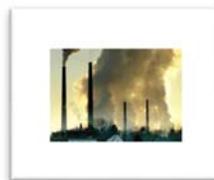
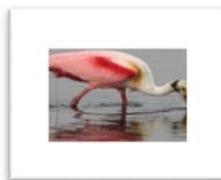
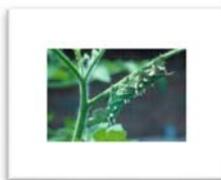
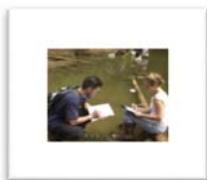
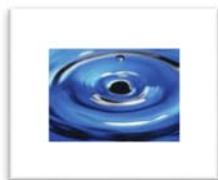


2017 Fall Course Offerings

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 001-10 Introduction to Environmental Studies 43949 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 (SS) please select ES 2 to fulfill the natural science (NS) requirement. **Professor Casagrande** M, W; 2:35 - 3:30 p.m.

SDEV 010-10 Challenges of Sustainable Development 42486 4 credits (SS) ES, CBE Global

History and principles of sustainable development, including their application to projects in both rich and poor countries. Survey of current environmental, social and economic challenges to sustainable development. Philosophy and ethics of external intervention for poverty alleviation and green development, especially in poor societies. Integrated approaches to sustainable development practice, including the inter-relationship of the health sciences, natural sciences, social sciences and management. **Professor Orrs** M, W; 12:45 - 2:00 p.m.

ES, EES 004 The Science of Environmental Issues 1 credits (NS) STS

Analysis of current environmental issues from a scientific perspective. The focus of the course will be weekly discussions based on assigned readings.

Professor Kodama Section 010 CRN 43564 M; 11:10 - 12:25 p.m.

Section 011 CRN 43565 W; 11:10 - 12:25 p.m.

Section 012 CRN 43566 F; 1:10 - 2:25 p.m.

ANTH 012-10 Human Evolution and Prehistory 43075 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 Small M, W, F; 12:10 - 1:00 p.m.

ES 093 Freshmen Supervised Internship in the Environmental Initiative Multiple sections 1-2 credits (SS, HU, NS)

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.* **Professor Staff** section 010 only, CRN 43219

ES, POLS 107-10 The Politics of the Environment 42886 4 credits (SS)

A survey of the major environmental, resource, energy and population problems of modern society, focusing on the United States. The politics of people's relationship with nature, the political problems of ecological scarcity and public goods, and the response of the American political system to environmental issues. **Professor Wurth** T, R; 10:45 - 12:00 p.m.

SOAN 111-10 Research Methods & Data Analysis 41794 4 credits (SS)

Research skills in anthropology, sociology, and social psychology. Problem formulation; research design; methods and measures; analysis and interpretation of data. Emphasis on the use of statistics in the research process. **Professor Zhang** M, W; 12:45 - 2:00 p.m.

ES 123-10 Sustainability in Action I (Fall) 42484 1-4 credits

First 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. Offered in coordination with the Campus Eco-Reps program. May be repeated for credit. *Instructor Permission Required.* **Professor Wurth**

ES, JOUR 125-10 Environment, the Public and the Mass Media 41744 4 credits (SS) STS, WI (Writing Intensive)

Extensive exploration of local, national and international environmental problems and their social, political and economic impacts. Analysis of mass media coverage of complex environmental issues and the media's effects on public opinion and government environmental policies. Examination of environmental journalism principles and practices in the United States and around the world. *Instructor permission required.*

Professor Friedman T, R; 1:10 - 2:25 p.m.

ES 131 Internship Multiple sections 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.* **Professor Staff** section 010 only, CRN 43286

ES 181 Independent Study Multiple sections 1-4 credits (HU, SS)

Directed readings or research on an Environmental Studies topic. May be repeated for credit up to four credits. *Instructor permission required.* **Professor Staff** section 010 only, CRN 43288

ES 194-10 Practicum in Environmental Studies 44080 1 credits

Supervised collaborative work on local, state or national environmental issues. *Instructor permission required.* **Professor Staff**

SDEV 201-10 Sustainable Development Solutions, I 44048 3 credits (SS) ES, CBE Global

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 010 or permission of the Program Director. *Prerequisite SDEV 10 or instructor permission required.* **Professor Orrs** TBD

SDEV 202-10 Sustainable Development Solutions, II 42487 2-4 credits (SS) ES

Continuation and extension of projects begun in SDEV 201. Refine implementation strategies and develop project evaluation protocol. Oral presentations and written reports. Prerequisite: SDEV 201. *Instructor permission required.* **Professor Orrs**

SDEV 203-10 Research in Sustainable Development 42488 2-4 credits (SS) ES

Students will work on sustainable development research projects not involving field work. May be repeatable for a maximum of 4 credits. Prerequisite: SDEV 010 and instructor permission. *Instructor permission required.* **Professor Orrs**

ES 223-10 Advanced Sustainability in Action I (Fall) 42485 1-4 credits

Leadership and coordination of Sustainability in Action projects and activities for students in ES 123. 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 and ES 124. Offered in coordination with the Campus Eco-Reps Program. May be repeated for credit. *Instructor Permission Required.* **Professor Wurth**

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

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. Consent of supervising faculty is required. *Instructor Permission Required* **Staff** section 10 only, CRN 43292

ES, POLS 305-10 Residential Segregation: Policies and Practices 43063 4 credits (SS)

ES, POLS 405-10 Residential Segregation: Policies and Practices 43065 3 credits

(Formerly Urban Politics and Planning) This course is an introductory planning course, with an emphasis on housing and community development policy. It will examine historical and contemporary aspects of urban politics; the economic, demographic, and spatial evolution of American cities; and various urban problems, such as the spatial mismatch between people and jobs, housing quality and affordability, and residential segregation. Finally, the course will review how planners have addressed conditions in cities and regions over time. *Open only to ES/POLS Majors.*

Professor Beck-Pooley M, W; 12:45 - 2:00 p.m.

ES, HMS 306-10 Food Justice in Urban Environments 44081 4 credits

ES 406-10 Food Justice in Urban Environments 44084 3 credits

This course will review how urban agriculture and city greening programs and policies are part of a growing movement working to strengthen neighborhoods, promote healthier living, and create more localized and sustainable food economies. This class will explore research and readings from multiple disciplines on these programs and policies, and will also delve into individual case studies that illustrate how efforts to improve food access, beautify vacant land, and reduce farm-to-table distances get creatively and successfully combined. **Professor Beck-Pooley** M, W; 11:10 - 12:25 p.m.

ES, SDEV 310-10 Foundations of Sustainable Development Practice 43067 4 credits (SS)

The broad goal of this course is to introduce students to the foundations of key sectoral and thematic knowledge for important challenges to sustainable development: food and nutritional security, social service delivery, energy policy, water resource management, urbanization, infrastructure, human rights, biodiversity, adaption to climate change, mitigating GHGs, sustainable business, good governance, and more. Through the Global Classroom, an approach pioneered by Columbia University and the Global Masters of Development Practice Association (<http://globalmdp.org/>), we will do this together virtually with academic partners from around the world. **Professor Morris, Orrs** T; 7:45 - 10:35 a.m.

ECO 311-10 Environmental Economics 44073 3 credits (SS)

Resource allocation implications of environmental degradation. Analysis of the benefits and costs associated with alternative pollution control programs and strategies. **Professor Munley** M, W; 11:10 – 12:25 p.m.

ES, HIST 315-10 American Environmental History 44166 4 credits (SS) STS

ES, HIST 315-11 American Environmental History 44168 3 credits (SS) STS

Relationship between Americans and their natural environment from the colonial period to the present: impact of European settlement, attitudes toward wilderness, role of technological development, rise of preservation and conservation movements, establishment of national parks, recent environmental protection legislation. **Professor Smith** T, R; 2:35-3:50 p.m.

GS, HMS, SOC 322-10 Global Health Issues 43510 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. *Restricted to HMS, Soc/Anth, and GS Majors/Minors.* *Instructor permission for all others.* **Professor Noble** T, R; 2:35 - 3:50 p.m.

ES, POLS 355-10 Environmental Justice & The Law 43955 4 credits (SS)

This course explores the various ways in which environmental law and policy can have discriminatory effects. It examines the rise and evolution of the environmental justice movement, and the impact of environmental justice claims on administrative rulemaking at both the state and federal level. Reviewing the history of case law concerning environmental justice suits filed under the 1964 Civil Rights Act, it also examines the future of environmental justice in environmental law and policy. Prerequisite: ES or POLS 105. **Professor Holland** T; 4:10 - 7:00 p.m.

ES 371 Special Topics Multiple sections 1-4 credits (HU, SS)

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. Prerequisite: consent of the program director. *Instructor permission required.*

Professor Staff Section 10 only, CRN 43295

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

Directed undergraduate research thesis required of students who apply and qualify for graduation with program honors. Prerequisite: consent of the program director. *Instructor permission required.* **Professor Staff** section 10 only, CRN 43298

ES, PSYC 398-10 Psychology of Environmental Issues 44019 4 credits (SS)

Environmental problems and solutions begin with the thoughts, feelings, and behaviors of individual people. We will examine Western ways of relating to nature and the beliefs people hold about it, how they reason about environmental issues, and how they perceive environmental risk and make decisions. We will also consider environmental communication and attitude and behavior change, exploring arenas ranging from patterns of consumption and recycling to climate change. Research methods for investigating these issues will be introduced. Prerequisite PSYC 001. *Department permission required.*

Professor Malt T, R; 9:20 - 10:35 a.m.

ES 401-10 Philosophical-Policy and Environmental Legal Design 43563 3 credits

A basic class for graduate students on the idea of policy design, as opposed to standard economic analysis of public policy and its application to various domestic and international environmental dilemmas. The course will also introduce the idea of Philosophical-Policy, or the use of integrated philosophical systems to justify specific policy design arguments, through the use of two distinct theoretical paradigms that focus on, specifically, the integrity of the natural environment and the capabilities of humans in relation to ecosystems. *Department permission required.* **Professor Gillroy** M; 4:10 - 7:00 p.m.

ES 410-10 Foundations of Sustainable Development Practice 43068 3 credits

The broad goal of this course is to introduce students to the foundations of key sectoral and thematic knowledge for important challenges to sustainable development: food and nutritional security, social service delivery, energy policy, water resource management, urbanization, infrastructure, human rights, biodiversity, adaption to climate change, mitigating GHGs, sustainable business, good governance, and more. Through the Global Classroom, an approach pioneered by Columbia University and the Global Masters of Development Practice Association (<http://globalmdp.org/>), we will do this together virtually with academic partners from around the world. **Professor Morris, Orrs** T; 7:45 - 10:35 a.m.

ES, POLS 455-10 Environmental Justice & The Law 43956 3 credits (SS)

This course is an in-depth exploration of the various ways in which environmental law and policy can have discriminatory effects. It examines the rise and evolution of the environmental justice movement, and the impact of environmental justice claims on administrative rulemaking at both the state and federal level. Reviewing the history of case law concerning environmental justice suits filed under the 1964 Civil Rights Act, it also examines the future of environmental justice in environmental law and policy. **Professor Holland** T; 4:10 - 7:00 p.m.

SUMMER COURSES

ES, PHIL 198-10 The Philosophical Foundations of Environmental Law & Policy (HU) 4 credits CRN 21385

The course examines the philosophical arguments that have shaped the evolution of environmental policy and law in the United States from Colonial times to the present. **Professor Gillroy** (SS 1) T, R 1:00 - 4:00 p.m.

ES, TLT 368-10 Teaching and Learning with Geospatial Tools (WI) 3 credits CRN 21197

Exploration of geospatial tools, including but not limited to global positioning systems (GPS), geographic information systems (GIS), and related visualization tools (e.g., Google Earth). Application of these tools and techniques to instructional settings, including appropriate pedagogy and assessment. **Professor Vallera** 7/16 - 7/19W & 7/21-7/24, 8:30 - 12:50 p.m.

ES, GS, SOC 370-10 Globalization and the Environment (SS) 4 credits CRN 21384

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**

(SS 2) online

