

# Environmental Studies

## Course Offerings Fall 2019

### ENVR 150 INTRODUCTION TO ENVIRONMENTAL STUDIES (4)

*MWF 9:10am — 10:05 am*                      *PENGL-225*                      *Knight, T*

*MWF 1:50pm — 2:45pm*                      *PENGL-225*                      *Grosse, C*

Interdisciplinary introduction to environmental studies. Case-based investigation of environmental issues combining perspectives from the social sciences, natural sciences, and humanities. Topics will vary but may include such subjects as endangered species, air/water pollution, environmental justice/racism, animal rights, global warming, ecotourism, agriculture, nature writing, campus ecology, and others.



### ENVR 175 EARTH SYSTEMS SCIENCE (NS) (4)

*MWF 10:20am — 11:15 am*    *PENGL 225*                      *Storlien, J*

*Laboratory M 12:40 pm— 3:40 pm*    *PENGL 210*                      *Storlien, J*

*Laboratory R 12:45 pm— 3:45 pm*    *PENGL 210*                      *Storlien, J*

An interdisciplinary introduction to the science underlying environmental issues. This course will focus on earth systems science, providing a basic understanding of how the earth's hydrosphere, lithosphere, atmosphere and biosphere work and how they interact.

### ENVR 250 ENVIRONMENTAL METHODS & ANALYSIS (4)

*MWF 11:30 am— 12:25 pm*    *PENGL 236*                      *Grosse, C*

This course serves as an introduction to the analytical tools and metrics of environmental studies, providing students with quantitative and qualitative methodological skills germane to environmental problem solving that can be applied in upper division courses and in their own research projects. Emphases will include basic quantitative literacy, units of measurement commonly used in environmental fields, estimation, basic applied statistical analysis, cost-benefit and other economic metrics, textual analysis of survey and interview data, and data visualization through construction of graphics and maps. Students will also be guided through the process of collecting both primary and secondary data. Students will learn to apply these methods and to critique the use of similar methods by the media, in marketing campaigns and by other researchers.





ENVR 275 **HUMANS AND THE ENVIRONMENT (NS)** (4)

TR 9:35 am—10:55 am PENGL 206 Knight, T  
Laboratory T 12:45pm—3:45pm PENGL 206 Knight, T  
Laboratory R 12:45pm—3:45pm PENGL 206 Knight, T

An interdisciplinary scientific exploration of environmental issues through case studies. Specific case studies will be chosen by the instructor, but will typically center around the broad topics of population, climate change, food and agriculture, biodiversity, pollution and energy.

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ENV 300T **SUSTAINABLE AGRICULTURE SCIENCE** (4)

TR 9:35 am—10:55 am PENGL 210 Storlien, J  
Laboratory T 12:45 pm—3:45 pm PENGL 210 Storlien, J

Managing agricultural landscapes to provide the world with sustainable food, fiber, and fuel while conserving the environment and addressing climate change is a grand challenge of 21st century agriculture. This course examines agroecosystems as complex adaptive systems characterized by interactions and feedbacks among organisms, the atmosphere, climate, and the cycling of elements at local to global scales. Key elemental cycles of carbon and nitrogen and how human activities are affecting these cycles, and creating environmental challenges will be emphasized. Soil and crop management practices and resulting interactions between soil, water, organisms, and organic and chemical inputs form the basis for discussions on diverse cropping systems, soil health, water quality and quantity, bioenergy, greenhouse gases, and sustainability. Laboratory experiences will involve local field studies and a student-designed experiment to further understanding of human impacts on drivers of global climate change.



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ENVR 300Y **ENVIRONMENTAL HAZARDS, RISKS, AND RESILIENCE** (4)

MWF 10:20am—11:15am PENGL 212 Enriquez, J

This course reviews theories and practices for risk reduction, including natural hazards, catastrophes, and acts of terrorism, all of which produce devastating impacts on social structures and the built and natural environments. We address these issues through readings selected from anthropology, geography, sociology, and planning to understand how governments, markets, and societies respond and adapt to the consequences of climate change, droughts, floods, tornados, tsunamis, and wildfires. Students will explore human subjectivity to hazards and risks, including measurement tools used for assessing vulnerability and the causes and consequences of environmental-based migration and displacement. Through the development of a case study, students will critically reflect on the roles of international and state institutions in community recovery efforts and how policies of programs prioritized or omitted social and environmental justice objectives. Finally, students will develop a final paper suggesting actionable strategies for policymakers to respond to an environmental crisis and pathways to a more resilient future.

**The instructor is Jared Enriquez, a new Teaching Fellow who will join the department in Fall 2019. Mr. Enriquez is currently a doctoral candidate in City and Urban Planning at Cornell University in Ithaca, New York.**





### ENV 303A CLIMATE ACTION WORKSHOP (2)

*T* 11:10am —12:30pm *PENGL 212 Grosse, C*

This course involves exploration of climate policy and action at the national, regional, and local level. Meeting once per week in the fall semester, students will learn about climate change and its effects, policies, and technologies to address climate change, and debates over taking action, focused on the national and local level. Each student will focus on one aspect of climate change at the regional scale, writing a research paper based on primary research with regional organizations and policy makers, including attendance at local events and interviews with stakeholders. This course can be combined with ENV 305A: Global Climate Workshop to create a four-credit course. Sophomore standing required. No course prerequisites. Offered annually.

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### ENV 305A GLOBAL CLIMATE POLICY (2)

*R* 11:10am — 12:30pm *PENGL 212 Grosse, C*

This course involves preparation for, research in support of, and attendance at the United Nations Framework Convention of Climate Change (UNFCCC) annual Conference of Parties (COP). Meeting once per week in the fall semester, students will learn about climate change and its effects on policies and technologies to address climate change, and debates over taking action, all at the global level. Students will also learn about the Intergovernmental Panel on Climate Change, and the UNFCCC, in preparation for attending the conference. Each student will focus on one aspect of climate change, writing a research paper that includes both preliminary research before the conference then primary research at the conference itself, attending sessions devoted to that issue and interviewing stakeholders. Participants are required to attend the COP during the semester they take this course. Enrollment is by permission of instructor only. This course can be combined with ENV 303A: Local Climate Action Workshop to create a four-credit course. Sophomore standing required. No course prerequisites.



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### ENVR 315 AMERICAN ENVR CLASSICS (HM) (4)

*TR* 11:10—12:30 pm *PENGL 229 Lyndgaard, K*

This course explores the long history of American writing about nature and the environment, with particular attention to questions of the human place in nature. Some of this literature is about exploration—what is out there? Some of this is about the utility of nature—what can we do with vast forests, grasslands, or rivers? But the most interesting examples are often about what we can learn from nature and what obligations we may have to non-human life—what is our place in nature? The styles and traditions of American nature/ environmental writing have changed dramatically over time and today are quite diverse, incorporating at times elements of philosophy, theology, ethics, science, economics, politics, and art. Through reading, thinking, discussing, and writing critically about a wide range of examples from the genre students will gain an appreciation for the depth of the American literary approach to nature, become familiar with many of the writers and texts that could be said to form a “canon” in the field, and will learn to actively engage such writing from a variety of academic perspectives including historical analysis,



### ENVR 320 RESEARCH COLLOQUIUM (4)

*MWF 1:50—2:45 pm P ENGL 232 Larson, D*



In depth, interdisciplinary study of a single topic in environmental studies. By design the course will provide both depth of exposure in a topic and methodological instruction and application of research skills in the field, as preparation for the research requirements of other upper division ENVR courses and for the application in post-collegiate career settings. Topics will vary each semester, but skills covered will include group discussion, formal oral presentation, poster design and presentation, secondary literature analysis, research design, collaborative project design and implementation, and written presentation of research results. This course is intended for junior/senior Environmental Studies majors and must be taken before enrolling in the ENVR 395: Research Seminar capstone.

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### ENVR 395 RESEARCH SEMINAR (4)

*MWF 1:50pm —2:45 pm P ENGL 238 Knight, T*

Capstone seminar for majors/minors; intensive research project and formal presentation in collaborative setting. Prerequisite: senior standing or permission of instructor.



### ENVR 397 INTERNSHIP (1 credit minimum)

Supervised career exploration which promotes the integration of theory with practice. An opportunity to apply skills under direct supervision in an approved setting. Prerequisites: approval of the department chair and a faculty moderator; completion of the pre-internship seminar.

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## Cross-Listed ENVR Courses

### PHIL 322 ENVIRONMENTAL ETHICS (ES) (4)

*MWF 9:10 am— 10:05 am QUAD 341 Wright, C*

This course investigates a variety of ethical issues that arise from consideration of the relation between humans and the non-human natural world (i.e., the environment, animals, land, ecosystems, wilderness areas). This course will introduce students to the basic concepts of environmental ethics, to specific ethical issues associated with environmental policy, and to philosophical theorizing about the environment.





### COMM 309 ENVIRONMENTAL RHETORIC (HM) (4)

TR 12:45 pm— 2:05 pm QUAD349 Hurt, N

This course examines how people use communication to articulate viewpoints about the natural environment in the public sphere. Students study an array of environmental discourse, including speeches, advocacy campaigns, advertisements, image events, environmental reporting and news, film and media, to see how these messages convey meaning and shape audience attitudes and behavior about the environment.

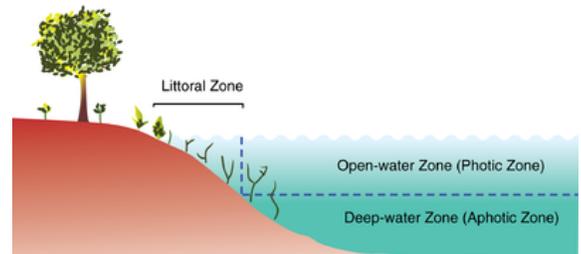
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## Non-ENVR Courses of Interest

### BIOL 337 AQUATIC ECOLOGY (4)

TR 11:10am — 12:30pm PENGL 369 Lamberts, W

An exploration of the ecology of lakes, streams, wetlands and other aquatic ecosystems. Topics include lake ontogeny, physical limnology, ecological interactions in lakes and streams and lake management. Laboratories take place on campus lakes, on shore and in the lab. BIOL 202 or ENVR 175 and 275 prerequisites.



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### ECON 318 NATURAL RESOURCE/ ENVIRONMENTAL ECONOMICS (4)

MWF 2:10pm — 3:05pm MAIN 103 CSB Staff

Examination of the economics of natural resources and the environment with special focus on environmental policy formulation. Topics include inter-temporal efficiency criteria, cost/benefit analysis, and sustainability issues. Econ 111 prerequisite.

