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, and 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 credit-bearing 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.

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<th>Code</th>
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The minor consists of 24 credits as follows:

**Required credits (6-10 credits)**

| Marine Science I: Oceanography (completed at GCRL) | 5 |

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 1
- BIOL 321 Ecology 1
- BIOL 345 Invertebrate Zoology 1
- BIOL 376 Aquatic Ecology 1
- BIOL 379 Biology of Fishes 1
- GEOG 178 Planet Earth: Conservation of the Environment or BIOL 180 Environmental Biology and Conservation
- 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

1 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 how 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.