

MARINE SCIENCE, MINOR

Liberal Arts (Code 150-400)

Advisors: D. Lonzarich (Biology) [On-Campus Affiliate Coordinator], [Todd Wellnitz \(Biology\)](#) or K. Syverson (Geology).

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 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. The majority of course work (minimum of four courses) is to be taken during two-summer sessions at the Gulf Coast Research Lab (GCRL) in Ocean Springs, Mississippi. Remaining credits are chosen from UW-Eau Claire courses outside of one's major. Courses in chemistry, physics, and calculus are strongly recommended.~~

The minor consists of 24 credits as follows:

Required ~~credits (6-10 credits)~~ courses at Gulf Coast Research Laboratory

~~First Summer (ten credits)~~

Marine Science I: Oceanography (completed at GCRL) 5

~~In consultation with the Marine Science minor academic advisor, complete at least one 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).~~

Marine Science II: Marine Biology 5

~~Second Summer (8 to 12 credits)~~

~~Choose from advanced courses offered at the Gulf Coast Research Laboratory in consultation with an advisor~~

~~Remaining credits to be selected from courses outside of one's major from the following:~~

Elective credits (up to 18 credits) selected from the following UW – Eau Claire courses.

| | | |
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| BIOL 320¹ | Studies in Tropical Environments | 3 credits |
| BIOL 321¹ | Ecology | 3 credits |
| BIOL 345¹ | Invertebrate Zoology | 4 credits |
| BIOL 376¹ | Aquatic Ecology | 3-4 credits |
| BIOL 379¹ | Biology of Fishes | 4 credits |
| GEOG 178 | Conservation of the Environment | 3 credits |
| or BIOL 180 | Environmental Biology and Conservation | 3 credits |
| GEOG 335 | Geographic Information Systems I | 3 credits |
| GEOG 338 | Remote Sensing of the Environment | 3 credits |
| GEOG 340 | Climatology | 3 credits |
| GEOL 106 | Earth Sciences | 4 credits |

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| <u>or</u> GEOL 110 | <u>Physical Geology</u> | <u>4 credits</u> |
| <u>or</u> GEOL 115 | <u>Environmental Geology</u> | <u>4 credits</u> |
| <u>or</u> GEOL 118 | <u>Societal Issues in Earth Science</u> | <u>4 credits</u> |
| GEOL 304 | <u>Global Environmental Change</u> | <u>3 credits</u> |

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.

~~BIOL 345 ——— Invertebrate Zoology~~

~~BIOL 361 ——— Biology of Microorganisms~~

~~BIOL 376 ——— Aquatic Ecology~~

~~BIOL 379 ——— Biology of Fishes~~

~~CHEM 213 ——— Quantitative Analysis~~

~~CS 170 ——— Computing for the Sciences and
Mathematics~~

~~ENPH 441 ——— Water and Wastewater~~

~~GEOG 280 ——— Cartographic Design~~

~~GEOG 335 ——— Geographic Information Systems I~~

~~GEOG 338 ——— Remote Sensing of the Environment~~

~~GEOG 340 ——— Climatology~~

~~GEOL 110 ——— Physical Geology~~

~~GEOL 312 ——— Mineralogy and Petrology I~~

~~GEOL 418 ——— Earth History~~

~~MATH 246 ——— Elementary Statistics~~