

Environmental Studies (EVST)

Courses

EVST 001 Introduction to Environmental Studies 4 Credits

This course surveys the dominant environmental issues confronting humanity and the natural world on a local, national, and global basis with an emphasis on critical thinking skills. Topics include humankind's role in environmental change; cultural perceptions and economic valuation of nature; resource availability and social equity; sustainability and consumerism; environmental justice and ethics; and environmental regulation, law, policy and planning. This course fulfills a social science credit requirement. Please select ES 002 to fulfill the natural science requirement.

Attribute/Distribution: CC, SS, SW, W

EVST 002 (EES 002) Introduction to Environmental Science 3 Credits

Focuses on natural and human-induced drivers and consequences of environmental change. Exploring options for mitigating and adapting to environmental change in ecosystems, physical and social systems, the course examines such topics as biogeochemical cycles, population pressure, ecosystem diversity, productivity and food security, energy, water resources, climate change, pollution, ozone, urban issues and sustainability. Stresses interactions using case studies. Intended for any student with an interest in the environment. May be combined with EES 022 or EES 004 for 4 credits.

Attribute/Distribution: CC, NS, NW

EVST 006 (HIST 006) Global Environmental Histories 4 Credits

This course explores how environmental forces have shaped the history of modern societies and how societies have shaped their environments. By examining interconnected global case studies, we will explore key themes through the lens of environment, including empire, industrialization, borders, and gender. We will encounter histories of pollution, resource extraction and its afterlife, cultural understandings of nature, animals and insects, natural disasters, and the toxic legacy of war.

Attribute/Distribution: CC, SS, SW, W

EVST 080 Independent Study 1-4 Credits

Independent work, research, and/or reading with a faculty member.

Repeat Status: Course may be repeated.

EVST 091 Special Topics 1-4 Credits

Intensive study of a topic of special interest not covered in other courses.

Repeat Status: Course may be repeated.

Attribute/Distribution: CC, HE, NW, SS, SW

EVST 105 (POLS 105) US Environmental Policy and Law 4 Credits

Analysis of the framework that has been established to protect the environment and promote sustainable growth. Focus on the roles of the different branches of the U.S. government and the relative responsibilities of state and local governments within this framework. Consideration of the political nature of environmental issues and the social forces influencing environmental protection in different areas of domestic environmental policy, such as climate change, toxic waste disposal, and natural resources conservation.

Attribute/Distribution: CC, SS, SW, W

EVST 106 (POLS 106) Environmental Values and Ethics 4 Credits

An introduction to ethics and values that shape human relationships to the natural environment. What are the moral implications of these relationships for non-human life and natural systems? How can justice and democracy correct unethical treatment of non-humans? What policy responses to environmental problems are morally or politically justifiable? The course explores ethical ideas from different schools of environmental thought, such as sentientism, ecocentrism, and biocentrism, and ideas that emerge from social movements, such as environmental justice and urban sustainability.

Attribute/Distribution: CC, HE, SS, W

EVST 107 (POLS 107) The Politics of the Environment 4 Credits

A survey of the major environmental, resource, energy and population problems of modern society, focusing on the United States. The politics of man's relationship with nature, the political problems of ecological scarcity and public goods, and the response of the American political system to environmental issues.

Attribute/Distribution: CC, SS, SW

EVST 108 (HIST 108) Climate and Energy in Modern History 4 Credits

This course examines the historical roots of the climate emergency. Focused on the history of energy, we will explore how empire, industrialization, and fossil fuels remade societies around the world in the 19th and 20th centuries. Through global case studies, we will encounter histories of energy regimes, extractivism, plastics, electricity, wildfires, weather events, disasters and disaster response, and the emergence and suppression of climate science and climate politics.

Attribute/Distribution: SUST, SW, W

EVST 110 (HMS 110, POLS 110) Environmental Planning for Healthy Cities 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.

Attribute/Distribution: CC, SS, SW

EVST 119 (ETH 119, PHIL 119) Environmental Ethics 4 Credits

Evaluates the ethical and moral dimensions of humanity's relationship to nature as well as our individual and collective moral duties to confront urgent environmental challenges. Topics may include the intersection of climate and social justice; responsibilities to future generations, distant others, and nonhuman animals; the limitations of traditional ethical, political, and economic frameworks for accommodating our obligations and commitments to justice; and possible legal and public policy responses.

Attribute/Distribution: CC, HE, HU

EVST 121 (ANTH 121) Environment and Culture 4 Credits

Impact of environment upon cultural variability and change. Comparative study of modern and past cultures and their environments as well as current theories of human/ environmental interaction.

Attribute/Distribution: CC, SS, SW, W

EVST 125 (JOUR 125) Environment, the Public and the Mass Media 4 Credits

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.

Attribute/Distribution: CC, SS, SW

EVST 127 Urban Permaculture 1-4 Credits

Students combine social, political, economic, engineering, and ecological modes of thinking in the design, construction, and evaluation of permaculture food gardens to serve as living laboratories and interactive classrooms to teach about sustainable urban living. Open to students from any major and college. Instructor permission required.

Attribute/Distribution: CC, SS, SW

EVST 180 Independent Study 1-4 Credits

Independent work, research, and/or reading with a faculty member.

Repeat Status: Course may be repeated.

EVST 191 Special Topics 1-4 Credits

Intensive study of a topic of special interest not covered in other courses.

Repeat Status: Course may be repeated.

Attribute/Distribution: CC, HE, NW, SS, SW

EVST 223 Advanced Sustainability in Action I 1-4 Credits

Experiential learning for students to engage with sustainability in both general theory and applied practice. Consent of program director required. May be offered in coordination with the Campus Eco-Reps Program. Consent of instructor required.

Repeat Status: Course may be repeated.

Attribute/Distribution: CC

EVST 254 (ASIA 254, ETH 254, REL 254) Buddhism and Ecology 4 Credits

Buddhism's intellectual, ethical, and spiritual resources are re-examined 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?

Attribute/Distribution: CC, HE, HU, W

EVST 280 Independent Study 1-4 Credits

Independent work, research, and/or reading with a faculty member.

Repeat Status: Course may be repeated.

EVST 291 Special Topics 1-4 Credits

Intensive study of a topic of special interest not covered in other courses.

Repeat Status: Course may be repeated.

Attribute/Distribution: CC, HE, NW, SS, SW

EVST 294 Practicum in Environmental Studies 1-4 Credits

Practical experience on or off campus in local, state or national environmental activities. Students must present a work plan that describes the activities included in the practicum, the activity's sponsor, expected outcomes and the number of credits requested. Must have program director's approval.

Repeat Status: Course may be repeated.

Prerequisites: ES 001 and ES 002 and (ES 105 or ES 107 or ES 110 or ES 121 or ES 125)

Can be taken Concurrently: ES 001, ES 002, ES 105, ES 107, ES 110, ES 121, ES 125

Attribute/Distribution: HU, NS, SS

EVST 300 Apprentice Teaching 1-4 Credits

Supervised participation in various aspects of the teaching of a course. Consent of instructor, department chairperson, and permission of the Dean required.

Repeat Status: Course may be repeated.

EVST 301 (PHIL 301) Philosophical-Policy & Legal Design: Methods & Applications 4 Credits

A basic class on the idea of policy design, as opposed to standard economic analysis of public policy and its application to various domestic and international areas of law, including environmental law. The course will introduce Philosophical-Policy Methods, or the protocol employing integrated philosophical systems to justify specific policy-legal design arguments, through the use of a variety of distinct policy paradigms.

Attribute/Distribution: CC, W

EVST 304 (ANTH 304) Socio-cultural Foundations of Environmental Policy 4 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.

Attribute/Distribution: CC, SS, SW, W

EVST 305 (AAS 305, POLS 305) Residential Segregation: Policies and Practices 4 Credits

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.

Attribute/Distribution: CC, SS, SW

EVST 310 Foundations of Sustainable Development Practice 4 Credits

This course introduces students to the foundational themes of sustainable development, including food and nutritional security, social service delivery, energy policy, water resource management, urbanization, infrastructure, human rights, biodiversity, adaptation to climate change, greenhouse gas reductions, and sustainable business and governance. Students are mentored by Lehigh faculty as they engage with world leaders in sustainability through the Global Classroom, an instructional platform pioneered by Columbia University and the Global Masters of Development Practice Association (<http://globalmdp.org/>).

Attribute/Distribution: CC, SS, SW

EVST 311 (POLS 311) Environmental Valuation for Policy Design 4 Credits

Seminar on how to value the environment for the purpose of designing and analyzing environmental policies. Review of the "contingent valuation method" currently used to price environmental resources, and assessment of this method's empirical and normative strengths and weaknesses. Evaluation of "deliberative monetary valuation" as an improved method for environmental assessment. Consideration of non-monetary approaches to environmental valuation as alternatives to understanding the environment's relationship to human well-being in policy contexts.

Attribute/Distribution: SS

EVST 312 (POLS 312) Urban Environmental Policy Workshop 4 Credits

An urban environmental planning and policy course in which students explore an issue affecting the local community, evaluate current policy responses and possible alternatives, and present recommendations to public officials, local organizations, and community members. Student research and analysis will draw on primary and secondary data, as well as feedback from conducting individual interviews, focus groups, and community meetings. Prior projects include determining how Bethlehem's new City Revitalization improvement Zone (CRIZ) might best benefit the South Side of Bethlehem, PA.

Attribute/Distribution: CC, SS, SW, W

EVST 315 (HIST 315) American Environmental History 4 Credits

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.

Attribute/Distribution: CC, HE, SS

EVST 319 (POLS 319) Mapping Data for Policymaking 4 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).

Attribute/Distribution: Q, SS

EVST 323 (HMS 323, JOUR 323) Health and Environmental Controversies 4 Credits

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.

Attribute/Distribution: SS, SW

EVST 328 (POLS 328) U.S. Politics and the Environment 4 Credits

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.

Attribute/Distribution: SS

EVST 341 (ENGL 341) Contemporary US Literature of Environmental Crises 3-4 Credits

This course addresses how contemporary US literature depicts toxic America and the environmental crises as well as the human (and other animal) tragedies that result from a variety of contemporary practices that deny connectivity to/dependence upon ecosystems. Students will engage with some of the most important novels written in the contemporary period that call readers to address human impact on the environment, to imagine alternative & less ruinous ways of being in the world, and to imagine more sustainable futures.

Attribute/Distribution: CC, HE, HU, W

EVST 353 (ANTH 353, GS 353) Ethnobotany: People and Plants 4 Credits

This course explores the meanings and uses given to plants by diverse cultures in their unique ecological settings. Ethnobotany combines botany and cultural anthropology to study how people classify, use, and manage plants for medicine, food, and ritual. This course introduces the history, methods, theory, and practical applications of ethnobotany, including plant conservation, sustainable development, and cultural survival. Special emphasis will be placed on learning to do ethnobotany through student research projects.

Attribute/Distribution: CC, SS, SW, W

EVST 355 (POLS 355) Environmental Justice: From Theory to Practice 4 Credits

This course explores the various ways in which environmental law and policy can have discriminatory effects. It examines the rise and evolution of environmental justice movement, and the impact of environmental justice claims on administration policies, especially at the federal level. Considering the role of politics in the ongoing struggle for environmental justice, it reviews theories of substantive and procedural justice, and uses them to consider strategies for advancing equity in environmental law and policy.

Prerequisites: POLS 105 or ES 105

Attribute/Distribution: CC, SS

EVST 357 (PSYC 357) Psychology of Environmental Issues 4 Credits

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.

Prerequisites: PSYC 001

Attribute/Distribution: CC, SS

EVST 366 (POLS 366) Advanced Environmental Policy 4 Credits

An introduction to the history of domestic environmental policy and contemporary policy trends, such as the rise of legal adversarialism and public participation in regulatory decisions. The role of market instruments in policy implementation, the emergence of rights-based approaches to environmental protection, and the role and value of distributional analysis will also be covered. Students will develop knowledge of a particular area of environmental policy at the federal, state, and/or level depending on their interests and current opportunities.

Prerequisites: POLS 105 or ES 105

Attribute/Distribution: CC, SS

EVST 367 (TLT 367) Environmental Education 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.

EVST 368 (TLT 368) Teaching and Learning with Geospatial Tools 3 Credits

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. Not available for credit for students who have completed EVST/TLT 369.

EVST 369 (TLT 369) Applied Geospatial Tools 3 Credits

Introduction to geospatial tools--including but not limited to global positioning systems (GPS), geographic information systems (GIS), and related visualization tools (e.g. Google Earth)--and related concepts such as geo-databases, map projection, and remote sensing. Application of these tools and techniques to research, policy, business, public health, and communications. Not available to students who have taken EVST/TLT 368.

EVST 370 (GS 370, SOC 370) Globalization and the Environment 4 Credits

This course investigates how globalization has influenced society-nature relationships, as well as how environmental conditions influence the globalization processes, focusing 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, toxic wastes, and food production/distribution are key themes.

Attribute/Distribution: CC, SS, SW, W

EVST 371 Honors Thesis 1-4 Credits

Directed undergraduate research thesis required of students who apply and qualify for graduation with program honors. Consent of program director required.

Repeat Status: Course may be repeated.

Attribute/Distribution: HU, SS

EVST 380 Independent Study 1-4 Credits

Independent work, research, and/or reading with a faculty member.

Repeat Status: Course may be repeated.

EVST 391 Special Topics 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. Consent of program director required.

Repeat Status: Course may be repeated.

Attribute/Distribution: CC, HE, NW, SS, SW

EVST 393 Supervised Internship 1-4 Credits

Experiential learning opportunities supervised by ES faculty including real-world experience with environmental organizations or governmental agencies, field work or research experience, all related to environmental studies. Students should collaborate with the supervising ES faculty member to develop a work plan that describes the activities included in the internship, the expected outcomes and the number of credits requested. Instructor permission required.

Repeat Status: Course may be repeated.

Prerequisites: ES 001 and ES 002 and (ES 105 or ES 107 or ES 110 or ES 121 or ES 125)

Attribute/Distribution: HU, NS, SS

EVST 394 Supervised Research 1-4 Credits

Research project under the direct supervision of a faculty member.

Repeat Status: Course may be repeated.

EVST 401 Philosophical-Policy & Legal Design: Methods & Applications 3 Credits

A basic class on the idea of policy design, as opposed to standard economic analysis of public policy and its application to various domestic and international areas of law, including environmental law. The course will introduce the idea of Philosophical-Policy Methods, or the protocol employing integrated philosophical systems to justify specific policy-legal design arguments, through the use of a variety of distinct policy paradigms.

EVST 402 (EES 402) Scientific Foundations for Environmental Policy Design 3 Credits

This course explores the science behind the environmental issues that bear on policy process at local, national and global scales. The course delves into the science of selected environmental issues that have either arisen from anthropogenic activities, that impact social systems, or that help policy-makers understand the consequence of different policy options. The course consists of readings and discussions of timely topics and one major project.

EVST 404 Socio-cultural Foundations of Environmental Policy 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.

EVST 405 (POLS 405) Residential Segregation: Policies and Practices 3 Credits

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.

EVST 410 Foundations of Sustainable Development Practice 3 Credits

This course introduces students to the foundational themes of sustainable development, including food and nutritional security, social service delivery, energy policy, water resource management, urbanization, infrastructure, human rights, biodiversity, adaptation to climate change, greenhouse gas reductions, and sustainable business and governance. Students are mentored by Lehigh faculty as they engage with world leaders in sustainability through the Global Classroom, an instructional platform pioneered by Columbia University and the Global Masters of Development Practice Association (<http://globalmdp.org/>).

EVST 411 (POLS 411) Environmental Valuation for Policy Design 3 Credits

Seminar on how to value the environment for the purpose of designing and analyzing environmental policies. Review of the "contingent valuation method" currently used to price environmental resources, and assessment of this method's empirical and normative strengths and weaknesses. Evaluation of "deliberative monetary valuation" as an improved method for environmental assessment. Consideration of non-monetary approaches to environmental valuation as alternatives to understanding the environment's relationship to human well-being in policy contexts.

EVST 412 (POLS 412) Urban Environmental Policy Workshop 3 Credits

An urban environmental planning and policy course in which students explore an issue affecting the local community, evaluate current policy responses and possible alternatives, and present recommendations to public officials, local organizations, and community members. Student research and analysis will draw on primary and secondary data, as well as feedback from conducting individual interviews, focus groups, and community meetings. Prior projects include determining how Bethlehem's new City Revitalization improvement Zone (CRIZ) might best benefit the South Side of Bethlehem, PA.

EVST 419 (POLS 419) Mapping Data for Policymaking 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).

EVST 420 (POLS 420) Food Justice in Urban Environments 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.

EVST 453 Ethnobotany: People and Plants 3 Credits

This course explores the meanings and uses given to plants by diverse cultures in their unique ecological settings. Ethnobotany combines botany and cultural anthropology to study how people classify, use, and manage plants for medicine, food, and ritual. This course introduces the history, methods, theory, and practical applications of ethnobotany, including plant conservation, sustainable development, and cultural survival. Special emphasis will be placed on learning to do ethnobotany through student research projects.

EVST 455 (POLS 455) Environmental Justice: From Theory to Practice 3 Credits

This course explores the various ways in which environmental law and policy can have discriminatory effects. It examines the rise and evolution of environmental justice movement, and the impact of environmental justice claims on administrative rule making at 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.

EVST 457 (PSYC 457) Psychology of Environmental Issues 3**Credits**

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.

EVST 460 (POLS 460) Public Administration 3 Credits

The nature of administration; problems of organization and management; public personnel policies; budgeting and budgetary system; forms of administrative responsibility.

EVST 466 (POLS 466) Advanced Environmental Policy 3 Credits

An introduction to the history of domestic environmental policy and contemporary policy trends, such as the rise of legal adversarialism and public participation in regulatory decisions. The role of market instruments in policy implementation, the emergence of rights-based approaches to environmental protection, and the role and value of distributional analysis will also be covered. Students will develop knowledge of a particular area of environmental policy at the federal, state, and/or level depending on their interests and current opportunities.

EVST 470 Globalization and the Environment 3 Credits

This course investigates how globalization has influenced society-nature relationships, as well as how environmental conditions influence the globalization processes, focusing 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, toxic wastes, and food production/distribution are key themes.

EVST 480 Internship in Environmental Policy 3 Credits

Students will gain practical experience working with governmental or non-governmental organizations or public officials formulating and/or implementing environmental policies at local, regional, national or international levels. Requires submission of a formal proposal drafted in collaboration with a faculty advisor and the professional mentor who will oversee the student's internship. Upon completion of the internship, students will report project outcomes in oral presentation, written, or digital media format. Instructor permission required.

Repeat Status: Course may be repeated.

EVST 483 Independent Study 1-3 Credits

Independent Study.

Repeat Status: Course may be repeated.

EVST 490 Thesis 1-6 Credits

Thesis.