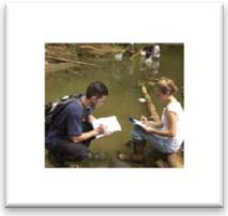
2016 Spring Course Offerings
Environmental Studies
Graduate Director: Professor Donald Morris
Undergraduate Director: Professor Al Wurth


Major and minor declaration forms are available in the Office of Interdisciplinary Programs, 31 Williams Hall, Suite 101

ES 001-10 Introduction to Environmental Studies (SS) *4 credits*
Gateway to the field of Environmental Studies, the course surveys central issues and themes confronting humanity in the natural world on a national and global basis. Topics include humankind's role in environmental change; society's response to the dynamism of nature; cultural evaluations of nature; population dynamics; resource availability and pollution sinks; land use patterns; sustainability and consumerism; environmental justice and ethics; policy and planning. This course fulfills a social science credit requirement (SS) please select ES 2 to fulfill the natural science (NS) requirement. **Professor Casagrande** M, W; 11:10 - 12:25 p.m.

ES, EES 004-61 The Science of Environmental Issues (NS) *1 credit*
Section 61 - F; 1:10 - 2:25 p.m.
Section 62 - 11:10 - 12:25 p.m.
Section 63 - M; 11:10 - 12:25 p.m.
Analysis of current environmental issues from a scientific perspective. The focus of the course will be weekly discussions based on assigned readings. Pre- or co-requisite: introductory-level course in EES. **Professor Berti**

ES 093-10 Freshmen Supervised Internship in the Environmental Initiative (SS, HU, NS or ND) *1-4 credits*
Experiential learning opportunities supervised by EI faculty including fieldwork, data collection or analysis, literature review, and information management. Consent of supervising faculty is required. The experience may be related to either environmental studies or environmental science depending upon the discipline of supervising faculty member. *Instructor permission required.*

ES, POLS 106-10 Environmental Value & Ethics (SS) *4 credits*
An introduction to the ethical perspectives and values that shape human relationships to the natural environment in contemporary society. What are the moral implications of these relationships for justice and human collective action? Given these implications, what policy responses to environmental problems are morally or politically justifiable? In answering these questions, the course explores ethical ideas developed in different schools of environmental thought, such as deep ecology and eco-feminism, in addition to ideas that emerge from social movements, such as environmental justice and bioregionalism. **Professor Holland** M, W; 12:45 - 2:00 p.m.

ES 124-10 Sustainability in Action II (ND) *1-4 credits*
Continuation of ES 123 Sustainability in Action I; second half of a year-long experiential learning program for students to engage with sustainability in both general theory and applied practices. Students will learn the political, economic and social effects of changing earth systems through a global, national and local lens. Students will explore the multitude of challenges posed by increasing natural resource consumption, inequitable distribution of wealth and rapid uneven globalization. Most importantly, students will engage the Lehigh community and broader community in developing and implementing practical solutions to creating a more sustainable and just world. Students in ES 124 expand the scope and scale of sustainability projects and activities piloted in ES 123. Offered in coordination with the Campus Eco-Reps program. May be repeated for credit *Instructor permission required.* **Professor Wurth**

ES 131-10 Internship (ND) *1-2 credits*
Practical experience in the application of environmental studies for both on- and off-campus organizations. Course is designed to provide credit for supervised experiential learning experiences. May be repeated for credit up to four credits. *Instructor permission required.*

ES 181-10 Independent Study (HU, SS) *1-4 credits*
Directed readings or research on an Environmental Studies topic. May be repeated for credit up to four credits. *Instructor permission required.*

ES 195-10 Practicum in Environmental Studies (ND) *1-4 credits*
Supervised collaborative work on local, state or national environmental issues. *Instructor permission required.* **Professor Wurth**

ES, POLS 196-10 Urban Environmental Planning (SS) *4 credits*
An introduction to the topic of environmental planning, the course will review the roles of citizens, other stakeholders, political interests, and local governments in determining the use of land; unpack the meaning of "sustainability;" and grapple with the challenge of balancing communities' demand for development with the need to protect valuable natural resources. Students will be introduced to examples of successful and unsuccessful instances of environmental planning both at home and abroad. **Professor Beck-Pooley** T, R; 9:20 - 10:35 a.m.

ES, HIST 197-10 A Walk in the Woods: America's Love Affair with Nature (HU) *4 credits*

From Henry David Thoreau and John Muir through Aldo Leopold, Wallace Stegner, and Edward Abbey to Bill Bryson and Cheryl Strayed (Wild), American writers have expressed a love affair with nature. Through readings of original works by these and other authors, students will explore and analyze this critical element in American cultural and environmental history. **Professor Cutcliffe** T, R; 10:45 - 12:00 p.m.

SDEV 201-10 Sustainable Development Solutions, I (SS) *ES attribute, 3 credits*
Projects practicum in which cross-disciplinary teams of 5-6 students focus on understanding the context of a particular NGO amidst the broader social, economic, and scientific challenges to sustainable development. Analytic techniques for designing, implementing and evaluating projects. Nuts and bolts of development practice. Teams work on needs assessment related to their NGO's proposed goals and devise innovative solutions for implementing development projects. On-the-ground field experience, whether international or domestic, is required. Course fee may apply. Oral presentations and written reports. *Prerequisite SDEV 10 or instructor permission required.* **Professor Orrs** M, W, F; 1:10 - 2:00 p.m.

ES 224-10 Advanced Sustainaiblity in Action II (ND) *1-4 credits*
Continuation of ES 223. Leadership and coordination of Sustainability in Action projects and activities for students in ES 124. Experienced students who have completed the year-long Sustainability in Action sequence (ES 123 and ES 124) continue in course coordination role. Prerequisites, ES 123, ES 124 and ES 223. Offered in coordination with the Campus Eco-Reps Program. May be repeated for credit. *Instructor permission required.* **Professor Wurth**

ES, REL, ASIA 254-10 Buddhism and Ecology (HU) *4 credits*
Buddhism's intellectual, ethical, and spiritual resources and rexamined in light of contemporary environmental problems. Is Buddhism the most green of the major world religions? What are the moral implications of actions that affect the environment?
Professor Pitkin M, W; 2:35 - 3:50 p.m.

ES 293-10 Supervised internship in the Environmental Initiative (NS, HU, SS) *1-4 credits*
Experiential learning opportunities supervised by EI faculty including fieldwork, data collection or analysis, literature review, and information management. The experience may be related to either environmental studies or environmental science depending upon the discipline of supervising faculty member. The students should collaborate with faculty to develop a work plan that describes the credits requested as well as the activities included in the internship and expected outcomes. *Instructor permission required.*

SDEV, ENTP, IR 307-10 International Social Entrepreneurship (SS) *4 credits*
International social entrepreneurship aims to change the world through innovation in solving social problems. Focus on the nexus between social entrepreneurship and development practice, especially in relation to NGOs. Emphasis on acquiring the tools and conceptual framework to launch a new social venture through real world hands-on field work and team-oriented learning by doing. Exposure to best practices in field methods with respect to development projects, to how to affect meaningful social change in poor countries, to generate and evaluate innovative ideas for poverty reduction, to develop those ideas into concrete on-the-ground start-up plans, and to take initial steps to implement them. It is recommended, but not required, that students have some previous experience with development or entrepreneurship, such as through enrollment in ENTP 101 or IR 322 or ECO 303 or CEE 205. *Instructor permission required.* **Professors Orrs and Watkins** M, W, F; 3:10 - 4:00 p.m.

ES, POLS 312-10 Urban Environmental Policy Workshop (SS) *4 credits*
An environmentally-focused design course in urban politics and planning, the class will give students the opportunity to explore an issue affecting the local community, evaluate current policy responses and possible alternatives, and develop their own policy recommendations. This semester, class participants will study how Bethlehem's City Revitalization Improvement Zone (CRIZ) might best affect, integrate into (in terms of both its design and its uses), and benefit the South Side. Course activities include: conducting individual interviews, running focus groups, attending community meetings, synthesizing primary and secondary data, and presenting findings to the community.
Professor Beck-Pooley T; 7:10 - 10:00 p.m.

GS, SOC 319-10 The Political Economy of Globalization (SS) *4 credits*
This course studies the relationship among economic, political and cultural forces in an era of globalization. Focus is on how global capitalism, the world market and local economics shape and are shaped by social, cultural and historical forces. Topics include political and cultural determinants of trade and investment; culture and the global economy; global capitalism, especially studied through the lens of culture; globalization and patterns of economic growth; crosscultural study of consumerism; poverty and inequality; the interplay of foreign and domestic economic policy; international economic organizations, such as the World Trade Organization, the International Monetary Fund, and the World Bank, and globalization and national development. **Professor Austin** M, W; 8:45 - 10:00 a.m.

GS, HMS, SOC 322-10 Global Health Issues (SS) *WI (Writing Intensive) 4 credits*
Examines the sociological dimensions of health, illness, and healing as they appear in different parts of the world. Focuses on patterns of disease and mortality around the world, with special emphasis on major epidemics such as HIV/AIDS, and malaria; the relative importance of 'traditional' and 'modern' beliefs and practices with regard to disease and treatment in different societies; the organization of national health care systems in different countries; and the role of international organizations and social movements in promoting health. **Professor Lasker** T, R; 10:45 - 12:00 p.m.

ES, IR 342-10 International Law and Policy Design (SS) *WI (Writing Intensive) 4 credits*
Beginning in the 13th Century, this course traces the various philosophical, historical, and policy design arguments that have been used to explain, justify, and influence the evolution of the rule of law between states (ius gentium). *Department permission required.* **Professor Gillroy**
W; 4:10 - 7:00 p.m.

ES, IR 343-10 Comparative Environmental Law & Policy (SS) *4 credits*

This course studies the different ways in which domestic legal systems handle the regulation of humanity's relationship to the natural world. The first part of the course concentrates on comparative law that examines the evolution of distinct types of legal systems from their origins in the ancient world. The second part of the course specifically and comparatively examines environmental law as it has developed in Canada, China, the European Union and the United States. Ranges of alternatives for environmental law and policy as practiced in various parts of the world will be explored. *Department permission required.* **Professor Gillroy** T, 4:10 -7:00 p.m.

ES, ANTH 352-10 Environmental Archeology (SS) *4 credits*
This course reviews the various categories of archaeological data used to examine the nature of past human-environmental relationships. We will explore how archaeologists use data to recognize anthropogenic and natural environmental changes, as well as cultural adaptations to local environments. T, R; 10:45 - 12:00 p.m.

ES, TLT 367-10 Environmental Education (ND) *3 credits*
Introductory environmental education course designed to prepare students to implement environmental education opportunities in formal and non-formal education settings. Topics include history and philosophy of environmental education, environmental laws and regulations, GIS, environmental issues and decision making, curriculum integration and environmental education teaching methodologies. This is a Web enhanced course containing both online and fieldwork components. **Professor Bodzin** 1/27, 3/2 and 3/30 7 p.m. - 10 p.m., 4/9, 4/30 9 a.m. - 4:00 p.m.

ES 371-10 Special Topics (HU, SS) *1-4 credits*
Intensive, research-oriented study of a subject or issue in Environmental Studies not covered in other courses. For students of demonstrated ability and adequate preparation. May be repeated for credit up to four credits. *Instructor permission required.*

SDEV 372-10 Independent Study in Sustainable Development (SS/HU) *ES 1-4 credits*
Opportunity for students to pursue individual sutainabile development projects or continue work begin in SDEV 201/202. May not count towards minor's credit requirements. Prerequisite: SDEV 010. *Instructor permission required.* **Professor Orrs**

ES, POLS 375-10 Seminar: Green Polity (SS) *4 credits*
Development of guidelines and applications for public policy and political action directed toward environmental sustainability and political feasibility. Focus on problem-solving and policy design, connecting sustainable environmental goals with workable and responsive institutional designs. **Professor Wurth** M, W; 11:10 - 12:25 p.m.

ES 391-10 Honors Thesis (HU,SS) *1-4 credits*
Directed undergraduate research thesis required of students who apply and qualify for graduation with program honors. *Instructor permission required.*

~~**ES 395-10 Bioenergy Systems** (SS) *4 credits*~~
~~In the next few decades to come, we expect a surge in renewable energy production and utilization. Shell International predicts that Renewable energy will supply 60% of the world's energy by 2060. Bioenergy will play a critical and indispensable role in meeting this quota. Among the many renewable energy sources, bioenergy is the most flexible and provide most diverse options for energy conversion and utilization. Bioenergy is, however, also arguable the most controversial renewable energy system. The aim of this course is to provide a fundamental overview and knowledge of existing and emerging technologies of biomass energy systems. Students will be exposed to the multiple issues that make the sustainability of bioenergy debatable. Students will draw on their various academic backgrounds to discover/develop fundamental principles and synthesize knowledge from multiple disciplines that can be integrated in developing a sustainable bioenergy solution, that prioritizes environmental and ecosystem health. The course is designed around research, laboratory hand-on activities, case analysis and discussion forums.~~
~~**Professor Darku** T, R; 2:35 - 3:50 p.m.~~ **CANCELLED**

ES, GS, SOC 398-10 Globalization & the Environment (SS) *CBE Global 4 credits*
Course investigates globalization and the environment including how globalization has influenced society-nature relationships, as well as how environmental conditions influence the globalization processes. A key focus will be on the rapidly evolving global economic and political systems that characterize global development dynamics and resource use. Particular attention is paid to the role of multi-national corporations, international trade, and finance patterns and agreements. Questions related to consumption, population, global climate change, and food production/distribution also represent key themes. **Professor Noble** T, R; 1:10 - 2:25 p.m.

~~**ES 495-10 Bioenergy Systems** (SS) *3 credits*~~
~~In the next few decades to come, we expect a surge in renewable energy production and utilization. Shell International predicts that Renewable energy will supply 60% of the world's energy by 2060. Bioenergy will play a critical and indispensable role in meeting this quota. Among the many renewable energy sources, bioenergy is the most flexible and provide most diverse options for energy conversion and utilization. Bioenergy is, however, also arguable the most controversial renewable energy system. The aim of this course is to provide a fundamental overview and knowledge of existing and emerging technologies of biomass energy systems. Students will be exposed to the multiple issues that make the sustainability of bioenergy debatable. Students will draw on their various academic backgrounds to discover/develop fundamental principles and synthesize knowledge from multiple disciplines that can be integrated in developing a sustainable bioenergy solution, that prioritizes environmental and ecosystem health. The course is designed around research, laboratory hand-on activities, case analysis and discussion forums.~~
~~**Professor Darku** T, R; 2:35 - 3:50 p.m.~~ **CANCELLED**