ENVIRONMENTAL STUDIES

Overview and Contact Information

Environmental Studies is a cross-divisional department with natural science, social science, humanities, and interdisciplinary courses. Our students learn about the origins and impacts of, as well as potential solutions to, environmental issues by studying the behavior of natural systems and their interactions with political, economic, social, and cultural factors. Because the study of environmental concerns is inherently interdisciplinary, students develop integrative thinking skills and a broad foundation of knowledge in their time at Mount Holyoke College. Environmental Studies majors graduate with the intellectual tools, practical skills, and depth of understanding to confront environmental challenges of the present and future.

Contact Information

Kate Ballantine, Co-chair Catherine Corson, Co-chair (Fall 2024) Debra LaBonte, Academic Department Coordinator

302 Clapp Laboratory 413-538-2278 https://www.mtholyoke.edu/academics/find-your-program/ environmental-studies (https://www.mtholyoke.edu/academics/find-yourprogram/environmental-studies/)

Learning Goals

The department emphasizes approaches to learning that engage students more actively in the scientific, social/human, and global dimensions of environmental study. Each approach is a fundamental component of environmental literacy.

- Interdisciplinary Thinking: Students develop the ability to integrate knowledge using modes of inquiry that conceptually organize and link ideas, methods, and data from several fields.
- **Critical Thinking:** Students cultivate the capacity to listen and think analytically and critically by questioning assumptions, evaluating evidence, and articulating well-reasoned arguments. They also develop quantitative and qualitative methodological expertise.
- **Depth of Knowledge:** Students gain a solid understanding of how the natural world operates, how it has been impacted by human activities, and how it has influenced human actions and development through time. They recognize that solving environmental challenges requires knowledge of the underlying physical and biological processes involved as well as the complex ways these processes interact with cultural, historical, political, and economic forces.
- Intercultural Competence: Students appreciate the diverse cultures that make human society, and develop perspectives, skills, and knowledge to engage with values, beliefs, attitudes, and behaviors of communities other than their own in environmental education, activism, development projects, and domestic and international research projects.
- Global Consciousness: Students recognize and understand global, national, regional, and local environmental concerns, perspectives, and experiences, including the impacts of economic, cultural, and political contexts on various communities and resources.

Skills

In order to meet the above goals, the Environmental Studies curriculum places a strong emphasis on habits of critical thinking and questioning across academic disciplines:

- Problem Identification, Assessment, and Solution: Students gain analytical skills in determining the scale and parameters of environmental problems. They develop an in-depth understanding of the scientific method, employing both quantitative and qualitative analyses to clarify and understand data. They become familiar with scientific, historical, and ethical analyses of environmental problems and are able to propose imaginative and creative solutions appropriate to specific issues, based on in-depth study of local to global factors.
- Communication and Information Literacy: Students recognize the breadth depth of environmental information, across a range of formats and fields. They strengthen writing and communication skills and develop a broad foundation of information literacy. They learn how to formulate and articulate questions, frame research projects, locate needed resources, evaluate information, and make critical judgments about the presentation of research. They are able to synthesize, present, and use this information in a way that helps answer a question, solve a problem, or educate self or others.
- Reflective Learning and Application of Knowledge: Students practice and develop their capacity for reflective learning in all courses, but especially in the capstone senior seminar. They develop the skills for peer feedback, self-reflection, and assessment of learning impacts. Experiential learning opportunities (e.g., community-based work, internships, and study abroad) allow students to increase their range of interactions with diverse peoples. They also develop leadership and decision-making skills including facility in working constructively with diverse perspectives, personalities, and groups. They develop pre-professional confidence in future options for environmental work in a range of government, education, business, and non-profit contexts.

These core foundational approaches and skills are important in all facets of environmental studies and will serve graduates well in their postcollege lives and careers.

Faculty

This area of study is administered by the Department of Environmental Studies:

Kate Ballantine, Marjorie Fisher Professor of Environmental Studies

Catherine Corson, Miller Worley Professor of Environmental Studies, Teaching Fall Only

Lauret Savoy, David B. Truman Professor of Environmental Studies, Teaching Spring Only

Olivia Aguilar, Associate Professor of Environmental Studies; Leslie and Sarah Miller Director of the Miller Worley Center for the Environment

Timothy Farnham, Associate Professor of Environmental Studies

Sylvia Cifuentes, Assistant Professor of Environmental and Social Equity and Justice

Kevin Surprise, Senior Lecturer in Environmental Studies

Gretchen Peltier, Visiting Assistant Professor in Environmental Studies

Thakshala Tissera, Visiting Instructor in Environmental Studies; UMass Teaching Associate

Requirements for the Major

A minimum of 44 credits:

Code	Title Cre	edits
Introductory C	Courses	
ENVST-100	Introduction to Environmental Studies ¹	4
or ENVST-1	50D'Introductory Topics in Environmental Studies: 'Introduction to the Histories and Theories of Development'	
or ENVST-1	50PIIntroductory Topics in Environmental Studies: 'Introduction to Environmental and Public Health'	
One Science w	vith Lab Course:	4
BIOL-145	Introductory Biology ²	
BIOL-160	Integrated Introduction to Biology and Chemistry	
CHEM-150	General Chemistry: Foundations	
CHEM-160	Integrated Introduction to Biology and Chemistry	
PHYS-100	Foundations of Physics	
PHYS-110	Force, Motion, and Energy	
PHYS-150	Phenomena of Physics	
NEURO-100	0 Introduction to Neuroscience and Behavior	
Intermediate (Core ³	
One Natural S	cience Course:	4
ENVST-200	Environmental Science	
ENVST-233	HC Topics in Environmental Studies: 'Human Health and Climate Change'	
BIOL-223	Ecology	
GEOL-203	The Earth's Surface	
One Social Sci	ience Course:	4
ENVST-210	Political Ecology	
ENVST-241	Environmental Issues	
One Humanitie	es Course:	4
ENVST-216	Global Environmental Justice	
ENVST-240	The Value of Nature	
ENVST-254	The Climate Humanities, Futures, and Activism	
Senior Semina	ar	
ENVST-390	Senior Seminar in Environmental Studies	4
Additional Ele	ctives	
Three courses	s at the 300 level ⁴	12
Two additiona	al electives at the 200 or 300 level	8
Total Credits		44

¹ Or a 4 or 5 on the Environmental Studies or Science AP exam

² BIOL-145 or any of its offerings; for example BIOL-145AB, BIOL-145EX, and BIOL-145GW.

- ³ A full list of the approved elective courses (p. 2) appears at the end of the Environmental Studies Courses section.
- ⁴ Independent study may be substituted for one of the 300-level courses, with approval of advisor. Independent study cannot be substituted for ENVST-390.

Additional Specifications

- When declaring their Environmental Studies major, students must choose an advisor who can help them select the elective courses that best suit their curricular goals.
- Students may take up to two 200- or 300-level courses off campus (study abroad, Five Colleges, etc.). Two additional 200- or 300level courses may be taken within the Five Colleges. All off-campus courses are subject to advisor approval.
- Students who declare an environmental studies major automatically fulfill the College's "outside the major" requirement.

Requirements for the Minor

A minimum of 20 credits:

Code	Title	Credits
Introductory Cour	se	
ENVST-100	Introduction to Environmental Studies	4
or ENVST-150D	O'Introductory Topics in Environmental Studies: 'Introduction to the Histories and Theories of Development'	
or ENVST-150F	Introductory Topics in Environmental Studies: 'Introduction to Environmental and Public Healt	h'
Intermediate Core	2	
One Natural Scier	nce Course	4
ENVST-200	Environmental Science	
ENVST-233HC	Topics in Environmental Studies: 'Human Healt and Climate Change'	h
BIOL-223	Ecology	
GEOL-203	The Earth's Surface	
One Social Science	ce Course	4
ENVST-210	Political Ecology	
ENVST-241	Environmental Issues	
One Humanities O	Course	4
ENVST-216	Global Environmental Justice	
ENVST-240	The Value of Nature	
ENVST-254	The Climate Humanities, Futures, and Activism	
Additional Electiv	e	
One course at the	300 level ¹	4
Total Credits		20

Students must choose a 300-level elective from the full list of the approved electives (p. 2) at the end of the Environmental Studies Courses section.

Additional Specifications

• Courses in the same department as the student's major may not be counted towards the minor in environmental studies.

Course Advice

In addition to courses in Environmental Studies, many elective courses for the major and minor in environmental studies are offered by other departments. Appropriate courses taken at Amherst, Hampshire, or Smith colleges or the University of Massachusetts may be counted toward the major or minor with the approval of environmental studies advisor. Courses taken at other colleges or universities, or through accredited field studies around the world, may also be counted toward the major or minor with the approval of environmental studies advisor.

Selecting Initial Courses

Students interested in environmental issues should register for a 100level Environmental Studies course during their first year. An introductory course is required for both the major and the minor in environmental studies and provides a broad overview of the field. It also gives students a good sense of how to continue their studies in the environmental field.

Other courses that are very useful for first-year students include:

Code	Title	Credits
BIOL-145	Introductory Biology	4
or BIOL-160	Integrated Introduction to Biology and Chemist	try
CHEM-150	General Chemistry: Foundations	4
or CHEM-160	Integrated Introduction to Biology and Chemist	try
GEOG-105	World Regional Geography	4
GEOL-103	Oceanography	4
GEOL-107	Environmental Geology	4
PHYS-104	Renewable Energy	4
STAT-140	Introduction to the Ideas and Applications of Statistics	4

A 100-level science course with lab is a required prerequisite for the 200level science courses that environmental studies majors and minors must take.

Intermediate Courses

Intermediate courses for the major and minor should be chosen from the list approved by the environmental studies faculty. Other courses may be counted toward this requirement with the approval of environmental studies advisor.

Advanced Courses

All majors must complete ENVST-390, and complete three other 300-level courses. Independent study (ENVST-395) may be substituted for one of the required advanced courses (though not ENVST-390), with approval of advisor.

Course Offerings

ENVST-100 Introduction to Environmental Studies

Spring. Credits: 4

This course introduces students to the field of environmental studies and to some of the scientific, historical, political, economic and cultural aspects of environmental concerns. Through interdisciplinary lenses, we explore the complexities of many issues and problems such as climate change, threats to biodiversity, and toxic environments. In addition to fostering an understanding of their origins, the course focuses on potential solutions.

Applies to requirement(s): Meets No Distribution Requirement S. Cifuentes, K. Surprise

ENVST-104 Renewable Energy

Spring. Credits: 4

We will examine the feasibility of converting the entire energy infrastructure of the US from one that is dependent on fossil fuels to one that utilizes mostly renewable sources of energy. We will examine the potential scale of energy production and the associated costs, natural resource requirements and land usage needs for both renewables, such as solar, wind and biofuel, and non-renewables, such as coal, natural gas, petroleum and nuclear. By applying extensive use of basic algebra and an elementary understanding of the physical processes underpinning each energy technology, we will arrive at a number of urgent conclusions about the challenges facing our energy infrastructure.

Crosslisted as: PHYS-104

Applies to requirement(s): Math Sciences A. Arango

ENVST-150 Introductory Topics in Environmental Studies

ENVST-150DV Introductory Topics in Environmental Studies: 'Introduction to the Histories and Theories of Development' Not Scheduled for This Year. Credits: 4

What is so compelling about the idea of development? Why does it fail much of the global south? Do colonialism and capitalism have anything to do with it? Why do hunger, poverty, inequality, unemployment, and ecological crises persist in the so-called developed world? What are the parameters of the proposed solutions to underdevelopment such as neoliberal market reforms versus those of alternative models? What are the connections between development and environmental issues? development and war? Can development be sustainable? Are gender and race incidental or central to these issues? This course engages these questions through readings, lectures, discussions, and writing assignments.

Applies to requirement(s): Social Sciences K. Surprise

ENVST-150PH Introductory Topics in Environmental Studies: 'Introduction to Environmental and Public Health'

Fall. Credits: 4

This course offers a broad introduction to the problems and solutions in the field of environmental and public health. Students will read about and discuss issues that occur in both industrialized and developing countries. Topics include the biological, physical, and chemical agents of environmental contamination; methods used in epidemiology and toxicology to evaluate environmental hazards; policies currently in place to reduce health risks and protect populations from exposure; and emerging global environmental health problems.

Applies to requirement(s): Math Sciences G. Peltier

ENVST-200 Environmental Science

Fall. Credits: 4

Most of the environmental challenges we face are complex and interdisciplinary in nature. This course introduces students to the scientific principles, concepts, and methodologies required to both understand the interrelationships of the natural world, as well as to identify and analyze environmental problems and think critically about alternative solutions for addressing them. Key concepts from ecology, biogeochemistry, and other fields inform our study of climate change, water resources, soil sustainability, food production, and other topics. Fundamental and emerging issues are examined using regional case studies, hands-on problem solving, and field and laboratory experiments in this interdisciplinary field-based course.

Applies to requirement(s): Math Sciences

K. Ballantine

Restrictions: This course is limited to Environmental Studies majors.; Course limited to sophomores, juniors and seniors

Prereq: One 100-level lab science. Coreq: ENVST-200L.

Advisory: One course in Statistics is recommended.

Notes: Pre-registration will open to Environmental Studies majors only. In the second week of pre-registration, remaining seats and waitlisting will be open to all sophomores, juniors, and seniors.

ENVST-210 Political Ecology

Spring. Credits: 4

This course will explore the historical, political, economic, social, and cultural contexts in which human-environment interactions occur. We will cover critical topics and trends in the field of political ecology, from its early manifestations to more recent expansions. Using case studies from the global south and north, we will discuss factors that shape social and environmental change across scales from the personal to the global, and we will examine the role of gender, race, class, and power in struggles over resources. Students will become familiar with the academic debates in which political ecologists are engaged, and they will apply the concepts discussed in a case of their choice.

Applies to requirement(s): Social Sciences; Multicultural Perspectives Other Attribute(s): Writing-Intensive

K. Surprise

Restrictions: Course limited to sophomores, juniors and seniors

ENVST-216 Global Environmental Justice

Fall. Credits: 4

From struggles for racial justice and Indigenous self-determination, to action for biodiversity conservation, many of the world's most urgent issues are also environmental justice challenges. This course will survey the theoretical questions, concepts, and perspectives on environmental justice at local and global scales. In the first part of the course, we will do a brief historical overview of the environmental justice movement and environmentalism(s), and we will discuss global contemporary issues like e-waste and food justice. In the second part of the course, we will analyze the multiple definitions and meanings that social movements and collectives give to justice. As such, we will engage with decolonial, Indigenous, eco-feminist, queer, and multispecies perspectives. Throughout the semester, students will analyze a case study of environmental (in)justice, which will culminate in a research-grounded sci-fi creative piece that represents a more just future in their chosen case.

Applies to requirement(s): Humanities; Multicultural Perspectives S. Cifuentes

Restrictions: This course is limited to sophomores and juniors. Prereq: ENVST-100 or 4 credits in humanities or social science.

ENVST-233 Topics in Environmental Studies

ENVST-233AN Topics in Environmental Studies: 'Narrating the Anthropocene'

Fall. Credits: 4

The location of a possible "golden spike" at Crawford Lake, marking the Anthropocene's onset, further underscores the claim that we have entered a new geological epoch in which human activity is the dominant force of planetary change. Thinking beyond physical markers, this course delves into the representational strategies, challenges, and speculative dimensions of Anthropocene thinking. How does the Anthropocene (re)shape our understandings of the human, the other-than-human, and the humanities? This course explores answers to these questions by engaging with critical debates on the concept, and closely analyzing literary, cinematic, and artistic representations of the Anthropocene. *Applies to requirement(s): Humanities*

T. Tissera

Restrictions: Course limited to sophomores, juniors and seniors

ENVST-233HC Topics in Environmental Studies: 'Human Health and Climate Change'

Spring. Credits: 4

Human health is directly and indirectly impacted by climate change. Throughout this course we will investigate the diverse human health impacts that are linked to climate change. We will ask how changes to our air quality, water quality, vector-borne disease distribution, and food production impact our health. We will examine how extreme weather events lead to changes in morbidity, mortality, and mental health conditions in communities. Through both lecture and discussion, we will critically review and evaluate our current knowledge regarding climate and human health as well as identify solutions for adapting to these changes.

Applies to requirement(s): Math Sciences Other Attribute(s): Speaking-Intensive G. Peltier

Prereq: ENVST-150 or 4 credits in science.

ENVST-240 The Value of Nature

Not Scheduled for This Year. Credits: 4

Through this seminar, students develop an in-depth knowledge of and articulate vocabulary for the significant and diverse ways that humans value the natural world - utilitarian, scientific, aesthetic, naturalistic, symbolic, ethical, and spiritual. We use these different typologies of human environmental values as frameworks for readings and discussion, extending our examination to historical and cultural variations in values, competing perspectives of the natural world, and other value concepts, including intrinsic and transformative value. We examine the concept of biophilia and probe the role values play in the concern over losses of biological diversity and its implications.

Applies to requirement(s): Humanities

T. Farnham

Prereq: ENVST-100 or ENVST-150PH.

ENVST-241 Environmental Issues

Fall. Credits: 4

In this course, we will explore the different facets of numerous environmental policy issues and review the substantive aspects, legal themes, and regulatory structure of the major federal environmental laws. The laws covered in this course include the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, the Endangered Species Act, and others. The course objectives are for the student to learn the basic regulatory characteristics of the major laws and to become well-versed in the current environmental issues which we will focus upon throughout the semester, such as global climate change, ocean degradation, energy resources, and biodiversity loss.

Applies to requirement(s): Meets No Distribution Requirement T. Farnham

Prereq: ENVST-100, or ENVST-150PH, or ENVST-150DV.

ENVST-251 Research, Ethics, Justice and Campus Sustainability Not Scheduled for This Year. Credits: 4

The course is designed for students interested in learning about and doing qualitative research on campus sustainability. We will discuss the logic of qualitative social research and examine a range of methods, considering the specific advantages and limitations of different techniques. Students will also discuss ethical issues, including the challenges of conducting research in cross-cultural settings, reflect on our own underlying assumptions, motivations and values in research, and consider what it means to decolonize methodologies. The course is a term-based learning course in which students work in teams to conduct research on a topic of their choice related to sustainability literacy on the Mount Holyoke College campus. Students share and discuss weekly assignments in class, and then analyze and present their results. *Applies to requirement(s): Social Sciences*

Other Attribute(s): Speaking-Intensive, Writing-Intensive C. Corson

Restrictions: Course limited to sophomores, juniors and seniors Prereq: 8 credits of social science or humanities courses. Advisory: Students from a variety of disciplines are welcome.

ENVST-254 The Climate Humanities, Futures, and Activism

Spring. Credits: 4

The climate humanities are uniquely positioned to imagine, question, and promote the necessary changes for more just climate futures. Thus, this course asks, how just are climate solutions for those who will be most impacted, and for those who have contributed the least, to climate change? How can we imagine alternative modes of existence and just futures? What can we learn from diverse climate imaginaries? We will first analyze climate change and history, climate ethics, and climate fiction. Next, through post/decolonial approaches, we will examine the contradictions of some climate mitigation and adaptation mechanisms, and how they can reinforce inequalities. Lastly, we will learn about the meanings of climate justice and the perspectives of Indigenous and other marginalized communities.

Applies to requirement(s): Humanities; Multicultural Perspectives Other Attribute(s): Writing-Intensive

S. Cifuentes

Restrictions: Course limited to sophomores, juniors and seniors Prereq: ENVST-100 or 4 credits of social science or humanities courses.

ENVST-295 Independent Study

Fall and Spring. Credits: 1 - 4 The department Instructor permission required.

ENVST-316 Restoration Ecology

Spring. Credits: 4

A key test of our ecological knowledge is whether we can successfully apply it to create or restore ecosystems that have been damaged or destroyed. As we take on the role of restoration ecologists this semester, we will use principles and methods of ecology, conservation biology, hydrology, soil science, and related disciplines to learn about the theory, practice, and politics of ecosystem restoration. This course emphasizes fieldwork, interdisciplinary teamwork, and ecological planning to evaluate and design restoration projects in our surrounding communities and regional landscapes. On a few occasions, meetings may last until 5:05 pm so that we can go on fieldtrips that are farther from campus. *Applies to requirement(s): Math Sciences*

Other Attribute(s): Community-Based Learning K. Ballantine

Restrictions: This course is open to juniors and seniors Prereq: ENVST-200 or at least 8 credits of 200 or 300-level laboratory science.

ENVST-321 Conference Courses in Environmental Studies

Selected topics in areas of environmental interest, determined by faculty expertise and student needs. Study in small groups or by individual students working with faculty.

ENVST-321CP Conference Courses in Environmental Studies: 'Political Economy of the Environment: Capitalism and Climate Change' Fall. Credits: 4

Can an economic system predicated on infinite growth achieve sustainability on a finite planet? This question will likely define the twenty-first century. This course aims to grapple with this paradox, examining the relationships and tensions between the globally dominant form of economy - capitalism - and global climate change. We will explore the interwoven rise of capitalism and emergence of fossil fuel energy, as well as the global expansion of capitalism and the connections between resources, economic growth, and political power. We will engage with various theoretical approaches to capitalism-environment relations, such as metabolic rift theory, the second contradiction of capitalism, and the production of nature thesis. These theories provide insight into recent forms of capitalism (i.e. neoliberalism) and the increasing degradation and commodification of the environment. We end by studying contemporary debates, examining institutions and policies seeking to manage climate change from with liberal-capitalist frameworks, the emergence of the "green economy", and the politics of climate denialism, concluding with alternatives economies and the climate justice movement. This course will provide students with theoretical knowledge and analytical skills for understanding economyenvironment relationships.

Applies to requirement(s): Social Sciences K. Surprise

Restrictions: This course is open to juniors and seniors

ENVST-321EQ Conference Courses in Environmental Studies: 'Food Equity and Empowerment' Change'

Fall. Credits: 4

This course uses a critical lens to examine the conflicts around equity and justice in our food systems, from production to consumption. Using race, ethnicity, gender and socioeconomic factors as the lens through which to examine the impacts associated with how we grow and consume food, this course seeks to understand an alternative to the dominant Western narrative on food systems. As a class, we will engage with readings, discussion and actual hands-on participation with food equity issues in the Pioneer Valley, so that we can reflect on our own power and privilege in the food system and come to a more holistic understanding of the challenges within the field.

Applies to requirement(s): Social Sciences; Multicultural Perspectives 0. Aguilar

Prereq: 8 credits in Environmental Studies or Geography including ENVST-100 or ENVST-150PH.

ENVST-321GW Conference Courses in Environmental Studies: 'Human Health and Water'

Spring. Credits: 4

Human health, both morbidity and mortality, is directly impacted by the accessibility and availability of safe drinking water. This course will focus on the human health implications, challenges, and successes of water access, scarcity, and quality in different parts of the world. We will cover threats to water quality including water-borne diseases, inorganic contaminants, and emerging contaminants of concern as well as strategies for reducing the impacts to human health. We will also discuss the disproportionate burden of water-related diseases on children, which impacts their long-term physical and cognitive development.

Applies to requirement(s): Math Sciences

G. Peltier

Restrictions: Course limited to sophomores, juniors and seniors Prereq: 8 credits in ENVST or science courses.

ENVST-321NH Conference Courses in Environmental Studies: 'Animal Tales: Narratives of Non-Human Animals'

Spring. Credits: 4

The animal, what a word!" Under the gaze of his cat, Derrida ponders the difficulty of representing the non-human animal. Yet, animals permeate the stories we tell. How do various narrative modes impact our relationships with animals? How do different cultural histories and perspectives of animals affirm or challenge assumptions regarding the non-human? Given the ongoing Sixth Extinction, can stories about animals compel us to envision a multispecies justice that ensures conditions of livability for all? To explore these questions, students will critically examine the aesthetics, ethics, and politics of animal representations in literature, cinema, art, and museum exhibits. *Applies to requirement(s): Humanities; Multicultural Perspectives Other Attribute(s): Writing-Intensive*

T. Tissera

Restrictions: Course limited to sophomores, juniors and seniors Prereq: 8 credits in humanities or social sciences.

ENVST-321TX Conference Courses in Environmental Studies: 'Toxic Entanglements: Environmental (In)Justice in the United States' Not Scheduled for This Year. Credits: 4

Toxic water in Flint, Michigan. Oil pipelines through sacred sites in North Dakota. These manifestations of environmental injustice and inequality are only the most recent incarnations of larger legacies. Environments are never simply natural or given: they are imbued with unequal entanglements of gender, race, class, and power. Environmental justice asks questions about the ways in which environments are produced, and the relations of risk, harm, benefit, access, privilege, domination, oppression, and liberation therein. In this course, we will study the theory and practice of environmental (in)justice in the United States. We will briefly explore histories of environmental injustice in the U.S. (from colonization and slavery, to industrialization and pollution); past and current struggles over the siting of production facilities, toxic waste, and pollution; and recent events around water (be they floods, toxicity, or protection): Hurricane Katrina, Flint, and Standing Rock. We will pay particular attention to questions of food and justice, examining gender, race, and class in agricultural labor, corporate power in agribusiness, food deserts, food access/health and white privilege, and gender in alternative community food movements.

Applies to requirement(s): Social Sciences K. Surprise

Restrictions: This course is open to juniors and seniors

Prereq: 4 credits from a related subject.

ENVST-333 Landscape and Narrative: Finding Place, Finding Home *Not Scheduled for This Year. Credits: 4*

Different types of stories or narratives – whether myth, literature, maps, oral tradition, or scientific theory – have been created about nearly every region or environment on Earth as attempts to describe and understand that place and human connections to it. In this seminar we'll explore how braided strands of human history and natural history contribute to stories we tell of the land, and to stories we tell of ourselves in the land. We'll consider examples of how lifeways, homeplace, and identity are linked with environment or landscape. We'll also create written, visual, and/or aural narratives of our own.

Applies to requirement(s): Humanities

Other Attribute(s): Speaking-Intensive, Writing-Intensive

T. Farnham, L. Savoy

Instructor permission required.

Prereq: 8 credits in Environmental Studies.

Advisory: Preference will be given to junior and senior Environmental Studies majors, but other students who meet the prerequisite of 8 credits in the department are welcome to apply. Application: https://tinyurl.com/envst333.

ENVST-335 Wetlands Ecology and Management

Not Scheduled for This Year. Credits: 4

Although they cover ~0.6% of the earth's surface, wetlands perform more ecosystem services per hectare than any other ecosystem type. Alarmingly, over half of the earth's wetlands have been lost to agriculture and development. With these wetlands were also lost the valuable ecosystem functions wetlands perform. This course takes an interdisciplinary approach to examine the biogeochemical, ecological, societal, and regulatory aspects of wetland ecosystems. Group discussion of primary scientific literature, as well as independent experimental design and the writing of a research proposal are core components. Field trips will sometimes keep us until 5:05 pm, and will provide an opportunity to explore these fascinating ecosystems in person.

Applies to requirement(s): Math Sciences

K. Ballantine Restrictions: This course is open to juniors and seniors Prereq: ENVST-200 or at least 8 credits of 200- or 300-level laboratory science.

ENVST-339 Indigenous and Decolonial Ecologies Fall. Credits: 4

From protesting pipelines in Standing Rock to fighting fires in Brazil, Indigenous peoples have been at the forefront of environmental struggles. But how do Indigenous peoples characterize relationships with land/territories? How do Indigenous and other marginalized groups contest colonialism when engaging with their territories, and in politics? What alternative worlds do they imagine? This course will seek to answer these questions in connection to theories, concepts, and cases focused on the Americas/Abya-Yala. It will further center Indigenous and other marginalized ways of knowing, worldviews, and lifeways, when analyzing issues like pollution, conservation, or environmental conflicts. *Applies to requirement(s): Meets No Distrib. Rgmt; Multicultural Perspectives*

Other Attribute(s): Speaking-Intensive, Writing-Intensive S. Cifuentes

Prereq: 8 credits in the department or in humanities or social science at the 200-level or above.

ENVST-342 Living in the Anthropocene: Development, Technology, Futures

Not Scheduled for This Year. Credits: 4

The concept of the Anthropocene (the "human epoch") signifies that human activity has become the dominant physical force on the planet. Mainstream narratives envision three phases of the Anthropocene: industrial origins (1800 - 1950); global expansion and the nuclear age (1950 - 2000+); and an emergent third phase marked by massive shifts in land-use and biodiversity. This course undertakes a critical examination of the Anthropocene concept. We will analyze debates over geological demarcation, the term itself and the "anthropos" it embodies, and eco-modernist conceptions of a "good" Anthropocene. We aim to historically contextualize the socio-technical phases of the Anthropocene (industrial revolution, post-WWII global expansion, and contemporary globalization), situating them as processes emerging within a specific political-economic context (capitalism). Finally, we examine struggles over the socio-ecological entanglements shaping its future directions: urbanization, industrialized agriculture, genetic technology, and geoengineering/Earth System management. This course explores what it means to live in an era where a subset of one species can determine the conditions of possibility for life on the entire planet. Applies to requirement(s): Social Sciences

Other Attribute(s): Speaking-Intensive, Writing-Intensive K. Surprise

Restrictions: This course is open to juniors and seniors

ENVST-346 Global Environmental Politics Governance Fall. Credits: 4

Why can't countries agree to strict emissions limits to solve the climate crisis? How can we halt unprecedented biodiversity loss? In this course, we review how legacies of colonialism and neoliberalism shape global environmental politics. We examine how actors from NGOs to Indigenous Peoples to corporations influence official negotiations and alternative models. We explore how novel technologies and financial instruments like AI, cryptocurrencies and nature-based video games are changing environmental governance. This curriculum-to-career course emphasizes the skills—from policy briefs to elevator pitches to treaty and congressional negotiations-to advocate for sustainability and justice. *Applies to requirement(s): Social Sciences; Multicultural Perspectives Other Attribute(s): Speaking-Intensive*

C. Corson

Restrictions: Course limited to sophomores, juniors and seniors Prereq: 8 credits in Environmental Studies or social science courses.

ENVST-347 Environmental Geopolitics and Security Spring. Credits: 4

Food insecurity, warfare, disasters, energy, climate crises: how are environments enrolled in and entangled with questions of power, security, and geopolitical strategy? This course will explore relationships between population, resources, and scarcity, starting from the premise that scarcity is more often manufactured to maintain power than it is a "natural" condition. We examine the weaponization of environments in modern warfare, relationships between racism, pollution, (in)security and slow violence, the ways that climate change is being militarized and securitized and energy transitions are raising new questions of geopolitical power. We conclude with perspectives on rethinking security. *Applies to requirement(s): Social Sciences K. Surprise*

Restrictions: This course is open to juniors and seniors Prereq: 8 credits in humanities or social science.

ENVST-390 Senior Seminar in Environmental Studies Spring. Credits: 4

This is the capstone course of the environmental studies major. The course explores linkages among the diversity of disciplines that contribute to the environmental studies major, illustrates how these disciplines that contribute to the environmental studies major are used in environmental decision making, enables students to inform one another's roles as environmentalists, and provides students with opportunities to develop individual and cooperative projects.

Applies to requirement(s): Meets No Distribution Requirement Other Attribute(s): Community-Based Learning

T. Farnham

Restrictions: This course is limited to Environmental Studies majors.; This course is limited to seniors.

ENVST-395 Independent Study

Fall and Spring. Credits: 1 - 8 The department Instructor permission required.

Courses Approved as Electives for the Major and Minor

Code	Title	Credits
Anthropology		
ANTHR-316CA	Special Topics in Anthropology: 'Carbon Christianity'	4

ANTHR-316MT	Special Topics in Anthropology: 'Multispecies Ethnography: 'Across Humans, Animals, and Plants'	4
Architecture		
ARCH-225ED	Intermediate Studies in Architecture: 'Environmental Principles'	4
Art History		
ARTH-290MV	Issues in Art History: 'Art, Nature, and Ecology in the Medieval World'	4
Biological Science	es	
BIOL-200	Introductory Biology II: How Organisms Develop	4
BIOL-226	Evolution: Making Sense of Life	4
BIOL-315	Behavioral Ecology	4
BIOL-323	Plant Growth and Development	4
BIOL-325	Plant Diversity and Evolution	4
BIOL-331	Conservation Biology	4
Chemistry		
CHEM-202	Organic Chemistry I	4
Classical Studies		
CLAS-250EC	Intermediate Topics in Classical Studies: 'Ecology, Crisis, and Renewal in Ancient Near Eastern Mythology'	4
Critical Race & Po	litical Econ	
CRPE-239	Latinx Urbanism	4
CRPE-240FD	Intermediate Topics: 'U.S. Latinx Foodways'	4
Economics		
ECON-219	Environmental Economics	4
ECON-319	Environmental Economics, Ecology and Conservation Policy	4
English		
ENGL-219CH	Topics in Creative Writing: 'Climate Changes Everything: Telling Stories at the End of the World As We Know It'	4
ENGL-350AB	Topics in African American Literature: 'Abolition and Climate Change'	4
Environmental St	udies	
ENVST-251	Research, Ethics, Justice and Campus Sustainability	4
ENVST-295	Independent Study	1-4
ENVST-316	Restoration Ecology	4
ENVST-321CP	Conference Courses in Environmental Studies: 'Political Economy of the Environment: Capitalism and Climate Change'	4
ENVST-321EQ	Conference Courses in Environmental Studies: 'Food Equity and Empowerment' Change'	4
ENVST-321GW	Conference Courses in Environmental Studies: 'Human Health and Water'	4
ENVST-321NH	Conference Courses in Environmental Studies: 'Animal Tales: Narratives of Non-Human Animals'	4
ENVST-321TX	Conference Courses in Environmental Studies: 'Toxic Entanglements: Environmental (In)Justice in the United States'	4
ENVST-333	Landscape and Narrative: Finding Place, Finding Home	4
ENVST-335	Wetlands Ecology and Management	4

ENVST-339	Indigenous and Decolonial Ecologies	4
ENVST-342	Living in the Anthropocene: Development, Technology, Futures	4
ENVST-346	Global Environmental Politics Governance	4
ENVST-347	Environmental Geopolitics and Security	4
ENVST-395	Independent Study	1-8
Geography		
GEOG-204	Human Dimensions of Global Environmental Change Change	4
GEOG-205	Mapping and Spatial Analysis	4
GEOG-206	Political Geography	4
GEOG-208	Global Movements: Migrations, Refugees and Diasporas	4
GEOG-210	GIS for the Social Sciences and Humanities	4
GEOG-224	Atmosphere and Weather	4
GEOG-230	Environmental Soil Science	4
GEOG-304UP	Planning and the Environment: 'Urban Planning'	4
GEOG-314	China in the Global South	4
GEOG-331	Water, People, and Politics in the Anthropocene	4
Geology		
GEOL-201	Rocks and Minerals	4
GEOL-202	History of Earth	4
GEOL-211	Uranium	4
GEOL-229	Hydrology and Hydrogeology: Hydrological Cycle, Surface, and Groundwater Movement	4
GEOL-342CC	Seminar in Geology: 'Global Effects of Climate Change'	4
GEOL-342EA	Seminar in Geology: 'Sea Level Science'	4
GEOL-342WA	Seminar in Geology: 'Water Issues Worldwide'	4
Gender Studies		
GNDST-333MS	Advanced Seminar. 'Multi-Species Justice? Entangled Lives and Human Power'	4
History		
HIST-239GF	Topics in Asian History: 'Global Food and Local Tastes in Modern East Asia'	4
HIST-239HH	Topics in Asian History: 'History of Humans and Other Living Beings'	4
HIST-247	Mountains and Modernity	4
HIST-277	History of Energy	4
HIST-332	Environmental History of China	4
Jewish Studies		
JWST-225EC	Topics in Judaism: 'Ecology, Crisis, and Renewal in Ancient Near Eastern Mythology'	4
Music		
MUSIC-203	Acoustic Ecology and Sonic Art	4
Politics		
POLIT-387EV	Advanced Topics in Politics: 'U.S. Environmental Politics and Policy'	4
Religion		
RELIG-225EB	Topics in Religion: 'Eco-Buddhism'	4
RELIG-225EC	Topics in Religion: 'Ecology, Crisis, and Renewal in Ancient Near Eastern Mythology'	4
	, .,	
RELIG-331CA	Advanced Topics in Religion: 'Carbon Christianity'	4

SPAN-250AT Concepts and Practices of Power. 'The Agency of 4 Things: Material Culture of Latin America, Spain, and the U.S. Border'