Marine Science and Policy

Marine Science and Policy Advisers
Paulette M. Peckol, Ph.D. **2, Professor of Biological Sciences, Co-Chair
L. David Smith, Ph.D. **1, Professor of Biological Sciences, Co-Chair
Sara B. Pruss, Ph.D. †2, Professor of Geosciences
Bosljka Glumac, Ph.D. **2, Professor of Geosciences

The marine science and policy minor permits students to pursue interests in coastal and oceanic systems through an integrated sequence of courses in the natural and social sciences.

An introduction to marine science is obtained through completion of the two basis courses. Students then choose among upper-level courses that focus on or complement scientific investigation of the oceans and the policy aspects of ocean conservation, exploitation and management. Students should consult with one of the co-directors as early as possible in the course selection process.

Requirements: Six courses, including three required courses as follows: an introductory oceanography course (e.g., GEO 108), BIO 268 (BIO 269 must be taken concurrently), and a Special Studies or 300-level course on a marine-related topic chosen in consultation with the minor adviser. Students select the three remaining courses as electives (example courses are listed below). Other appropriate courses offered at Smith, within the Five College Consortium, or in study-away programs may be used to satisfy the requirements with consultation and approval of the minor adviser.

Biological Sciences
BIO 260  Invertebrate Diversity
BIO 366  Biogeography
BIO 390  Seminar: Topics in Environmental Biology
Investigations in Conservation Biology
Coral Reef Ecology and Conservation
BIO 400  Special Studies

Environmental Science and Policy
ENV 101  Sustainability and Social-Ecological Systems
ENV 108  Environmental Chemistry
ENV 150  Mapping Our World: An Introduction to Geographic Information Systems
ENV 201  Researching Environmental Problems
ENV 202  Researching Environmental Problems Laboratory
ENV 311  Interpreting and Communicating Environmental Information

Geosciences
GEO 231  Invertebrate Paleontology and the History of Life
GEO 232  Sedimentary Geology
GEO 302  Field Studies of the Desert Southwest
GEO 334  Carbonate Sedimentology
GEO 341  Advanced Studies in Geobiology
GEO 400  Advanced Work or Special Problems in Geosciences

Social Sciences & Humanities
ECO 224  Environmental Economics
ENG 118  Colloquia in Writing
Writing About Science
Water: Science and Politics
ENV 326  Seminar: Environmental Justice and Natural Resource Management
GOV 207  Politics of Public Policy
GOV 254  Colloquium: Politics of the Global Environment
GOV 404  Special Studies
PHI 304  Seminar in Applied Ethics
Sustainability
PPL 220  Public Policy Analysis

Five College Course Possibilities
Courses may be chosen from within the Five Colleges with approval of minor advisers; a sample of possible courses follows:

Amherst College
GEOL 105:  Introduction to Oceanography
GEOL 107:  Marine Environments

Hampshire College
CS 0259:  Marine Mammals
CS 0261:  Oceans of Change

Mount Holyoke College
GEOL 103:  Oceanography
BIOL 321C:  Marine Conservation Biology
BIOL 326:  Ocean Blues: World’s Oceans

UMass
GEO-SCI 131:  Intro Oceanography
GEO-SCI 190BH:  Biological Oceanography
BIOLOGY 273:  Marine Vertebrates
BIOLOGY 487H:  Tropical Field Biology
NRC 260:  Fish Conservation and Management
MICROBIO 494: A Sea of Microbes

Off-Campus Course Possibilities
Students may choose to fulfill up to three of their minor courses away from Smith through participation in a marine-oriented, off-campus program. In recent years, Smith students have been enrolled in the following programs:

Marine Biological Laboratory (Boston University Marine Program, fall semester); Williams-Mystic Maritime Studies Program; SEA Semester; Duke University Marine Laboratory (semester and summer programs); University of Maine Semester by the Sea (fall semester); marine programs of the School for Field Studies, the School for International Training and Shoals Marine Laboratory.