



ENVIRONMENTAL STUDIES

"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has."

-- Margaret Mead



The idea of "creative tension" that inspires us to strive for a better tomorrow from our honest assessment of our world today was also the inspiration for this painting. It celebrates human ingenuity and asks that we confront environmental challenges in thoughtful, honest, empowering ways.

Carolyn Loeb and Isaac Holt, Class of 2008

Environmental Studies is an interdisciplinary department based on a holistic understanding of environmental issues occurring at the local, national, and global level. The department teaches students to use the tools and perspectives of the humanities, natural sciences, and social sciences to understand the causes and consequences of environmental problems and to develop solutions to these problems.



MACALESTER COLLEGE



HISTORY

In 1973 the Environmental Studies (ES) concentration began. Students were required to take 6 courses in one department, 6 supporting courses, and 2 new ES courses - a senior seminar and an introductory course. Students could graduate with this concentration alone, or they could also obtain a major in the other department (students at Macalester were able to graduate with a concentration only until the late 1990s when the faculty voted to require a major for graduation).

In 1982, the Environmental Studies Coordinating Committee revised the major and made the requirements more stringent. The new set of requirements, which were continued with only minor modifications until 2000, required students to complete a major (or core) in an approved department, as well as some additional course requirements (Principles of Economics, Physical Geography, Physical Geology, and Ecology or Biodiversity), an internship and a senior capstone course.

A new ES Director was hired at the start of the 1998-9 academic year. This position was added as part of a general expansion of the size of the faculty during which a number of interdisciplinary programs, including ES, were granted their first “stand alone” positions. New courses were added as requirements: an introductory Environmental Science course and a junior-level course in Environmental Policy Analysis. New requirements for the major were also developed.

In 2004, the current ES program was converted to an interdisciplinary department. In 2005 two new faculty members were hired, one with expertise in Environmental History and the other in Environmental Policy. In addition, the Biology Department agreed that one of its Ecology positions would be structured in such a way that the person holding that position would contribute 0.5 FTE of his/her position to ES.

In 2006 the Macalester Faculty approved the development of a minor in Environmental Studies.

In 2007 the ES Department received approval for a third full-time position. The department hired a Climate Scientist. The department is now staffed with 3.5 FTE and will continue to draw on courses from faculty in other departments.



MAJOR CONCENTRATION

The Environmental Studies major consists of ten courses (40 credits) in environmental studies and related subjects plus a seven-course emphasis. Since some double counting of courses is allowed, the total number of courses must exceed 15 (60 credits).

The ten course requirement is distributed as follows:

- Introductory Courses - Must take two of three:
 - * ENVI 133: Environmental Science
 - * ENVI 215: Environmental Politics and Policy
 - * ENVI 234: Environmental History

- Required ES Courses - Three courses:
 - * ENVI 280: Environmental Classics
 - * ENVI 489/490: Env. Leadership Practicum and Seminar
or ENVI 624: Internship
 - * ENVI 488: Senior Seminar or ENVI 477/GEOG 488:
Comparative Environment and Development Studies or GEOG
488: Urban Geography Field Seminar or ENVI 644: Honors
Project in ES

- Two Natural Science courses:
 - * ENVI 120: Environmental Geology
 - * ENVI 130: Science of Renewable Energy
 - * ENVI 133: Environmental Science
 - * ENVI 285: Ecology
 - * Biology 342: Animal Behavior and Ecology
 - * Biology 344: Aquatic Ecology
 - * Biology 345: Field Botany
 - * Chemistry 111: General Chemistry I
 - * Chemistry 112: General Chemistry II
 - * Chemistry 115: Accelerated General Chemistry
 - * Geology 150: Dynamic Earth and Global Change
 - * Geology 155: History and Evolution of the Earth
 - * Geology 260: Geomorphology



- * Geology 265: Sedimentology and Stratigraphy
- * ENVI 194, 294, and 394 natural science topic courses

Other natural science courses require prior approval by the Environmental Studies Department Chair.

■ Two Social Science Courses:

- * ENVI 215: Environmental Politics and Policy
- * ENVI 231: Environmental Economics and Policy
- * ENVI 232: People and the Environment
- * ENVI 246
- * ENVI 252: Water and Power
- * ENVI 335: Science and Citizenship
- * ENVI 365: Environmental Anthropology
- * ENVI 368: Sustainable Development and the Global Future
- * ENVI 370: Education and the Challenge of Globalization
- * ENVI 477: Comparative Env. and Development Studies
- * Economics 119: Principles of Economics
- * Geography 111: Human Geography of Global Issues
- * ENVI 194, 294, and 394 social science topic courses

Other social science courses require prior approval by the Environmental Studies Department Chair.

■ Two Humanities Courses:

- * ENVI 229: Environmental Ethics
- * ENVI 234: American Environmental History
- * ENVI 236: Consumer Nation: American Consumer Culture in the 20th Century
- * ENVI 237: Environmental Justice
- * ENVI 265: Justice
- * ENVI 266: Field, Fold, and Table: Literature and Sustainable Farming
- * ENVI 267: Literature and Environment: The Poetry of Dwelling
- * ENVI 304: Myth and Environment in the Middle Ages
- * ENVI 340: U.S. Urban Environmental History
- * ENVI 343: Imperial Nature: The United States and the Global Environment
- * ENVI 345: Car Country: The Automobile and the



American Environment

- * Philosophy 125: Ethics
- * ENVI 194, 294, and 394 humanities topic courses

Other humanities courses require prior approval by the Environmental Studies Department Chair.

Disciplinary or Interdisciplinary Core: Seven courses

■ Disciplinary Option:

- * 6 courses in a discipline (2 must be 300-level courses)
- * 1 methods course related to the core's focus

Disciplinary cores in departments other than Anthropology, Biology, Chemistry, Economics, Geography, Geology, History, Philosophy, Political Science or Physics must be approved by the chair.

■ Interdisciplinary Option:

- * 6 courses organized around a clear theme or environmental problem (2 must be 300-level courses)
- * 1 methods course related to the core's focus

Examples of interdisciplinary core plans might be: Environmental Science, Global Citizenship, Environmental Justice, Natural Resources Management

Preapproved cores can be found on the Environmental Studies web site www.maclester.edu/environmentalstudies/advising.htm





MINOR CONCENTRATION

Requirements for the Minor Concentration

Five courses (20 credits) in Environmental Studies: two from the introductory sequence (Environmental Studies 133, 215, or 234), and three additional Environmental Studies courses selected in consultation with a department faculty member and approved by the department chair.

ES Courses

ENVI/Geology 120 – Environmental Geology

ENVI/Physics 130 – The Science of Renewable Energy

ENVI 133 – Environmental Science

ENVI/Political Science 215 – Environmental Politics and Policy

ENVI/Philosophy 229 – Environmental Ethics

ENVI/Economics 231 – Environmental Economics and Policy

ENVI/Geography 232 – People and the Environment

ENVI/History 234 – American Environmental History

ENVI/History 236 – Consumer Nation: American Consumer Culture in the 20th Century

ENVI/History 237 – Environmental Justice

ENVI/Geography/Political Science 252 – Water and Power

ENVI/English 265 – Justice

ENVI/English 266 – Field, Fold, and Table: Literature and Sustainable Farming

ENVI/English 267 – Literature and Environment: The Poetry of Dwelling

ENVI 280 – Environmental Classics

ENVI/Biology 285 – Ecology

ENVI/English 304 – Myth and Environment in the Middle Ages

ENVI/Political Science 335 – Science and Citizenship

ENVI/History 340 – U.S. Urban Environmental History

ENVI/History 343 – Imperial Nature: The United States in the Global Environment



ENVI/History 345 – Car Country: The Automobile and the American Environment

ENVI/Anthropology 365 – Environmental Anthropology

ENVI/International Studies 368 – Sustainable Development and the Global Future

ENVI/Education 370 – Education and the Challenge of Globalization

ENVI 477/Geography 488 – Comparative Environment and Development Studies





STUDY ABROAD

Study abroad at Macalester College means both high academic performance and an acute awareness of diversity that is uniquely fostered by international experience. It enhances education in the liberal arts by engaging well prepared students in rigorous and stimulating learning experiences in a variety of countries outside the United States. Study abroad enables students to encounter foreign cultures through contact with faculty, students and the general public of the host country, and, in societies where the native language is not English, provides them with a useful and consciousness-expanding proficiency in a second language. ES majors have studied abroad at the following locations:

Program

Assoc. Colleges of the Midwest (ACM)
Denmark's International Studies
Program (DIS)
Inst. for Study Abroad, Butler (IFSA)
School for International Training (SIT)

Macalester-Pomona-Swarthmore
Consortium Globalization and the
Natural Env. @ Univ. of Capetown
Marine Biological Laboratory: Env.
Sciences Research Semester
Minnesota Studies in International
Development (MSID)
Sea Education Association (SEA)

Location

Chicago, IL
Copenhagen, Denmark

Buenos Aires
Australia, Granada, Panama,
and Brazil
Capetown, South Africa

Woods Hole, MA

Senegal

Oceanographic Research, MA





INTERNSHIPS

An internship is required for Environmental Studies majors. It is an excellent way for students to apply knowledge learned in the classroom and laboratory, to learn more in an environmental area, and to explore career options. ES majors have interned at the following places.

<u>Site</u>	<u>Intern Title</u>
Aurora/St. Anthony Dev. Corp.	Central Corridor Intern
Central Corridor Partnership	Business Outreach Intern
Clean Water Action	Perfluorocarbon Coordinator
Eco Education	Urban Env. Education Intern
Eureka Recycling	Outreach Intern, Waste Reduction Intern, Social Marketing Intern
Friends of the Mississippi River	Outreach Intern
Global Warming 101.Com	Emerging Leaders Intern
Great River Greening	Outreach Intern
Green Institute	Green Building Intern
Izzak Walton League of America	Community Energy Intern
KidWind Project	Sustainable Community Challenge Education Intern
Land Stewardship Proeject	Community Based Food Systems Intern, Cellulosic Energy Research, Intern, Policy Intern
Minnesota Environmental Initiative	Climate Change Policy Intern
Minnesota House of Representatives	Legislative Intern
Neighborhood Energy Connection	Energy Efficiency Pricing Study
Office of the Mayor	Environmental Intern
The Minnesota Project	Biofuels Intern, Local Food Intern
Transit for Livable Communities	Medial Relations & Comm. Intern
United Auto Workers-Ford Plant	Research Intern, Student Organizer, Community Outreach Intern
University National Bank	Community Investing Intern
U-PLAN	LEED Certified Buildings Intern
Wisdom Ways	Soul Conference Intern



HONORS THESIS

Honors in the Environmental Studies Program is awarded to ES majors who produce a thesis that meets these three conditions: a) scholarly excellence through original research worthy of publication in a peer-reviewed journal; b) it has an environmental issue as main topic; and, c) it is based on an interdisciplinary approach to that topic. Approaches that encompass two or more disciplines across different areas of knowledge, i.e., social sciences, natural sciences, humanities, are particularly encouraged.

Students pursuing the Honors Thesis are expected to make a major commitment in terms of time and effort. This endeavor should be undertaken only by those with strong research interests and the ability to focus intellectually in scholarly production.

WHERE ALUMNI GO AFTER GRADUATION

<u>Title</u>	<u>Employer</u>
Air Policy Specialist	Minnesota Pollution Control Agency
Naturalist/Partner	EverGreen Escapes
Environmental Scientist	U.S. EPA
Environmental Specialist	Dept. of Environmental Resources
Executive Director	E4, Inc.
Natural Resources Specialist	MN Department of Natural Resources
Environmental Planner	City of San Diego
Program Coordinator	The Watershed Project
Working Waterfront Access Pilot Program Administrator	Coastal Enterprise Inc.
Environmental Strategies Researcher	Environmental Monitoring/Agenda 21
Environmental Organizer for Public Education	Sierra Club
Director of Business Development	Eureka Recycling
Environmental Compliance Coordinator	Ceridian Corporation

FACULTY AND STAFF

The Environmental Studies major is interdisciplinary, which means that in addition to the Environmental Studies courses in the catalog, majors have the opportunity to take courses in a broad range of departments and programs. There is a member of the Environmental Studies faculty in each of the departments in which students can choose to core, minor, or major as part of their Environmental Studies major. In addition to these faculty, the Department Chair is available to assist students in designing their majors and choosing courses.



Dan Hornbach
DeWitt Wallace Prof.
of Biology & Chair



Roopali Phadke
Asst. Prof. of Env. St.
Policy & Politics



Chris Wells
Asst. Prof. of Env.
Studies History



Louisa Bradtmiller
Asst. Prof. of Env.
Climatology



Ann Esson
Dept. Coordinator



Jerald Dosch
Visiting Asst. Prof.
of Biology



Christie Manning
Visiting Asst. Prof.
of Env. Psychology



Stephanie Rutherford
Visiting Asst. Prof. of
Env. St. Policy & Politics

In addition to the names above, the following are members of the Environmental Studies Coordinating Committee:

- James Dawes, English
- Jim Doyle, Physics
- Arjun Guneratne, Anthropology
- Suzanne Savanick-Hanson, Sustainability Office
- Keith Kuwata, Chemistry
- Kelly MacGregor, Geology
- Bill Moseley, Geography
- Wang Ping, English
- Sarah E. West, Economics



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