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

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. Required for 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, or GE)

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

X193 credits: Not permitted.