

Environmental Policy

PROGRAM OVERVIEW This interdisciplinary degree prepares students in a liberal arts tradition to understand the connections between human beings and the Earth's environment. The program will enable students to understand and engage in the intersection of social and natural sciences that produces environmental policy. Students will develop expertise in decision-making, policy formulation and implementation, the natural sciences, adaptive management, and critical thinking. Graduates of the program will be well prepared to undertake graduate study in environmental law or policy, as well as to work in governmental and non-governmental capacities on environmental issues and policy-making.

Environmental policy is forged at the intersection of scientific and political systems; therefore students will need to be familiar with the political institutions that reconcile conflicts between these systems. Students with an interdisciplinary environmental policy degree will be conversant in multiple discourses that influence environmental policy. Coursework that emphasizes theory and application of policy is required, and students are able to choose a focus on either national or international issues. Policy must also be evaluated in its sociological impact and affect on cultural justice. Students will develop an understanding of natural science disciplines including the life sciences, physical sciences, and environmental issues. An understanding of organisms and their environments, ecosystem function, and atmospheric process is fundamental to formulating policy that protects air, land, water and organisms. A course in statistics will develop an understanding of the importance of research and data analysis for both natural and social scientists. The capstone experience will require students to complete a group service-learning project in which, working as environmental consultants, they will produce and present a product to a local or regional client.

Students are strongly encouraged to develop depth in a focus area of interest by consulting with their academic advisor or the program director. Students planning to attend either graduate school or law school should also work with their advisor to determine what additional courses will be needed to prepare for admission.

Drake's Environmental Policy major is distinguished by its strong focus on interdisciplinary study, emphasis on experiential learning, opportunities for research and independent study, and service learning approach to the senior capstone experience.

FACULTY There are two full-time faculty in the Environmental Science and Policy program. Another five full-time faculty are contributing faculty to the program and represent the Biology, Philosophy, Politics and International Relations, Physics, and English departments. All full-time faculty have PhDs. The Environmental Science and Policy Program has employed several part-time instructors to teach courses in geology, geographic information systems, animal reintroduction, landfill operation, and restoration ecology. All part-time instructors have a minimum of a Bachelors degree; some have Masters and PhD degrees.

David Courard-Hauri helped to develop an Iowa Environment course that has been used by the NSF as a national model for teaching science through civic engagement. David frequently leads a class to study the social and economic aspects of sustainable development in Central America. He is currently working on an introductory-level environmental science textbook. His research interests are in issues at the interface of environmental science and policy: the use of computer models of complex chemical, biological, and physical systems in the face of uncertainty about the parameters and the models themselves; how best can this information be used when we ask questions about the costs and benefits of expected environmental policies.

Keith Summerville was named Teacher of the Year for 2007 by Iowa Sierra Club. Since coming to Drake in 2003, Keith has published 12 papers (eight of them with undergraduate co-authors) and has been awarded over \$200,000 in grant monies. His research interests are focused on elucidating ecological factors that are responsible for generating and maintaining animal biodiversity, and determining significant environmental variables that contribute to the assembly of animal communities at multiple scales. Projects frequently concentrate on hyperdiverse insect communities in forest or prairie habitats, with a specific focus on lepidopteran (butterflies and moths) community dynamics.

ACADEMIC PREPARATION There are no prerequisite high school courses or requirements needed for enrollment in Environmental Policy, but students should have a well-rounded academic high school curriculum and proficiency in reading and writing.

REQUIREMENTS FOR MAJOR A minimum 50 credit hours in areas such as biology, politics, economics, as well as environmental policy courses are required for a major.

REQUIREMENTS FOR MINOR A minor in Environmental Policy provides students with an opportunity to develop familiarity with the science and policy in environmental issues and formally establish an interdisciplinary link from related professions. All minors must have an adviser in the program and must successfully complete 23 credit hours.

DRAKE CURRICULUM The Drake Curriculum, required of all undergraduates, is designed to help students meet personal and professional goals as they acquire fundamental knowledge and abilities in ten Areas of Inquiry, including communication, critical thinking, artistic experience, historical consciousness, information and technology literacy, international and multicultural experiences, scientific and quantitative literacy, values and ethics and engaged citizenship. Students work closely with their academic advisers to craft a program of study in general education that prepares students for civic and professional leadership.

The Drake Curriculum also requires first-year seminars, which foster development of critical thinking and written and oral communication skills through a topical focus; and a Senior Capstone, in which students

demonstrate the capacity to bring information, skills and ideas to bear on one project.

INTERNSHIPS & OPPORTUNITIES Environmental Policy students are well prepared for legislative and administrative internships at all levels of government, as well as with non-governmental organizations working on environmental issues. Examples of employers students have had include Iowa Natural Heritage Foundation, Sierra Club, Student Conservation Association, Iowa Department of Natural Resources

The Environmental Science and Policy Program has access to two 4WD vehicles, a cargo trailer, a boat and boat trailer, two canoes, considerable camping equipment, and various research and prescribed burning equipment.

CAREER OPTIONS Graduates can find careers with government agencies, private environmental agencies, environmental organizations, or in public service. Graduate school in environmental law, political science, and public administration is also a potential option.

HONORS

Dennis O'Brien Environmental Science Award
Award for Promise in Environmental Science and Policy
Environmental Policy Scholar/Citizen Award
Environmental Science and Policy Outstanding Research Award
Central Iowa Mineralogical Society Award

STUDENT ORGANIZATIONS AND ACTIVITIES Students in the Environmental Science and Policy Program often join and attend meetings of the Drake Environmental Action League, the Drake Outdoor Club, and become involved with off campus groups such as the Iowa Environmental Council.

HOW TO REACH US

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