requiring a C or better are denoted with an asterisk (*).

Legend is available on the last page of this document.

Year 1							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
BIOL 0001	First-Year Academic Seminar	1		GC1Y 1000	Critical Thinking (student’s choice) (pre-req to GC2Y 2000)	3	Core
ENGL 1101*	English Composition I (pre-req to ENGL 1102)	3	Core	ENGL 1102	English Composition II	3	Core
BIOL 1107* BIOL 1107L*	Principles of Biology I & Lab (pre-reqs to BIOL 2100, 2800, 3400, and 3700)	4	Field	BIOL 1108* BIOL 1108L*	Principles of Biology II & Lab (pre-reqs to BIOL 2800, 3700, and 4715)	4	Field
MATH 1113*	Precalculus (pre-req to MATH 1401)	4	Core	MATH 1401	Elementary Statistics	3	Core
Core Humanities	Humanities and Ethics (student’s choice)	3	Core	POLS 1101	American Government	3	Core
Total Semester Hours:		15		Total Semester Hours:		16	
Notes:	ENGL 1101, ENGL 1102, MATH 1113, and GC1Y 1000 must be completed by 30 earned hours. First-Year Seminar is a graduation requirement and impacts a student’s GPA; however, it does not count toward the minimum of 120 semester hours required for a degree. MATH 1113 or higher, passed with a C or better, is required as Core Math for biology majors. MATH 1401 may be substituted by MATH 1261: Calculus I or CSCI 1301: Computer Science I.						

Year 2							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
BIOL 2100*	Genetics (pre-req to BIOL 3200 & 3700)	4	Field	BIOL 2800*	Ecology	4	Field
CHEM 1211K*	Principles of Chemistry I & Lab (pre-req to CHEM 1212K & 3361)	4	Core + Cognate	CHEM 1212K*	Principles of Chemistry II & Lab	4	Core + Cognate
Core Social Science	Social Science (student's choice)	3	Core	GC2Y 2000	Global Perspectives (student's choice)	4	Core
Core Art	Fine Arts (student's choice)	3	Core	BIOL 3500*	Marine Biology	4	Major
STEM Elective*	1000- or 2000-level course that is relevant to biology (BIOL, CHEM, CSCI, ENSC, GEOL, MATH)	3	Field				
Total Semester Hours:		17		Total Semester Hours:		16	
Summer	Consider study abroad over summer to complete requirements (e.g., GC2Y 2000)						
Notes:	BIOL 2100, BIOL 2800, and GC2Y 2000 must be taken between 30–59 earned hours. Elective course can be used to fulfill the 2 hours at 1000- or 2000-level required for Field of Study, if needed.						

Year 3							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
BIOL 3200*	Cellular & Molecular Physiology	3	Major	BIOL 3000*	Seminar	2	Major
BIOL 3400*	Organismal Physiology	3	Major	BIOL 3500*	Marine Biology	4	Major
CHEM 3361* CHEM 3361L*	Organic Chemistry I & Lab	4	Cognate	HIST 2111 or HIST 2112	The United States to 1877 or The United States Since 1877	3	Core
Lang 1001*	World Language I (1001-level)	3	Elective	Lang 1002*	World Language II (1002-level)	3	Foreign Lang
BIOL 3700*	Evolution	3	Major	Gen Elective	Any general elective course	3	Elective
Total Semester Hours:		16		Total Semester Hours:		15	
Summer	Consider completing capstone internship or study abroad. Internships or REU programs help build experience.						
Notes:	BIOL 3000: Seminar should be taken after at least 59 hours earned. General electives can be in any discipline and any level (1000–4999, unless specified as upper-level). Students must complete a world language course at the 1002 level or higher. Complete the WebCAPE exam to determine placement for first course.						

Year 4							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
PHYS 1111* PHYS 1111L*	Introductory Physics I & Lab	4	Cognate	Concentration Elective*	Marine Sciences Concentration course (student's choice)	4	Major
Concentration Elective*	Marine Sciences Concentration course (student's choice)	4	Major	Concentration Elective*	Marine Sciences Concentration course (student's choice)	4	Major
Capstone*	Capstone	4	Capstone	Upper-Level Gen Elective	Any 3000- or 4000-level elective	3	Elective
Gen Elective	Any general elective course	3	Elective	Gen Elective	Any general elective course	3	Elective
Total Semester Hours:		15		Total Semester Hours:		14	
Notes:	<p>Senior capstone can only be completed when 90 or more credit hours have been earned. General electives can be in any discipline and any level (1000–4999, unless specified as upper-level). Choose 3 classes from this list to fulfill Marine Sciences Concentration requirements: BIOL 4480, 4490, 4500, 4610, 4795, 4950 (Global Climate Change, 3 credit hours), or 4951 (Coastal Biology, Coral Reef Biology, or Marine Biology in the Bahamas).</p>						

Legend	
Area	This section of the plan references the area of the curriculum the course fulfills.
Core	Core IMPACTS — coursework required for every student regardless of major, which includes the following areas: Institutional Priority (GC1Y 1000 and GC2Y 2000); M athematics and Quantitative Skills; P olitical Science and U.S. History; A rts, Humanities, and Ethics; C ommunicating in Writing; T echnology, Mathematics, and Sciences; and S ocial Sciences.
Field	Core Field of Study courses, part of each major's requirements. These courses prepare students for further study in their chosen major field. Field of Study courses are specific to each major program.
Major	Biology Major and Marine Sciences Concentration requirements
Elective	Course(s) a student selects. Hours are needed to meet overall graduation hours. Number of electives varies per major. Electives can be used towards GC Journeys, minors, or professional/graduate school pre-requisites, or to take courses of interest.
Cognate	Cognate courses are required courses within a student's curriculum. These courses are connected to the major but may be from other academic disciplines.