WHY ENVIRONMENTAL STUDIES?

If you are concerned about environmental issues at home or across the globe—from climate change, to sustainable use of natural resources, environmental health, and biodiversity loss, consider the Environmental Studies (ES) Coordinate major.

The ES Major will give you the skills, knowledge and hands-on experience necessary to address such complex and interrelated problems. Our goal is to ensure that students graduate with a firm grounding in a discipline and the capacity for thinking and working collaboratively across disciplinary lines.

Bowdoin offers a coordinate Environmental Studies (ES) major, and an ES minor. Students majoring in environmental studies also choose a disciplinary major, either a departmental major, such as biology, economics, or visual art, or a program major such as Asian studies, or gender and women’s studies. Up to two courses may be double-counted toward the ES major.

Bowdoin’s ES coordinate major provides depth within the disciplinary major that ES programs at other colleges cannot match, it also provides interdisciplinary breadth through its courses, community-based projects, internships, and co-curricular events.

Bowdoin’s location on the Maine coast offers unique opportunities for coastal and marine studies, such as the program’s participation in the “Maine Rivers Project” a collaborative effort bringing together students, and scientists from Bowdoin and Bates Colleges, the University of Southern Maine, the Penobscot East Resource Center, the University of Maine, and stakeholders within two local watersheds. The project’s goal is to understand the ecological and socioeconomic influences on recovery of Maine’s rivers, estuaries and coastal marine environments.

Examples of the Coordinate Major

<table>
<thead>
<tr>
<th>Asian Studies/ES</th>
<th>Biology/ES</th>
<th>Chemistry/ES</th>
<th>English/ES</th>
<th>French/ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociology/ES</td>
<td>Spanish/ES</td>
<td>History/ES</td>
<td>Economics/ES</td>
<td>Philosophy/ES</td>
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</table>
The “Maine Rivers Project” explores the ecological and socioeconomic influences of river restoration on estuaries, and coastal marine environments. Bowdoin students have participated in this project through course work, independent study and honor’s projects, and through summer research fellowships.

THE MAJOR

The ES Major consists of 9 courses. Students can count two ES courses towards their departmental major:

- **Our Earth: Introduction to Environmental Studies** (ES 1101) - a unique interdisciplinary course team-taught by a scientist, and an environmental historian;
- **Environmental science core course**: ES 2201 Perspectives in Environmental Science
- Introductory science course in biology, chemistry, earth & oceanographic science or physics (numbered 1102-1999)
- **Environmental humanities core course**: ES 2403 Environment and Culture in North American History
- **One Environmental Studies social science course** (see the ES website for courses meeting this requirement: courses numbered 2300-2330)
- **One Senior Seminar**: A culminating one-semester course that provides indepth study within a discipline, or a capstone course that explores a topic and/or project from an interdisciplinary perspective.

Beyond the core courses, ES majors choose a concentration, and take three 1100-level or higher courses within a concentration:

- **History, Landscape, Values, Ethics & the Environment** (courses designated with a ‘c’)
- **Environmental Economics and Policy** (courses designated with a ‘b’)
- **Interdisciplinary Environmental Science** (courses designated with an ‘a’)
- **Student-designed Environmental Studies Concentration**

Fellowship recipients conducting fish counts in Merrymeeting Bay

The “Maine Rivers Project” explores the ecological and socioeconomic influences of river restoration on estuaries, and coastal marine environments. Bowdoin students have participated in this project through course work, independent study and honor’s projects, and through summer research fellowships.
**THE MINOR**

The environmental studies minor consists of five courses:
Our Earth: Introduction to Environmental Studies, (ES 1101); two ES courses at the intermediate level or higher, (one must be outside the students' disciplinary major); and two core courses in the disciplinary area specified in the box to the right.

**FACILITIES & RESOURCES**

The ES Program offices are located on the first floor of Adams Hall. ES majors have access to a large, informal common room, computers, printer, and a seminar room.

Off-campus facilities include the Coastal Studies Center (CSC), a 118 acre coastal field station on Harpswell Sound, minutes from campus. The CSC is a research and teaching facility with a marine lab, terrestrial Lab/ art studio, 2.5 miles of coastline & 5 miles of trails. Fall 2015, and each subsequent fall, Bowdoin will offer the Marine Science Semester (BMSS) at the CSC, an immersion program of 4 courses taught in module format, with field trips in the Gulf of Maine and Baja California Sur. The BMSS courses count as electives for the ES major, and minor.

Students also have the opportunity to conduct field research on topics such as ecology, animal behavior, ornithology, botany, earth & Oceanographic science, or visual art at Bowdoin’s field station on Kent Island, in New Brunswick, Canada.

Additionally, ES students are encouraged to take community-based courses or an independent study which connects classroom concepts to community needs in order to enhance learning, promote active citizenship and foster mutually beneficial ties between campus and the larger community.

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**Disciplinary Requirements**

**Natural Science Majors:**
ES 2403 Environment and Culture in North American History + 1 social science course

**Social Science Majors:**
ES 2201 Perspectives in Environmental Science + ES 2403 Environment and Culture in North American History

**Humanities Majors:**
ES 2201 (above)+ 1 social science course

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Sabine Berzins and Nora Hefner, ES Summer Fellows, 2014
HONORS & INDEPENDENT STUDY

The ES Program encourages majors to consider independent research or an honors project as part of their academic program. Projects can be an extension of work begun in an ES course, fellowship, or study aboard experience.

An honors project in Environmental Studies provides students with an opportunity to engage in interdisciplinary research and analysis. ES students should elect an Environmental Studies honors project, in consultation with their faculty adviser if they have an interest in an area that is interdisciplinary in nature and the topic of their project cannot be addressed through their departmental major. See the ES webpage (bowdoin.edu/environmental-studies/student research) for details.

Recent Honors Projects

- The Price of Carbon: Politics and Equity of Carbon Taxes in Mexico and South Africa
- The effects of land use change on riparian environment, water quality, and society along the Kimana-Kikarangot River, Kenya
- Into the den: my search for the West
- Toward Collaboration on the Androscoggin River: evolving norms in environmental governance
- Gateway to the Forest City? Portland, Maine’s Bayside neighborhood, 1866-2014
- Roadkill: the battle to start-and stop- Maine’s east-west highway
- Planning the motor city: the influence of the Big Three on Detroit’s urban landscape
- Food hubs: acting locally, producing regionally and thinking collaboratively in Vermont and Maine
- “A degeneracy of the old New England stock” : northern New England’s poor farms in the nineteenth and twentieth centuries
ES students have many opportunities to pursue environmental interests outside of Bowdoin, including off-campus study, and internships and fellowships. These fellowships can lead to independent study projects.

Environmental Fellowships

The Environmental Studies Program places ES students in stipended summer fellowships. Students receive $4,000 for these ten-week fellowships:

**Maine Based Fellowships** place 6-8 students with Maine non-profit organizations and governmental agencies.

**Sustainability & Environmental Justice Fellowships** place 1-2 students in a fellowship site of their choice with a business, at the government level, or with a nonprofit organization to explore themes of sustainability or environmental justice. Students can choose to work in their hometown, or anywhere in the U.S. or internationally.

The **Cooke Research Fellowship** funds 1-2 students to conduct community based research with a faculty mentor at Bowdoin, or at an off-campus location.

**National Audubon Fellowship** provides an opportunity for 2 students to work with National Audubon’s Seabird Restoration Program which operates seven island field stations along the Maine Coast. Bowdoin Fellows participate in research, monitoring and management at the field stations. (Note: students receive a weekly stipend and room and board)

Q. What do you believe was the value of study abroad for you personally?

A. “Where can I start? The Thailand program benefitted me in ways that I could not have experienced in any other program. The way I think and interact with the world and my surroundings has changed completely. I have a deep understanding of how interconnected this world is, how my actions in the United States impact people in Northeastern Thailand and all over the world. Every time I pick up a piece of food, take a shower, or drive my car, I can think of what went into those actions, where it came from, and who had to sacrifice for my benefit. I am so grateful that I have the means with which to analyze the complexities of this world.”

Larissa Gaias ’11 on her study abroad experience in Thailand, ES/Psychology major
“This fellowship afforded me a close look at what environmental political advocacy looks like on a state level, and helped me realize that this is undoubtedly the type of work I would like to do after college. I have learned invaluable lessons about how a public interest non-profit works and about the perseverance and commitment it takes to make political progress fighting climate change and protecting the environment and public health.”

Camille Wasinger ‘15, Psi U Fellow, Maine Conservation Voters

ES National Fellowship Awards & Opportunities

Recent ES National Fellowship awards include:

ES/ Econ major **Samuel David Bruce ’13** was one of 40 students around the country to receive a **Thomas J. Watson Fellowship** and $25,000 to study climate change in threatened cities from Europe to South America. David was the first recipient of the Cooke Environmental Research Fellowship in the summer of 2012.

ES/English major **Erica Berry ’14** received a **Morris K. Udall Fellowship** in 2013 honoring her environmental leadership. She strives to “write narrative nonfiction about the intersections between the ever-shifting environment and humanity”. Erica received Honors in ES.

**Teona Williams** (ES/History) ’12, was awarded a **Watson Fellowship** in 2011.

Teona Williams and Andrew Cushing ’12 (ES/History) were both awarded the **Morris K. Udall Fellowship**.

Off-Campus Study Opportunities

The Off-Campus Study Office assists Bowdoin students in broadening and enriching their education through study at other academically rigorous institutions and programs around the world. Approximately 50% of Bowdoin students choose to study abroad, while about 60% of ES students choose this option. In recent years, ES students have studied in countries such as Argentina, Costa Rica, Ireland, Kenya, Denmark, Brazil, New Zealand, Australia, Thailand, and Peru, among many others. Students are encouraged to visit the Off-campus study office and the ES program office to discuss different programs.
<table>
<thead>
<tr>
<th>Program</th>
<th>Location</th>
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<tbody>
<tr>
<td>Antioch in Germany, Tübingen</td>
<td>Germany</td>
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<tr>
<td>Boston University, Padova</td>
<td>Italy</td>
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<tr>
<td>Brown in Bologna</td>
<td>Italy</td>
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<tr>
<td>CIEE, Ghana, Thailand</td>
<td>See country list</td>
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<tr>
<td>Dickinson College, Toulouse</td>
<td>France</td>
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<tr>
<td>DIS, Copenhagen</td>
<td>Denmark</td>
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<tr>
<td>Duke in the Andes</td>
<td>Ecuador</td>
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<td>Goldsmiths, London</td>
<td>England, UK</td>
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<td>Hebrew University, Jerusalem</td>
<td>Israel</td>
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<tr>
<td>IES Granada, Salamanco</td>
<td>Spain</td>
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<tr>
<td>IFSA-Butler, Argentina, Valparaiso</td>
<td>Argentina, Chile</td>
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<tr>
<td>IHP, Cities in the 21st Century/Global Ecology</td>
<td>Multiple</td>
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<tr>
<td>ISLE, Kandy</td>
<td>Sri Lanka</td>
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<td>James Cook University</td>
<td>Australia</td>
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<td>JCMU, Hikone</td>
<td>Japan</td>
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<tr>
<td>Middlebury in Chile, Middlebury in Poitiers</td>
<td>Chile &amp; France</td>
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<td>Org. for Tropical Studies, Costa Rica, South Africa</td>
<td>See country list</td>
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<tr>
<td>OTS Costa Rica (Global Health)</td>
<td>Costa Rica</td>
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<tr>
<td>S.E.A. Semester, Woods Hole</td>
<td>USA</td>
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<tr>
<td>SFS, Kenya, Mexico, Turks &amp; Caicos</td>
<td>See country list</td>
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<tr>
<td>SIT Multiple Programs: Australia, Chile, China, Ecuador, Madagascar, Panama, Switzerland, Tanzania</td>
<td>See country list</td>
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<tr>
<td>St. Lawrence University, Kenya Semester</td>
<td>Kenya</td>
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<td>Stellenbosch, South Africa</td>
<td>South Africa</td>
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<tr>
<td>Swarthmore College, Grenoble</td>
<td>France</td>
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<tr>
<td>The Swedish Program, Stockholm</td>
<td>Sweden</td>
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<tr>
<td>University of Cape Town</td>
<td>South Africa</td>
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<tr>
<td>University of College Cork (NUI)</td>
<td>Ireland</td>
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<tr>
<td>University of Edinburgh</td>
<td>Scotland, UK</td>
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<tr>
<td>University of Otago, Dunedin</td>
<td>New Zealand</td>
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<td>University of South Africa</td>
<td>South Africa</td>
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<tr>
<td>University of Svalbard</td>
<td>Norway</td>
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<tr>
<td>University of Tasmania</td>
<td>Australia</td>
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What can you do with an ES Major?

Thai Ha-Ngoc, ’10
ES/Econonomics
Current Position: Program Assistant, Kendall Foundation
The Kendall Foundation is a grantmaking organization with a new program focused on creating a sustainable and resilient food system in New England. Prior to joining the Foundation in 2012, Thai worked at the Northeast Energy Efficiency Partnerships in Lexington, MA as part of the Evaluation, Measurement, and Verification (EM&V) team. He provided project management support for the development and use of consistent protocols to measure the impacts of regional energy efficiency programs. From 2010 to 2011, Thai served as an Ameri-Corps member in the Massachusetts Land Initiative For Tomorrow (MassLIFT) program at the Sudbury Valley Trustees based in Sudbury, MA. There, he monitored and developed baseline reports for conservation land owned or managed by the regional land trust. One of his most rewarding accomplishments at the land trust was providing stewardship workshops for local conservation commissions and land trusts.

Sue Kim-Ichel, ’05
ES/Government & Legal Studies
Promptly following graduation, Sue went on to attend graduate school at Columbia University. There her studies centered on environmental management with a focus on renewable energy and climate change. After Columbia, she began working at the NYC Mayor’s Office of Management and Budget where she gained valuable experience in the public sector. She then pursued a career at Malcolm Pirnie, a consulting firm where she worked in water and wastewater project financing. She left Malcolm Pirnie to work as an analyst for a consulting firm called Sustainable Energy Advantage, which seeks to further the sustainable agenda dealing exclusively on renewable energy.

To those looking to get started on an environmental career, Sue has one thing to say: “Network, network, network! And then network some more! It opens up chances to make yourself memorable to those who can connect you to future work in your related field.”
ENVIRONMENTAL STUDIES PROGRAM FACULTY 2015-2016

Jennifer Baca, Consorium for Faculty Diversity Fellow, Latin American Studies
Mark Battle, Associate Professor of Physics.
Phil Camill III, Rusack Professor of Environmental Studies and Earth & Oceanographic Science.
Dave Carlon, Associate Professor of Biology, Director of the Coastal Studies Center.
Connie Y. Chiang, Associate Professor of History and Environmental Studies.
Shaun Golding, Visiting Assistant Professor of Sociology
Divya Gupta, Visiting Assistant Professor of Government & Legal Studies and Environmental Studies.
Laura Henry, Associate Professor of Government
Guillermo Herrera, Associate Professor of Economics
Amy Johnson, James R. and Helen Lee Billingsley Professor of Marine Biology.
Eileen Sylvan Johnson, Program Manager/GIS Analyst & Lecturer, Environmental Studies.
Susan Kaplan, Associate Professor of Anthropology; Director of the Peary-MacMillan Arctic Museum and Arctic Studies Center
Sarah Kingston, Doherty Marine Biology Postdoctoral Scholar
Matthew W. Klingle, Associate Professor of History and Environmental Studies.
Michelle LaVigne, Assistant Professor of Earth and Oceanographic Science
Peter Lea, Associate Professor of Earth and Oceanographic Science
John Lichter, Professor of Biology & Environmental Studies, Director of Environmental Studies Program.
Barry Logan, Professor of Biology; Associate Dean for Academic Affairs and Associate Affirmative Action Officer
Marcos Lopez, Assistant Professor, Sociology abd Anthropology
Bobbie Lyon, Coastal Studies Scholar, Biology
Sarah McMahon, Associate Professor of History
Erik Nelson, Assistant Professor of Economics
Jill Pearlman, Senior Lecturer in Environmental Studies
Russ Rymer, Visiting Writer in Residence, English
Conrad G Schneider, Adjunct Lecturer in Environmental Studies.
Allen Springer, Professor of Government & Legal Studies
Dharni Vasudevan, Professor of Chemistry and Environmental Studies.
Nathaniel Wheelright, Anne T. and Robert M. Bass Professor of Natural Sciences Chair of Biology Department
Enrique Yepes, Associate Professor of Romance Languages
Mary Lou Zeeman, R. Well Johnson Professor of Mathematics
SELECTED GRADUATE SCHOOLS ATTENDED BY ES ALUMNI

Architecture
- Harvard University - Graduate School of Design
- University of Pennsylvania
- Washington University

Biology/ Microbiology
- Boston University
- Boston University-Medical School
- College of William & Mary
- Ohio University-Athens
- Rutgers University-Camden-Graduate
- State University of New York-Binghamton
- University of California-San Diego
- University of Iowa
- University of Missouri
- University of North Carolina-Chapel Hill
- University of Washington
- Yale University
- University of New Hampshire

Business
- Brandeis University
- Rivier College

Chemistry/Biochemistry
- University of California-Berkeley
- California Institute Technology

Civil Engineering
- University of Iowa
- Northwestern University

Economics
- Florida State University
- University of Maryland
- University of Wisconsin-Madison

Education
- Brown University-Medical School
- California State University-Hayward
- Harvard University-School of Education

Environmental Science/ Natural Science
- Antioch College
- Duke University
- Harvard University-School of Public Health
- Miami University
- Rhodes College
- University of California
- University of Delaware
- University of Georgia
- University of Michigan

Law
- Columbia University-School of Law
- University of Oregon-Eugene
- University of Pacific
- Vermont School of Law
- Villanova University
- Western New England College
- Yeshiva University-Cardoza Law

Management
- Boston University-School of Management

Marine Environmental Science/ Oceanography
- Oregon State University
- Virginia Technical
- Oregon State University
- University of California-San Diego
- University of Washington

Political Science
- University of Chicago
- University of Utah

Public Health
- Boston University
- Columbia University-Graduate School
- Yale University-Public Health

Public Policy
- Columbia University-International Affairs
- University of Maine

Urban Planning
- University College-London-UK
- University of North Carolina-Chapel Hill
- University of Oregon-Eugene
- University of Otago-NZ
- Virginia Technical

Zoology
- Colorado State University
A SAMPLE OF ES ALUMNI CAREERS IN THE FIELD

- Federal Energy Regulatory Commission, Fish Biologist
- State of Vermont, Healthcare Administration, Healthcare Administrator/Policy Analyst
- Texas A & M University, Assistant Professor, Environmental Planning
- The Nature Conservancy, Conservation Ornithologist
- Maine Island Trail Association, Stewardship Manager
- Gradient Corporation, Senior Environmental Scientist
- Landscape Architecture,
- Environmental Protection Agency, Lawyer
- Science Magazine, Science Reporter/Writer
- Beals & Thomas Inc., Environmental/Wetland Consultant
- Lemole Poiton Architects, Planner
- Echo Hill Outdoors School, Director of Outreach
- Oregon Health & Science University, Oceanographer
- Northwest Fisheries Science Centre, Stream Ecologist
- Scripps College, Birch Aquarium, Instructor
- New York, City Department of Environmental Protection
- Director of the Stream Management Program
- USDA Forest Service, Natural Resource Specialist, Pres. Manager Fellow
- Project for Public Space, Vice President
- Woodard and Curran, Environmental Scientist
- Menzie-Cura & Assoc. Inc., Senior Scientist
- Oregon Health & Science University, Oceanographer
- New York State University - Binghamton, Independent Biologist
- Freelance Artist, Natural History Illustrator
- Computer Mapping Systems, GIS Manager/Project Planner
- Groundwater & Environmental Services Inc., Senior Project Manager

Get Involved!

Through involvement in student-run environmental organizations and volunteer work, campus jobs, and summer internship opportunities, students can put their environmental experience and passion to work. Campus organizations include:

- Bowdoin Outing Club, Green Bowdoin Alliance, Bowdoin Green Athletics,
- Organic Gardening Club, the Food Coop and the Yellow Bike Club.

Students may also work as their dorm’s ‘Eco Rep’ to improve Bowdoin’s sustainability, or join faculty and staff working to meet Bowdoin’s commitment to reach climate neutrality by 2020.

For more information- see the webpage: www.bowdoin.edu/environmental-studies
or get in contact with:

Program Coordinator:
Rosemary Armstrong
rarmstro@bowdoin.edu
(207) 725-3396

Program Manager:
Eileen Johnson
ejohnson@bowdoin.edu
(207) 798-7157