

Marine Science and Conservation Leadership Certificate



The Marine Science and Conservation Leadership program is rooted in marine science and conservation and includes studies in a variety of disciplines: biology, earth and ocean sciences, economics, engineering, environmental sciences and policy, markets and management studies, philosophy, political science, public policy, religion, and theater studies. The Certificate will provide undergraduate students with leadership skills and an understanding of both natural and social science concepts and practices. The Certificate program requires a residential component at the Duke Marine Lab in Beaufort, NC, for one full academic semester (fall or spring) or two five-week summer terms. Marine Lab residence features opportunities that bring Duke undergraduates together with local, regional, national, and international leaders in formal and informal settings. An exciting new aspect to the Marine Science and Conservation Leadership Certificate is a plan for publication. Questions? Contact Katie Wood: kw72@duke.edu.

The certificate requires a total of six courses:

- One introductory course: Environ 102 Introduction to Environmental Science and Policy or Environ 201 Integrating Environmental Sciences and Policy (Durham)
- One leadership, ethics, management, or communication course;
- Two marine science courses (one natural science and one social science);
- One marine conservation course; and
- One capstone course taken during spring of senior year (in Durham).

For complete certificate information, including enrollment instructions:

www.nicholas.duke.edu/marinelab/programs/certificate.html

Introductory course - required for all certificate students	Typically Offered
ENV 102. Introduction to Environmental Science and Policy <i>NS, STS</i>	Fall, Spring
Or	
ENV 201. Integrating Environmental Sciences and Policy <i>NS, SS, STS, W</i>	Fall, Spring
Leadership/Ethics/Communication courses - students choose ONE	
BIO 156. Genetics, Genomics, and Society <i>EI, STS, NS, SS</i>	Spring
ENGR 350S. Ethics in Professions: Scientific, Personal and Organizational Frameworks <i>EI, STS</i>	Spring
ENV 214S. Ethical Challenges in Environmental Conservation <i>EI, W, SS</i>	Fall, Spring
ENV 216S /POLSCI 306S/PUBPOL 279S. Environment and Conflict <i>CCI, EI, W, SS</i>	Fall
ENV 222S DOCST248S. Environmental Conservation and Documentary Photography <i>EI, R, ALP</i>	Fall
NEW! ENV/PUBPOL 314 Managing the Oceans to Solve Global Problems	Spring (Durham)
MMS 210. Managerial Effectiveness <i>SS, STS</i>	Spring
PHIL 314 /BIO 255. Philosophy of Biology <i>CZ, NS, R, STS</i>	Fall
PUBPOL 302D. Policy Choice as Value Conflict <i>EI, SS</i>	Fall, Spring
PUPOL 263. Border Crossing: Leadership, Value Conflicts, and Public Life <i>CCI, EI, W, SS</i>	Spring
ENV 212/PUBPOL 275 U.S. Environmental Politics	Spring
RELIGION 287. Religion and Science: Biology, Minds and Souls <i>CCI, CZ, STS</i>	Spring
THEATRST 248S. Voice and Speech <i>ALP</i>	Fall
THEATRST 103S. Communication, Improvisation, and Business <i>ALP</i>	Summer

Marine Science (Natural Science) courses - students choose ONE

BIO 175LA. Marine Biology <i>EI, NS, STS</i>	Summer Term I
BIO/ENV/EOS 369LA. Biological Oceanography <i>NS, R</i>	Fall
BIO/EOS/ENV 273LA. Marine Ecology <i>NS, R, W</i>	Fall
BIO 275A. Biology for Engineers <i>NS, STS</i>	Summer
BIO 278LA. Physiology of Marine Animals <i>NS, R, W</i>	Fall/Spring
BIO 373LA. Sensory Physiology and Behavior of Marine Animals <i>NS, R, W</i>	Fall
ENV 476A Data and Time Series Analysis	Fall
BIO/ENV/EOS 377LA. Marine Invertebrate Zoology <i>NS, R</i>	Fall, Spring, Summer
BIO/ENV 379LA. Research Methods in Marine Science <i>NS, R, W</i>	Summer
BIO 393/493. Research Independent Study <i>R</i>	Fall, Spring, Summer
EOS 102. The Dynamic Oceans <i>NS, STS</i>	Fall, Spring
EOS 202. Atmosphere and Ocean Dynamics <i>NS, R</i>	Fall
EOS 315. Waves, Beaches, and Coastline Dynamics <i>NS, STS</i>	Fall
EOS 364S/ENV 362S. Changing Oceans <i>NS</i>	Spring
EOS 404S. Geology of Tropical Marine Environments <i>NS, R</i>	Spring
ENV 280LA/ECE 384LA/EOS 280LA. Marine Bioacoustics <i>NS, STS, R</i>	Spring
NEW! ENV 335LA Drones in Marine Biology, Ecology and Conservation <i>NS, STS</i>	Summer
ENV 370A. Introduction to Physical Oceanography <i>NS, QS, STS</i>	Fall, Spring
ENV 383LA/BIO 380LA. Marine Molecular Microbiology <i>NS</i>	Spring
NEW! ENV/BIO 445A Marine Climate Change	Fall
NEW! ENV TBA Deep-Sea Science and Environmental Management	Spring

Marine Science (Social Science) courses - students choose ONE

CULANTH 419S. Global Environmentalism and the Politics of Nature <i>CCI, CZ, SS, STS</i>	Fall, Spring
ECON 339/ENV 363. Economics of the Environment <i>SS, STS</i>	Spring
ENV 212. United States Environmental Policy. <i>EI, SS, STS, W</i>	Fall
ENV 286A. Marine Policy <i>EI, SS, STS</i>	Fall
NEW! ENV 305A. Social Impact Analysis (<i>EI, SS</i>)	Spring
ENV 528SA. Community Based Marine Conservation (Gulf of California) <i>CCI, STS, SS</i>	Spring
ENV 551DA. Conservation and Development <i>CC, NS</i>	Spring
ENV 520/ECON 530/PUBPOL 576. Resource and Environmental Economics <i>SS</i>	Fall
ENV 533A. Marine Fisheries Policy <i>EI, SS, STS</i>	Spring

Marine Conservation courses - students choose ONE

NEW! ENV/PUBPOL 314 Managing the Oceans to Solve Global Problems	Spring (Durham)
BIO/ENV 270A Conservation Biology and Policy	Summer
BIO/ENV 375LA. Biology and Conservation of Sea Turtles <i>NS, STS</i>	Spring/Summer
BIO 376A. Marine Mammals <i>NS, STS</i>	Fall/Summer
BIO/ENV 205. Marine Megafauna <i>NS, STS</i>	Fall
BIO 571A. Urban Tropical Ecology <i>CCI, NS, SS, STS</i>	Spring

Capstone course - required for all certificate students

ENV 350S/PUBPOL 280S. Marine Science and Conservation Leadership <i>NS, STS, SS, EI</i>	Spring (Durham)
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Courses highlighted in light blue are offered at the Duke Marine Lab

No more than three courses may originate in a single department; no more than two courses that are counted toward the Marine Science and Conservation Leadership Certificate may also satisfy the requirements of any major, minor, or other certificate program. At least four of the six classes need to be 100-level or above and at least half of the classes need to be taken at Duke. Appropriate courses may come from this list or may include other courses as approved by the Director. Acceptance into the certificate program does not guarantee enrollment in electives, with the exception of the capstone course.