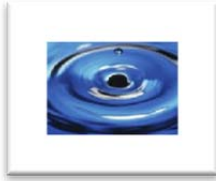


2017 Spring Course Offerings

Environmental Studies

Graduate Director: Professor Karen Beck Pooley

Undergraduate Director: Professor Al Wurth



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

ES 001-010 Introduction to Environmental Studies CRN 11807 4 credits (SS)

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. **Professor Casagrande** M, W; 11:10 – 12:25 p.m.

ES, EES 004 The Science of Environmental Issues Multiple sections 1 credit (NS)

Analysis of current environmental issues from a scientific perspective. The focus of the course will be weekly discussions based on assigned readings. **Professor Berti** Section 060, CRN 13212 M; 11:10 - 12:25 p.m. - Section 061, CRN 13215 F; 1:10 - 2:25 p.m - Section 062, CRN 13218 W; 11:10 – 12:25 p.m.

ANTH 012-010 Human Evolution and Prehistory CRN 13530 4 credits (NS)

Introductory biological anthropology and prehistory. Adaptive functions of human culture and its relation to biological evolution. Mechanisms of evolution, non-human primate morphology and behavior, hominid fossil record, cultural beginnings, and survey of world prehistory. **Professor Wesson** M, W, F; 12:10 - 1:00 p.m.

ES 093 Freshmen Supervised Internship in the Environmental Initiative 1-2 credits (SS, HU, NS) Instructor permission required.

ES 124-010 Sustainability in Action II CRN 12662 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. Instructor permission required. May be repeated for credit. *Instructor permission required.* **Professor Wurth**

ES 131 Internship 1-2 credits Instructor permission required.

ES 181 Independent Study 1-4 credits (HU, SS) Instructor permission required.

ES, POLS 196-010 Urban Environmental Planning CRN 12862 4 credits (SS)

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 224-010 Advanced Sustainability in Action II CRN 12663 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. Instructor permission required. May be repeated for credit. *Instructor permission required.* **Professor Wurth**

ES, ASIA, REL 254-010 Buddhism and Ecology CRN 13346 4 credits (HU) CBE Global, WI (Writing Intensive)

Buddhism's intellectual, ethical, and spiritual resources and reexamined 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** T, R; 2:35 - 3:50 p.m.

CEE 272-010 Environmental Risk Assessment CRN 12595 2 credits

Effects of chemical releases on human health; ecological risks. Application of risk assessment methodology, including hazard identification, exposure assessment, toxicity assessment, and risk characterization. Accounting for uncertainty in data during risk management, risk reduction and implementation of regulations and environmental policy. **Professor Brown** M, W; 8:10 - 9:00 a.m.

ES 293 Supervised Internship in Environmental Initiative 1-4 credits (HU, NS, SS)

ENTP, SDEV 307-010 International Social Entrepreneurship CRN 13547 4 credits (SS) Course fee \$2675, does not include airfare, passport/visa, medications/immunizations. 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.* **Professor Orrs** M, W; 12:45 - 2:00 p.m.

ES, POLS 312/412-10 Urban Environmental Policy Workshop CRN 13134 4 credits (SS) / CRN 13135 3 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 319-010 The Political Economy of Globalization CRN 13386 4 credits (SS)

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 Noble** T, R; 7:55 - 9:10 a.m.

POLS 321/421-010 Research In Political Science CRN 13945 4 credits (SS) / CRN 14115 3 credits

Models in the explanation of political phenomena, appropriateness of measurement techniques; construction of research designs; rationale and application of statistical analyses; individual projects involving the construction and testing of models employing a major social science data set. *Consent of instructor required.*
Professor Davis T, R; 9:20 - 10:35 a.m.

GS, HMS, SOC 322-010 Global Health Issues CRN 12115 4 credits (SS)

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, HMS, STS, JOUR 323-010 Health and Environmental Controversies CRN 14137 4 credits (SS)

Exploration of health and environmental controversies from the perspectives of scientific uncertainty and mass media coverage. Examines genetic engineering, biotechnology, environmental health risks, and nanotechnology. Includes discussion of ethical and social responsibilities and interactions with the public. *Restricted to ES majors only.* **Professor Friedman** T, R; 1:10 - 2:25 p.m.

ES, POLS 328-010 U.S. Politics and the Environment CRN 14139 4 credits (SS) WI (Writing Intensive)

An examination of contemporary American politics and policy dealing with environmental issues. Current controversies in the legislative and regulatory areas will be covered to examine environmental issues and the political process. Significant portions of the course readings will be taken from government publications. **Professor Wurth** T, R; 10:45 - 12:00 p.m.

ES, IR 342/442-010 International Law and Policy Design CRN 13189 4 credits (SS) WI (Writing Intensive) / CRN 13188 3 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** M; 4:10 - 7:00 p.m.

ES, TLT 367-010 Environmental Education CRN 13038 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 containing both online and fieldwork components. *Face to face dates are 1/25/17, 3/1/17, 3/22/17 from 7:10-10 p.m.; Two Saturday Field trips are 4/8/17 and 4/29/17. \$30.00 van rental collected in class.* **Professor Bodzin**

ES, GS, SOC 370-010 Globalization and the Environment CRN 14142 4 credits (SS)

This 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 therefore 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, toxic wastes, and food production/distribution represent key themes.
Professor Noble T, R; 1:10 - 2:25 p.m.

ES, POLS 375/475-010 Seminar: Green Polity CRN 13146 4 credits (SS) / CRN 13148 3 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 T, R; 2:35 - 3:50 p.m.

EES 386-010 Wetland Ecology CRN 13247 3-4 credits

Ecology of wetlands and factors controlling wetland structure and function. Responses and feedbacks of wetlands to natural and human-induced environmental variability. Topics include wetland classification and delineation, origin and development of wetlands, biotic adaptations to the wetland environment, wetland hydrology, wetland biogeochemistry and microbial communities, wetland vegetation dynamics, and wetland restoration. Lectures, laboratories, applied activities, and field trips. **Professor Boothe** T, R; 9:20 - 10:35 a.m., T 1:10 - 4:00 p.m.

ES 391 Honors Thesis 1-4 credits (HU,SS)

ES, POLS 396/496-010 Descriptive Statistics and Mapping CRN 14162 4 credits (SS) / CRN 14172 3 credits

This research methods course teaches students to highlight important conditions and trends – ones that warrant policymakers' attention – using publicly available data sources (like the Census). Conveying information in a clear and persuasive way, one that motivates decision-makers to act, is a key step in any policymaking process. Students will become familiar with these databases and proficient at generating charts, graphs and maps using Microsoft Excel, Microsoft Access, and ArcMAP (three programs central to most jobs in policy-related fields). **Professor Beck-Pooley** M, W; 12:45 - 2:00 p.m.

ES, EES 402-010 Scientific Foundations for Environmental Policy Design CRN 12664 3 credits (ND)

This course explores the science behind the environmental issues that bear on the policy process at local, national and global scales. It delves into the science of selected environmental issues that have either arisen from anthropogenic activities, or that impact social systems, or that help policy makers understand the consequences of different policy options. The course will consist of readings and discussions of timely topics and one major project. **Professor Sahagian** R; 4:10 - 7:00 p.m.

ES, SOC 404-010 Socio-cultural Foundations of Environmental Policy Design CRN 13511 3 credits

This course is based on the premise that social and ecological sustainability require new policy approaches. Drawing on social, organizational, and behavioral theory, students will learn techniques for analyzing and critiquing existing environmental policies and designing more effective policies. Case studies highlight how cultural values, social norms, public opinion and politics shape policies and their outcomes. We examine the entire policy process from how environmental problems are defined, to how organizations implement policies and how policies are evaluated. **Professor Casagrande** W; 4:00 – 7:00 p.m.

SOC 411-010 Advanced Research Methods, Part I: Quantitative CRN 13758 3 credits

Study of quantitative methods of data collection and analysis, measurement and research design issues at an advanced level. *Prerequisite SOAN 111.* **Professor Zhang** R; 4:10 - 7:00 p.m.

SOC 412-010 Adv Research Methods, Part II, Qualitative CRN 13759 3 credits

Study of a variety of qualitative methods for social research and of qualitative data analysis techniques. **Professor Munson** T; 4:10 - 7:00 p.m.

CEE 471-010 Environmental Risk Assessment CRN 12596 3 credits

Effects of chemical releases on human health; ecological risks. Application of risk assessment methodology, including hazard identification, exposure assessment, toxicity assessment, and risk characterization. Accounting for uncertainty in data during risk management, risk reduction and implementation of regulations and environmental policy. Term project. **Professor Brown** M, W; 9:10 - 10:00 a.m.

ES 480 Internship in Environmental Policy 3 credits *Instructor permission required.*

ES 483 Independent Study 1-3 credits *Instructor permission required.*

ES 490 Thesis 1-6 credits *Instructor permission required.*