

# Environmental Studies

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*Co-Director:* Amy Molitor, Environmental Studies  
Susanne Altermann, Biology  
Phil Brick, Politics (Semester in the West, Fall 2018)  
Eunice L. Blavascunas, Anthropology and Environmental  
Studies (on Sabbatical 2018-2019)  
Emily Jones, German Studies and Environmental  
Humanities (on Sabbatical, Fall 2018)

Tim Parker, Biology  
Lyman Persico, Geology and Environmental Studies  
Kathleen Shea, Environmental Humanities/Classics  
Donald Snow, Environmental Studies

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 program introduces students to a wide variety of perspectives that examine the many connections between humans and nature. To do this, the program combines a broad set of relevant courses in the natural and social sciences as well as the humanities. The basic preparation can then transfer easily to further graduate training or to an immediate career in research, policy, or some other professional environmental direction. The hallmarks of the Whitman program are its multidisciplinary organization, and local and regional in empirical emphasis. Students wrestle with the challenges, and come to understand the necessities, of an interdisciplinary approach in the elucidation of any environmental problem. They develop a literacy in understanding their Walla Walla environmental address, so they can appreciate the deep links between their temporary community and the surrounding human and natural environments. Field trips and internship opportunities are a vital part of this experience.

## Program Goals

- To foster critical thinking skills in relation to environmental problems.
- To enhance environmental literacy.
- To encourage interdisciplinary integration of disciplinary approaches to environmental concerns.
- To develop communication skills in a wide variety of formats designed for diverse audiences.

## Learning Outcomes

Students will be able to:

- Articulate an understanding of relevant concepts that underlie environmental processes, thought and governance in the natural sciences, social sciences and humanities.
- Integrate and apply sophisticated perspectives from multiple disciplinary approaches that address complex environmental problems.
- Design and conduct research on environmental topics. Research could include a variety of methods (quantitative, qualitative, artistic, rhetorical, spatial, etc.) as well as in a variety of contexts (senior thesis, summer research, course assignments, study abroad, etc.).
- Communicate effectively in both written and oral formats to academic and non-academic audiences.

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 Wallawas 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 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 302/German Studies 301 *ST: Moles, Memoirs and Metamorphosis*; 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 262 *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\**; 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: Anthropology 246 *ST: Indigenous, ecologies, epistemologies, religion(s), ontologies*; 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 206 *European Environmental History to 1800*; History 231 *Oceans Past and Future: Introduction to Marine Environmental History*; History 232 *Changing Landscapes: Introduction to Terrestrial Environmental History*; History 262 *People, Nature, Technology: Built and Natural Environments in U.S. History*; History 263 *From Farm to Fork: Slow Food, Fast Food, and European Foodways*; History 355 *Pacific Whaling History*; 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*; Politics 309 *Environment and Politics in the American West\**; Politics 339 *Nature, Culture, Politics*; Sociology 229 *Environmental Sociology*; Sociology 349 *Environmental Social Movements*.

**Interdisciplinary coursework:** Take a minimum of one of the following courses. Course substitutions for interdisciplinary coursework must be approved by the Environmental Studies Committee. All offerings of Environmental Studies 203 and 303 *Interdisciplinary Studies*; Environmental Studies 259 *Culture, Environment and Development in the Andes*; Environmental Studies 305 *Water in the West*, Environmental Studies 306 *Culture, Politics, Ecology*; Environmental Studies 307 *Beastly Modernity: Animals in the 19<sup>th</sup> Century*; Environmental Studies 322 *The Anthropocene*; Environmental Studies 327 *Biodiversity*; Environmental Studies 329 *Environmental Health*; Environmental Studies 353 *Environmental Justice*; Environmental Studies 362 *The Cultural Politics of Science*; Environmental Studies 369 *Food, Agriculture, and Society*; Environmental Studies 408 *SW Western Epiphanies: Integrated Project\**; and Environmental Studies 459 *Interdisciplinary Fieldwork*.

\* Offered only to students admitted to Semester in the West

**Senior coursework:** Take Environmental Studies 479 *Environmental Citizenship and Leadership*.

Additional senior year requirements vary by major. For majors where a thesis is required, students must complete an interdisciplinary research project with a grade of C- or better. In addition, all environmental studies majors must pass an oral examination within their area or department of concentration. For majors that do not require a senior thesis, or if a student's senior thesis is deemed insufficiently interdisciplinary by the Environmental Studies Committee, an oral examination in Environmental Studies also is required.

## Environmental Humanities

Patrick Frierson, Philosophy (on Sabbatical 2018-2019)

Rebecca Hanrahan, Philosophy, *Chair, Division II*

Emily Jones, German Studies and Environmental

Humanities(on Sabbatical, Fall 2018)

Kathleen Shea, Environmental Humanities/Classics

Donald Snow, Environmental Humanities

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.

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 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/German 335 *Romantic Nature*; Environmental Studies/German Studies 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 262 *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 352 *Art/Environment*; Art History and Visual Culture Studies 248 *Ways of Seeing: Japanese Art and Aesthetics*; 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*; 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 335/German 335 *Romantic Nature*; Environmental Studies 339/German Studies 339 *Writing Environmental Disaster*; Environmental Studies 340 *Environmental Radicals in Literature*; 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*; Philosophy 120 *Environmental Ethics*; Philosophy 262 *Animals and Philosophy*; Philosophy 300 *Emerson*; Religion 290; World Literature 328 *Haiku and Nature in Japan*.

**Senior Assessment:** Take Environmental Studies 488 *Senior Project* or Environmental Studies 498 *Honors Project*. The senior assessment will also include an hour-long oral examination of the senior thesis.

\*Offered only to students admitted to Semester in the West

**Honors in the Major:** In the Environmental Humanities major, students do not apply for admission for honors candidacy. Students majoring in Environmental Humanities should register for "Environmental Studies 488, Senior Thesis" in their final semester. If at the Senior Thesis Oral Examination, Committee members determine that the thesis written is an honors-level thesis, the student will earn Honors in Major Study, provided that he or she additionally:

- earns distinction in the Senior Thesis Oral Examination,
- attains sufficient Cumulative and Major GPA's, as specified in the Faculty Code (3.3 and 3.5 respectively),
- earns a grade of A- or above on the thesis.

The Program Director will notify the Registrar of those students attaining Honors in Major Study no later than the beginning of the third week of April, at which time the Registrar will change the thesis course in which each Honors student is registered from ENVS 488 to ENVS 498. Two copies of each Honors Thesis must be submitted to Penrose Library no later than Reading Day.

## Environmental Sciences

Susanne Altermann, Biology

Nicholas Bader, Geology

Mark Beck, Physics

Lyman Persico, Geology and Environmental Studies

Frank Dunnivant, Chemistry

Delbert Hutchison, Biology

Tim Parker, Biology

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- or water-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.

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, 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 245, 246, 251, 252; 310; and at least two of 320, 346, 388. Also required are Mathematics 125, 126, and Physics 145, 155, or 165, and 146, 156, or 166; one credit of either Chemistry 401 or 402 taken no later than the second to the last semester at Whitman; and at least one credits of Chemistry 490 or 498.

#### **Geology-Environmental Studies:**

Geology 125 and 126 (or 110 and 111, or 120 and 121), 227, 270, 350, 358, 405, 420 or 301, 470; Chemistry 125, 126, 135; Mathematics 125; one additional course from a supporting science list which includes any three- or four-credit courses from the department of Mathematics, Chemistry, Physics, or Computer Science at a catalog number higher than 125; and *either* an additional course from the supporting science list *or* Biology 115, 130, or 177. 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, and 244.

## **Environmental Social Sciences**

Jakobina Arch, History (on Sabbatical, Spring 2019)

Alissa Cordner, Sociology

Eunice L. Blavascunas, Anthropology and Environmental Studies (on Sabbatical 2018-2019)

Rosie Mueller, Economics

Nina Lerman, History

Aaron Bobrow-Strain, Politics

Jason Pribilsky, Anthropology, *Chair, Division I*

Philip D. Brick, Politics (Semester in the West, Fall 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. Available majors and required courses appear below.

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 30 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 201 *The Strange Familiar: Fundamentals of Cultural Anthropology*.

Core Anthropology Courses: Two courses, eight credits, from the department's offerings in Environmental Anthropology from: Anthropology 246 ST: *Indigenous, ecologies, epistemologies, religion(s), ontologies*; 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.

Electives: Take elective courses, eight credits: Anthropology 257 *Chinese Society and Culture*, Anthropology 258 *Peoples of the Tibeto-Burman Highlands*, Anthropology 259 *Culture, Environment, and Development in the Andes*, Anthropology 317 *Language and Culture*, Anthropology 349 *Urban Life: Readings in the Anthropology of Cities*, Anthropology 358 *Social Bodies, Diverse Identities: the Anthropology of Sex and Gender*.

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):

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 155 *Animal, Vegetable, Mineral*, History 205 *East Asian Environmental History*, History 206 *European Environmental History*, History 262 *People, Nature, Technology*, History 263 *Farm to Fork*, History 307 *Beastly Modernity*, and History 355 *Pacific Whaling History*.

Senior year requirements: Take History 401, and successfully complete senior assessments in History (a written field exam or honors thesis, plus an oral exam) with the oral exam touching on elements from all three distribution areas within Environmental Studies. 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, Persico; Spring: Altermann**      **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.

### **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.

### **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****Not offered 2018-19****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****Not offered 2018-19****4 credits**

This course explores a variety of philosophical conceptions of nature and the natural world in Modern European philosophy, from Francis Bacon to 20<sup>th</sup> century thinkers such as Heidegger. May be elected as Philosophy 227.

**230 The Cultural and Literary Life of Rivers****Spring****Shea****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****Not offered 2018-19****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****Fall****Snow****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 2018-19****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 201, 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.

## **260 VT: Geology in the Field: Mojave Desert**

**Spring**

**Persico**

**1 credit**

Course will introduce students to the world-class geology and ecology of the Mojave Desert. The class will also explore the unique environmental issues of the Mojave including water resource management, alternative energy, nuclear waste, and anthropogenic impacts to ecosystems. Includes 9-day field trip and camping. *Corequisite:* Geology 258.

## **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.

## **302 ST: Moles, Memoirs, and Metamorphosis: Animals and Text**

**Fall**

**Hoffman**

**4 credits**

How do we understand humanity in reference to and against animality? How do poetic texts throughout history challenge the boundaries between humans and animals? How do writers envision the links between poetry, language, and animals in their work? And how do they make sense of and cope with environmental crises that threaten animals and humans alike? This course explores how writers and artists of the German-speaking world from Romanticism to Postmodernism reflect on and challenge the boundaries between humans and animals and animals and language. Students will engage in close and critical reading of literary texts by German speaking author and study theoretical texts from the fields of cultural and literary studies, continental philosophy, environmental humanities, and critical animal studies. Course taught in English. For students electing German Studies 301 rather than Environmental Studies 302, some discussion, reading and writing assignments will be completed in German. May be elected as German Studies 301. *Prerequisite:* any 300-level German Studies course or consent of instructor.

## **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**

**Not offered 2018-19**

**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 20<sup>th</sup> 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 19<sup>th</sup> 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**

**Not offered 2018-19**

**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 19<sup>th</sup> Century**

**Not offered 2018-19**

**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**

**Not offered 2018-19**

**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**

**Spring**

**Shea**

**4 credits**

As mothers, witches, nymphs, 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**

**Not offered 2018-19**

**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. *Course fee and international airfare estimate will be announced in Fall 2017.*

### **322 The Anthropocene**

**Spring**

**Brick**

**4 credits**

This course is a discussion seminar on the implications of climate change for human societies, natural communities, and hybrid human/natures in the Anthropocene, the age of man. Discussions will focus on controversies surrounding the relatively new concept of the Anthropocene itself and how this concept unsettles understandings of nature, wildness, sustainability, democracy, citizenship, global capitalism, environmental justice, and environmental governance. Our approach will be interdisciplinary, drawing on readings in climate politics, sociology, anthropology, philosophy and critical climate studies. Although our focus will be on theoretical and conceptual debates, we will also explore proposed climate mitigation and adaptation strategies such as low carbon social and economic systems, geo-engineering, carbon sequestration, and landscape-scale conservation efforts. A field trip and a longer research paper may be required. May be elected as Politics 322, but must be elected as Environmental Studies 322 to satisfy the interdisciplinary course requirement in environmental studies.

### **327 Biodiversity**

**Spring**

**Parker**

**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**

**Not offered 2018-19**

**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**

**Spring**

**Jones**

**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**

**Not offered 2018-19**

**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**

**Spring**

**Snow**

**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**

**Not offered 2018-19**

**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 stain 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**

**Spring**

**Cordner**

**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 2018-19**

**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**

**Fall**

**Brick**

**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 2018-19**

**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 2018-19**

**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 2018-19**

**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**

**Fall**

**Brick**

**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: Snow; Spring: Staff**

**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 262 *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*

