**College of Arts and Sciences**

**The Ohio State University**

**Type 1b & 3A Marine Science Certificate (Marine-CT)**

The 12-13.5 credit hour Marine Science Certificate will provide students with a competitive advantage in pursuing careers in marine science in the private and public sectors or pursuing entrance into a graduate degree program in marine science. The certificate is designed to enhance both critical thinking and the technical skills in marine science.

**Required core course (3 credits):**

* **EARTHSC 5206**: Advanced Oceanography (3)

**Elective courses (9 credits):**

In addition, students will select from the courses listed below.

* **EARTHSC 4450:** Water, Ice and Energy in the Earth System (3)
* **EARTHSC 5622**: Stable Isotope Biogeochemistry (3)
* **EARTHSC 5602.02**: Carbonate Depositional Systems (3)
* **EARTHSC 5780**: Reflection Seismology (4)
* **GEOG 5900**: Climatology (3)
* **EEOB 5410**: Ocean Ecology (1.5)
* **EEOB 5430**: Fish Ecology (3)
* **EEOB 4230**: Focused study on ecology and evolution of invertebrates (2)
* **ENR 5614**: Marine and aquatic education ()

**Of these electives, no more than one of**:

* **GEOG 5210:** Fundamentals of Geographic Information Systems (3)
* **EARTHSC 5310:** Remote Sensing in the Earth Sciences (3)
* **CIVILEN 5001:** Introduction to Geographic Information Systems (4)

**Marine Geology Certificate program guidelines**

The following guidelines govern the Marine Geology Certificate.

Credit hours required: 12-13.5 credit hours.

Overlap with a major

* The certificate must be in a different subject than the major.
* Max 50% overlap with degree program (i.e. major, minor, other certificate, GE, or graduate program)

X193 credits: Not permitted.

Certificate Completion: If the certificate is not complete on the DAR, the student must consult with the Coordinating Advisor.

Consult with Coordinating Advisor

* For filing deadlines.
* For changes or exceptions to a certificate plan.

Undergraduate certificate program:

Coordinating Advisor: Professor Ashley Griffith, 381 Mendenhall Labs, Columbus, OH 43210; griffith.233@osu.edu

* Minimum C- for a course to be listed on the certificate.
* Minimum 2.00 cumulative point-hour ratio required for the certificate.

Graduate certificate program:

Coordinating Advisor: Professor Steve Lower, 084 Orton Hall, lower.9@osu.edu; 614-292-1571

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* Course selections must be numbered 4000+ outside the student’s home unit and 5000+ within the home unit.
* Minimum C- for a course to be listed on the certificate.
* Minimum 3.00 cumulative point-hour ratio required for the certificate.