

ABOUT THE BS in MARINE BIOLOGY:

The B.S. Marine Biology allows students to explore the vast world of marine biology while providing an important foundation in modern biological sciences. It is designed for students who plan to work in marine biology, marine ecology, biological oceanography, marine conservation, or related fields at a professional level, or who wish to apply their training to a wide range of other exciting careers. We encourage students to participate in lab, field and shipboard research with faculty and other researchers and to develop and conduct original research in their areas of interest. Graduates get jobs in a variety of marine and environmental fields, or continue their education in graduate school in areas such as marine biology, oceanography and related fields; some students have gone on to Veterinary School. Please consult the Marine Biology website at: web.uri.edu/marbio.

Step 1: REVIEW YOUR PROGRAM REQUIREMENTS

Required BIO, Biology Core and Marine Biology Elective courses (36 credits required)

Must earn a 2.0 GPA in these 36 credits in order to graduate.

Required BIO Courses: (17 credits)

Course	Semester	Credits	Grade
*BIO 101 or 101H			
*BIO 102			
*BIO 103			
*BIO 104			
BIO 130			
BIO 352			
BIO 360			

BIOLOGY CORE Requirement: (9-12 credits)

Pick a total of 3 courses; each course must be in a different category (5 categories are below)

Cell & Development: BIO 302, 311, 341

Course	Semester	Credits	Grade

Ecology & Evolution: BIO 262, 272

Course	Semester	Credits	Grade

Molecular Biology: BIO 437

Course	Semester	Credits	Grade

Organismal Biology: BIO 308, 310, 321, 323, 354, 365, 366, 385, 404, 412, 417, 425G, CMB 211

Course	Semester	Credits	Grade

Physiology: BIO 201, 346

Course	Semester	Credits	Grade

MARINE BIOLOGY Elective Requirement:

(balance of 36 credits)

Choose from the following:

BIO: 256G, 308, 310, 345, 354, 355, 365, 412, 416, 441, 425G, 441, 455, 457, 485, **469, **475, 563

AFS: 415, 486 **AVS:** 440 **NRS:** 475

OCE: 575 **OCG:** 420, 480, 561, 576

*****Directed Research/Special Problems from the following:**

AFS, AVS, BIO, CMB, NRS, OCE, OCG 493 or 494, PLS 491 or 492

Other Marine Biology Electives - by petition or pre-approval of transfer credit.

Course	Semester	Credits	Grade

LAB Requirement:

Students must take two lab courses in addition to BIO 103, 104, and 360, from among the courses used to satisfy BIO Core or Marine BIO elective requirements, but excluding Independent Study/Research. Example: BIO 201 (lecture/lab) can be used to satisfy the Core requirement AND the Lab requirement, but BIO 491, 492, and 495 cannot count towards the Lab requirement.

Course

*Course approved for general education.

**Courses taught at the Bermuda Institute of Ocean Sciences.

***No more than 3 credits of Directed Research/Special Problems (491, 492, 493, 494, or 495) may be used towards the 36 credits of Biology and Marine Biology courses required for the major.

Step 1: REVIEW YOUR PROGRAM REQUIREMENTS CONTINUED

CHEMISTRY Requirement: (15-16 credits)

Course	Semester	Credits	Grade
*CHM 101		3	
CHM 102		1	
OR			
CHM 191		5	

Course	Semester	Credits	Grade
CHM 112		3	
CHM 114		1	
OR			
CHM 192		5	

Course	Semester	Credits	Grade
CHM 124		3	
CHM 126		1	
CMB 311		3	
OR			
CHM 227		3	
CHM 228		3	
CHM 226		2	

MATH Requirement: (6-8 credits)

Course	Semester	Credits	Grade
*MTH 131		3	
OR			
*MTH 141		4	

Course	Semester	Credits	Grade
MTH 132		3	
OR			
*MTH 142		4	
OR			
STA 308		4	

The requirement for transfer to CELS from University College for Academic Success is:

Minimum 30 credits and a grade of C or better in the following: BIO 101, 103, 102, and 104; and min. of C- in CHM 101.

Minimum 2.0 GPA required in the 36 credits in BIO/Marine Biology for graduation.

Minimum overall 2.0 cumulative GPA required in the total 120 credits required for graduation.

PHYSICS Requirement: (8 credits)

Course	Semester	Credits	Grade
*PHY 111		3	
*PHY 185		1	
OR			
*PHY 203		3	
*PHY 273		1	

Course	Semester	Credits	Grade
*PHY 112		3	
*PHY 186		1	
OR			
*PHY 204		3	
*PHY 274		1	

OCEANOGRAPHY Requirement: (3 credits)

Pick 1 of the following:

Course	Semester	Credits	Grade
OCG 301		3	
OR			
OCG 451		3	

WRITING Requirement: (3 credits)

Pick 1 of the following:

Course	Semester	Credits	Grade
*WRT 104		3	
OR			
*WRT 106		3	

EXAMPLE

B.S. Marine Biology Sample 4 Year Plan - Effective Fall 2020 College of the Environment and Life Sciences

Freshman Year *Fall* Semester

Course Code	Description	Cr
*BIO 101, 103	Principles of Biology, Lab	4
*CHM 101, 102	General Chemistry, Lab	4
*MTH 111 or *MTH 131	Precalculus or Applied Calculus 1	3
	*General Education Course	3-4
BIO 130	Topics in Marine Biology	1
		15-17

Freshman Year *Spring* Semester

Course Code	Description	Cr
*BIO 102, 104	Principles of Biology II, Lab	4
CHM 112, 114	General Chemistry II, Lab	4
MTH *131, 132, or STA 308	Applied Calculus, Applied Calculus II, or Statistics	3-4
	*General Education Course	3-4
		15-17

Year 1 Milestones: Complete BIO 101, 103, 102, 104, CHM 101, 102, 112, 114, MTH 131, and MTH 132 or STA 308

Sophomore Year *Fall* Semester

Course Code	Description	Cr
BIO 360 or Marine BIO core	Marine Biology or Biology Core	3-4
CHM 124,126, or 227 or 112,114	Intro to Organic Chem., Lab, or Organic Chemistry Lecture or General Chemistry Lecture 2, Lab	4
Elective or *MTH 132 or STA 308	Elective, or Applied Calculus II, or Statistics	3-4
	*General Education Course	3-4
		15-17

Sophomore Year *Spring* Semester

Course Code	Description	Cr
BIO 360 or Marine BIO Core	Marine Biology or Biology Core	3-4
BIO Core or Marine Biology Elective	Biology Core or Marine Biology Elective	3-4
CHM 124,126 or 227 or 228 or CMB 311	Intro. to Organic Chem., Lab, or Organic Chem. Lecture 1, or 2, or Intro. Biochemistry	3-5
	*General Education Course	3-4
		15-17

Year 2 Milestones: Complete BIO 360 and begin organic chemistry sequence. Meet with faculty advisor to discuss Year 3 courses, research and internship opportunities.

Junior Year *Fall* Semester

Course Code	Description	Cr
BIO 352 or Marine Biology Elective	General Genetics or Marine Biology Elective	3-4
PHY 111, 185	General Physics, Lab	4
CHM 226 and/or 228 or CMB 311 or Elective	Organic Chemistry Lecture, Organic Chemistry Lecture 2, or Introductory Biochemistry, or Elective	3-5
	*General Education Course	3-4
		15-17

Junior Year *Spring* Semester

Course Code	Description	Cr
BIO 352 or Biology Core	General Genetics or Biology Core	3-4
	Marine BIO Elective	3-4
PHY 112, 186	General Physics 2, Lab	4
*Gen Ed or CMB 311	*General Education Course or Introduction to Biochemistry	3-4
		15-17

Year 3 Milestones: Complete PHY 111, 185, 112, 186, finish organic chemistry sequence. Prepare intent to graduate with professional advisor for fall submission.

Senior Year *Fall* Semester

Course Code	Description	Cr
	Marine Biology Elective	3-4
	Marine Biology Elective	3-4
	*General Education Course	3-4
OCG 301 or Elective	General Oceanography or Elective	3-4
		15-17

Senior Year *Spring* Semester

Course Code	Description	Cr
	Marine Biology Elective	3-4
	Marine Biology Elective	3-4
	*General Education Course or Elective	3-4
OCG 451 or Elective	Oceanographic Science or Elective	3-4
		15-17

Year 4 Milestones: OCG 301 or 451, finish Marine Biology electives and general education.

Minimum of 120 credits to graduate.

Minimum 2.0 cumulative GPA required in the 36 credits in BIO/Marine Biology for graduation.

Minimum overall 2.0 cumulative GPA required for graduation.