

MARINE BIOLOGY

Degree: Bachelor of Science
 Department: Biology
 Building 58, Room 79
 (850) 474-2748
 biology@uwf.edu
 College: Arts and Sciences
 Semester Hours Required for Degree: 120

Faculty: G. Stewart (Chairperson), K. Behan, W. Bennett, S. Bonomelli, A.B. Chaet (Emeritus), S.B. Collard, C.N. D'Asaro, P. Darby, D. Davis, T.C. Fox, M.A. Hood (Emeritus), W.H. Jeffrey, S. Krothapalli, J.E. Lepo, C. Pomory, K.R. Rao, V. Sharma, M.S. Shields, S. Smith, R.A. Snyder, P.A. Winter, F. Wray. Faculty Associates: B. Brecke, J. Burkhalter, J.C. Cornette, J.A. Couch, L.C. Folmar, J. Lanza, R.L. Lavine, P. Linehan, C.L. McKinney, D. Miller, B. Ripps, M. Thetford, J.B. Unruh, J.T. Winstead

The University of West Florida is one of only a few institutions in the United States which offers a Bachelor of Science in Marine Biology. The program is provided through the Department of Biology. The curriculum includes a series of five core-courses fundamental to all areas of biology. Elective courses emphasize theoretical and practical aspects of aquatic/marine biology. Wetlands and estuarine marshes of the main campus, as well as the nearby Santa Rosa Island campus and the Gulf of Mexico, provide living specimens for study and serve as laboratories supporting elective courses. Graduates may seek careers in marine biology, fisheries management, aquaculture, pollution biology, and marine toxicology, and find employment in local, state, and federal departments of environmental regulation and education, as well as the private sector. Graduates are also well prepared to pursue advanced degrees. Prospective students need to be aware that some biology lab courses involve use of live animals; students may wish to seek details from course instructors before enrolling.

A fast-track program leading to a BS and MS is available to highly qualified students who have earned an Associate of Arts degree from a Florida public institution. Another fast-track program in Biological Chemistry is available. See the Undergraduate Chemistry and Graduate Biology sections of this catalog.

PROGRAM REQUIREMENTS

In addition to general University requirements, students seeking the B.S. in Marine Biology must meet the requirements listed below.

A grade of "C" or better is required in each of the five biology core courses.

Consult with your academic advisor for courses which may satisfy both the General Studies requirements and common prerequisites.

Course descriptions are listed alphabetically by prefix in the back of this catalog.

General Studies (36 sh)

Marine Biology majors should satisfy the mathematics (6 sh) and science (7 sh) components of General Studies with course work taken from the common prerequisites shown below.

Marine Biology majors should take ANT 2000 or PSY 2013 to satisfy the social science/behavioral perspectives component of General Studies. For additional information see the General Studies section of this catalog.

Common Prerequisites (31-32 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program.

Graduation requirements for the B.S. degree in Marine Biology include the successful completion of the following science/mathematics prerequisites: three foundation courses in biology (recommended: General Botany; General Zoology; Cell Biology); General Chemistry I & II; Organic Chemistry I & II; two courses in physics; Calculus I and either Calculus II or Statistics. Statistics is preferred.

Since it will be difficult to incorporate all prerequisites into the 60 sh Lower Division Curriculum, students are advised to complete the following common prerequisites.

Courses in brackets indicate substitutes from Florida Public Community/Junior Colleges and Universities.

+ CHM	2045/L	General Chemistry I/Lab	4
		[CHM x045/L]	
+ CHM	2046/L	General Chemistry II/Lab	4
		[CHM x046/L]	
+ MAC	2311	Analytic Geometry & Calculus I	4
		[MAC x311, 2233, 2253, x281]	
		<i>Choose one:</i>	
+ BOT	2010/L	General Botany/Lab	4
		[BOT x010/L, x013/L]	
+ ZOO	1010/L	General Zoology/Lab	4
		[ZOO x010/L, BSC x041/L, 1011/L]	
		<i>Choose one:</i>	
+ BSC	1010/L	General Biology/Lab	4
		[BSC x040/L, 2012/L]	
+ PCB	2131/L	Cell Biology/Lab *	4
		[PCB x010/L, x011/L, x021/L, x131/L]	
		*Preferred course	
		<i>Choose one:</i>	
+ MAC	2312	Analytic Geometry & Calculus II	4
		[MAC x312, 2234, 2254, x282]	
+ STA	2023	Elements of Statistics *	3
		[STA 2122, 2014, 2024, 2321]	
		*Preferred course	

Choose one (Option 1 is recommended):

		<i>Option 1</i>	
CHM	2210/L	Organic Chemistry I/Lab	4
CHM	2211/L	Organic Chemistry II/Lab	4
		<i>Option 2</i>	
+ PHY	2048/L	University Physics I/Lab	4
		[PHY x048/L]	
+ PHY	2049/L	University Physics II/Lab	4
		[PHY x049/L]	
		<i>Option 3</i>	
+ PHY	2053/L	General Physics I/Lab	4
		[PHY x053/L]	
+ PHY	2054/L	General Physics II/Lab	4
		[PHY x054/L]	

+ Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (0-6 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Biology Core (20 sh)

BCH 3033/L	Biochemistry I/Lab	4
PCB 3063/L	Genetics/Lab	4
PCB 3253/L	Developmental Biology/Lab	4
PCB 4043/L	Ecology/Lab	4

Choose one:

BOT 4503/L	Plant Physiology/Lab	4
PCB 4723/L	Comparative Animal Physiology I/Lab	4

Specialization (22 sh)

At least 18 sh upper division aquatic/marine electives; at least one upper division botany course (3-4 sh) with aquatic/marine emphasis:

BOT 4404/L	Aquatic Botany/Lab	4
MCB 4710	Biology of the Protists	3
MCB 4733	Marine Microbiology	3
PCB 4364/L	Marine Ecological Physiology/Lab	4
PCB 4673	Principles of Evolution	3
ZOO 4254/L	Marine Invertebrate Zoology/Lab	4
ZOO 4304/L	Marine Vertebrate Zoology/Lab	4
ZOO 4513	Animal Behavior	3
ZOO 5514L	Animal Behavior Lab	2
ZOO 5816	Zoogeography	3
Any upper division biology course except ZOO 3733		3
Biology directed studies		V

Major-Related (18 sh)

STA 4173	Biostatistics	3
3000/4000 level Computer Science elective		3

If not completed at the Lower Division:

BOT 2010/L	General Botany/Lab	4
CHM 2210/L & CHM 2211/L	Organic Chemistry I & II/Lab	8
ZOO 1010/L	General Zoology/Lab	4

Choose One:

PHY 2048/L & PHY 2049/L	University Physics I & II/Lab	8
PHY 2053/L & PHY 2054/L	General Physics I & II/Lab *	8

* Preferred Course

Upper Division Electives (0 sh)