## MARINE SCIENCE, MINOR

## Liberal Arts (Code 150-400)

Advisors: D. Lonzarich (Biology) [On-Campus Affiliate Coordinator] or K. Syverson (Geology and Environmental Science).

This minor is designed for students who are majoring in biology, chemistry, geography, or geology and who are interested in Marine Science. Requirements for this minor include one academic course at the Gulf Coast Research Lab (GCRL) in Ocean Springs, Mississippi and at least one other creditbearing academic experience (i.e., coursework, internship or research) at a marine laboratory or field location (developed in consultation with Marine Science Minor academic advisor). Remaining credits are to be earned from courses at UW-Eau Claire or GCRL.

Code Title Credits

The minor consists of 24 credits as follows:

Required credits (6-10 credits)

Marine Science I: Oceanography (completed at GCRL)

In consultation with the Marine Science minor academic advisor, complete at least one of the following three academic experiences: 1) Marine Science II: Marine Biology offered at the Gulf Coast Research Laboratory (5 credits), 2) marine science internship (BIOL 498, 1-3 credits) and/or 3) marine science undergraduate research experience (BIOL 395, BIOL 396, BIOL 399 or BIOL 499, 1-3 credits).

Elective credits (up to 18 credits) selected from the following **UW-Eau Claire courses:** 

	BIOL 320	Studies in Tropical Environments <sup>1</sup>
	BIOL 321	Ecology <sup>1</sup>
	BIOL 345	Invertebrate Zoology <sup>1</sup>
	BIOL 376	Aquatic Ecology <sup>1</sup>
	BIOL 379	Biology of Fishes <sup>1</sup>
	GEOG 178	Planet Earth: Conservation of the Environment
	or BIOL 180	<b>Environmental Biology and Conservation</b>
	GEOG 335	Geographic Information Systems I
	GEOG 338	Remote Sensing of the Environment
	GEOG 340	Climatology
	GEOL 106	Earth Science
	or GEOL 110	Physical Geology
	or GEOL 115	Environmental Geology
	or GEOL 118	Societal Issues in Earth Science
	GEOL 304	Global Environmental Change

<sup>&</sup>lt;sup>1</sup> Courses at GCRL can be substituted for any of these UW-Eau Claire courses.

Note: A maximum of 12 credits from this minor can count toward the student's major.

## **Program Learning Outcomes**

Students completing this program will be expected to meet the following learning outcomes:

• Demonstrate a general understanding of fundamental concepts in marine science, including principles of geological, physical, chemical, and biological processes in the marine environment.

- Demonstrate a general understanding of common laboratory, field, and modeling methods used in marine science.
- Demonstrate a general understanding of how human activities impact the marine environment and how the marine environment impacts human activities.