Environmental studies courses deal with a wide range of contemporary problems associated with the interactions between humans and nature. Coursework is designed to meet the needs of two groups of students: those who choose to major in environmental studies and those who desire knowledge in this area as part of their general education. A primary objective of the program is to aid the student in understanding that environmental problems are multi-causal phenomena, and to develop skills necessary for effective environmental citizenship and leadership.

The environmental studies major develops a common core of knowledge through extensive interdepartmental coursework, complemented by a concentration in a specific area in either the environmental humanities, sciences, or social sciences. The student may elect one of eight areas of concentration — biology, chemistry, economics, geology, humanities, physics, politics, sociology, or an individually planned major (psychology, for example) in the environmental studies major.

The following course of study is required of all environmental studies majors. Students earn a minimum of 25 credits in environmental studies (including foundation courses), and combine these credits with an area of concentration. No more than eight transfer credits may be applied to the environmental studies requirements. Semester in the West and Whitman in the Wallowas are programs run by Whitman College and count as credit earned on campus. Courses taken P-D-F may not be used to satisfy requirements for the environmental studies major.

**Introductory coursework:** Take the following: Environmental Studies 120 *Introduction to Environmental Studies*; Environmental Studies 207 *Methods of Environmental Analysis*.

**Foundation coursework:** Satisfy requirements in the two areas listed below that are outside the area of your declared environmental studies major. Course substitutions for foundation area courses must be approved by the Environmental Studies Committee.

**Humanities area coursework:** Take a minimum of two of the following: Art History and Visual Culture Studies 226/Classics 319/Environmental Studies 319 *Landscape and Cityscape in Ancient Rome*; Art History and Visual Culture Studies 352 *Art/Environment*; Classics 200/Environmental Studies 202 ST: *Animals and Animality in Greek and Roman Culture*; Classics 217/Environmental Studies 217 *Classical Foundations of the Nature Writing Tradition*; Classics 226/Environmental Studies 226 *Concepts of Nature in Greek and Roman Thought*; Classics 309/Environmental Studies 309 *Women and Nature in the Ancient World*; all offerings of Environmental Studies 202 and 302 *Environmental Humanities*; Environmental Studies 230 *The Cultural and Literary Life of Rivers*; Environmental Studies 235 *The Pastoral, the Wild, and the Commons*; Environmental Studies 247 *The Literature of Nature*; Environmental Studies 308 (Re)Thinking Environment; Environmental Studies 335/German Studies 335 *Romantic Nature*; Environmental Studies 339/German Studies 339 *Writing Environmental Disaster*; Environmental Studies 340 *Environmental Radicals in Literature*; Environmental Studies 347 *The Nature Essay*; Environmental Studies 349 *Regional Literatures of Place: The West and the South*; Environmental Studies 358 *Ecocriticism*; Environmental Studies 360 *Environmental Writing and the American West*; Environmental Studies 365 *Other Earths: Environmental Change and Speculative Fiction*; Geology 338 *Pages of Stone: The Literature of Geology*; Philosophy 120 *Environmental Ethics*; Philosophy 208 *Ethics and Food: What’s for Dinner?*; Philosophy 227/Environmental Studies 227 *Concepts of Nature in Modern European Philosophy*; Philosophy 345 *Animals and Philosophy*; World Literature 328 *Haiku and Nature in Japan*.

**Natural/physical science area coursework:** Take a minimum of two of the following courses from different departments, including at least one course with a laboratory: Biology 115 *Natural History and Ecology*; Biology 118 *Agroecology*; Biology 130 *Conservation Biology*; Biology 177 *Ecology of the American West*; Biology 178 *Fundamentals of Marine Biology* (to count as a laboratory course, must be taken concurrently with Biology 179 *Fundamentals of Marine Biology Field Trip*); Chemistry 100 *Introduction to Environmental Chemistry and Science*; all offerings of Environmental Studies 201 and 301 *Environmental Sciences*; Geology 125 *Environmental Geology* (or Geology 110 *The Physical Earth* or Geology 120 *Geologic History of the Pacific Northwest*); Geology 229 *Geology and Ecology of Soils*; Physics 105 *Energy and the Environment*.

**Social sciences area coursework:** Take a minimum of two of the following courses from different departments: Economics 100 *Principles of Microeconomics and the Environment*; all offerings of Environmental Studies 200 and 300 *Environmental Social Sciences*; Environmental Studies 313 *Communism, Socialism, and the Environment*; History 155 *Animal, Vegetable, and Mineral: Natural Resources in Global Environment History*; History 205 *East Asian Environmental History*; History 231 *Oceans Past and Future: Introduction to Marine Environmental History*; History 232 *Changing Landscapes: Introduction to Terrrestrial Environmental History*; History 262 *People, Nature, Technology: Built and Natural Environments in U.S. History*; History 355 *Pacific Whaling History*; Politics 119 *Whitman in the Global Food System*; Politics 124 *Introduction to Politics and the Environment*; Politics 201 ST: *Oil and Mining in Indian Country*;
Inquiry in environmental humanities is guided by two questions: What is the relation between nature and culture? What should this relation be? These questions have become ever more important in the face of growing environmental problems. The environmental humanities major is governed by a subcommittee of the Environmental Studies Committee. The environmental humanities major uses traditions of nature writing, European and American literature, environmental philosophy, and the classics to give direction and focus to inquiry into the values and concepts that may govern our relation to nature. In order to insure an intellectually cohesive program, the student’s faculty adviser will review and approve each major’s plan for coursework leading to a senior thesis.

Learning Goals: Upon graduation, a student will be able to:

- **Major-Specific Areas of Knowledge**
  - Be literate in environmental humanities.

- **Citizenship**
  - Be critically engaged environmental citizens

In addition to the courses required of all environmental studies majors, the following are required for the environmental humanities major:

Foundation coursework: Take two foundation courses from the following list (courses satisfying this requirement cannot also satisfy the elective requirement): Art History and Visual Culture Studies 226/Classics 319/Environmental Studies 319 Landscape and Cityscape in Ancient Rome; Art History and Visual Culture Studies 352 Art/Environment; Classics 200/Environmental Studies 202 ST: Animals and Animality in Greek and Roman Culture; Classics 217/Environmental Studies 217 Classical Foundations of the Nature Writing Tradition; Classics 309/Environmental Studies 309 Women and Nature in the Ancient World; English 348 The American Literary Emergence, 1620-1920; Environmental Studies 230 The Cultural and Literary Life of Rivers; Environmental Studies 235 The Pastoral, the Wild, and the Commons; Environmental Studies 247 The Literature of Nature; Environmental Studies 308 (Re)Thinking Environment; Environmental Studies/Classics 355 Romantic Nature; Environmental Studies/Classics 339 Writing Environmental Disaster; Environmental Studies 349 Regional Literatures of Place: The West and the South; Environmental Studies 358 Ecocriticism; Geology 338 Pages of Stone: The Literature of Geology; Philosophy 300 Emerson.

Writing requirement: To fulfill the writing requirement take either Environmental Studies 347 The Nature Essay; or Environmental Studies 360 Environmental Writing in the American West*.

Critical thinking requirement: To fulfill the critical thinking requirement take one course from: Classics 226/Environmental Studies 226 Concepts of Nature in Greek and Roman Thought; Environmental Studies 308 (Re) Thinking Environment; Philosophy 107 Critical Reasoning; Philosophy 117 Problems in Philosophy; Philosophy 120 Environmental Ethics; Philosophy 127 Ethics; Philosophy 208 Ethics and Food: What’s for Dinner?; Philosophy 227/Environmental Studies 227 Concepts of Nature in Modern European Philosophy; Philosophy 345 Animals and Philosophy.

Electives: Take three elective courses, two of which must be 300 or above, from: Art History and Visual Culture Studies 226/Classics 319/Environmental Studies 319 Landscape and Cityscape in Ancient Rome; Art History and Visual Culture Studies 248 Ways of Seeing: Japanese Art and Aesthetics; Classics 200/Environmental Studies 202 ST: Animals

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### Environmental Humanities

Patrick Frierson, Philosophy
Rebecca Hanrahan, Philosophy, Chair, Division II
Emily Jones, German Studies and Environmental Humanities (on Sabbatical, Spring 2018)
Kathleen Shea, Environmental Humanities/Classics
Donald Snow, Environmental Humanities

* Offered only to students admitted to Semester in the West
The natural and physical sciences provide foundational theories for understanding environmental phenomena in the physical world and support environmental studies by gathering and analyzing baseline data to inform policy decisions. Issues ranging from the effects of pollution, optimal land-use practices, protections of biodiversity, and effective energy consumption all benefit from insights provided by the natural and physical sciences. Available majors and required courses appear below.

Learning Goals: Upon graduation, a student will be able to:

- **Major-Specific Areas of Knowledge**
  - Be literate in the environmental sciences.

- **Citizenship**
  - Be critically engaged environmental citizens.

These requirements are in addition to courses required of all environmental studies majors.

### Biology-Environmental Studies:
Biology 111; 112; 205; three credits from the Molecular/Cell category; four credits from the Organismal Biology category; eight credits from the Ecology/Evolution category (see Biology Department course descriptions for courses in each category); 489; 490 or 498; 499; Chemistry 125, 126, 135, 136, (or 140), 245; Mathematics 125 or a statistics course (Mathematics 128 or 247, Biology 228, Economics 227, Psychology 210, Sociology 208). Courses in physics are recommended.

### Chemistry-Environmental Studies:
Chemistry 125, 126; 135, 136 (Note: Chemistry 140 is equivalent to Chemistry 125, 126, 135 and 136); Chemistry 240; 245; 246; 251 and 252; 346; 388 or 320. Also required are Mathematics 125, 126, and Physics 155 or 165, 156 or 166; Chemistry 490 or 498.

### Geology-Environmental Studies:
Geology 125 (or 110, or 120), 227, 343, 346, 350, 358, 420, 470, plus one other three- or four-credit geology course numbered 250 or above; Chemistry 125, 126, 135; Biology 115, 130, 177, or a substitution approved by the geology department. Strongly recommended are Geology 480 and courses in meteorology, physics, calculus, and statistics, and additional courses in biology and chemistry.

### Physics-Environmental Studies:
Physics 145 or 155 or 165, 156 or 166, 245, 246, 255, 256, 325, 339, and one additional physics course numbered from 300-480 or BBMB 324. Also required are Mathematics 125, 126, 225, 235, and 244.

Environmental Social Sciences

Jakobina Arch, History
Eunice L. Blavascunas, Anthropology and Environmental Studies
Aaron Bobrow-Strain, Politics
Philip D. Brick, Politics (on Sabbatical, 2017-2018)

Human activities are at the root of most aspects of environmental degradation from global climate change to toxic waste to habitat loss. Applying social science theories and methods, environmental social science majors explore how human systems affect the natural environment, how decisions to utilize natural resources are made, and how various political strategies might address environmental concerns. Major requirements and required courses appear below.

Learning Goals: Upon graduation, a student will be able to:

- Major-Specific Areas of Knowledge
  - Be literate in environmental social sciences.
- Citizenship
  - Be critically engaged environmental citizens.

These requirements are in addition to courses required of all environmental studies majors.

Anthropology-Environmental Studies: How does culture mediate relationships with land, water, soils, climate, plants, and animals? And how have these more-than-human beings had reciprocal relationships with humans? Using a range of methodologies, including ethnography, Anthropology-Environmental Studies majors will learn to build from different ways of knowing to examine the multi-faceted character of the environment and environmentalism at a time widely heralded as the Anthropocene. With humans at the center of this proposed geologic epoch the Anthropology-Environmental Studies major requires students to develop a working grasp of fundamental natural and scientific concepts central to environmental studies, while also understanding how scientific knowledge is always embedded in specific cultural features and historical contexts. An anthropological approach stresses that, while environmental processes and phenomena have material existence, they work within diverse cultural frames of meaning. As an environmental anthropologist you will be able to recognize the commonalities, coalitions and alliances that cut across cultures, as well as recognizing the political and economic agendas that guide and inform globalized environmental movements.

Students must take 26 credits in Anthropology, as specified below. No more than eight credits earned in off-campus programs and transfer credits may be used to satisfy major requirements. Courses taken P-D-F may not be used to satisfy the course and credit requirements for the major.

Introductory course work: Anthropology 101 Becoming Human: An Introduction to Anthropology, and Anthropology 102 Introduction to Cultural Anthropology.

Core Anthropology Courses: Two courses, eight credits, from the department’s offerings in Environmental Anthropology from: Anthropology 300 Malignant Cultures: Anthropologies of Cancer, Anthropology 306 Culture, Politics, Ecology, Anthropology 313 Communism, Socialism and the Environment, Anthropology 328 Medical Anthropology, Anthropology 360 The Cultural Politics of Science.

Methods and research: Anthropology 318 History and Theory in Anthropology.

Senior year requirements: Take Anthropology 490 Applied Theory Seminar, and Anthropology 492 or 498 Thesis/Honors Thesis.

Economics-Environmental Studies:

Economics 100 Principles of Microeconomics and the Environment or Economics 101 Principles of Microeconomics; Economics 102 Principles of Macroeconomics; Economics 227 Statistics for Economics (Mathematics 128 Elementary Statistics or Mathematics 247 Statistics with Applications, while not ideal, would be acceptable substitutes); Economics 307 Intermediate Microeconomics; Economics 308 Intermediate Macroeconomics (Note: Mathematics 125 Calculus I is a prerequisite for Economics 307 and Economics 308); Economics 477 Environmental and Natural Resource Economics; and one additional course in economics. One additional relevant course in another social science is required (see social science area of the environmental studies major requirements). A minimum requirement of C (2.0) is required in Economics 307 and 308. Economics 493, 494 Directed Reading and other economics courses taken P-D-F may not be used to meet the 27-credit requirement. The senior assessment consists of the Major Field Test (MFT) and an oral exam in economics and (for those not writing a suitably interdisciplinary honors thesis) an oral exam in environmental studies.

History-Environmental Studies major:

A total of 32 credits in History, consisting of 12 credits in methods and research, 12 credits in geographical areas, and eight credits of electives. The 12 credits from the methods and research must include History 299, History 401, and a 400-level seminar in history. A minimum grade of C (2.0) is required in History 299. The 12 credits from the geographical areas must include at least one 200- or 300-level course in two of the department’s seven geographical areas, and one additional course from one of those areas. The eight credits in electives must include two courses in History. Only one of these courses may be at the 100-level. No more than ten transfer credits may be applied to the History requirements.

The 32 credits above must include the following three areas (note: courses can be applied to multiple requirements):

- History
- Anthropology
- Economics
Comparisons and Encounters and Pre-modern Courses: A course at any level meeting the department’s pre-modern requirement; and one course at the 200- or 300-level meeting the department’s Comparisons and Encounters requirement.

Core Environmental History Courses: Three courses from the department’s offerings in Environmental History, at least one of which must be either History 231 Oceans Past and Future or History 232 Changing Landscapes. Other Environmental History courses include History 205 East Asian Environmental History, History 262 People, Nature, Technology, History 355 Pacific Whaling History. Applicable recent Special Topics courses are History 150 Animal, Vegetable, Mineral, History 279 ST: Ecologies and Economies, and History 283 ST: Environmental History of Latin America.

Senior year requirements: Take History 401, and successfully complete a senior oral examination in Environmental Studies (in addition to the senior assessment in History, which consists of a book exam, an oral examination and a written field exam). Honors Candidates in History will take History 498 for three credits and Environmental Studies 498 for one credit.

Politics-Environmental Studies:
Introductory courses: Take at least one of the following: Politics 119 Whitman in the Global Food System; Politics 124 Introduction to Politics and the Environment; Politics 228 Political Ecology; Politics 287 Natural Resource Policy and Management.
Political economy: Take at least one of the following: Economics 100 Principles of Microeconomics and the Environment; Politics 363 Genealogies of Political Economy.
Global politics: Take at least one of the following: Politics 147 International Politics; Politics 232 The Politics of Globalization; Politics 331 Politics of International Hierarchy.
Electives: Take 12 additional credits in politics. At least eight of these must be 300- and 400-level courses.
Senior year requirements: Take the following: Politics 490 Senior Seminar; Politics 497 Senior Thesis or Politics 498 Honors Thesis; Environmental Studies 488 Senior Project or 498 Honors Project.

No more than eight credits earned in off-campus programs, transfer credits, and/or credits from cross-listed courses may be used to satisfy major requirements. Of these eight credits, no more than four may count toward 300- and 400-level courses. Courses taken P-D-F may not be used to satisfy the course and credit requirements for the major.

Sociology-Environmental Studies:
Sociology 117 Principles of Sociology; Sociology 207 Social Research Methods; Sociology 229 Environmental Sociology; Sociology 367 History of Sociological Theory; one course chosen from either Sociology 329 Environmental Health, or Sociology 349 Environmental Social Movements, or Sociology 353 Environmental Justice; one additional four-credit course in sociology; Sociology 490 Current Issues in Sociology; and Sociology 492 Thesis or Sociology 498 Honors Thesis; Environmental Studies 488 Senior Project or 498 Honors Project. One additional relevant course in another social science is required (see social science area of the environmental studies major requirements).

* Offered only to students admitted to Semester in the West

Environmental studies majors are encouraged to study for a semester or a year in a program with strong environmental relevance. Particularly appropriate are Whitman College’s field program in environmental studies, Semester in the West; and the School for Field Studies. See the Special Programs section in this catalog. Also, consider the University of Montana’s Northwest Connections Field Semester.

120 Introduction to Environmental Studies
Fall, Spring

Fall: Snow; Spring: Blavascunas 4 credits
An introduction to interdisciplinary themes in environmental studies, including perspectives from the sciences, social sciences, and humanities. Emphasis is placed on understanding local and regional environmental problems as well as issues of global environmental concern. Students enrolling in this course also will be required to enroll in Environmental Studies 120L Environmental Studies Excursions. The weekly afternoon excursions cover the length of the Walla Walla drainage basin, from the Umatilla National Forest to the Columbia River. Excursions may include the watershed, the water and wastewater treatment plants, energy producing facilities, a farm, a paper mill, different ecosystems, and the Johnston Wilderness Campus. This course is required of all environmental studies majors. All environmental studies majors must pass this course with a minimum grade of C (2.0). First-year students and sophomores only or consent of instructor.

200 Special Topics: Introductory Environmental Social Sciences
3-4 credits
An introductory course designed to investigate environmentally significant topics in the social sciences. Any current offerings follow.

201 Special Topics: Introductory Environmental Sciences
3-4 credits
An introductory course designed to investigate environmentally significant topics in the sciences. Any current offerings follow.
202 Special Topics: Introductory Environmental Humanities
3-4 credits
An introductory course designed to investigate environmentally significant topics in the humanities. Any current offerings follow.

202 ST: Animals and Animality in Greek and Roman Culture
Spring
Shea
4 credits
This course will survey the significance of the animal and animality in the ancient cultures of Greece and Rome. Exploring representations of animals in ancient art and literature, we will examine cultural conceptions of animals as the wild, the exotic, the monstrous, the domesticated, the pet, and the sacrificial offering. Through philosphic texts we will investigate how the human and non-human animal relationship has been defined and its ethics. We will also read ancient and modern literary treatments of metamorphosis and consider how these works illuminate our understanding of the human animal. May be elected as Classics 200. Distribution area: humanities.

203 Special Topics: Interdisciplinary Studies
3-4 credits
An introductory course designed to investigate environmentally significant topics from an interdisciplinary perspective. Any current offerings follow.

203 ST: Politics of Salmon
Fall
Thayne
4 credits
The history of Indigenous peoples, settler colonial infrastructure, commerce, hydropower, agriculture, recreation, dam-building and dam removal, treaty rights, environmentalism, and sovereignty in the Northwest—and particularly in the Columbia River Basin—can be told through the story, and politics, of salmon. Salmon was once the center of the Northwest's economy, ecology, and cosmology. By the mid-twentieth century, most species were functionally extinct in many tributaries. Through the efforts of the Columbia River Inter-Tribal Fish Commission—after numerous court cases and Treaty Rights activism—salmon have largely been restored. Still, politics over salmon continue to rage over issue such as dam removal, climate change, recreation, conservation, protection of endangered species, wild vs. hatchery propagation, invasive and native species, federal-state-tribal jurisdictions, ecology, subsistence, and sovereignty. Whitman College—the almost sockeyes—located on the eastern edge of the Columbia River Basin, with the concrete-choked and salmon-bereft Mill Creek flowing through it, is a perfect place to learn about the politics of salmon. It will involve at least one field trip to significant salmon sites in the Columbia River Gorge and Plateau. May be elected as Politics 200, but must be elected as Environmental Studies 203 to satisfy the interdisciplinary course requirement in environmental studies. Distribution area: social sciences.

207 Methods of Environmental Analysis
Fall, Spring
A. Molitor
3 credits
An introduction to analytic methods and tools utilized to address environmental issues and problems. Building on a basic understanding of elementary concepts in statistics (variables, descriptive and inferential statistics, confidence intervals, hypothesis testing, effect sizes, etc.), students will learn to read, interpret, and critically evaluate environmental data and literature. Additionally, students will become familiar with environmental analysis procedures and surveys such as environmental assessment (Environmental Impact Statements); environmental risk assessment; land, soil, water, wildlife, agricultural, and mineral surveys. Lastly, given the inherent spatial nature of environmental data, students will utilize Geographic Information Systems software to assess spatial relationships between variables. Two hours of lecture per week plus one three-hour laboratory. Prerequisites: Environmental Studies 120; declared environmental studies major and consent of instructor.

217 Classical Foundations of the Nature Writing Tradition
Fall
Shea
4 credits
The Western nature writing tradition is deeply rooted in models from classical antiquity. In order to appreciate more fully the tradition we will explore the relationship between ancient literature and the natural environment. In our literary analysis of ancient works, we will examine approaches to natural description in several literary genres, which may include the poetic genres of epic, lyric, pastoral, and elegiac, as well as the prose genres of ethnographic history, natural history, and travel-writing. Authors may include Homer, Herodotus, Theocritus, Vergil, Ovid, and Pliny. We will consider how these ancient approaches influenced the development of natural description in the modern period and may read works by later authors such as Shakespeare, Milton, and Thoreau. May be elected as Classics 217.
220 Internship Project
Fall, Spring  A. Molitor  1-2 credits
Engage in an internship with a college, local, regional, national, or international environmental organization. Prior to the beginning of the semester, students must present an internship proposal outlining specific goals, responsibilities, and time commitment. From this proposal, the internship coordinator, along with input from the student’s internship supervisor, will determine the appropriate number of credit hours. In addition to the internship proposal, students are required to maintain an internship journal, submit a midterm and final internship report, and present their intern experience in a poster or oral presentation. May be repeated for a maximum of four credits. Prerequisite: consent of instructor.

226 Concepts of Nature in Greek and Roman Thought
Spring  Shea  4 credits
The Greek term “physis” and the Latin word “natura” refer to what has come to be, as well as to the process of coming into being. This course will consider a broad range of texts which develop important concepts of Nature. Philosophic texts may include the pre-Socratics, Aristotle, the Stoics, and Lucretius. Literary texts may include Theocritus, Virgil, and the early-modern European pastoral tradition. In addition, we will encounter other texts in various genres that contribute some of the ideas, which inform the complex and changing concepts of Nature. May be elected as Classics 226.

227 Concepts of Nature in Modern European Philosophy
Spring  Frierson  4 credits
This course explores a variety of philosophical conceptions of nature and the natural world in Modern European philosophy, from Francis Bacon to 20th century thinkers such as Heidegger. May be elected as Philosophy 227.

230 The Cultural and Literary Life of Rivers
Not offered 2017-18  4 credits
Sources of life-giving water, protectors of borders, images of change and oneness, rivers hold deep symbolic and cultural significance. In this course, we will explore the life of the river in the mythological, religious and literary traditions of several ancient and modern cultures. Using comparative approaches, we will examine the meaning and value major rivers hold for the people that live around them and their role in shaping cultural identity and religious practice. We will also read several major literary works that make rivers a central aspect of their narrative and will consider how the author writes about the river and its landscape in order to explore wider issues of the human experience.

235 The Pastoral, the Wild, and the Commons
Fall  Snow  4 credits
As Aldo Leopold plainly stated in A Sand County Almanac, Western societies, from antiquity to the present, have grappled with human-land relations. Recently, the American conservation and environmental movements have intensified these struggles in various efforts to designate public lands, conserve green space, protect family agriculture, and preserve wilderness, wildlife and scenic areas. In this course, we will examine various texts that bring life to life three concepts that lie at the foundations of most conservationist and preservationist action: the pastoral, the wild, and the commons. Theoretical texts by Leo Marx, Rousseau, Lewis Hyde, Roderick Nash, William Cronon and Kathryn Newfont will form cornerstones of the course. Literary readings may include works by Theocritus, Virgil, Gilbert White, Wordsworth, Frost, Thoreau, Hawthorne, Hurston, Marilynne Robinson, Fitzgerald, and Wendell Berry.

247 The Literature of Nature
Not offered 2017-18  4 credits
Students will examine the tradition of nature-writing and literary natural history. Readings will be drawn from classics in the field (Gilbert White, Darwin, Emerson and Thoreau, Burroughs and Muir, Leopold, Rachel Carson, Loren Eiseley, Mary Hunter Austin), and from the best contemporary nature-writers (Terry Tempest Williams, Ed Abbey, Annie Dillard, Ellen Meloy, Wendell Berry, David Quammen). Lectures and discussions will trace how nature-writing has mirrored the evolution of social, cultural, political, and scientific perspectives on nature.

259 Culture, Environment and Development in the Andes
Not offered 2017-18  4 credits
This course focuses on the intersection of two major concerns in global development—environmental sustainability and the self-determination of indigenous communities—as they play out in the Andes region of South America. Environmentally, this mountainous region is home to astounding biotic and geomorphological diversity and concentrations of major watersheds, glaciers, and complex forests. Culturally and politically, the Andes region also stands out as a locus of Latin America’s indigenous rights movement. This course asks a series of questions centered on understanding environmental issues and movements from the perspective of indigenous peoples, including: How are pressing environmental changes
altering indigenous livelihoods and how are indigenous groups responding to these challenges? How do indigenous
movement politics rooted in struggles for sovereignty and legal recognition intersect with global environmental concerns
and social movements to address climate change, water resources, and biodiversity? How do approaches to development
that take seriously nature-culture connections address issues of indigenous livelihoods and sustainability and in what ways
do they fail? Readings will draw from anthropology, geography, global health, political theory, journalism, and history.
This course builds on Anthropology 102, but it is not required. May be elected as Anthropology 259, but must be elected as
Environmental Studies 259 to satisfy the interdisciplinary course requirement in environmental studies.

260 Regional Studies
1-3 credits
A study of a specific geographical region using a multidisciplinary approach. Regions covered may include Alaska, western
Canada, the northwest or southwest U.S., Hawaii, or Latin America. Lectures, readings, and discussions in various
disciplines, concentrating mainly in the natural and social sciences, will precede a one- to three-week field trip. One or
more examinations or papers will be required. May be repeated for credit with focus on a different region. Prerequisite:
consent of instructor. Any current offering follows.

300 Special Topics: Environmental Social Sciences
3-4 credits
An upper level course designed to investigate environmentally significant topics in the social sciences. Any current
offerings follow.

301 Special Topics: Environmental Sciences
3-4 credits
An upper level course designed to investigate environmentally significant topics in the sciences. Any current offerings
follow.

302 Special Topics: Environmental Humanities
3-4 credits
An upper level course designed to investigate environmentally significant topics in the humanities. Any current offerings
follow.

303 Special Topics: Interdisciplinary Studies
3-4 credits
An upper level course designed to investigate environmentally significant topics from an interdisciplinary perspective. Any
current offerings follow.

305 Water in the West
Fall Persico 4 credits
A central narrative to the history of western North America is the pursuit of water. The climate is dry and droughts are
common, yet some of the most productive agricultural lands in world reside here. Many of the defining features of the
West: snowy mountains, raging rivers, large multiuse reservoirs, livestock grazing, potatoes, avocados, fine wine, and
growing metropolises depend upon a continual supply of fresh water and cheap power. Technological innovations in the
20th century have brought more and more water to the people, which have allowed large population increases and expansion
into formerly inhospitable terrain. Recent extreme droughts, however, are forcing a reevaluation of the western growth
model, which is rooted in the 19th century concept of Manifest Destiny. Furthermore, the prospect of perpetual drought,
driven by global climatic change, further questions capability of the West to sustain permanent growth. This course will
cover the West’s tangled history with water, climate, landscapes, and people. We will use a diverse suite of case studies to
highlight western water issues including water resource management, power generation, water law, water economics, and
climate change. Ultimately, this course will foster the exploration of human-landscape interactions and contemplate
strategies for a sustainable path forward. Prerequisite: Environmental Studies 120.

306 Culture, Politics, Ecology
Spring Blavascunas 4 credits
This seminar examines a range of approaches to the analysis of ecological and social processes, drawing on interpretations
of different socio-ecological studies in anthropology and geography. Covers cultural ecology and political ecology. Topics
include human/environment relations through the lens of gender, race, class, livelihoods, the topic of nature and nature
conservation, local knowledge, resistance and resilience, environmental discourses, social movements and the connections
between production and consumption. Students will gain an understanding of how hierarchies, privilege, status and power
shape patterns of natural resource use; who and what causes environmental problems; and what the solutions might be. May be elected as Anthropology 306, but must be elected as Environmental Studies 306 to satisfy the interdisciplinary course requirement in environmental studies.

**307 Beastly Modernity: Animals in the 19th Century**  
*Fall  Arch*  
4 credits  
Many people think that history has to be focused on humans. Furthermore, the modern era can seem like a period of minimal cohabitation with animals. However, many of the dramatic changes in the nineteenth-century world in the transition to modernity were irrevocably linked to the ways that humans interacted with, used, and thought about other animals. By investigating human history around the globe with an eye to the nonhuman actors within it, you will learn more about the different ways that humans relate to other animals and the importance of other living beings in human lives in Europe, the Americas, Asia and Africa. This course considers the factors that shaped some of the most important trends in modern history, including: more extensive and faster transportation networks, modern urban design, scientific research, how nature is used as a resource, and the global increase in mass extinctions and invasive species. Class will be discussion-based, including in-class debates and a presentation of your final research paper. May be elected as History 307 but must be elected as Environmental Studies 307 to satisfy the interdisciplinary course requirement in environmental studies.

**308 (Re)Thinking Environment**  
*Fall  Jones*  
4 credits  
Pairing post-nature, abstract, and non-traditional theories of space and place with pieces of literature that push the boundaries of our understanding of environment, this advanced course encourages students to reconsider environment beyond the natural. The course will engage at a high level with post-natural, toxic, post-industrial and gendered environments alongside a variety of human habitats including the urban, domestic, and transient. Authors may include Sloterdijk, Augé, Buell, Tuan, Jackson, Boym, Sebald, Döblin, Goethe, Handke, and others. Regular readings in both theory and literature will be accompanied by substantial analytical writing assignments and in-class discussion.  
**Prerequisite:** at least one course in Environmental humanities or consent of instructor.

**309 Women and Nature in the Ancient World**  
*Not offered 2017-18  Arch*  
4 credits  
As mothers, witches, nympha, and virgin-huntresses of the wild, women in the ancient world were depicted in roles that denoted a special relationship with nature. Likewise, the natural world was articulated through gendered imagery. In this course, we will explore the association of gender and nature in the ancient Greco-Roman world. We will give particular focus to the status of women as intermediaries to nature. We will examine a range of representations of the feminine in literature and art, as well as in ritual and social practice, studying the female role in negotiating society’s interactions with nature. Works that we will read and discuss may include the *Homeric Hymns*, plays by Aeschylus and Euripides, and the novel, *The Golden Ass*, by Apuleius. May be elected as Classics 309. May be taken for credit toward the Gender Studies major.

**313 Communism, Socialism, and the Environment**  
*Fall  Blavascunas*  
4 credits  
In an age where many associate climate change and environmental destruction with capitalism, what can we learn from the history, ideology and practice of socialism and communism? Was communism uniformly destructive to the environment, marked by catastrophes like the Chernobyl meltdown or the nightmarish geoengineering of Three Gorges Dam in China? What are the unexpected environmental surprises or sustainable aspects of the communist experiment, inadvertent as well as purposeful? This course provides both political theory and case studies to examine what was state socialism, the Communist Party, the experience of living in a Communist country. The course will draw on materials from environmental history, post-socialist anthropology and political ecology to explore the lived realities and utopian projects of communism and socialism. Course draws examples from around the world, including Eastern Europe, China, Vietnam, Cuba, Brazil and Tanzania. May be elected as Anthropology 313, but must be elected as Environmental Studies 313 to satisfy the social sciences course requirement in environmental studies.

**319 Landscape and Cityscape in Ancient Rome**  
*Summer 2018  Shea*  
4 credits  
Despite Rome being one of the greatest cities in the ancient world, its identity was fundamentally rooted in its natural landscape. In this intensive 4-week course in Italy, we will study the ancient city of Rome and its supporting landscape, both through the lens of ancient literary accounts and directly through field trips to major archeological sites and museums. We will explore how the realms of urban, rural, and wild were articulated in Roman culture, conceptually and materially.
We will investigate both how the Romans conceived of the relationship between the built environment of urban space and the natural environment that supported and surrounded it and how they dealt with the real ecological problems of urban life. Students will also actively participate in archeological excavation at a Roman coastal settlement. May be elected as Art History 226 or Classics 319. Prerequisite: Acceptance into the Crossroads Rome Summer 2018 course.

327 Biodiversity
Not offered 2017-18 4 credits
This class will place the concept of biodiversity in historical, ethical, biological, and social context. Students will trace the history of the concept of biodiversity from before the coinage of the term through today. They will learn about different biological definitions of diversity, and the ecological and evolutionary factors responsible for controlling diversity. Students will then consider the scientific evidence for an anthropogenic biodiversity decline, and they will identify components of biodiversity most at risk. The class will evaluate, from ethical, social, and scientific perspectives, various arguments that have been advanced to justify the conservation of biodiversity. We will assess government and nongovernmental actions that serve or strive to protect biodiversity. Students also will come to understand social implications of biodiversity conservation, including both convergence and divergence between the perspectives of local people and those of conservationists and managers. Prerequisites: Environmental Studies 120 and 207.

329 Environmental Health
Fall Cordner 4 credits
Environmental health issues are inherently interdisciplinary. This seminar-style course will examine how the natural, built, and social environments impact human and environmental health outcomes. The course will draw on research articles, theoretical discussions, and empirical examples from fields including toxicology, exposure science, environmental chemistry, epidemiology, sociology, history, policy studies, and fiction. Particular attention will be paid to the use of science to develop regulation, the role of social movements in identifying environmental health problems, and inequalities associated with environmental exposures. This course will be reading, discussion, and writing intensive. May be elected as Sociology 329, but must be elected as Environmental Studies 329 to satisfy the interdisciplinary course requirement in environmental studies. Prerequisites: Environmental Studies 120 and 207.

335 Romantic Nature
Not offered 2017-18 4 credits
Why does nature inspire us? Where did our understanding of nature come from? We have inherited our interactions with nature from a variety of sources: The Enlightenment was marked by political, intellectual, and scientific revolution and attempted to explain the world through science. The Romantics, on the other hand, reacted by trying to restore some mystery to Nature and to acknowledge its sublime power. This Nature ideal spread throughout Europe and then on to America, where European Romanticism inspired writers like Emerson, Thoreau, Whitman, and their contemporaries’ nature writing, which continues to exert influence on the American understanding of the natural world. This course will look at where American Transcendentalists and Romantics found inspiration. Students will read key literary and philosophical texts of the Romantic period, focusing on Germany, England, and America and explore echoes of these movements in the twentieth and twenty-first centuries: How do the Romantics continue to influence the discourse of environmentalism in America and around the world? Is the Romantic impulse at work in the establishment of the national parks system? Can we see echoes of the Romantic Nature ideal in narratives of toxic, post-industrial landscapes? May be elected as German Studies 335.

339 Writing Environmental Disasters
Fall Jones 4 credits
From natural disasters (earthquakes, floods, storms) to man-made ecological catastrophe (nuclear accidents, oil spills, the thinning ozone layer), environmental disaster inspires fear, rage, and action. This course will focus on fiction and non-fiction that meditates on these events and our reactions to them. We will examine the ways in which literature and the other arts depict disaster, how natural disaster descriptions differ from those of man-made environmental crisis, whether humans can coexist peacefully with nature or are continually pitted against it, and how literature’s depiction of nature changes with the advent of the toxic, post-industrial environment. Authors discussed may include Kleist, Goethe, Atwood, Ozeki, Carson, Sebald, and others. May be elected as German Studies 339.

340 Environmental Radicals in Literature
Not offered 2017-18 4 credits
Much contemporary environmental thought provides a radical critique of industrial and postindustrial society, but in earlier times, the first true environmental thinkers challenged systems of agriculture, market economics, land ownership, and
urbanism. What was once radical moved toward the center. In this course, students will examine the radical tradition of environmental thought as it has been expressed in literary and other texts. Bioregionalism, ecofeminism, agrarian communalism, Luddism, Deep Ecology, eco-centrism, and other radical environmental expressions will be examined critically. Works by Hawthorne, Thoreau, Ed Abbey, Kirk Sale, Gary Snyder, Susan Griffin, Paul Shepard, David Abram, and others may be included. Offered in alternate years.

347 The Nature Essay
Spring Snow 4 credits
The class will be conducted as a nonfiction prose writing workshop in which students read and comment on each other’s writing. After examining published works chosen as models, students will write essays in the nature-writing tradition, selecting approaches from a broad menu. Nature-writing includes literary natural history; “science translation writing”; essays on current environmental issues; personal essays based on engagement with land, water, wildlife, wilderness; travel or excursion writing with a focus on nature; “the ramble”; and other approaches. Students will learn how contemporary nature-writers combine elements of fiction, scientific descriptions, personal experience, reporting, and exposition into satisfying compositions. Prerequisite: consent of instructor.

349 Regional Literatures of Place: The West and the South
Spring Snow 4 credits
The literatures of both the American West and the American South often reflect political struggles. Issues of federalism and states’ rights, economic dependency on the land, the rapid and radical transformation of an indigenous economy and ecology, and the strain of history stand in the foreground. This seminar will examine literary regionalism by focusing on southern and western writers whose works emanate from and reinforce the ethic and spirit of place. Several of the “Southern Agrarians” may be included along with William Faulkner, Eudora Welty and Flannery O’Connor. Western writers may include Bernard DeVoto, Wallace Stegner, Cormac McCarthy, and James Welch. In addition, films may be used to illustrate the peculiar burden of the contemporary western writer. Offered in alternate years.

353 Environmental Justice
Not offered 2017-18 4 credits
How are environmental problems experienced differently according to race, gender, class and nationality? What do we learn about the meaning of gender, race, class, and nationality by studying the patterns of environmental exposure of different groups? Environmental justice is one of the most important and active sites of environmental scholarship and activism in our country today. This course integrates perspectives and questions from sciences, humanities, and social sciences through the examination of a series of case studies of environmental injustice in the United States and worldwide. Biology and chemistry figure centrally in links between environmental contaminants and human health. Systematic inequalities in exposure and access to resources and decision-making raise moral and ethical questions. Legal and policy lessons emerge as we examine the mechanisms social actors employ in contesting their circumstances. This course will be reading, discussion, and research intensive. May be elected as Sociology 353, but must be elected as Environmental Studies 353 to satisfy the interdisciplinary course requirement in environmental studies. Prerequisite: prior coursework in Sociology or Environmental Studies 120, or consent of instructor.

358 Ecocriticism
Not offered 2017-18 4 credits
This course explores the emergence of ecocriticism in the 1990s and its subsequent evolution as a recognizable school of literary and social criticism. Students will analyze foundational texts underpinning ecocritical theory, beginning with Joseph Meeker’s The Comedy of Survival, then move on to more recent texts that seek to expand ecocriticism beyond the boundaries of nature-writing. Students will discuss, present, and write ecocritical analyses of various literary works. Offered in alternate years.

360 Environmental Writing and the American West
Not offered 2017-18 4 credits
This course explores how writers and others conceptualize and portray various aspects of the American West. Emphasis is placed on the analysis of a variety of genres, including nature writing, political journalism, creative writing, poetry, and writing for interdisciplinary journals in environmental studies. We will write daily, and we will often read aloud to one another from our work. Goals include developing a voice adaptable to multiple audiences and objectives, understanding modes of argument and effectiveness of style, learning to meet deadlines, sending dispatches, reading aloud, and moving writing from the classroom to public venues. The course will be sequentially team-taught in the eastern Sierra Nevada region of California and southeastern Utah. Required of, and open only to, students accepted to Semester in the West. This
course can be used by environmental studies majors to satisfy environmental studies-humanities credits within the major. 

**Prerequisite:** acceptance into the Semester in the West Program.

### 362 The Cultural Politics of Science
**Not offered 2017-18**  
**4 credits**  
An upper-level introduction to the widening field known as science and technology studies (STS). Interdisciplinary in scope, this course primarily draws on ethnographic attempts to understand how science and technology shape human lives and livelihoods and how society and culture, in turn, shape the development of science and technology. Throughout the course, we will be particularly concerned with ways that scientific visions and projects, broad in scope, articulate, mirror, distort, and shape hierarchies based on such categories as gender, race, class, development, definitions of citizenship, understandings of nature, the production of knowledge, and global capitalism. Topics may include race-based pharmaceuticals, climate debates and “natural” disasters, genomics, politicized archaeology, science in postcolonial contexts, DNA fingerprinting, clinical trials, cyborgs, nuclear weapons production, and human/nonhuman relationships. May be elected as Anthropology 360, but must be elected as Environmental Studies 362 to satisfy the interdisciplinary course requirement in environmental studies.  

**Prerequisites:** Environmental Studies 120 and 207.

### 365 Other Earths: Environmental Change and Speculative Fiction
**Not offered 2017-18**  
**4 credits**  
As scientists in the recently-christened Anthropocene contemplate solutions to the crises of climate change, growing energy needs, species extinction, and population growth, the language of science grows ever closer to that of science fiction. In literary and artistic representations of these crises, some find conventional, non-speculative fictions lacking, focusing primarily on the present and the past. Speculative fiction, however, provides us with a language to think about the future. This course will engage seriously with works of science fiction ranging from H. G. Wells and Kurt Vonnegut to Ursula K. Le Guin and Kim Stanley Robinson, exploring ways in which these works use the language of science and speculative futures to explore that which is most human. We will study literary representations of climate change and its possible solutions, non-humans and post-humans, future Earths and other worlds in order to understand how it is that we as humans interpret, react to, and struggle against the emergent conditions which challenge our very survival. Students will practice a variety of approaches to literary analysis. This course will also explore the role of artistic representations of the environment in shaping our understanding of the environment and of environmental crisis.

### 367, 368 Special Topics
**1-4 credits**  
An investigation of environmentally significant issues centered on a common theme. The course may include lectures by off-campus professionals, discussions, student presentations, and field trips. Any current offerings follow.

### 369 Food, Agriculture, and Society
**Not offered 2017-18**  
**4 credits**  
Why does the food system work the way it does, and how can it be changed? This advanced reading seminar draws together classic texts from political theory, geography, literature, sociology, anthropology, history, political economy, and agroecology to explore the workings of the global food system. It builds on Politics 119, but previous completion of this course is not required. May be elected as Politics 369, but must be elected as Environmental Studies 369 to satisfy the interdisciplinary course requirement in environmental studies.  

**Prerequisite:** Environmental Studies 207.

### 390 Independent Study
**Fall, Spring**  
**Staff**  
**1-4 credits**  
A series of readings or a program of individual research of approved environmental topics.  

**Prerequisite:** consent of instructor.

### 408 SW Western Epiphanies: Integrated Project
**Not offered 2017-18**  
**4 credits**  
In this course students will be responsible for developing a final project based on Semester in the West experiences with the objective of integrating knowledge from courses in politics, ecology, and writing. Each student will produce a final project that sheds light on a substantive issue addressed on Semester in the West. Students must also present their project in a public forum and publish it as an audiovisual podcast on the Semester in the West website. Required of, and open only to students accepted to Semester in the West.  

**Prerequisite:** acceptance into the Semester in the West Program.
459 Interdisciplinary Fieldwork
4 credits
Students may earn credit for interdisciplinary fieldwork conducted on programs approved by the Environmental Studies Committee. Fieldwork must integrate knowledge from at least two areas of liberal learning, including the sciences, social sciences, and the humanities. This course may be used to satisfy the interdisciplinary coursework requirement for environmental studies majors. Prerequisite: admission to field program approved by the Environmental Studies Committee for interdisciplinary credit. Any current offerings follow.

479 Environmental Citizenship and Leadership
Fall, Spring Fall: Persico and Snow; Spring: Blavascunas and Snow 2 credits
An intensive course in environmental problem-solving, with an emphasis on developing skills necessary for effective environmental citizenship and leadership. Students will first engage in readings and discussions to enhance their understanding of environmental decision-making processes and institutions. Then they will work individually and in teams to study active environmental disputes, with the ultimate aim of recommending formal solutions. This course is required of, and open only to, environmental studies majors in their senior year. Field trips and guest presentations may be included.

488 Senior Project
Fall, Spring Staff 1-3 credits
The student will investigate an environmental issue of his or her own choice and prepare a major paper. The topic shall be related to the student’s major field of study and must be approved by both major advisers.

498 Honors Project
Fall, Spring Staff 1-3 credits
An opportunity for qualified environmental studies senior majors to complete a senior project of honors quality. Requires the student to adhere to application procedures following the guidelines for honors in major study. Students enrolled in this course must also participate in and meet all requirements of the Environmental Studies 488 course.

The following are course titles of required and/or recommended environmental studies courses. See detailed descriptions under the relevant departmental heading in this catalog.

Biology 115 Natural History and Ecology
Biology 118 Agroecology
Biology 122 Plant Biology
Biology 125 Genes and Genetic Engineering
Biology 127 Nutrition
Biology 130 Conservation Biology
Biology 215 Plant Ecology
Biology 277 Ecology
Biology 327 Biology of Amphibians and Reptiles
Biology 350 Evolutionary Biology
Chemistry 100 Introduction to Environmental Chemistry and Science
Chemistry 388 Environmental Chemistry and Engineering
Economics 100 Principles of Microeconomics and the Environment
Economics 277 Global Environmental and Resource Issues
Economics 477 Environmental and Natural Resource Economics
Geology 125 Environmental Geology
Geology 130 Weather and Climate
Geology 250 Late Cenozoic Geology and Climate Change
Geology 301 Hydrology
History 150 Animal, Vegetable, Mineral
History 232 Changing Landscapes
History 205 East Asian Environmental History
History 262 People, Nature, Technology: Built and Natural Environments in U.S. History
History 231 Oceans Past and Future
History 355 Pacific Whaling History
Philosophy 120 Environmental Ethics
Philosophy 127 Ethics
Philosophy 345 Animals and Philosophy
Physics 105 Energy and the Environment
Politics 119 Whitman in the Global Food System
Politics 124 Introduction to Politics and the Environment
Politics 147 International Politics
Politics 287 Natural Resource Policy and Management
Politics 309 Environment and Politics in the American West
Politics 339 Nature, Culture, Politics
Religion 227 Christian Ethics
Sociology 229 Environmental Sociology
Sociology 348 Technology and Society
Sociology 349 Environmental Social Movements
Sociology 353 Environmental Justice