

ENVIRONMENTAL STUDIES CONCENTRATION

Chair: Associate Professor Nicolas Howe

Associate Director: Lecturer Sarah Gardner

Associate Professor: N. Howe. Assistant Professor: G. Forte. Assistant Professor: L. Martin. Assistant Professor: B. Meché. Class of 1946 Visiting Distinguished Professor of Environmental Studies: D. Cassuto. Visiting Assistant Professor: S. Auer. Lecturers: A. Apotsos, S. Gardner, J. Racela. Research Associates: H. Art, R. Bolton, D. Dethier, L. Venolia.

Environmental Studies Advisory Committee (2021-2022): Professors: R. Bradburd, J. French. Associate Professors: N. Howe, J. Constantine, Assistant Professor: L. Martin, B. Meché, Lecturers: S. Gardner, J. Racela.

Maritime Studies Advisory Committee: Chair: R. Cox. Professors: J. Constantine, S. Jacobson, C. Thorne. Associate Professor: T. Pusack. Assistant Professor: S. Zepeda. Associate Dean: J. Gerry. Mystic Executive Director: T. Van Winkle.

FACULTY AFFILIATES OF THE PROGRAM IN ENVIRONMENTAL STUDIES (2022-2023)

Alex Apotsos, Visiting Lecturer in Geosciences

Henry W. Art, Professor of Biology and Environmental Studies, Emeritus

Sonya Auer, Visiting Assistant Professor of Biology

Lois M. Banta, Professor of Biology

Ron D. Bassar, Assistant Professor of Biology

Julie C. Blackwood, Associate Professor of Mathematics

Roger E. Bolton, Professor of Economics, Emeritus

Ralph Bradburd, David A. Wells Professor of Political Economy

Alice C. Bradley, Assistant Professor of Geosciences

Nicole G. Brown, Assistant Professor of Classics

Cory E. Campbell, instructional Technology Specialist

Anthony Carrasquillo, Assistant Professor of Chemistry

Gregory Casey, Assistant Professor of Economics

David Cassuto, Class of 1946 Visiting Distinguished Professor of Environmental Studies

Phoebe A. Cohen, Associate Professor of Geosciences

Jose E.A. Constantine, Associate Professor of Geosciences

Mea S. Cook, Associate Professor of Geosciences

David P. Dethier, Professor of Geosciences, Emeritus

Joan Edwards, Samuel Fessenden Professor of Biology

Laura Ephraim, Associate Professor of Political Science

Michael Evans, Assistant Director of The Zilkha Center

Jessica M. Fisher, Associate Professor of English

Antonia Foias, Professor of Anthropology and Sociology

Giuseppina Forte, Assistant Professor of Environmental Studies and Studio Art

Jennifer L. French, Rosenberg Professor of Environmental Studies and Spanish

Sarah S. Gardner, Lecturer in Environmental Studies

Matthew Gibson, Associate Professor of Economics

Allison Gill, Assistant Professor of Biology

Catherine Hall, Lecturer, Williams-Mystic Maritime Studies Program

Nicolas Howe, Associate Professor of Environmental Studies

Sarah Jacobson, Associate Professor of Economics

Andrew Jones, Manager, Hopkins Memorial Forest

Paul Karabinos, Professor of Geosciences

Joel Lee, Associate Professor of Anthropology

Scott Lewis, Assistant Professor of Physical Education and Director of Outing Club

James Manigault-Bryant, Professor of Africana Studies

Luana Maroja, Associate Professor of Biology

Laura Martin, Assistant Professor of Environmental Studies

Brittany Meché, Assistant Professor of Environmental Studies

Karen R. Merrill, Professor of History

Manuel Morales, Professor of Biology and Director of Research, Hopkins Forest

James Nolan, Washington Gladden 1859 Professor of Sociology

Julie Pedroni, Lecturer in Philosophy

Timothy Pusack, Assistant Professor of Marine Ecology, Williams-Mystic Maritime Studies Program

Jay Racela, Lecturer in Environmental Studies and Supervisor, Environmental Analysis Lab

David P. Richardson, Professor of Chemistry

Kenneth Savitsky, Professor of Psychology

David C. Smith, Senior Lecturer in Biology, Emeritus

David L. Smith, Professor of English

Greta F. Snyder, Visiting Assistant Professor of Women's, Gender, and Sexuality Studies

John W. Thoman, Jr., Professor of Chemistry

Claire Ting, Professor of Biology

Tom Van Winkle, Executive Director of The Williams-Mystic Maritime Studies Program

Sofia Zepeda, Assistant Professor, Maritime History, Williams-Mystic Maritime Studies Program

ENVIRONMENTAL STUDIES

Environmental issues call upon citizens, organizations, and governments to grasp complex scientific concepts, address conflicting human values, and make difficult economic, political and ethical choices. A proper understanding of environmental issues is therefore an interdisciplinary exercise. The concentration in Environmental Studies is designed to help students to:

- Effectively address complex environmental issues by integrating perspectives from the natural sciences, the social sciences, and the arts and humanities;
- Understand the physical nature of environmental systems;
- Understand the social, cultural, and historical factors that shape environmental thought, history, and behavior;
- Apply scientific methods to collect environmental data and evaluate environmental quality;
- Understand the political and economic factors that inform, enable, and constrain environmental action and policy;
- Develop significant understanding of one or more of the essential methodological approaches required in addressing environmental challenges;
- Have an appreciation for the ambiguity and uncertainty inherent in many environmental issues;

- Apply their learning in a practical setting.

The program is administered by the Center for Environmental Studies (CES), located in the Class of 1966 Environmental Center. Founded in 1967, CES is considered to be the first environmental studies center at a liberal arts college. In addition to the academic program described below, CES is the focus of a varied set of activities in which students lead and participate, often with other members of the Williams community. CES offers extensive resources including databases, funding for student-organizations and student-initiated activities, and generous support for summer research and internships. The Class of 1966 Environmental Center, a Living Building and the Program's home, includes a classroom, living room, study rooms, kitchen, as well as student gardens. CES manages the Hopkins Memorial Forest, a 2600-acre natural area 1.5 miles from campus, in which there are field-study sites and a laboratory, and where passive-recreation opportunities may be found in all seasons. CES also operates the Environmental Analysis Laboratory in Morley Science Center.

ADVISING

Majors (or first-years and sophomores interested in the major offered by CES) are encouraged to talk at any time with the Chair, Associate Director of Environmental Studies, or any other Environmental Studies faculty for advice. All incoming majors will be assigned a faculty advisor in the spring of their sophomore year.

Advisors for 2022-2023: Nicolas Howe, Sarah Gardner, Laura Martin, Brittany Meché.

STUDY AWAY

Many study away options are available to students in Environmental Studies, including the Williams-Mystic Maritime Studies Program. Students considering either a semester or year away who intend to major in Environmental Studies should consult the Chair or Associate Director of Environmental Studies and the Dean in charge of study abroad as early as possible to discuss their options. Students may take up to two courses outside of Williams toward their major but must have advance approval in writing from the Chair of Environmental Studies.

CONCENTRATION IN ENVIRONMENTAL STUDIES

The Environmental Studies concentration provides students with an opportunity to explore how humans interact with the environment, including physical, biological, philosophical, and social elements. The concentration is designed so that students will understand the complexity of issues and perspectives that inhere in environmental problems and will appreciate that most environmental issues lack distinct disciplinary boundaries. The goal of the concentration is to educate students to be well-informed, environmentally literate citizens who have the capacity to become active participants in the local and global community. To this end, the concentration is designed to develop the capability to think in interdisciplinary ways and to use synthetic approaches to solve problems while incorporating the knowledge and experiences gained from majoring in other departments at the College.

The Environmental Studies concentration is a six-course concentration in which students gain broad exposure to environmental studies while pursuing another major. In addition to the core introductory courses of ENVI 101 and ENVI 102, students pursuing the concentration will take one elective from each group that represents a broad category of inquiry: Environmental Policy; Humanities, Arts and Social Sciences; and the Natural World. In their junior or senior year, they will take a hands-on 400-level seminar.

THE MAJOR IN ENVIRONMENTAL STUDIES

The Environmental Studies major is a ten-course major. All majors are required to take ENVI 101, ENVI 102, and one 400-level Senior Seminar. ENVI 101 – Nature and Society: An Introduction to Environmental Studies, is a broad introduction to the field, emphasizing the humanities and social sciences. ENVI 102 – Introduction to Environmental Science, introduces students to the interdisciplinary study of the Earth's systems through the synthesis of physical, chemical, geological, and biological perspectives. The 400-level senior seminars focus on advanced interdisciplinary research and problem-solving in range of fields, including environmental planning, design, ethnography, and history. The remaining core requirements are comprised of three foundational 200-level courses, one from each of three lists of courses (see below). These lists represent the three main branches of the environmental curriculum: Environmental humanities, environmental social science/policy, and environmental science. Students choose, in consultation with their major advisor, the course they will take from each of the three lists.

In addition to these core courses, students choose four electives from a large body of courses in Environmental Studies and cross-listed courses in other fields. To ensure depth in the student's area of interest, at least three of these courses must be from one of the three curricular branches: environmental humanities, environmental social science/policy, and environmental science. Lists of approved electives will be updated each year. When declaring their major, students should consult with their major advisor to discuss which electives are right for them.

Planning for Prerequisites on your Path through the Major

While ENVI 101 or ENVI 102 are recommended starting points for the major, and are prerequisites for many other ENVI course offerings, please note that some of the course options for the major may have other courses as prerequisites that may not count toward the programs. For example, ENVI/ECON 213 (*Intro to Environmental and Natural Resource Economics*) has a prerequisite of ECON 110 (*Principles of Microeconomics*). We strongly suggest that you do advance planning to avoid being blocked from taking a relevant course. Students interested in the program are encouraged to consult with members of the Environmental Studies Program and to contact the Chair or Associate Director.

Credit for AP, IB, A-levels and other pre-Williams Courses

Students are not allowed to place out of ENVI 101. Students with a score of 5 on the AP Environmental Science exam may take a 200-level environmental science lab course (cross-listed with Environmental Studies) in lieu of ENVI 102.

Introductory Required Courses (2 courses)

ENVI 101 Nature and Society: An Introduction to Environmental Studies

ENVI 102 Introduction to Environmental Science

Foundational Required Courses for all Environmental Studies Majors (3 courses, 1 from each category)

Culture/Humanities Foundational (1 course)

[ENVI 229 / HIST 264\(F\) SEM Environmental History](#)

Taught by: [Laura Martin](#)

[Catalog details](#)

[ENVI 244 / PHIL 244\(S\) TUT Environmental Ethics](#)

Taught by: [Julie Pedroni](#)

[Catalog details](#)

[ENVI 246 / AMST 245 / HIST 265 SEM Race, Power, & Food History](#)

Taught by: April Merleaux

[Catalog details](#)

[ENVI 250 / STS 250 SEM Environmental Justice](#)

Taught by: [Laura Martin](#)

[Catalog details](#)

[ENVI 260 / ARTS 261\(S\) SEM Design and Environmental Justice](#)

Taught by: [Giuseppina Forte](#)

[Catalog details](#)

[ENVI 298 SEM Cultural Geography](#)

Taught by: [Nicolas Howe](#)

[Catalog details](#)

[RLSP 216 / ENVI 233 SEM Latin American Environmental Literature and Cultural Production](#)

Taught by: [Jennifer French](#)

[Catalog details](#)

Environmental Science Foundational (with lab, 1 course)

[BIOL 203 / ENVI 203\(F\) LEC Ecology](#)

Taught by: [Manuel Morales](#)

[Catalog details](#)

[CHEM 363 / ENVI 363\(F\) LEC Environmental Organic Chemistry](#)

Taught by: [Anthony Carrasquillo](#)

[Catalog details](#)

[GEOS 215 / ENVI 215 LEC Climate Changes](#)

Taught by: [Mea Cook](#)

[Catalog details](#)

[GEOS 227 / ENVI 226 TUT Climate Data Analysis](#)

Taught by: [Alice Bradley](#)

[Catalog details](#)

[GEOS 301 / ENVI 331\(F\) LEC Geomorphology](#)

Taught by: [José Constantine](#)

[Catalog details](#)

[GEOS 309 / ENVI 209\(F\) LEC Modern Climate](#)

Taught by: [Alice Bradley](#)

[Catalog details](#)

Social Science/Policy Foundational (1 course)

[ECON 213 / ENVI 213\(S\) LEC Introduction to Environmental and Natural Resource Economics](#)

Taught by: [Sarah Jacobson](#)

[Catalog details](#)

[ENVI 206 SEM Global Environmental Politics](#)

Taught by: April Merleaux

[Catalog details](#)

[ENVI 275 / STS 275\(S\) SEM Environmental Science, Policy, and Justice](#)

Taught by: [Laura Martin](#)

[Catalog details](#)

[ENVI 288 / GBST 288\(S\) SEM Environmental Security: Policy Dilemmas and Solutions](#)

Taught by: TBA
[Catalog details](#)

[ENVI 297 / GBST 287 SEM Global Sustainable Development](#)

Taught by: [Brittany Meché](#)
[Catalog details](#)

[ENVI 307 / PSCI 317\(F\) LEC Environmental Law](#)

Taught by: [David Cassuto](#)
[Catalog details](#)

Electives (4 courses)

In addition to ENVI 101, 102, three Foundational courses, and one 400-level senior seminar, each student must take four electives from a list of approved courses in Environmental Science, Social Science/Policy, and Culture/Humanities. To ensure depth in the area of interest, at least three of these courses must be from one list. Courses taken abroad may be included with the approval of the Chair or Associate Director.

Senior Seminar Required Course (1 course)

In the junior or senior year, students will take one 400-level seminar in Environmental Studies. These seminars will focus on advanced, interdisciplinary research and/or problem-solving, typically with an applied, experiential, and/or service-learning focus.

INDEPENDENT STUDY AND WINTER STUDY

In addition to courses fulfilling the Environmental Studies major requirements, the following courses are offered:

ENVI 397, 398 Independent Study of Environmental Problems

ENVI 493-W31-494 Honors Thesis and Senior Research

Winter Study courses play an important role in the program, offering opportunities to learn about aspects of environmental studies with which students would like to become more familiar. We encourage students to bear in mind their interests in the environment and maritime studies when reviewing each year's Winter Study offerings.

HONORS IN ENVIRONMENTAL STUDIES

Candidates for honors in Environmental Studies will complete a thesis in their senior year. A student earns honors by successfully completing a rigorous independent project under the supervision of a member of the Environmental Studies faculty. The thesis may either be a one-semester plus Winter Study project, or a full-year project (two semesters plus Winter Study). Students who are majoring in environmental studies, and who opt to complete a year-long thesis project, have the option of substituting the second semester of their thesis work for the senior seminar. Honors will be awarded on the basis of the academic merit and originality demonstrated by the student in the completed thesis. Because many theses will require sustained field, laboratory or archival work that is difficult to combine with conventional coursework, full-year thesis students are strongly encouraged to spend the summer before senior year and/or their senior year Winter Study doing advance research.

Funds to support student summer research are available from endowment funds of the CES, and an open competition is held each spring to allocate summer funding resources. Other departments may also provide limited support for summer thesis research. Students and their faculty sponsors should plan the thesis with the expectation of such research in mind.

Juniors who wish to apply to pursue honors should submit a 5-page proposal to their intended advisor and the Chair of Environmental Studies by the first Friday in March. If a student wishes to pursue thesis research advised by a faculty member not affiliated with CES, the student must also identify a co-advisor from within the program. Students applying to conduct an honors thesis in Environmental Studies will be notified before spring break whether or not their proposal has been approved.

Students doing a full-year thesis give a presentation in October to their thesis advisor, second reader, and environmental studies community. Further details on the honors program are available through the Environmental Studies website: <https://ces.williams.edu/academic-program/honors/>

ENVI 100 (S) Introduction to Weather and Climate (QFR)

Cross-listings: GEOS 100

Secondary Cross-listing

How is it that we have such a hard time predicting if it's going to rain next week, but we can be confident in projections of future climate change decades from now? This course will explore how fundamental laws of physics determine why air moves and changes, creating the wind, clouds, precipitation, and extreme events that form our weather. Building off of our understanding of the atmosphere, we'll look at longer time scales to

develop an understanding of earth's climate system, global heat and moisture transport, climate change, and the ways that humans can change our planet. We will use weather and climate models to learn how scientists and meteorologists predict future conditions. Labs include benchtop experiments, data analysis projects, and self-scheduled meteorological observations. This course is in the Oceans and Climate group for the Geosciences major.

Requirements/Evaluation: weekly problem sets, lab assignments, midterm exam, and final exam

Prerequisites: none

Enrollment Limit: 60

Enrollment Preferences: first year and second year students, Geosciences majors

Expected Class Size: 60

Grading: yes pass/fail option, yes fifth course option

Distributions: (D3) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 100(D3) GEOS 100(D3)

Quantitative/Formal Reasoning Notes: This course will have regular problem sets which require substantial quantitative reasoning. Labs will require analysis, presentation, and explanation of quantitative data, and exams will require some quantitative problem solving.

Attributes: ENVI Natural World Electives EXPE Experiential Education Courses

Spring 2024

LEC Section: 01 MWF 10:00 am - 10:50 am Alice C. Bradley

LAB Section: 02 M 12:30 pm - 2:30 pm Alice C. Bradley

LAB Section: 03 R 12:30 pm - 2:30 pm Alice C. Bradley

ENVI 101 (F)(S) Nature and Society: An Introduction to Environmental Studies

Environment and society interact on scales from the local to the global. This course explores these interactions and introduces students to the interdisciplinary methods of environmental studies. We will investigate the social, political, and historical aspects of environmental problems -- including environmental racism, species extinction, climate change, and more -- as well as their possible solutions. We will survey policy-making and activism in a variety of contexts and will examine art, literature, film, music, maps, advertisements, and other cultural objects. Throughout the course, we will ask how unequal distributions of power affect people and environments. Case studies, readings, discussions, and field exercises will help students develop their understanding how natural systems influence and are influenced by human activities.

Requirements/Evaluation: participation, in-class exercises, several short writing assignments (varying from 2-5 pages), mid-term exam, final exam

Prerequisites: none

Enrollment Limit: 30/section

Enrollment Preferences: Environmental Studies majors and concentrators

Expected Class Size: 30/section

Grading: yes pass/fail option, yes fifth course option

Unit Notes: required course for the Environmental Studies major and concentration

Distributions: (D2)

Attributes: AMST Space and Place Electives ENVI Core Courses EVST Core Courses GBST Urbanizing World Electives

Fall 2023

LEC Section: 01 MW 7:00 pm - 8:15 pm Nicolas C. Howe

Spring 2024

LEC Section: 01 MR 1:10 pm - 2:25 pm Brittany Meché

ENVI 102 (S) Introduction to Environmental Science

Environmental Science is an interdisciplinary field that develops scientific and technical means for assessing and mitigating human impacts on the

environment. This course provides an overview of the discipline in the context of the interconnected global earth system: the geosphere, atmosphere, hydrosphere, and biosphere. Students are introduced to scientific methods from physics, chemistry, geology, and biology that are used to examine real-world case studies at global and local scales. Topics may include: climate change, air and water pollution, resource extraction and management, land use change, and their effects on environmental quality, biodiversity, and human health. During weekly fieldwork and laboratory sessions, students gain hands-on experience in collecting, analyzing, and interpreting data that can be used to make recommendations for addressing local environmental issues.

Class Format: Two 75-minute lecture/discussion sessions and one 3-hour field/laboratory session each week.

Requirements/Evaluation: Weekly quizzes, final project, lab assignments, participation

Prerequisites: none

Enrollment Limit: 48

Enrollment Preferences: first- and second-year students, Environmental Studies majors and concentrators

Expected Class Size: 48

Grading: yes pass/fail option, yes fifth course option

Unit Notes: Required course for Environmental Studies major and concentration

Distributions: (D3)

Attributes: ENVI Core Courses EVST Core Courses EXPE Experiential Education Courses

Spring 2024

LEC Section: 01 TR 9:55 am - 11:10 am Alex A. Apotsos, Jay Racela

LAB Section: 02 T 1:00 pm - 4:00 pm Alex A. Apotsos, Jay Racela

LAB Section: 03 W 1:00 pm - 4:00 pm Alex A. Apotsos, Jay Racela

LAB Section: 04 R 1:00 pm - 4:00 pm Alex A. Apotsos, Jay Racela

ENVI 103 (F) Global Warming and Environmental Change

Cross-listings: GEOS 103

Secondary Cross-listing

Earth is the warmest it has been for at least five centuries, and the surface of our planet is responding. From extreme floods and drought to landslides and wildfires, the natural processes that shape Earth's surface are tied to temperature and precipitation. People are beginning to feel the impacts, but in different ways depending on where they call home. In this course, we will investigate how climate change is altering landscapes and the natural processes that support them, highlighting all the ways that people are being affected today. Ultimately, we will develop an understanding of the consequences of climate change that connects physical processes with geography. Specific topics include foundations of the Earth system, plate tectonics and the construction of landscapes, Earth materials, rivers and flooding, hillslope processes, coastal processes, and climate impacts on natural resources such as fresh water and soil. Labs will use local field sites and analytical exercises to evaluate recent cases that reflect an interaction of the landscape and climate. We will also visit and engage with Black communities and community leaders across New England who are grappling with the unjust distribution of resources to mitigate climate impacts and who have been disproportionate bearers of environmental risk.

Requirements/Evaluation: written reports from laboratories and readings, class participation, a midterm and final exam

Prerequisites: none

Enrollment Limit: 48

Enrollment Preferences: first year and second year students, Geosciences majors and Environmental Studies majors and concentrators

Expected Class Size: 48

Grading: yes pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 103(D3) GEOS 103(D3)

Attributes: ENVI Natural World Electives EXPE Experiential Education Courses

Not offered current academic year

ENVI 104 (F) Oceanography

Cross-listings: MAST 104 / GEOS 104

Secondary Cross-listing

The oceans cover three quarters of Earth's surface, yet oceanography as a modern science is relatively young: the first systematic explorations of the geology, biology, physics and chemistry of the oceans began in the late 19th century. This introduction to ocean science includes the creation and destruction of ocean basins with plate tectonics; the source and transport of seafloor sediments and the archive of Earth history they contain; currents, tides, and waves; photosynthesis and the transfer of energy and matter in ocean food webs; the composition and origin of seawater, and how its chemistry traces biological, physical and geological processes; oceans and climate change; and human impacts.

Class Format: three 50-minute lecture/discussion meetings each week; 2-hour lab every second week; one all-day field trip to the Atlantic coast of New England.

Requirements/Evaluation: lab activities (25%), homework (25%), quizzes (5%), three exams (45%)

Prerequisites: none

Enrollment Limit: 48

Enrollment Preferences: first year and second year students, Geosciences majors, Maritime Studies concentrators

Expected Class Size: 48

Grading: yes pass/fail option, yes fifth course option

Unit Notes: This course and GEOS 110 Oceans and Society cannot both be taken for credit.

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

MAST 104(D3) GEOS 104(D3) ENVI 104(D3)

Attributes: ENVI Natural World Electives EXPE Experiential Education Courses GEOS Group A Electives - Climate + Oceans

Not offered current academic year

ENVI 105 (F) The Co-Evolution of Earth and Life

Cross-listings: GEOS 101

Secondary Cross-listing

Our planet is about 4.6 billion years old and has supported life for at least the last 3.5 billion of those years. This course will examine the relationship between Earth and the life that inhabits it, starting with the first living organisms and progressing to the interaction of our own species with the Earth today. Students will investigate the dynamic nature of the Earth-life system and learn about the dramatic changes that have occurred throughout the history of our planet. We will ask questions such as: How did the Earth facilitate biologic evolution, and what effects did those biologic events have on the physical Earth? When did photosynthesis evolve and how did this biological event lead to profound changes in the world's oceans and atmospheres? How and why did animals evolve and what role did environmental change play in the radiation of animal life? How did the rise and spread of land plants affect world climate? How do plate tectonics, glaciation, and volcanism influence biodiversity and evolutionary innovation? What caused mass extinctions in the past and what can that teach us about our current extinction crisis? Labs will involve hands-on analysis of rocks, fossils, and real-world data as well as conceptual and analytical exercises; field trips will contextualize major events in Earth history and will help students learn to read the rock record. Through these investigations, the class will provide a comprehensive overview of Earth's dynamic history.

Class Format: one laboratory per week plus one all-day field trip

Requirements/Evaluation: lab assignments, weekly quizzes, and a final independent project

Prerequisites: none

Enrollment Limit: 30

Enrollment Preferences: first year and second year students, Geosciences majors

Expected Class Size: 30

Grading: yes pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 105(D3) GEOS 101(D3)

Attributes: ENVI Natural World Electives EXPE Experiential Education Courses

Fall 2023

LEC Section: 01 TR 9:55 am - 11:10 am Phoebe A. Cohen

LAB Section: 02 T 1:00 pm - 3:00 pm Phoebe A. Cohen

LAB Section: 03 W 1:00 pm - 3:00 pm Phoebe A. Cohen

ENVI 108 (F) Energy Science and Technology (QFR)

Cross-listings: PHYS 108

Secondary Cross-listing

Energy use has skyrocketed in the United States and elsewhere in the world, causing significant economic and political shifts, as well as concerns for the environment. This course will address the physics and technology of energy generation, consumption, and conservation. It will cover a wide range of energy sources, including fossil fuels, hydropower, solar energy, wind energy, and nuclear energy. We will discuss energy use in transportation, manufacturing, building heating and lighting, and energy storage. Students will learn to compare the efficiencies and environmental impacts of various energy sources and uses.

Class Format: twice a week, occasional lab exercises, and a field trip to the college heating plant, all during class hours

Requirements/Evaluation: weekly assignments, two hour tests, and a final project culminating in an oral presentation to the class and a 10-page paper; all of these will be substantially quantitative

Prerequisites: high school physics, high school chemistry, and mathematics at the level of MATH 130

Enrollment Limit: 20

Enrollment Preferences: non-physics majors

Expected Class Size: 20

Grading: yes pass/fail option, yes fifth course option

Distributions: (D3) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 108(D3) PHYS 108(D3)

Quantitative/Formal Reasoning Notes: problems sets, exams, and projects will all have a quantitative aspects.

Attributes: ENVI Natural World Electives

Not offered current academic year

ENVI 109 (F) Oceans and Society

Cross-listings: GEOS 110 / MAST 110

Secondary Cross-listing

Oceans impact society in many ways: they provide much of our protein, they hide untapped mineral wealth, their circulation regulates global climate, they transport and accumulate our plastic garbage, marine storms batter coastal infrastructure, and sea-level rise threatens communities. However, despite the oceans' importance throughout history--for trade, as a source of food, and because of their unpredictable dangers--we know shockingly little about them. More than 6000 people have reached the summit of Everest, Earth's highest elevation; but only 22 have visited Challenger Deep, the deepest point below the ocean surface. We have mapped the surfaces of Mars and Venus in far more detail than the topography of Earth's ocean basins. New marine organisms are discovered regularly. And we still don't fully understand the complex details of how ocean and atmosphere work together as the planet's climate engine. In this course, you will examine ocean science themes with direct societal relevance that are also at the forefront of scientific investigation. Topics will be selected based on current events, but are likely to include deep sea mining, meridional overturning, sea level rise, atmospheric rivers, and aquaculture. By taking focused dives into a range of subjects you will learn about the evolution and operation of the ocean as a physical and geological system as well as investigating the intersections between ocean functions, climate change, and human societies. Exercises and discussions will foreground active learning. A field trip to the Atlantic coast will integrate experiential investigation of the intersection between coastal change, extreme weather, and communities. The aim is to have energised interdisciplinary discussions about topics of pressing societal relevance, to understand some of the fundamentals of ocean science, to develop expertise in gathering and distilling information by

researching new topics, and thereby to improve critical and analytical thinking.

Class Format: Two 75-minute lecture/discussion meetings each week; 2-hour lab every second week; one all-day field trip to the Atlantic coast.

Requirements/Evaluation: Evaluation is based on engagement with in-class activities, six graded lab exercises, four short writing/research assignments, and a five-page term paper

Prerequisites: none

Enrollment Limit: 60

Enrollment Preferences: First year and second year students

Expected Class Size: 60

Grading: yes pass/fail option, yes fifth course option

Unit Notes: This course and GEOS 104 Oceanography cannot both be taken for credit.

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 109(D3) GEOS 110(D3) MAST 110(D3)

Attributes: ENVI Natural World Electives EXPE Experiential Education Courses MAST Interdepartmental Electives

Fall 2023

LEC Section: 01 TR 11:20 am - 12:35 pm Rónadh Cox

LAB Section: 02 T 1:00 pm - 3:00 pm Rónadh Cox

LAB Section: 03 R 1:00 pm - 3:00 pm Rónadh Cox

ENVI 134 (F) The Tropics: Biology and Social Issues (DPE)

Cross-listings: BIOL 134

Secondary Cross-listing

Biology and Social Issues of the Tropics explores the biological dimensions of social and environmental issues in tropical societies, focusing specifically on the tropics of Africa, Asia, Latin America, Oceania, and the Caribbean. Social issues are inextricably bound to human ecologies and their environmental settings. Each section of the course provides the science behind the issues and ends with options for possible solutions, which are debated by the class. The course highlights differences between the tropics and areas at higher latitudes while also emphasizing global interconnectedness. It begins with a survey of the tropical environment, including a global climate model, variation in tropical climates and the amazing biodiversity of tropical biomes. The next section focuses on human population biology, and emphasizes demography and the role of disease particularly malaria, AIDS and Covid-19 (SARS-CoV-2). The final part of the course covers the place of human societies in local and global ecosystems including the challenges of tropical food production, the interaction of humans with their supporting ecological environment, and global climate change. This course fulfills the DPE requirement. Through lectures, debates and readings, students confront social and environmental issues and policies from the perspective of biologists. This builds a framework for lifelong exploration of human diversity in terms of difference, power and equity.

Class Format: Debate

Requirements/Evaluation: two hour exams, a short paper, debate presentation, and a final exam

Prerequisites: none

Enrollment Limit: 62

Enrollment Preferences: Preference will be given to Environmental Studies majors/concentrators, students in need of a Division III or DPE requirement, and then Seniors, Juniors, Sophomores, and First Year students.

Expected Class Size: 62

Grading: no pass/fail option, no fifth course option

Unit Notes: Does not count for credit in the Biology major.

Distributions: (D3) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 134(D3) BIOL 134(D3)

Difference, Power, and Equity Notes: This course highlights differences between the tropics and higher latitudes. For each section we focus on difference--different natural habitats and biodiversity, different patterns of population growth, different human disease profiles, different types of agriculture and different contributions to and impacts of climate change. For each section we highlight differences in power and the inequities of resource distribution. We then debate potential solutions to ameliorate these inequities.

Attributes: ENVI Natural World Electives GBST African Studies Electives PHLH Biomedical Determinants of Health

Fall 2023

LEC Section: 01 MWF 10:00 am - 10:50 am Joan Edwards

ENVI 201 (S) The Geoscience of Epidemiology and Public Health (DPE)

Cross-listings: GEOS 207

Secondary Cross-listing

The Coronavirus pandemic has highlighted the many ways that diseases can be transmitted in the environment. As a society we are becoming aware of the many ways that geological processes and materials influence human health, in ways both beneficial and dangerous. This course unites geoscience, biomedicine and public health approaches to address a wide range of environmental health problems. These include water-related illnesses (e.g. diarrhea, malaria); minerals and metals, both toxic (e.g. asbestos, arsenic) and essential (e.g. iodine); radioactive poisoning (e.g. radon gas); and the transport of pathogens by water and wind. In many cases, the environmental health problems disproportionately affect marginalised populations, contributing to greater disease and death among poor communities and populations of colour. We will examine the broad array of dynamic connections between human health and the natural world. We will discuss the social justice implications of a range of environmental health problems. And we will examine current research into how coronaviruses, such as the one causing COVID-19, are transported in the environment. This course is in the Sediments and Life group for the Geosciences Major.

Requirements/Evaluation: Evaluation will be based on short weekly writing assignments as well as an individual project and poster presentation.

Prerequisites: No prerequisites

Enrollment Limit: 34

Enrollment Preferences: Preference to first-years, sophomores, and prospective Geosciences majors

Expected Class Size: 30

Grading: yes pass/fail option, yes fifth course option

Distributions: (D3) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

GEOS 207(D3) ENVI 201(D3)

Difference, Power, and Equity Notes: Through a series of case studies, we will examine ways in which marginalised groups (whether due to poverty, race, or ethnicity) are disproportionately affected by environmental health issues. Themes of power and equity in terms of decision making, access to knowledge, and funding availability, will be woven into all aspects of the class and will underpin our analysis of the science.

Attributes: ENVI Natural World Electives GEOS Group B Electives - Sediments + Life PHLH Nutrition, Food Security+Environmental Health

Not offered current academic year

ENVI 202 (S) Critical Practice of Architecture: Theories, Methods, and Techniques (DPE)

Cross-listings: ARTS 222

Secondary Cross-listing

In this course, students will transform an architectural or urban space through design interventions that contribute to reorienting public perception, imagination, and politics. Skills taught include methods and techniques for critical architecture practice, including architecture drawing, 2D graphic design, and 3D modeling (digital and physical). Students will also build on design strategies (e.g., spatial hijacking and détournement), community architecture, and visual techniques to rethink normative understandings of space and time. Through selected readings and discussions, we will examine key ideas that have inspired design thinking and activism. The class culminates in a presentation to external reviewers and a final exhibition.

Requirements/Evaluation: This is an intensive studio tutorial requiring working in the architecture studio and/or PC lab outside of scheduled class hours. The class will meet in large and small groups throughout the semester for critique and discussion. Assignments include weekly discussions and

design projects requiring drawings and model design. Final project: design project to reorient public perception, imagination, and politics. Evaluation will be based on the design quality at theoretical/conceptual levels.

Prerequisites: Drawing I or permission of instructor.

Enrollment Limit: 12

Enrollment Preferences: Studio Art majors, Art History and Studio Art majors, Envi majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Materials/Lab Fee: \$350-\$450 lab fee charged to term bill. Lab and materials fees for all studio art classes are covered by the Book Grant for all Williams financial aid recipients.

Distributions: (D1) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 202(D1) ARTS 222(D1)

Difference, Power, and Equity Notes: This design studio invites students to think critically about how power, equity, and difference are manifested through the built environment. It will equip them with the tools to become active agents of change through design activism. We will use design as a cultural practice and creative technique to envision more just and equitable futures through interventions in architectural or urban spaces.

Attributes: ENVI Humanities, Arts + Social Science Electives

Spring 2024

STU Section: 01 T 9:55 am - 12:35 pm Giuseppina Forte

ENVI 203 (F) Ecology (QFR)

Cross-listings: BIOL 203

Secondary Cross-listing

This course combines lectures & discussion with field and indoor laboratory activities to explore factors that determine the distribution and abundance of plants and animals in natural systems. The course begins with an overview of global environmental patterns and then builds from the population to ecosystem level. Throughout the course, we will emphasize the connection between basic ecological principles and current environmental issues. Selected topics include population dynamics (competition, predation, mutualism); community interactions (succession, food chains and diversity) and ecosystem function (biogeochemical cycles, energy flow). Laboratory activities are designed to engage students in the natural history of the region and build skills in data analysis and scientific writing.

Requirements/Evaluation: pre-class quizzes, lab reports, two mid-term exams, and a final exam

Prerequisites: BIOL 102, or ENVI 102, or permission of instructor

Enrollment Limit: 30

Enrollment Preferences: students planning to pursue Biology and/or ENVI

Expected Class Size: 30

Grading: yes pass/fail option, yes fifth course option

Unit Notes: satisfies the distribution requirement for the Biology major

Distributions: (D3) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

BIOL 203(D3) ENVI 203(D3)

Quantitative/Formal Reasoning Notes: Much of the material in this course centers on the interpretation and application of mathematical models used to describe ecological systems. The laboratory section of this course also contains a large data analysis component (based in R). Students are introduced to t-tests, chi-square analysis, and regression.

Attributes: ENVI Natural World Electives EVST Environmental Science

Fall 2023

LEC Section: 01 TR 8:30 am - 9:45 am Manuel A. Morales

LAB Section: 02 T 1:00 pm - 3:50 pm Manuel A. Morales

LAB Section: 03 W 1:00 pm - 3:50 pm Manuel A. Morales

ENVI 204 (F) Colonialism, Capitalism and Climate Crisis (DPE)

Cross-listings: GBST 233 / AFR 233

Secondary Cross-listing

Evolutions are part of human existence. These changes are not necessarily natural, uniform or linear across space and time. As colonial conquests sought to capture, dominate and exploit vast swathes of land, nature and people, supported by economic theories, violent, wide-ranging and long-term changes profoundly altered the environment and human-nature relationships. This course examines these transformations, specifically attending to the relationship between colonized/colonial (hu)man, nature and non-human species, drawing in perceptions of nature and the economy. Our starting point for this intellectual journey is the colonial imprint on human-ecological relations i.e. economic man, or Sylvia Wynter's conception of "ethno-class man" and "homo-economicus". We will consider social difference especially race as a central conjuncture of the changing relationship of capitalism and social organization relative to natural resource extraction, techno-scientific knowledge, industrial development and resulting accumulation of greenhouse gases that induce climate and ecological crises. We will also examine economic perspectives of climate change as a market failure, loss of economic value or a financial risk to stock portfolios that may be at odds with humane ways of organizing our collective planet. This course exposes the hierarchies of social difference and resulting inequalities (class, race, gender, species) under climate crisis to advance reparative and decolonial understandings. Drawing upon experiences from social, labor and environmental movements for climate justice, students will be able evaluate situated political economic responses to the climate crisis.

Requirements/Evaluation: 'Colonialism and my community' writing/ poster assignment (5 pages) 20%; Either a video essay on a 'green' technology (10 minutes), recorded interview with an environmental justice movement/activist/practitioner (20 minutes) or critical in-class presentation on an emerging 'green' technology (10 minutes) 25%; Creative activist project that reflects on histories and axes of power - gender, race, class, species (6-8 pages); Participation and attendance (leading a discussion/presentation) 20%

Prerequisites: None

Enrollment Limit: 15

Enrollment Preferences: If over enrolled preference goes to Africana Studies and then Environmental Studies students.

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

GBST 233(D2) AFR 233(D2) ENVI 204(D2)

Difference, Power, and Equity Notes: The course addresses from a global perspective and from different contexts how social groups, societies and organizations are being transformed under climate crisis.

Attributes: AFR Black Landscapes AFR Core Electives ENVI Humanities, Arts + Social Science Electives

Fall 2023

LEC Section: 01 Cancelled

ENVI 206 (S) Global Environmental Politics

This course examines the history and current status of international environmental cooperation and conflict. We will consider the interactions of nation-states, multilateral international organizations, non-governmental organizations, and social movements in the formation of transnational environmental policy and treaties. We will also examine non-state approaches to global environmental challenges. After reviewing competing explanations for the causes of global environmental problems and diverse disciplinary approaches to studying those issues, we will read case studies covering a range of topics. These include fresh water conflict, fisheries and oceans, climate change, waste and pollution, agriculture, pesticides, population and development, wildlife, forestry, and consumerism. The reading assignments are drawn from the fields of environmental and foreign policy history, political science, international relations, geography, and anthropology in order to develop an interdisciplinary approach to international policy analysis. The written assignments are a series of policy briefs. You will also be responsible for two oral presentations during the semester, related to the policy briefs.

Class Format: Depending on enrollment, some discussion may be scheduled outside of the class hours, as would be the case in a tutorial.

Requirements/Evaluation: 2-3 short writing assignments based on assigned readings (3 pages each), 2 oral presentations, discussion participation, 2 policy briefing papers based on library research (5 pages each)

Prerequisites: ENVI 101 or permission of the instructor

Enrollment Limit: 19

Enrollment Preferences: environmental studies majors and concentrators

Expected Class Size: 19

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

Attributes: ENVI Environmental Policy EVST Social Science/Policy GBST Economic Development Studies Electives

Not offered current academic year

ENVI 208 (F) Saharan Imaginations (DPE) (WS)

Cross-listings: ARAB 209 / COMP 234

Secondary Cross-listing

Deconstructing reductive Saharanism, which the course conceptualizes as a universalizing discourse about deserts, this course seeks to critically examine the myriad assumptions that are projected upon deserts across times and cultures. In addition to their depiction as dead and empty, deserts have become a canvas for the demonstration of religiosity, resilience, heroism and athleticism. Cultural production, particularly literature and film, do, however, furnish a critical space in which important questions can be raised about deserts' fundamental importance to different cultures and societies. Drawing on novels, films, and secondary scholarship, the course will help students understand how myth, memory, history, coloniality/postcoloniality, and a strong sense of ethics are deeply intertwined in the desert sub-genre of African, Euro-American, and Middle Eastern literatures. Whether grappling with transcontinental issues of climate change, cannibalization of biodiversity or overexploitation of natural resources, desert-focused cultural production invites us to interrogate the politics of space and place as well as mobility and spatial control as they relate to this supposedly dead nature.

Requirements/Evaluation: active participation, short presentation, short weekly responses on GLOW, midterm exam, and final paper

Prerequisites: none

Enrollment Limit: 14

Enrollment Preferences: Students are admitted into the course on a first-come-first-serve basis. If the course is over-enrolled, preference will be given to Arabic Studies and Comparative Literature majors and certificates.

Expected Class Size: 14

Grading: no pass/fail option, no fifth course option

Distributions: (D1) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ARAB 209(D1) COMP 234(D1) ENVI 208(D1)

Writing Skills Notes: Students will receive constant and extensive feedback on their written work. Students will write regular weekly responses on Glow, a reflection statement, two 5pp. papers for midterms, and one 10pp. final paper.

Difference, Power, and Equity Notes: Students will gain critical awareness of the imbrication of power, hegemony, economic injustice, and colonial policies in the disruption of indigenous conceptions of the Saharan space. Students will also be able to question representations of the Sahara as a dead or empty space by engaging with locally produced alternative conceptualizations of place. Finally, students will produce written assignments that address issues of power and environmental discrimination.

Attributes: ENVI Humanities, Arts + Social Science Electives

Fall 2023

SEM Section: 01 MR 1:10 pm - 2:25 pm Brahim El Guabli

ENVI 209 (F) Modern Climate (QFR)

Cross-listings: GEOS 309

Secondary Cross-listing

What will happen to the Earth's climate in the next century? What is contributing to sea level rise? Is Arctic sea ice doomed? In this course we will study the components of the climate system (atmosphere, ocean, cryosphere, biosphere and land surface) and the processes through which they interact. Greenhouse gas emission scenarios will form the basis for investigating how these systems might respond to human activity. This course will explore how heat and mass are moved around the atmosphere and ocean to demonstrate how the geographic patterns of climate change arise. We will also focus on climate feedback effects--like the albedo feedback associated with sea ice and glacier loss--and how these processes can accelerate climate change. In labs we will learn MATLAB to use process and full-scale climate models to investigate the behavior of these systems in response to increasing greenhouse gasses in the atmosphere. This course is in the Oceans and Climate group for the Geosciences major.

Requirements/Evaluation: 4 multi-week lab projects and several short quizzes

Prerequisites: Any of GEOS 100, GEOS 103, ENVI 102, GEOS 215, or permission of instructor

Enrollment Limit: 20

Enrollment Preferences: GEOS and ENVI majors

Expected Class Size: 20

Grading: yes pass/fail option, yes fifth course option

Distributions: (D3) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 209(D3) GEOS 309(D3)

Quantitative/Formal Reasoning Notes: Lab projects consist of a series of numerical climate modeling projects, which require significant quantitative and logical reasoning.

Attributes: ENVI Natural World Electives EVST Environmental Science GEOS Group A Electives - Climate + Oceans

Fall 2023

LEC Section: 01 TR 11:20 am - 12:35 pm Alice C. Bradley

LAB Section: 02 TBA Alice C. Bradley

ENVI 211 (S) Race, Environment, and the Body

Cross-listings: AFR 211 / SOC 211 / AMST 211

Secondary Cross-listing

This course is organized around three distinct, but overlapping, concerns. The first concern is how polluting facilities like landfills, industrial sites, and sewage treatment plants are disproportionately located in communities of color. The second concern is the underlying, racist rationales for how corporations, in collaboration with state agencies, plot manufacturers of pollution. The final concern is how the environmental crises outlined in the first two sections of the course are experienced in the body. In reviewing a range of Black cultural productions--like literature, scholarship, music, and film--we will not only consider how environmental disparities physically affect human bodies, but also how embodiments of eco-crises lend to imaginaries of the relationship between the self and the natural world.

Class Format: discussion

Requirements/Evaluation: class participation, 2-3 short papers (5-7 pages), and a self-scheduled final

Prerequisites: none

Enrollment Limit: 20

Enrollment Preferences: preference given to AFR concentrators, ENVI concentrators and majors, and ANSO majors.

Expected Class Size: 20

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

AFR 211(D2) SOC 211(D2) AMST 211(D2) ENVI 211(D2)

Attributes: AFR Core Electives AMST Comp Studies in Race, Ethnicity, Diaspora AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives PHLH Nutrition, Food Security + Environmental Health PHLH Social Determinants of Health

Not offered current academic year

ENVI 212 (F) The Economics and Ethics of CO2 Offsets (WS)

Cross-listings: ECON 214

Secondary Cross-listing

Some electric utilities and other CO2 emission polluters are allowed to purchase carbon offsets to achieve a portion of their mandated emissions cuts, in effect, to pay others to reduce carbon emissions in their stead. Some individuals, college and universities, and for-profit and non-profit institutions have chosen voluntarily to purchase carbon offsets as a way of reducing their carbon footprint. But do offsets actually succeed in reducing carbon emissions? What separates a legitimate offset from one that is not? How should we measure the true impact of an offset? How do carbon offsets compare to other policies for reducing carbon emissions in terms of efficiency, equity, and justice? Is there something inherently wrong about "commodifying" the atmosphere? Is there something inherently wrong about selling or buying the right to pollute? Should colleges and universities be using the purchase of offsets to achieve "carbon neutrality?"

Class Format: Each student will be the tutorial partner of one other student, and each pair of tutorial partners will meet with the instructor for 75 minutes each week.

Requirements/Evaluation: a 5- to 7-page paper every other week; a 3-page written critique every other week; one re-write paper

Prerequisites: ECON 110 or the equivalent, permission of instructor

Enrollment Limit: 10

Enrollment Preferences: first-year students and sophomores intending to major in Economics and/or to major or concentrate in Environmental Studies

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ECON 214(D2) ENVI 212(D2)

Writing Skills Notes: Each student will write five 5-7 page papers on which I will provide written feedback regarding grammar, style, and argument. Each student will write five 3-page critiques of their partner's papers. As the final assignment, each student will revise one of their five papers.

Attributes: ENVI Environmental Policy POEC Comparative POEC/Public Policy Courses

Not offered current academic year

ENVI 213 (S) Introduction to Environmental and Natural Resource Economics (QFR)

Cross-listings: ECON 213

Secondary Cross-listing

We'll use economics to examine why we harm the environment and overuse natural resources, and what we can do about it. We'll study cost benefit analysis, pollution in general, climate change, environmental justice, natural resources (like fisheries, forests, and fossil fuels), and energy. We'll talk about how economists put a dollar value on nature and ecosystem services (as well as human health and life!), and the concerns involved in doing so. We will take an economic approach to global sustainability, and study the relationship between the environment and economic growth. Consideration of justice and equity will be woven throughout the whole semester.

Requirements/Evaluation: problem sets, short essays, final paper; intermediate assignments may include a poster, one or more short presentation(s), other brief writing assignment(s)

Prerequisites: ECON 110 or equivalent

Enrollment Limit: 30

Enrollment Preferences: first-year and sophomore students

Expected Class Size: 30

Grading: yes pass/fail option, yes fifth course option

Unit Notes: this course will count toward both the Environmental Studies major and concentration

Distributions: (D2) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

ECON 213(D2) ENVI 213(D2)

Quantitative/Formal Reasoning Notes: We will use formal theory expressed in math and graphs, perform calculations, and consume statistical data.

Attributes: ENVI Environmental Policy EVST Social Science/Policy MAST Interdepartmental Electives POEC Depth

Spring 2024

LEC Section: 01 MWF 8:30 am - 9:45 am Sarah A. Jacobson

ENVI 214 (F) Mastering GIS

Cross-listings: GEOS 214

Secondary Cross-listing

The development of Geographic Information Systems (GIS) has allowed us to investigate incredibly large and spatially complex data sets like never before. From assessing the effects of climate change on alpine glaciers, to identifying ideal habitat ranges for critically endangered species, to determining the vulnerability of coastal communities to storms, GIS has opened the door for important, large-scale environmental analyses. And as these technologies improve, our ability to understand the world grows ever greater. This course will teach you how to use GIS to investigate environmental problems. We will review fundamental principles in geography, the construction and visualization of geospatial datasets, and tools for analyzing geospatial data. Special attention will also be given to analysis of remotely sensed (satellite) imagery and to collection of field data. By the end of the course, you will be able to conduct independent GIS-based research and produce maps and other geospatial imagery of professional quality.

Class Format: lecture, three hours per week and laboratory, three hours per week

Requirements/Evaluation: weekly lab exercises, weekly quizzes, and a research project

Prerequisites: at least one course in Geosciences or Environmental Studies

Enrollment Limit: 18

Enrollment Preferences: Geosciences majors and Environmental Studies majors and concentrators.

Expected Class Size: 18

Grading: yes pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

GEOS 214(D3) ENVI 214(D3)

Attributes: ENVI Natural World Electives EXPE Experiential Education Courses

Fall 2023

LEC Section: 01 TR 8:30 am - 9:45 am Alex A. Apotsos

LAB Section: 02 T 1:00 pm - 4:00 pm Alex A. Apotsos

LAB Section: 03 R 1:00 pm - 4:00 pm Alex A. Apotsos

ENVI 215 (S) Climate Changes (QFR)

Cross-listings: GEOS 215

Secondary Cross-listing

Paleoclimatology is the reconstruction of past climate variability and the forces that drove the climate changes. The Earth's climate system is experiencing unprecedented and catastrophic change because of anthropogenic emission of greenhouse gases and land use change. Paleoclimatology allows humans to put modern climate changes into the context of the history of this planet, and shows how and why it is unprecedented and catastrophic. Each climate event we study from Earth's past teaches us lessons on why the climate system responds to anthropogenic perturbations, what climate changes we're committed to in the future, how long-lasting they will be, and what climate consequences we can avoid if we take action and reduce greenhouse gas emissions sooner. In this course, we will discuss the major mechanisms that cause natural climate variability, how climate of the past is reconstructed, and how climate models are used to test mechanisms that drive climate variation. With

these tools, you will analyze and interpret data and model simulations from climate events from Earth's history, and apply these findings to anthropogenic climate changes happening now and that are projected to happen in the future. Laboratories and homework will emphasize developing problem solving skills as well as sampling and interpreting geological archives of climate change. This course is in the Oceans and Climate group for the Geosciences major.

Class Format: This class has three scheduled lectures per week, and one lab meeting per week which will consist of field excursions, lab exercises, problem solving and discussion

Requirements/Evaluation: lab exercises and homework (25%), three quizzes (50%), and a final project (25%)

Prerequisites: 100-level course in GEOS, CHEM, or PHYS or ENVI 102 or permission of instructor

Enrollment Limit: 24

Enrollment Preferences: Geosciences majors and Environmental Studies majors and concentrators and Maritime Studies concentrators

Expected Class Size: 16

Grading: yes pass/fail option, yes fifth course option

Distributions: (D3) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

GEOS 215(D3) ENVI 215(D3)

Quantitative/Formal Reasoning Notes: Labs and homework include quantitative problem solving, visualization and analysis of quantitative data, and scientific computing with Matlab. No previous programming experience is assumed.

Attributes: ENVI Natural World Electives EVST Environmental Science EXPE Experiential Education Courses GEOS Group A Electives - Climate + Oceans MAST Interdepartmental Electives

Not offered current academic year

ENVI 216 (S) Philosophy of Animals

Cross-listings: PHIL 216

Secondary Cross-listing

Animals are and always have been part of human life. To name just a few ways: We treat animals as companions, as food, as objects of wonder in the wild, as resources to be harvested, as testing grounds for science, and as religious sacrifice. The abstract philosophical question before us is, *what are animals such that they can be all these things?* In this course we aim to engage that abstract question through two more focused projects. Firstly, we will try to understand the mental lives of non-human animals. Secondly, we will try to make sense of the moral dimensions of our relationship to animals. Throughout we will aim to fuse a rigorous scientific perspective with more humanistic themes and philosophical inquiry. Topics include sentience, animal cognition, language in non-human animals, empathy and evolution, the history of domestication, animal rights, cross-cultural views on animals, arguments against and for vegetarianism and veganism, the morality of zoos, hunting and fishing, and pets and happiness.

Requirements/Evaluation: four 3-to-4 page papers and one 8-to-10 page final paper. In addition, students are required to attend remotely at least four talks in the speaker series associated with the course. These will be during the Friday course time slot. (When there is no speaker, there will not be class during that slot, so class itself will be solely on Mondays and Wednesdays.)

Prerequisites: none, though at least one course in philosophy is recommended.

Enrollment Limit: 16

Enrollment Preferences: students with at least one previous philosophy or cognitive science course; there is no need to email the professor in advance to indicate special interest in the course.

Expected Class Size: 16

Grading: no pass/fail option, no fifth course option

Unit Notes: meets Contemporary Metaphysics & Epistemology requirement only if registration is under PHIL

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

PHIL 216(D2) ENVI 216(D2)

Attributes: COGS Interdepartmental Electives ENVI Humanities, Arts + Social Science Electives PHIL Contemp Metaphysics + Epistemology Courses

Not offered current academic year

ENVI 219 (F) Evolution of and on Volcanic Islands (WS)**Cross-listings:** GEOS 220**Secondary Cross-listing**

Plate tectonic theory accounts for the vast majority of volcanic islands in ocean basins. They form above mantle plume hot spots (Hawaiian and Galapagos Islands), subduction zones (Aleutian and Indonesian arcs), and mid-ocean ridges (Azores and Ascension Island). Iceland is unusual because it is located above a hot spot and the mid-Atlantic ridge. Each plate tectonic setting produces chemically distinctive magmas, and the lifespan of volcanic islands varies widely. Islands above hot spots may be geographically remote and emergent for only several million years, but be part of a long-lived sequence of islands that persists for over a hundred million years. In contrast, island arc volcanoes belong to long geographically continuous chains of volcanoes, commonly in close proximity to continents. This tutorial explores the geologic evolution and lifespan of volcanic islands from formation to submergence, and searches for correlations between these characteristics and plate tectonic setting. We will also consider how geographic isolation, areal extent, lifespan, and climate affect biological evolution on volcanic islands. There will be weekly tutorial meetings with pairs of students, and students will alternate writing papers on assigned topics. This course is in the Solid Earth group for the Geosciences major.

Class Format: One-hour weekly meetings with tutorial partner and instructor**Requirements/Evaluation:** five 5-page papers and critiques of partner's papers**Prerequisites:** 100-level GEOS course or permission of instructor**Enrollment Limit:** 10**Enrollment Preferences:** Geosciences majors and students with a demonstrated interest in geosciences**Expected Class Size:** 10**Grading:** no pass/fail option, no fifth course option**Distributions:** (D3) (WS)**This course is cross-listed and the prefixes carry the following divisional credit:**

GEOS 220(D3) ENVI 219(D3)

Writing Skills Notes: Students will write five 5-page papers and will receive instructor feedback on how to improve their writing skills and formulate sound arguments.**Attributes:** ENVI Natural World Electives GEOS Group C Electives - Solid Earth**Not offered current academic year****ENVI 220 (S) Field Botany and Plant Natural History****Cross-listings:** BIOL 220**Secondary Cross-listing**

This field-lecture course covers the evolutionary and ecological relationships among plant groups represented in our local and regional flora. Lectures focus on the evolution of the land plants, the most recent and revolutionary developments in plant systematics and phylogeny, the cultural and economic uses of plants and how plants shape our world. The course covers the role of plants in ameliorating global climate change, their importance in contributing to sustainable food production and providing solutions to pressing environmental problems. Throughout we emphasize the critical role of biodiversity and its conservation. The labs cover field identification, natural history and the ecology of local species.

Class Format: both field and indoor laboratories**Requirements/Evaluation:** Based on two hour exams, field quizzes, a final project, and a final exam**Prerequisites:** none**Enrollment Limit:** 30**Enrollment Preferences:** Biology majors, and Environmental Studies majors & concentrators**Expected Class Size:** 24**Grading:** no pass/fail option, yes fifth course option**Unit Notes:** satisfies the distribution requirement for the Biology major**Materials/Lab Fee:** There is a charge for the lab manual (\$25); the sketchbook (\$7) and hand lens (\$23) can be self-provided or purchased from the department.

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

BIOL 220(D3) ENVI 220(D3)

Attributes: ENVI Natural World Electives EXPE Experiential Education Courses PHLH Nutrition,Food Security+Environmental Health

Spring 2024

LEC Section: 01 MWF 10:00 am - 10:50 am Joan Edwards

LAB Section: 02 T 1:00 pm - 3:50 pm Joan Edwards

LAB Section: 03 W 1:00 pm - 3:50 pm Joan Edwards

ENVI 222 (F) Examining Inconvenient Truths: Climate Science meets U.S. Senate Politics (WS)

Cross-listings: GEOS 221 / LEAD 221

Secondary Cross-listing

Former President Barack Obama once said: "There's one issue that will define the contours of this century more dramatically than any other, and that is the urgent threat of a changing climate." While consensus regarding the causes and impacts of climate change has been growing steadily among scientists and researchers (and to some extent, the general public) over the past two decades, the U.S. has yet to confront this issue in a manner consistent with its urgency. This lack of action in the U.S. is at least partly due to the fact that science provides necessary but insufficient information towards crafting effective climate change legislation and the unfortunate fact that climate change has become a highly partisan issue. The primary objective of this tutorial will be to help students develop a greater understanding of the difficulties associated with crafting climate change legislation, with an emphasis on the role of science and politics within the legislative process. To this end, the tutorial will address how the underlying scientific complexities embedded in most climate policies (e.g., offsets, carbon capture and sequestration, uncertainty and complexity of the climate system, leakage) must be balanced by and blended with the different operational value systems (e.g., economic, social, cultural, religious) that underlie U.S. politics. Over the course of this tutorial, students will develop a nuanced sense of how and when science can support the development of comprehensive national climate change legislation within the current partisan climate. This course will take a practical approach, where students will craft weekly policy oriented documents (e.g., policy memos, action memos, research briefs) targeted to selected members of the current U.S. Senate Environment and Public Works Committee, the committee that has historically held jurisdiction over a majority of the major climate change bills that have moved through the legislative process. This course is in the Oceans and Climate group for the Geosciences major.

Requirements/Evaluation: weekly papers (2 - 5 pages in length) and a final oral presentation

Prerequisites: none

Enrollment Limit: 10

Enrollment Preferences: sophomores, Geosciences and Environmental Studies juniors and seniors

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D3) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

GEOS 221(D3) LEAD 221(D3) ENVI 222(D3)

Writing Skills Notes: You will learn to write in a variety of policy-focused formats

Attributes: ENVI Environmental Policy EXPE Experiential Education Courses GEOS Group A Electives - Climate + Oceans

Not offered current academic year

ENVI 224 (F) The Rise and Fall of Civilizations

Cross-listings: ANTH 214

Secondary Cross-listing

Over the centuries, philosophers and historians have asked how societies evolved from simple hunter-gatherer bands to complex urban civilizations. Human prehistory and history have shown the repeated cycles of the rise, expansion and collapse of early civilizations in both the Old and New World. What do the similarities and differences in the development of these first civilizations tell us about the nature of societal change, civilization and the state, and human society itself? The course will examine these issues through an introductory survey of the earliest civilizations in Mesopotamia,

Egypt, India, Mesoamerica and South America. Classical and modern theories on the nature, origin, and development of the state will be reviewed in light of the archaeological evidence.

Class Format: Class discussion and debates will complement lectures based on powerpoint presentation.

Requirements/Evaluation: midterm, final exam, 15pp analytical paper, two quizzes

Prerequisites: none

Enrollment Limit: 30

Enrollment Preferences: First and second years.

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 224(D2) ANTH 214(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives

Fall 2023

LEC Section: 01 TF 2:35 pm - 3:50 pm Antonia E. Foias

ENVI 226 (S) Climate Data Analysis

Cross-listings: GEOS 227

Secondary Cross-listing

In this tutorial, students will learn how to access and work with the datasets that show how our climate is changing. The course introduces a series of analytical methods used in climate science, and students then apply those 'recipes' to data of their choosing to research parts of the climate system. Over the course of the term, a student might investigate the seasonality of global atmospheric carbon dioxide levels, maps of sea level anomalies, and the impact El Niño patterns have on Western US rainfall. Students will present their findings, and their insights into the particular aspect of the climate system, at weekly tutorial meetings. Analytical approaches covered in the class include climatologies, time series analysis (trends, periodicity, and autocorrelation), anomaly maps, composites, and zonal/meridional averaging. As for regions and climate systems students can explore: the sky is the limit. This course is in the Oceans and Climates group for the Geosciences major.

Class Format: Asynchronous recorded lectures will provide instruction on new analytical techniques every two weeks. Students will meet in pairs for one hour every week with the instructor: each student will present the results of their data analysis and their interpretation for discussion every other week.

Requirements/Evaluation: Five 3-4 page papers including figures made from analyzing data.

Prerequisites: At least one GEOS or ENVI course

Enrollment Limit: 10

Enrollment Preferences: Students with a strong interest in Geosciences and Geoscience majors.

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 226(D3) GEOS 227(D3)

Attributes: ENVI Natural World Electives EVST Environmental Science GEOS Group A Electives - Climate + Oceans

Not offered current academic year

ENVI 229 (F) Environmental History

Cross-listings: HIST 264

Primary Cross-listing

This course is an introduction to Environmental History: the study of how people have shaped environments, how environments have shaped human

histories, and how cultural change and material change are intertwined. As such, it challenges traditional divides between the humanities and the sciences. Taking U.S. environmental history as our focus, we will strive to understand the historical roots of contemporary environmental problems, such as species extinction, pollution, and climate change. We will take field trips to learn to read landscapes for their histories and to examine how past environments are represented in museum exhibits, digital projects, and physical landscapes. And we will develop original arguments and essays based on archival research. It is imperative that we understand this history if we are to make informed and ethical environmental decisions at the local, national, and global scale.

Class Format: with field trips

Requirements/Evaluation: several short essays; final research project

Prerequisites: none

Enrollment Limit: 18

Enrollment Preferences: juniors, seniors

Expected Class Size: 15

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 229(D2) HIST 264(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives EVST Culture/Humanities EXPE Experiential Education Courses HIST Group F Electives - U.S. + Canada

Fall 2023

SEM Section: 01 TR 8:30 am - 9:45 am Laura J. Martin

ENVI 230 (S) Geographies of Food Justice (DPE)

Recent scholarship & reporting clearly show inequalities of race, class, & gender in access to adequate, nutritious, & culturally appropriate food. Observers often call poor, segregated urban areas food *deserts*, evoking a landscape dominated by fast food & devoid of vegetables. Farmer & food sovereignty activist Leah Penniman instead refers to these places as experiencing food *apartheid* to emphasize that the inequalities are the result of structural racism. Notably, *deserts* & *apartheid* are both spatial metaphors, referring not only to the environments in which people eat, but also the systems of social, political, & economic power that define those places. This course considers the relationship between food, power, & geography by looking at such places. We ask: How does *where* people eat shape *what* they eat? What can we learn about structural racism & settler colonialism by looking at the diverse sites of food insecurity? How do people experience a globalized food system in uniquely localized ways? How do struggles over land & labor shape the possibilities for justice in the food system? Does it matter where our food is produced? We begin with an exploration of the concepts of food security, sovereignty, and justice. Subsequent units include a critical reevaluation of the concept of food deserts, drawing on works by scholars who question the term's usefulness. Next, we consider disruptions to indigenous hunting & fishing practices from settler colonialism-induced climate change & toxic contamination. Finally, we evaluate evidence about whether local food is the solution to the social and environmental problems with our food systems. We will read works by geographers, anthropologists, sociologists, planners, & journalists, among others. Several "lab" sessions throughout the semester introduce participants to data analysis tools used by policymakers and activists working on food security and justice.

Requirements/Evaluation: 2-3 short papers on assigned topics, several lab exercises focused on data analysis, final research paper, class discussion, occasional short oral presentations

Prerequisites: ENVI 101 or permission

Enrollment Limit: 19

Enrollment Preferences: Environmental studies majors and concentrators

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

Difference, Power, and Equity Notes: This course considers how race, racism, and class shape access to food. We will discuss accountability within the food movement, and discuss ways to address inequalities in this area.

Attributes: ENVI Humanities, Arts + Social Science Electives PHLH Nutrition, Food Security+Environmental Health

Not offered current academic year

ENVI 231 (S) Africa and the Anthropocene (DPE)

Cross-listings: AFR 231 / STS 231

Primary Cross-listing

Despite its low contributions to global carbon emissions, the continent of Africa is predicted to experience some of the worst effects of climate change. This interdisciplinary course investigates the causes and consequences of this troubling contradiction. It positions the African continent as an important site for understanding how legacies of empire, racial and gendered inequality, resource extraction, and capital accumulation impact contemporary global environmental politics. Students will engage theoretical texts, reports from international organizations, films, novels, and web-based content. Topics include: humanism/post-humanism; migration and displacement; representations of conflict; and sustainable development.

Requirements/Evaluation: Assignments include: 2 short written commentaries (2-3 pages each), mid-term current event analysis (5-7 pages), final analytical essay (10-12 pages) and class presentation

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Environmental Studies majors and concentrators

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

AFR 231(D2) ENVI 231(D2) STS 231(D2)

Difference, Power, and Equity Notes: Africa and the Anthropocene considers inequity in environmental politics from the vantage of the African continent. Through selected readings and classroom discussions students will tackle questions of power, racial and gendered difference, empire, and economic stratification. The course contributes to the DPE requirement by helping students to develop skills to better analyze abiding challenges in global society.

Attributes: AFR Black Landscapes ENVI Humanities, Arts + Social Science Electives GBST African Studies Electives GBST Economic Development Studies Electives

Spring 2024

SEM Section: 01 Cancelled

ENVI 232 (S) The Garden in the Ancient World

Cross-listings: REL 235 / COMP 235 / CLAS 235

Secondary Cross-listing

Drawing on the literature, art, and archaeology of ancient gardens and on real gardens of the present day, this course examines the very nature and experience of the garden and the act of gardening. Using a multi-disciplinary approach, we will explore the garden as a paradise; as a locus for philosophical discussion and religious encounter; as a site of labor, conquest, and resistance; and as a place for solace, inspiration, and desire. This course will be grounded in crucial readings from antiquity, such as the Hebrew Bible, Homer, Sappho, Cicero, Lucretius, Vergil, Horace, Columella, and Augustine, and in the perspectives of more modern writers, from Jane Austen and Tom Stoppard to contemporary cultural historian George McKay. Ultimately, our goal is to analyze conceptions and expressions of beauty, power, and love-in the garden. All readings are in translation.

Requirements/Evaluation: class participation, short written assignments, and a final project

Prerequisites: none

Enrollment Limit: 10

Enrollment Preferences: Classics majors

Expected Class Size: 10

Grading: no pass/fail option, yes fifth course option

Distributions: (D1)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 232(D1) REL 235(D2) COMP 235(D1) CLAS 235(D1)

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 233 (S) Latin American Environmental Literature and Cultural Production (DPE)

Cross-listings: RLSP 216

Secondary Cross-listing

This foundational course explores a wide array of ecocultural texts from Latin America, ranging from accounts of Europeans' first arrival to the crisis of mass extinction and anthropogenic climate change today. In between we consider an eclectic mix of styles and genres, including poetry, essays, prose fiction and speeches produced by a varied group of cultural agents. We read classic texts by canonical figures (José Martí's "Our América," the *Popol vuh*), which take on new meaning in the current context, as well as some little-known gems of ecological consciousness. Readings and discussion trace connections between environmental thought and the region's long and multi-layered history of colonialism, and students are encouraged to develop their own positions by responding to some of the leading theoretical discourses that animate the field of Latin American ecocriticism: decolonial and creole ecologies, ecofeminism, transcultural materialism, and postdevelopment. Conducted in English.

Requirements/Evaluation: Students will write and revise three formal essays over the course of the semester. There will also be shorter written assignments and intermittent discussion-leading.

Prerequisites: None.

Enrollment Limit: 15

Enrollment Preferences: Preference given to students majoring in Spanish or Environmental Studies.

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D1) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

RLSP 216(D1) ENVI 233(D1)

Difference, Power, and Equity Notes: This course meets the goals of the DPE requirement in that it focalizes the current environmental crisis through the long history of political, economic and cultural struggles in Latin America. We examine the genealogies of environmental culture, tracing the emergence of ecofeminism, for example, through generations of writers. We also examine the phenomenon of creolization and its relationship to the environmental cultures of Latin America's originary peoples.

Attributes: ENVI Humanities, Arts + Social Science Electives EVST Culture/Humanities

Not offered current academic year

ENVI 234 (S) Global Poverty and Economic Development (DPE)

Cross-listings: ECON 507 / ECON 204

Secondary Cross-listing

Why are some nations rich while other nations are poor, and what can be done to end global poverty and promote shared prosperity? This course explores the historical determinants of global poverty and inequality, and analyzes the range of policy options available to promote economic development and equalize opportunities. Drawing on research in development economics, development studies, political science, and anthropology, we seek to understand the factors that shaped the global economy and contributed to the cross-country income disparities observed today. In addition, we'll use the tools of modern empirical microeconomics to assess the possibilities for eliminating global poverty and underdevelopment in the future. Undergraduate students will receive 200-level credit and should not register at the 500-level.

Class Format: discussion

Requirements/Evaluation: short written assignments and empirical exercises; two individual take-home exams; final group project

Prerequisites: one economics course or permission of instructor

Enrollment Limit: 25

Enrollment Preferences: first-year and sophomore students

Expected Class Size: 25

Grading: no pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 234(D2) ECON 507(D2) ECON 204(D2)

Difference, Power, and Equity Notes: This course provides a setting for students to learn about the causes and consequences of poverty in developing countries. It requires students to engage with questions of political and economic power, stressing attentiveness to how market relationships may not generate welfare-maximizing opportunities for poor and marginalized populations. Through exercises and a group project, the course builds analytical and empirical skills for diagnosing and addressing constraints on economic development.

Attributes: ENVI Environmental Policy GBST African Studies Electives GBST Economic Development Studies Electives POEC Comparative POEC/Public Policy Courses

Not offered current academic year

ENVI 235 (S) Survival and Resistance: Environmental Political Theory

Cross-listings: PSCI 235

Secondary Cross-listing

Contemporary struggles to reverse environmental destruction and establish sustainable communities have prompted some political theorists to rethink longstanding assumptions about politics and its relationship to nature. Does the environment have "rights"? What, if anything, is the difference between an ecosystem and a political community? Is democracy dangerous to the planet's health? Are environmental protections compatible with political freedom? How is the domination or conquest of nature connected with domination and conquest within human societies? What does justice demand in an age of climate change? In this class, we will consider the promise and limits of political theory to illuminate present day environmental crises and foster movements to overcome them. We will engage classic texts that helped to establish political theory's traditional view of nature as a resource, as well as contemporary texts that offer alternative, ecological understandings of nature and its entwinements with politics. Class will be driven primarily by discussion. Students will have significant responsibility for setting the agenda for discussions through informal writing submitted prior to class. As a writing intensive course, attention to the writing process and developing an authorial voice will be a recurrent focus of our work inside and outside the classroom.

Requirements/Evaluation: formal and informal writing assignments and class participation

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: first-years and sophomores

Expected Class Size: 12

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

PSCI 235(D2) ENVI 235(D2)

Attributes: AMST Critical and Cultural Theory Electives ENVI Humanities, Arts + Social Science Electives PHIL Related Courses PSCI Political Theory Courses

Not offered current academic year

ENVI 238 (F) Sustainable Economic Growth

Cross-listings: ECON 238

Secondary Cross-listing

Is it possible to have infinite economic growth on a finite planet? This question has sparked a great deal of inquiry across the social sciences. Some argue that we need to slow or even end economic growth to prevent environmental catastrophe. Others argue that market forces, especially changing prices and improved technology, will ensure that growth can continue unabated without significant negative consequences. Still others argue that government intervention is necessary to limit negative consequences of economic progress, but that effective interventions are still compatible with sustained economic growth. In this class, we will explore the insights that economics has to offer on this important question. We will start by considering the importance of finite inputs used in production, including fossil fuels, minerals, and land, among others. Then, we will consider whether

undesirable byproducts of economic growth will prevent sustained growth. This second part of class will place a lot of emphasis on climate change. Throughout the class, we will pay special attention to the role that government intervention can or cannot play in promoting sustainable economic growth. This class will reinforce important concepts taught in introductory microeconomics and introductory macroeconomics.

Class Format: The first half of the class is lecture-based. The second half of the class is discussion-based.

Requirements/Evaluation: midterms exams, final exam, problem sets, short writing assignments, video-taped presentations, class participation

Prerequisites: ECON 110 and ECON 120

Enrollment Limit: 25

Enrollment Preferences: potential or declared social science majors

Expected Class Size: 20

Grading: yes pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 238(D2) ECON 238(D2)

Attributes: ENVI Environmental Policy POEC Comparative POEC/Public Policy Courses

Not offered current academic year

ENVI 243 (F) Reimagining Rivers (WS)

Cross-listings: ANTH 243

Primary Cross-listing

In the era of climate change and widening inequality, how we live with rivers will help define who we are. Rivers are the circulatory systems of civilization, yet for much of modern history they have been treated as little more than sewers, roads, and sources of power. Today they are in crisis. Rivers and the people who rely on them face a multitude of problems, including increased flooding, drought, pollution, and ill-conceived dams. These problems will threaten human rights, public health, political stability, and ecological resilience far into the future unless we learn to manage rivers more justly and sustainably. Can we reimagine rivers before it is too late? This course will pursue this question by examining the social, cultural, and political dimensions of conflict over rivers in the twentieth and twenty-first centuries. Drawing on scholarship from a wide range of social science and humanities disciplines and focusing on case studies in Asia, Africa, Europe, and the Americas, it will explore a diverse array of sources: film, fiction, ethnography, history, journalism, and more.

Class Format: This class will be taught in a modified tutorial format, with five groups of three students, each of which will meet for one 75-minute session per week.

Requirements/Evaluation: Each week, each student will either write a 5-page essay on assigned readings or write a 2-page critique of a partner's paper.

Prerequisites: Environmental Studies 101

Enrollment Limit: 10

Enrollment Preferences: Environmental Studies majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ANTH 243(D2) ENVI 243(D2)

Writing Skills Notes: Students take turns writing 5-page essays and 2-page responses to those essays, with each writing 6 in total. For each five-page paper, I meet with the student to discuss technical aspects of the paper and specific ways in which it could be improved. At the end of the semester, students have the option of handing in one revised paper as part of a portfolio of papers from throughout the semester. This enables me to have an ongoing, in-depth discussion with each student about their writing skills.

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 244 (S) Environmental Ethics (WS)

Cross-listings: PHIL 244

Primary Cross-listing

What ethical standards should guide our individual and societal choices when those choices affect current and future environmental conditions? This course will introduce students to fundamental concepts, methods, and issues in environmental ethics. Initial tutorial meetings will focus on theoretical materials that will background later discussions and will include classic readings from the environmental ethics literature (e.g., Leopold, Taylor, Rolston). Most sessions will pair readings about key concepts with specific cases that raise complex ethical issues, including the concept of moral standing and, e.g., people who do not yet exist, non-human individuals, species, and complex living systems; the concept of moral responsibility and complicity in environmentally damaging practices; the legitimacy of cost-benefit analysis as an environmental policy tool; and the valuation of human lives.

Requirements/Evaluation: five essays (5-7 pages each) and five prepared oral responses to partners' essays; evaluation will be based on essays, oral responses, and quality of discussion

Prerequisites: ENVI 101 or one course in PHIL

Enrollment Limit: 10

Enrollment Preferences: declared and prospective Environmental Studies majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Unit Notes: meets Value Theory requirement only if registration is under PHIL

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 244(D2) PHIL 244(D2)

Writing Skills Notes: Students will write five tutorial papers of 5-7 pages in length, one of which they will revise and submit at the end of the term. In each of the tutorial papers students will describe and evaluate arguments that appear in the assigned readings, and will develop arguments in support of their own ethical positions. Students will receive written and oral feedback, concentrated particularly in the first half of the semester, to improve their ability to present clear and effective written arguments.

Attributes: ENVI Humanities, Arts + Social Science Electives EVST Culture/Humanities PHIL Contemporary Value Theory Courses

Spring 2024

TUT Section: T1 TBA Julie A. Pedroni

ENVI 246 (F) Race, Power, & Food History (DPE)

Cross-listings: HIST 265 / AMST 245

Primary Cross-listing

Have you ever wondered why Spam is so popular in Hawaii and why Thai food is available all across the United States? Are you curious why black-eyed peas and collards are considered "soul food"? In this course, we will answer these questions by digging in to the histories of global environmental transformation through colonialism, slavery, and international migration. We will consider the production and consumption of food as a locus of power over the last 300 years. Beginning with the rise of the Atlantic slave trade and continuing through the 20th century, we trace the global movement of plants, foods, flavors, workers, businesses, and agricultural knowledge. Major units include rice production by enslaved people in the Americas; Asian American food histories during the Cold War; and fat studies critiques of obesity discourse. We will discuss food justice, food sovereignty, and contemporary movements for food sustainability in the context of these histories and our contemporary world. Readings are interdisciplinary, but our emphasis will be on historical analyses of race, labor, environment, health, and gender.

Requirements/Evaluation: two to three papers on assigned topics (4-6 pages); one longer final paper (8-10 pages); participation in discussion and online activities

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Environmental Studies majors and concentrators; American Studies majors; Public Health concentrators; history majors

Expected Class Size: 19

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

HIST 265(D2) ENVI 246(D2) AMST 245(D2)

Difference, Power, and Equity Notes: This course considers the production and consumption of food as a locus of power over the last 300 years, and contextualizes current movements for food justice and sovereignty in light of those histories. Students will have opportunities to reflect on questions of power, privilege, and racism in contemporary food movements. Our final unit focuses on challenges to critical food studies from fat liberation and body positivity

Attributes: AMST Comp Studies in Race, Ethnicity, Diaspora ENVI Humanities, Arts + Social Science Electives EVST Culture/Humanities HIST Group F Electives - U.S. + Canada PHLH Nutrition, Food Security+Environmental Health

Not offered current academic year

ENVI 247 (F) Race, Land and Settler (Racial) Capitalism: Ongoing Topics in (Dis)/(Re)possession

Cross-listings: HIST 274 / AFR 234 / AMST 234

Secondary Cross-listing

This sequential studio course serves as an introduction to ongoing topics in colonialism, racial thinking, African Diaspora studies, Global, Caribbean, and local studies. We will examine how race, gender and class operate under racial capitalism and settler colonialism. The readings in this class will center the works of critical geographers, caribbeanist, scholars of the African Diaspora, Indigenous theorists, among other critical, anti-capitalist or decolonial scholars. Reading in this course will take up the question(s) of land and land-making; race, racialization, and racial thinking; alongside questions of space and place as they all relate to the various processes, projects and methods of (dis)/(re)possession. This course is the first part of a complementary course, which will be offered in the Spring, titled, "Race, Land, Space and (Dis)/(Re)possession: Critical Topics in Environmental Injustice and Subaltern Geographies," which tracks both the "historical breaks" and ongoing processes of (dis)/(re)possession to more contemporary materializations. Weekly in-class discussion will be combined with guest lectures in order to provide the opportunity for exploring how race, space and (dis)/(re)possession can be understood geographically, and to also explain how a range of these territorializing processes operate in the transnational and local contexts. Those who take this studio course can expect to be actively engaged in directing their learning experience through research/final creative projects of their own selection. Sound, music and other audio engagements will also complement discussions in this course. Therefore, the capacity of deep listening, in-and-out of class, is mandatory. Sample topics covered in the course include the following: indigeneity and Blackness; dispossession and accumulation; environmental imperialism, war and colonial resistance. You are strongly encouraged to participate in both courses in this complementary sequence, but are not required to do so.

Requirements/Evaluation: The following requirements serve as the basis for course evaluation: Attendance and Participation 30%; Serve as Discussion Leader Once 20%; Weekly 300-500-word Critical Response Papers 20%; One Final Creative Project, which can take any number of forms, including the conventional research paper (8-12 double-spaced pages plus bibliography). More creative projects might include, a pamphlet or zine, a written play or theatrical performance, or an op-ed. We will discuss further possibilities in class. 30%

Prerequisites: None

Enrollment Limit: 10

Enrollment Preferences: If the course is overenrolled, preference will be given to Africana studies concentrators.

Expected Class Size: 7

Grading: yes pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 247(D2) HIST 274(D2) AFR 234(D2) AMST 234(D2)

Attributes: HIST Group D Electives - Latin America + Caribbean HIST Group F Electives - U.S. + Canada HIST Group G Electives - Global History LATS Countries of Origin + Transnationalism Elect

Not offered current academic year

ENVI 249 (S) Food, Agriculture, and Globalization

This course examines the history and current politics of the international political economy of food with a focus on how agriculture and food provisioning have been transformed through imperialism and globalization. We examine the interactions of corporations, nation-states, multilateral

international organizations, non-governmental organizations, and social movements in the formation of a globalized food system. Topics include the historical antecedents of our present system, plantation agriculture, the influences of war and settler colonialism on global food production, Cold War transformations in the international food system, the origins of sustainable development discourse, international anti-hunger programs, fair trade and other labeling schemes, labor migration, the antiglobalization and local food movements, and neoliberalism. We will pay particular attention to theories about how producers and consumers are connected to one other through the political economy of food. The reading assignments are drawn from the fields of environmental, food, and policy history, and we will also read works from political scientists, international relations scholars, geographers, anthropologists, and advocacy organizations.

Requirements/Evaluation: 2 short concept papers (3-4 pages); 1 research paper (10 pages); several short policy exercises

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Environmental Studies majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

Attributes: ENVI Environmental Policy GBST Economic Development Studies Electives

Not offered current academic year

ENVI 250 (F) Environmental Justice (DPE)

Cross-listings: STS 250

Primary Cross-listing

How are local and global environmental problems distributed unevenly according to race, gender, and class? What are the historical, social and economic structures that create unequal exposures to environmental risks and benefits? And how does inequity shape the construction and distribution of environmental knowledge? These are some of the questions we will take up in this course, which will be reading and discussion intensive. Through readings, discussions, and case studies, we will explore EJ in both senses. Potential topics include: toxics exposure, food justice, urban planning, e-waste, unnatural hazards, nuclearism in the U.S. West, natural resources and war, and climate refugees. Occasionally, community leaders, organizers, academics, and government officials will join the class to discuss current issues.

Requirements/Evaluation: several short essays, final essay

Prerequisites: ENVI 101 or permission of the instructor

Enrollment Limit: 12

Enrollment Preferences: juniors, seniors

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 250(D2) STS 250(D2)

Difference, Power, and Equity Notes: This course will explore how unequal power leads to environmental injustice. Specifically, we will analyze how local and global environmental problems are distributed unevenly according to race, gender, and class. This is a service-based learning course, and students will hone skills to address environmental injustices.

Attributes: ENVI Humanities, Arts + Social Science Electives EVST Culture/Humanities EXPE Experiential Education Courses GBST Economic Development Studies Electives JLST Interdepartmental Electives

Not offered current academic year

ENVI 251 Science and Militarism in the Modern World (WS)

In 1961, United States President Dwight D. Eisenhower warned of the global dangers of what he called the "military-industrial complex." In this course, we will interrogate the military-scientific complex, or the imbrication of militarism and scientific knowledge. This tutorial takes up a number of environmental themes, including the role of environmental science within military campaigns, conservation and environmental racism, nuclear waste and ecological contamination. Surveying conflicts from World War II through the present-day War on Terror, this course will investigate how

environmental scientists, politicians, soldiers, activists, and artists have grappled with the intertwined legacies of science and militarism. Students will engage a range of textual materials including books, films, photographs, and news reports.

Requirements/Evaluation: Course requirements include bi-weekly response papers (5-7 pages) and tutorial discussions.

Prerequisites: None

Enrollment Limit: 10

Enrollment Preferences: ENVI and STS majors and concentrators

Expected Class Size: 10

Grading:

Distributions: (D2) (WS)

Writing Skills Notes: Over the course of the semester, students will write 5 papers (5-7 pages each). They will receive bi-weekly detailed feedback on their writing from the professor and their tutorial partner. This feedback will include advice on strengthening their argumentation and use of textual evidence, as well as grammar and usage suggestions/corrections. Students will be graded on the portfolio of papers, with specific attention to how they have incorporated feedback in each subsequent paper.

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 253 (S) Race, Land, Dis/Re-possession: Critical Topics in Environmental Injustice and Subaltern Geographies

Cross-listings: AFR 235 / GBST 235 / HIST 275 / AMST 235

Secondary Cross-listing

This course is an introduction to ongoing and contemporary topics in colonialism, racial thinking, African Diaspora and, Global and Caribbean studies, studies of 'the environment,' and dispossession. We will examine how race, gender and class operate under racial capitalism and settler colonialism as ongoing, sometimes continuous and discontinuous processes. The readings will center the works of critical geographers, caribbeanist, scholars of the African Diaspora, and other critical, anti-capitalist or decolonial scholars. Readings, as in AFR 234, will take up the question(s) of land and land-making; race, racialization, and racial thinking; of space and place as they all relate to the various processes, projects and methods of (dis)/(re)possession, both "past" and "contemporary." We will interrogate temporal binaries, settler time, notions of [the] "progress(ives)" and other bifurcated understandings of the world. This course is the second part of a complementary course, titled, "Race, Land and Settler (Racial) Capitalism," which focuses on the historical geography of processes of (dis)/(re)possession from a Black and Indigenous Atlantic perspective. In this iteration, weekly in-class discussion will be combined with guest lectures to provide the opportunity for exploring how race, space and (dis)/(re)possession can be understood geographically, and to explain how a range of these territorializing processes operate. Sound, music and other audio will complement discussions. Therefore, the capacity of deep listening, in-and-out of class, is a grounding. Sample topics covered in the course include: indigeneity and Blackness; (dis)possession and accumulation; plantation geographies and economies; housing and houselessness; the problem of parks and conservation; prisons and carceral geographies; Black geographies; environmental racism and colonial resistance. You are strongly encouraged to participate in both courses in this sequence, but are not required to do so.

Requirements/Evaluation: The following requirements serve as the basis for course evaluation: Attendance and Participation 30%; Serve as Discussion Leader Once 20%; Weekly 300-500-word Critical Response Papers 20%; One Final Creative Project, which can take any number of forms, including the conventional research paper (8-12 double-spaced pages plus bibliography). More creative projects might include, a pamphlet or zine, a written play or theatrical performance, or an op-ed. We will discuss further possibilities in class. 30%

Prerequisites: None

Enrollment Limit: 10

Enrollment Preferences: If the course is overenrolled, preference will be given to Africana studies concentrators.

Expected Class Size: 7

Grading: yes pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

AFR 235(D2) GBST 235(D2) HIST 275(D2) ENVI 253(D2) AMST 235(D2)

Attributes: HIST Group D Electives - Latin America + Caribbean HIST Group F Electives - U.S. + Canada HIST Group G Electives - Global History
LATS Countries of Origin + Transnationalism Elect

Not offered current academic year

ENVI 254 (S) Food, Forests, & Fungi: Environmental Health in the Anthropocene (DPE) (WS)

Cross-listings: ANTH 254 / STS 254

Secondary Cross-listing

This tutorial will examine the impacts of the climate crisis on human, environmental, and planetary health via the lens of food systems & plant medicines in the Anthropocene. We use anthropological, environmental, evolutionary, & ecological approaches to explore the ecosystems connecting humans, plants, animals, and fungi that have been massively disrupted by systems of industrial agriculture, industrial forestry, corporate food systems, and corporate biomedicine. We will dwell on the growing signs of our climate catastrophe including the sharp rise of global temperatures, floods, hurricanes, alongside declining freshwater reserves, melting cryosphere, and falling crop yields, that are helping produce a growing wave of hunger and climate refugees in every world region. Along the way, we will hear from and read about youthful climate activists from Extinction Rebellion, Ende Gelände, Fridays for the Future, 350.org, and the Sunrise Movement who are designing and implementing innovative, local, and sustainable solutions to inaction, apathy, and inertia even as situations of internal migration or displacement, food scarcity, food sovereignty, water shortages, and other climate-related disruptions are increasing in both developing and developed parts of our globe. We learn how activist narratives intersect with wider movements to promote more local and circular economies of regenerative agriculture and forestry, ethically produced and sourced organic food, wild & cultivated botanicals, and complementary medicines that are healing both humans and the planet.

Requirements/Evaluation: Weekly attendance, reading 200-300 pages/week, weekly lead essays or oral responses to texts, showing up in mind & body each week.

Prerequisites: none, but a class in ENVI or ANTH preferred

Enrollment Limit: 10

Enrollment Preferences: ANTH, ENVI, STS majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ANTH 254(D2) ENVI 254(D2) STS 254(D2)

Writing Skills Notes: Students will write essays: either a lead essay of 1400 words, or written & oral feedback on the lead essay plus an oral response to text. Students receive intensive weekly feedback on their essays and a mid semester writing chat with instructor to negotiate and understand strengths and weaknesses of their writing.

Difference, Power, and Equity Notes: We will examine the ways that food systems reproduce social and structural inequalities within public health, environmental health, climate health. We also examined the interconnected nature of the health of our planet, food systems, forests, and fungal networks and how climate activism and action can fight unequal access to food, forests, nature, and health.

Attributes: ENVI Humanities, Arts + Social Science Electives PHLH Nutrition, Food Security+Environmental Health

Spring 2024

TUT Section: T1 TBA Kim Gutschow

ENVI 255 (F) Environmental Observation

Cross-listings: GEOS 255

Secondary Cross-listing

To study the environment, we need to observe and measure it. We collect data--numbers that represent system states--and analyze them to create understanding of the world we live in. Advances in technology create more opportunities to discover how the planet works. Through a survey of observational approaches (including weather stations, direct sampling, remote sensing, community-based monitoring, and other techniques), this course will investigate the process of turning a physical property in the environment into a number on a computer and then into meaningful information. We will explore both direct field measurements and remote sensing techniques, diving into how to choose the appropriate sensor for a scientific question, how sensors work, analysis approaches and statistical methods, and how to interpret the resulting data. We will also learn how to mitigate measurement bias through a combination of lab experiments and field work and how to make interpretations of measurements that accurately reflect what is being measured. The course will focus on the near-surface environment, including the atmosphere, water, and biosphere. Students will carry out a research project using observation techniques covered in class to explore a scientific question of interest. This course is in the Oceans and

Climate group for the Geosciences major.

Requirements/Evaluation: Weekly labs, four quizzes, and a final project

Prerequisites: at least one prior course in GEOS or ENVI

Enrollment Limit: 20

Enrollment Preferences: sophomores, then GEOS majors

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

GEOS 255(D3) ENVI 255(D3)

Attributes: ENVI Natural World Electives EVST Methods Courses EXPE Experiential Education Courses GEOS Group A Electives - Climate + Oceans

Not offered current academic year

ENVI 256 (F) Race, Environment, and the Body

Cross-listings: AFR 255 / AMST 257 / SOC 255

Secondary Cross-listing

This course examines the relationship between structural racism and racial/ethnic health disparities. Through class discussions of readings and media images, we will explore three topics: 1) how racism intersects with classism, sexism, and xenophobia to govern the implementation of local, state and federal health care policies; 2) how the uneven enforcement of health care policies ultimately produces differences in mortality, morbidity, and quality of life among various populations; and 3) anti-racist public health scholarship that offers strategies for creating racial health equity.

Class Format: Discussion

Requirements/Evaluation: Class participation, 2-3 short papers (5-7 pages), and a final presentation

Prerequisites: None

Enrollment Limit: 20

Enrollment Preferences: Preference given to AFR majors, ENVI concentrators and majors, and ANSO majors.

Expected Class Size: 20

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 256(D2) AFR 255(D2) AMST 257(D2) SOC 255(D2)

Attributes: AFR Core Electives AMST Comp Studies in Race, Ethnicity, Diaspora AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives PHLH Nutrition, Food Security + Environmental Health PHLH Social Determinants of Health

Fall 2023

LEC Section: 01 TR 8:30 am - 9:45 am Christopher O. Ndubuizu

ENVI 257 (S) Cities, Suburbs, and Rural Places (DPE)

Cross-listings: AMST 247 / LATS 230

Secondary Cross-listing

Long associated with cities in the scholarly and popular imagination, immigrants have increasingly settled in U.S. suburbs. Through the lens of new destinations for im/migrants, this course introduces spatial methods, perspectives, and concepts to understand cities, suburbs, and rural places and the relationships between these various spaces. We ask how geographically specific forces and actors shape these trends, as well as the spatially uneven outcomes of complex processes like globalization. This interdisciplinary course highlights racial, legal, economic, political, environmental, social, and cultural dimensions of how transnational migrants become part of and create homes in new places. Through a range of textual materials (academic, technical, popular, visual), we explore why people migrate, the origin of the "illegal alien" figure, economic restructuring and local

immigration policies, environmental justice, place-making and community development. Rooted in critical race geographies, case studies are often comparative across different racial and ethnic groups in the U.S. West, South, Midwest, and Northeast. We analyze how documentation status and perceptions of illegality affect the lived experiences of Latinas. This course will be mostly discussion-based, with grading based on participation, short writing exercises, three assignments, a midterm examination, and a final exam.

Class Format: This is also a discussion course. While I will spend some time at the beginning of the class lecturing, most of the time will be spent in class discussions.

Requirements/Evaluation: Class participation, weekly in-class writing, three 3-6 page essays, a midterm, and a final examination. All writing materials and exams are based on coursework.

Prerequisites: None

Enrollment Limit: 25

Enrollment Preferences: LATS concentrators or those intending to become LATS concentrators

Expected Class Size: 20

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 257(D2) AMST 247(D2) LATS 230(D2)

Difference, Power, and Equity Notes: Students examine how race, gender, sexuality, class, and documentation status also impact how immigrants 'transition' to new migration destinations. We consider how the exercise of unequal power affects migration, settlement, and place-making. Students analyze representations and demographic data to determine how people are portrayed and what their material conditions are.

Attributes: AMST Comp Studies in Race, Ethnicity, Diaspora AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives LATS Core Electives

Spring 2024

LEC Section: 01 TF 1:10 pm - 2:25 pm Edgar Sandoval

ENVI 260 (S) Design and Environmental Justice (DPE)

Cross-listings: ARTS 261

Primary Cross-listing

This seminar/digital art studio offers key literature to examine the relationship between design and environmental justice. It will help build a vocabulary to study the environment as disputed terrain between technological fixes and issues of race, ethnicity, gender, sexuality, class, and colonial status. Students will develop textual/graphic projects about a chosen case study aiming to reorient public perception and imagination around environmental justice. Case studies include contemporary issues like "natural" disasters, eco-cities, and urbanization in the Global South and North. Skills taught include design-thinking and collaborative design, digital art (Photoshop), and participation in collective reviews and public presentations. The class culminates in a presentation to external reviewers and a final exhibition.

Class Format: Because this seminar is cross-listed with ARTS, there is a studio component (short assignments and final project).

Requirements/Evaluation: Active presence in class discussions and presentations, quality of work, depth and quality of the investigative process, willingness to experiment, and contributions to a collaborative learning environment. This intensive seminar/digital art studio requires working in the architecture studio and/or PC lab outside of scheduled class hours.

Prerequisites: Drawing I, ENVI 101, or permission from the instructor.

Enrollment Limit: 15

Enrollment Preferences: Envi majors and concentrators, Studio Art majors, Art History and Studio Art majors

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Materials/Lab Fee: \$300-\$450 lab fee charged to term bill. Lab and materials fees for all studio art classes are covered by the Book Grant for all Williams financial aid recipients.

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 260(D2) ARTS 261(D1)

Difference, Power, and Equity Notes: This seminar/digital art studio examines the interrelationship between design and environmental justice from an intersectional perspective. It encourages students to develop a critical understanding of the role that technical rationality, devoid of ethics and respect for difference, plays in producing racist, heteropatriarchal, and ecocidal forms of oppression. In parallel, we will explore place-based practices that counter neoliberal and extractivist approaches to the (built) environment.

Attributes: ENVI Humanities, Arts + Social Science Electives EVST Culture/Humanities

Spring 2024

SEM Section: 01 TR 8:30 am - 9:45 am Giuseppina Forte

ENVI 261 (F)(S) Science and Militarism in the Modern World (WS)

Cross-listings: STS 261

Primary Cross-listing

In 1961, United States President Dwight D. Eisenhower warned about the global dangers of what he called the "military-industrial complex." In this course, we will interrogate the military-scientific complex, or the imbrication of militarism and scientific knowledge. Surveying conflicts from World War II through to the present-day War on Terror, this course will consider how empire, networks of expert knowledge, resource extraction, environmental contamination, and land degradation have shaped the modern world. Students will engage a range of textual materials including books, films, photographs, and news reports. Course requirements include weekly writing assignments and participation in small group discussions.

Class Format: This course adopts a tutorial model. Students will be divided into 5 groups of 2. Each week the groups will meet with me. Each pair will include one "presenter," who shares a 5-7 page paper responding to the week's theme, and one "respondent," who will offer a 2-3 page response to the presenter's paper. The roles of presenter and respondent will alternate each week. Each student will produce 5 papers as "presenter" and 5 papers as "respondent."

Requirements/Evaluation: Each student will produce five (5-7 page) papers as "presenter" and five (2-3 page) papers as "respondent." Grades will be issued based on the portfolio of papers and active participation in discussions.

Prerequisites: None

Enrollment Limit: 10

Enrollment Preferences: ENVI and STS majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 261(D2) STS 261(D2)

Writing Skills Notes: This is a writing intensive tutorial. Students will complete weekly written assignments and receive in-depth feedback to improve their writing. Over the course of the semester, students will write 10 papers ranging from 2-7 pages.

Attributes: ENVI Humanities, Arts + Social Science Electives

Fall 2023

TUT Section: T1 Cancelled

Spring 2024

TUT Section: T1 TBA Brittany Meché

ENVI 263 (S) The Global Ocean: An Interdisciplinary Introduction

Cross-listings: MAST 263

Secondary Cross-listing

Though it covers most of the planet, the ocean's importance to everyday life is easy to overlook. Its roles as a cultural symbol, resource, highway, and climate regulator make it essential to life around the world. This interdisciplinary course, team-taught by the faculty of the Williams-Mystic Program, will

examine key issues in each of the world's oceans while introducing students to the ways these issues connect multiple disciplines and transcend physical, political, and imaginary ocean boundaries. By drawing on the expertise of the five professors -- from humanities, social sciences, and sciences -- this course facilitates the critical study of the ocean from an interdisciplinary perspective and helps them consider their own role in the shifting relationship between humanity and the ocean. This seminar-style course will meet twice a week online, with students assessed by their participation, response papers, and final project, while helping them apply interdisciplinary skills to pressing sustainability issues connecting the environment and society.

Requirements/Evaluation: Five 2-page papers, participation, and a 6-8 page final paper

Prerequisites: none, open to all students

Enrollment Limit: 20

Enrollment Preferences: 1. first years, 2. sophomores, 3. MAST concentrators

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

MAST 263(D2) ENVI 263(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 265 (F) Coral Reefs: Ecology, Threats, & Conservation

Cross-listings: MAST 265 / BIOL 165

Secondary Cross-listing

Coral reefs are a fascinating ecosystem found throughout the world's tropical oceans. Corals can thrive in nutrient-poor oceans because of the mutualistic relationship with algal symbionts. And as a foundational species, corals provide a habitat for numerous species, possibly the highest diversity found on the planet. However, these complex and beautiful ecosystems are declining worldwide from a variety of local and global threats. In this course, we will explore coral reef ecology through an in-depth examination of the biotic and abiotic factors contributing to the ecosystem's functioning. We will also investigate the causes and consequences of threats to coral reefs, such as ocean warming, ocean acidification, and resource extraction. Finally, we will identify the many efforts worldwide to conserve coral reefs and promote their resilience. In this seminar course, you will demonstrate your proficiency through knowledge assessments, short writing reflections, a virtual coral fragmentation experiment, and a creative advocacy project. This course aims to deepen your awareness of the complex species interactions on coral reefs and the physical factors affecting coral survival while fostering hope through current conservation efforts.

Requirements/Evaluation: Four 1-paragraph discussion board post, One 20-question knowledge assessment (quiz), Three 2-page writing reflections, One lab results and discussion write-up 2-3 pages figures included, and a creative (medium is student choice) advocacy project.

Prerequisites: none, open to all students

Enrollment Limit: 20

Enrollment Preferences: 1. First-Year, 2. Sophomores

Expected Class Size: 16

Grading: yes pass/fail option, yes fifth course option

Unit Notes: Does not count for Biology major credit.

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

MAST 265(D2) BIOL 165(D3) ENVI 265(D2)

Attributes: ENVI Natural World Electives

Not offered current academic year

ENVI 266 (S) Reading Water (WS)

Cross-listings: MAST 266

Secondary Cross-listing

Water has such profound and far-reaching influence on individuals, societies, and the planet that it simultaneously risks going overlooked and appearing clichéd. Human beings are made of it and need it to live, yet will die if immersed in it. It is venerated by cultures around the world, yet most people either cannot access clean water, or don't know where their clean water is piped in from. It covers the earth's surface, and has shaped it over eons, yet scientists are still not sure how it came to be here in the first place. This wide-ranging influence also presents challenges for traditional academic structures; thinking about water demands crossing times, spaces, and disciplines. This course will explore the wide-ranging and diverse ways water impacts individuals, cultures, and the environments they call home by drawing on a range of content: hydrology, literature, political theory, storytelling, geography, and more. To do this, we will also develop and examine methods of critically reading as "non-experts"--reading scientific articles as rhetorical objects and reading for scientific principles in literature, for instance--to explore what interdisciplinary thinking opens up (and inhibits), and thus how to effectively engage with and create interdisciplinary work. The goal here is not to define water's cultural or scientific importance, or to determine which disciplines "best" combine to explain water, or to come up with humanities-based solutions to "the water crisis." Rather, these texts, and the water that flows through them will help us explore the opportunities and limits of human perceptions of the other-than-human world. It will help us consider the extent to which those perceptions both shape, and are shaped by, a seemingly simple molecule. And it will help us imagine epistemologies and ontologies that account for the ways water simultaneously flows through us, around us, and through the deep geological history of the planet. Course Texts: Tristan Gooley -- *How to Read Water* (selections) Vandana Shiva -- *Water Wars* (selections) Luna Leopold -- *Water, Rivers, and Creeks* (selections) Richard White -- *The Organic Machine* Linda Hogan -- *Solar Storms* Marc Reisner -- *Cadillac Desert* Jesmyn Ward -- *Salvage the Bones* John McPhee -- "Atchafalaya" Emmi Itäranta -- *Memory of Water* Brenda Hillman -- "The Hydrology of California"

Class Format: The class will be primarily discussion-based, and will ask students to lead and structure discussions. Students will have questions, reflections, and insights prepared before class, and use those to drive our in-class activities.

Requirements/Evaluation: 100pg of reading a week, give or take. Approx 20-25 pages of written work throughout the semester.

Prerequisites: None

Enrollment Limit: 20

Enrollment Preferences: Preference to majors, and then to sophomores and juniors, respectively.

Expected Class Size: 20

Grading: yes pass/fail option, no fifth course option

Distributions: (D1) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

MAST 266(D1) ENVI 266(D1)

Writing Skills Notes: Students will write four papers of increasing complexity that will require workshoping and drafts. Each of these papers will receive forward-looking writing feedback from me. The first paper centers on paragraph-level stylistic choices, the second on argument/evidence connections, the third on genre, and the final paper synthesizes these writing skills. In addition, students' final grades will allow for revision of earlier papers to encourage and assess growth of writing skills.

Not offered current academic year

ENVI 268 (S) Debating Ocean Biodiversity at the Intersection of Science and Policy

Cross-listings: MAST 268

Secondary Cross-listing

Biodiversity in the ocean is facing an onslaught of challenges, both directly and indirectly. It is likely that we are undergoing a sixth mass extinction event, where diversity of life on earth is stunningly at risk. Fortunately, however, we are also finding innovative ways to solve issues and attempt to stave off these dramatic changes to our ecosystems. These solutions potentially have both positive and negative effects. Difficult tradeoffs must be weighed and decisions must be made as people wrestle with known knowns, known unknowns, and unknown unknowns. In this class, we will explore five issues that relate to biodiversity in the ocean. You will have the opportunity to investigate one side of an issue, to collect supporting information, and to advocate for your position all while learning about current biodiversity issues in the ocean. You will be challenged to weigh conflicting evidence to find a positive outcome. Throughout the class you will practice critical thinking, evaluation, and synthesizing skills as you work with multiple viewpoints. Class time will include lecture, in-class group work, and student-led debates of timely, controversial issues. You will be assessed on summaries of information, reflections on topics, and a final project on an issue of your choice relating to ocean biodiversity.

Requirements/Evaluation: Five 2-page papers, participation, and a 6-8 page final paper

Prerequisites: none, open to all students

Enrollment Limit: 20

Enrollment Preferences: 1. first years, 2. sophomores, 3. MAST concentrators

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 268(D2) MAST 268(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives MAST Interdepartmental Electives

Not offered current academic year

ENVI 271 (S) Theatre & Environment: Site, Nature, Ecoperformance, Utopia (DPE)

Cross-listings: THEA 272

Secondary Cross-listing

What is theatre's relation to the environment, whether natural or social? How does the site, place, or ecology of a performance change its meaning and reception? What role can live performance play in grassroots campaigns for climate action or environmental justice? How can we use theatre to, in the words of adrienne maree brown, "practice, in every possible way, the world we want to see?" In this combined seminar/studio course, participants will work collaboratively to create a series of mini-performances based on four categories: site, nature/ecology, ecoperformance, and utopia.

Acknowledging the deep inequities (racial, gendered, ethnic, class-based) that constitute *all* human and environmental interaction, we will work to understand how art's relationship to the environment is itself shaped by the historical legacies of empire and global capitalism. As a contribution to the work of the studio, each student will share independent research on an artist, activist movement, or collective of their choice, such as: Hito Steyerl, Ellie Ga, Marta Rosler, Joan Jonas, Paul Chan, Theaster Gates, Bread and Puppet, Punch Drunk, En Garde Arts, Artichoke Dance, Talking Birds, Extinction Rebellion, Greenpeace, and others. As a special project in the class, we will collaborate with The Zilkha Center to create performances that engage directly with topics relevant to the campus and surrounding community. This is a seminar and maker's course that invites students to create, develop, perform, and share their work with each other and, in some cases, public audiences.

Class Format: This is a maker-based studio and seminar course that requires deep collaboration on the creation, development, and performing of original works of live performance.

Requirements/Evaluation: Creation and presentation of a series of four mini-performance pieces; a 15-minute independent oral presentation on a chosen artist or collective; weekly journal writing; deep and active participation and collaboration.

Prerequisites: none

Enrollment Limit: 14

Enrollment Preferences: if overenrolled, preference will be given to Theatre majors and Environmental Studies majors

Expected Class Size: 10

Grading: yes pass/fail option, yes fifth course option

Distributions: (D1) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

THEA 272(D1) ENVI 271(D1)

Difference, Power, and Equity Notes: This course interrogates the deep inequities, injustices (racial, gendered, ethnic, and class-based), and power relations that constitute all of humanity's relation with earth's environment, ecosystem, and ecology. Students will not only study artists and collectives engaged with the work of environmental justice, accountability, and action, they will also make such art themselves.

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 275 (S) Environmental Science, Policy, and Justice (DPE)

Cross-listings: STS 275

Primary Cross-listing

Environmental science is much more than collecting data. Scientific experts are often called upon--and often position themselves--to guide environmental governance, which means that science has (some) power over public life. What is, and what should be, the relationship between

science, on the one hand, and the creation and implementation of environmental policy, on the other? In this seminar we will study how science shapes governance and how science itself is governed. We will explore how legislatures, agencies, and courts respond to scientific information and uncertainty. And we will learn about how communities facing environmental racism and injustice collect data and use it in their advocacy. Along the way, we will challenge the idea of a unified "scientific method," and we will think about how Western scientific knowledge relates to other ways of knowing, including non-Western sciences, embodied knowledge, and traditional knowledge. Topics include: international climate negotiation, chemical exposure, the regulation of biotechnology, agricultural policy, pandemic responses, and plastics and electronics waste.

Requirements/Evaluation: several short essays, final essay

Prerequisites: none

Enrollment Limit: 18

Enrollment Preferences: juniors, seniors

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 275(D2) ENVI 275(D2)

Difference, Power, and Equity Notes: This course will explore how unequal power leads to environmental injustice. Specifically, we will analyze how local and global environmental problems are distributed unevenly according to race, gender, and class. Using case studies we will analyze how communities facing environmental racism interact with scientists and sciences.

Attributes: ENVI Environmental Policy EVST Social Science/Policy

Spring 2024

SEM Section: 01 TR 8:30 am - 9:45 am Laura J. Martin

ENVI 280 Carbon dioxide uptake and our climate future (WS)

Because of the failure to substantially reduce global greenhouse gas emissions, it is now clear that removal of carbon dioxide already emitted to the atmosphere is necessary to meet the 1.5 degree Celsius maximum warming target to avoid severe and irreversible consequences from continued greenhouse gas emissions. Natural carbon sinks have already taken up two thirds of the excess carbon dioxide from the atmosphere, and these terrestrial and marine systems are being investigated to determine if this uptake can be enhanced by geoengineering: human intervention to offset the impacts of climate change. In addition, technologies are being developed to capture carbon dioxide directly from the atmosphere, though none are yet operating at a large enough scale and low enough cost. In this tutorial, students will study the terrestrial, near-coastal, and deep-ocean carbon cycles, and analyze both the capacity for future natural uptake, the potential augmented uptake that could be achieved by deliberate manipulation of these systems, and the impacts of these carbon cycle perturbations on ecosystems and humans. Students will evaluate the scientific basis behind real startup ventures and carbon credit schemes that capitalize on the exploding interest and investment in carbon uptake technologies. And they will write a research proposal for investigating and/or testing a scientifically compelling carbon uptake strategy. This course is in the Oceans and Climate group for the Geosciences major.

Requirements/Evaluation: evaluation will be based on the critical analysis of readings through discussion, writing and revision

Prerequisites: one GEOS course or ENVI 102

Enrollment Limit: 10

Enrollment Preferences: students with a strong interest in Geosciences, Geosciences majors, Environmental Studies majors and concentrators

Expected Class Size: 10

Grading:

Distributions: (D3) (WS)

Writing Skills Notes: Each student will write five 5-page papers and five 1-page response papers; students will give and receive feedback through peer review and tutorial meeting discussion and will develop their writing and critical analysis skills through revision.

Attributes: ENVI Natural World Electives GEOS Group A Electives - Climate + Oceans

Not offered current academic year

ENVI 288 (S) Environmental Security: Policy Dilemmas and Solutions

Cross-listings: GBST 288

Primary Cross-listing

Water wars. Climate refugees. Scarcity-induced conflict. These and other challenges shape collective discourses about the climate change present and future. This course explores the relationship between environmental and security issues. It surveys the emergence of environmental security as a field of study and a policy arena. Students will engage a range of materials, including policy documents from the United Nations, international non-governmental organizations, global think tanks, the United States Department of Defense, and other security agencies. Students will also explore critical scholarship on the possibilities and limitations of environmental security as a leading policy paradigm.

Requirements/Evaluation: Class discussions; Two short response papers (2-5 pages each); Semester-long group policy project, including a mid-term policy report (4-6 pages) and a final group presentation as part of a mini conference put on by the class.

Prerequisites: None

Enrollment Limit: 19

Enrollment Preferences: environmental studies majors and concentrators; global studies concentrators

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 288(D2) GBST 288(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives ENVI Environmental Policy EVST Social Science/Policy

Spring 2024

SEM Section: 01 Cancelled

ENVI 291 (S) Religion and Ecology in America (WS)

Cross-listings: REL 291 / SOC 291

Primary Cross-listing

This course examines the relationship between religious and environmental thought in America. Exploring a broad range of practices, symbols, and beliefs, we will examine the religious roots and branches of modern environmentalism. Rather than survey the formal teachings of organized religious groups, we will explore the creation and contestation of environmental meaning in the public sphere through literature, art, philosophy, and popular culture. How have writers, thinkers, and artists from different religious and cultural backgrounds shaped the way we think about nature? How have they shaped the way we think about politics, science, and social justice? How have they influenced each other to produce distinctively American forms of eco-spirituality? In pursuit of these questions, we will consider a diverse array of topics and cases, including struggles to protect Native American sacred places, the role of Black churches in fighting environmental racism, Protestant outdoorsmanship, Catholic climate activism, Jewish eco-mysticism, atheist biology, Buddhist therapy, and more.

Requirements/Evaluation: Each week each student will either write a 5- to 7-page essay on assigned readings or offer a 2-page critique of their partner's paper.

Prerequisites: ENVI 101 or instructor permission

Enrollment Limit: 10

Enrollment Preferences: Environmental Studies majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 291(D2) REL 291(D2) SOC 291(D2)

Writing Skills Notes: Each student will write five five-page papers and five two-page papers in this class. They will be given extensive weekly feedback on their writing in the form of one-on-one meetings and written comments, and they will be given multiple opportunities for revision. Emphasis will be placed on the mechanics of argumentation, logic and rhetoric, and the development of a distinctive voice.

Attributes: AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives

Spring 2024

TUT Section: T1 Cancelled

ENVI 297 (F) Global Sustainable Development (DPE)

Cross-listings: GBST 287

Primary Cross-listing

In 2015, the United Nations launched the Sustainable Development Goals, an ambitious multi-pronged effort to eliminate poverty, improve health outcomes, advance clean energy, address the effects of climate change, and support more equitable forms of life on earth. This course explores the historical antecedents and contemporary manifestations of global sustainable development, a constellation of ideas and a set of policy imperatives. This course will ask: what is sustainability and how did it emerge as a key paradigm in the present? Relatedly, how have different organizations and actors worked to address entrenched global challenges? Students will engage a range of materials, including policy documents from the United Nations, World Bank, and international non-governmental organizations. Students will also explore critical scholarship on the possibilities and limitations of global development. Together we will grapple with ways to build more sustainable futures.

Requirements/Evaluation: Class discussions; 2 Policy Analysis Papers (4-6 pages each); Class presentations; Final Take-Home exam (8-10 pages)

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Envi majors and concentrators

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 297(D2) GBST 287(D2)

Difference, Power, and Equity Notes: This class considers topics of global inequality, including the impacts of colonialism, uneven development, extractive capitalism, gender-based discrimination/violence, and racial/ethnic environmental disparities. Students are invited to reconsider stereotypes about the "developing world" through a deep engagement with history and policy-making.

Attributes: ENVI Environmental Policy EVST Social Science/Policy

Not offered current academic year

ENVI 298 (F) Cultural Geography

Why do things happen where they do? What is the relationship between place and identity? How do history and politics shape the way people conceptualize space? What can landscapes tell us about the values, beliefs, and ideas of the people who inhabit them? Questions like these drive the vibrant field of cultural geography. Cultural geographers study how humans shape, experience, and imagine the material world. They explore the relationship between humans and their environment at scales ranging from the global to the local, and they ask how we may better understand ourselves and others by examining the places and landscapes we create. Drawing on case studies from around the world and exploring our local area, this class will survey the major theoretical, methodological, and empirical themes that have preoccupied modern geographers. Along the way, students will acquire some useful tools for making a world that is more beautiful, sustainable, and just.

Requirements/Evaluation: Three 5-7-pages essays and several shorter writing assignments.

Prerequisites: Environmental Studies 101

Enrollment Limit: 19

Enrollment Preferences: Environmental Studies majors and concentrators.

Expected Class Size: 15

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

Attributes: ENVI Humanities, Arts + Social Science Electives EVST Culture/Humanities

Not offered current academic year

ENVI 300 (S) "'Rebel Ecologies': Black and Indigenous Struggles for Land and Life"

Cross-listings: AMST 362 / AFR 300 / WGSS 362

Secondary Cross-listing

This course will ask, what other socioecological models exist? We will weave together a study of differing, yet often converging or synergistic traditions of Black/Womanist eco-feminism that often confronts the social constructions of race, gender, class and sexuality, dominant religion as a means of social control, imperialism, capitalism, and colonialism; Ecosocialism which often frames ecology in terms of a mode of production beyond or outside of capitalism; and Indigenous perspectives on resistance to capitalist extraction, imperialism, and colonialism. Given ongoing struggles against the extraction of land and labor, the urgent calls raised in the present-day "climate strike," the COVID-19 Pandemic, Black-led pandemic rebellions, along with long(er) histories of land-based peoples around the planet opposing racial capitalism, settler colonialism, and imperialism, this class will explore not only what those in opposition to both extractivism and expropriation resist, but also what we want. We will critique binaries, settler notions of time and explore theories of change. Additionally, this class will look to an array of literature, film, sound, and other forms of cultural production in order to not just "locate," but describe and reveal rebel ecological visions emerging "from below." Ultimately this class will consider how the above ecological praxis can work simultaneously and within a sense of plurality, examining what we can learn from the work of activists, intellectuals, and defenders on the frontline. This course is an extension of Dr. Guess' concept of a "rebel ecology."

Requirements/Evaluation: The following requirements serve as the basis for course evaluation: Attendance and Participation 30%; Serve as Discussion Leader at least twice 20%; Weekly 500-word Literature Review 20%; One Final Project, which can take any number of forms, including the conventional research paper (8-12 double-spaced pages plus bibliography). More projects might include, an annotated bibliography of 7 texts, film analysis, syllabus, book review, a written play, an op-ed, etc. We will discuss further possibilities in class.

Prerequisites: None

Enrollment Limit: 10

Enrollment Preferences: If the course is overenrolled, preference will be given to Africana studies concentrators.

Expected Class Size: 7

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

AMST 362(D2) AFR 300(D2) ENVI 300(D2) WGSS 362(D2)

Not offered current academic year

ENVI 303 (S) Cultures of Climate Change

Cross-listings: SOC 303

Primary Cross-listing

This course asks why people think and talk about climate change in such very different ways. Climate change is a physical phenomenon that can be observed, quantified, and measured. But it is also an idea, and as such it is subject to the vagaries of cultural interpretation. Despite scientific agreement about its existence and its causes, many people do not see climate change as a serious problem, or as a problem at all. Many others see it as the most serious problem our species has ever faced. What are the sources of this disparity? Why can't we agree about what climate change means? How does something as complex as climate change become a "problem" in the first place? And what can its many proposed "solutions" tell us about the role of culture in environmental policy, politics, and decision-making. This course will explore a broad array of factors, from religion to race, class to colonialism. Emphasizing ethnographic and historical accounts of climate change as lived experience, it will apply a range of theories from the social sciences and humanities to case studies from around the world.

Requirements/Evaluation: a 15- to 18-page research paper and several shorter writing assignments

Prerequisites: ENVI 101 or permission of instructor

Enrollment Limit: 19

Enrollment Preferences: Environmental Studies majors and concentrators first; Anthropology and Sociology majors second

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 303(D2) SOC 303(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 304 (S) Sacred Custodians: Environmental Conservation in Africa (DPE)

Cross-listings: AFR 335 / HIST 304 / GBST 304

Secondary Cross-listing

In this seminar we will explore environmental conservation in Africa. In particular we will look at African ideas, ethics, and approaches to environmental conservation. Are there African ideas, ethics, and activities that are uniquely conservationist in nature? We will explore well-known African leaders to understand what spurred them to become conservationists, how they interpreted and communicated environmental crises. For example, Wangari Maathai is a world-renowned female scientist who established the Green Belt Movement in Kenya. This movement focuses on addressing the problem of de-forestation. Ken Saro-Wiwa was an activist in Nigeria who fought for and alongside local communities against multinational oil corporations. We will examine these and other African conservation practices alongside popular images of environmental crisis that place blame for environmental degradation on Africans. Students will be invited to critically study histories of environmental management on the continent and the emergence, development, and impact of the idea of conservation. We will unpack the rich histories of conservation efforts in Africa, such as resource extraction, game parks, desertification, wildlife and hunting, traditional practices, and climate change.

Requirements/Evaluation: Requirements/Evaluation: active participation in discussion, map quiz, reading reflections, critical reflections on films, a case study (5-7 pages), and one exam.

Prerequisites: None

Enrollment Limit: 25

Enrollment Preferences: If course is over-enrolled, preference to History Majors and students with a demonstrated interest in African studies.

Expected Class Size: 20

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

AFR 335(D2) HIST 304(D2) ENVI 304(D2) GBST 304(D2)

Difference, Power, and Equity Notes: This course will intensively explore the question of how various global and local actors have defined environmental degradation and promoted approaches to conservation in Africa. It guides students through an examination of the different power dynamics that have shaped environmental conservation thought and practices on the continent. This course, therefore, provides a critical lens through which to examine the inequalities rooted in race, gender, and other forms of difference

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 307 (F) Environmental Law

Cross-listings: PSCI 317

Primary Cross-listing

We rely on environmental laws to make human communities healthier and protect the natural world, while allowing for sustainable economic growth. Yet, despite 40 years of increasingly varied and complex legislation, balancing human needs and environmental quality has never been harder than it is today. Environmental Studies 307 analyzes the transformation of environmental law from fringe enterprise to fundamental feature of modern political, economic and social life. ENVI 307 also addresses the role of community activism in environmental law, from local battles over proposed industrial facilities to national campaigns for improved corporate citizenship. By the completion of the semester, students will understand both the successes and failures of modern environmental law and how these laws are being reinvented, through innovations like pollution credit trading and "green product" certification, to confront globalization, climate change and other emerging threats.

Requirements/Evaluation: Several short writing assignments, active participation in class and a final examination

Prerequisites: ENVI 101 or permission of instructor

Enrollment Limit: 19

Enrollment Preferences: Preference to Environmental Studies majors and concentrators and sophomores and above.

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

PSCI 317(D2) ENVI 307(D2)

Attributes: AMST Space and Place Electives ENVI Environmental Policy EVST Social Science/Policy JLST Interdepartmental Electives MAST Interdepartmental Electives POEC Depth

Fall 2023

LEC Section: 01 M 7:00 pm - 9:40 pm David N. Cassuto

ENVI 310 (F) Design for the Pluriverse: Architecture, Urban Design, and Difference (DPE)

Cross-listings: ARTS 314

Secondary Cross-listing

The built environment has a critical role in shaping how people enact, reproduce, and refashion social relations over time. Spatial forms, such as architecture and urbanism, are enmeshed in relationships, contestations, and change processes. This studio tutorial investigates the role of different environments in supporting or preventing specific spatial practices and ensuring spatial justice. Using approaches from activist design, students will work in pairs to re-imagine spaces where different ways of being in the world can thrive and coexist--the pluriverse. Students will use a media they master to investigate a theme connecting design, the built environment (architecture and urbanism), and spatial justice.

Requirements/Evaluation: This is an intensive studio tutorial requiring working outside of scheduled class hours. In this course, students can work with the following media assuming that they can master them for a 300-level course: architecture models (physical and digital), photo reportages, 2D collages (e.g., Photoshop), creative writing (image-text booklets), digital humanities (cartographies, countermapping, oral histories, digital archives), and curatorial platforms. Students will participate in tutorials plus a final project of significant scope. Evaluation will be based primarily on the quality of the final project but also on participation.

Prerequisites: 200-level course on students' medium of choice (for the final project) or permission of instructor.

Enrollment Limit: 10

Enrollment Preferences: Studio Art majors, Art History and Studio Art majors, Envi majors and concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Materials/Lab Fee: \$350-\$450 lab fee charged to term bill. Lab and materials fees for all studio art classes are covered by the Book Grant for all Williams financial aid recipients.

Distributions: (D1) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ARTS 314(D1) ENVI 310(D1)

Difference, Power, and Equity Notes: "Pluriverse" refers to various ways of being in the world. This tutorial will employ theories and approaches from design activism and critical environmental studies to analyze the relationship between space and difference, including, but not limited to, race, class, ethnicity, gender, sexuality, religion, and species. Students will apply these theories and approaches to creating place-based projects.

Attributes: ENVI Humanities, Arts + Social Science Electives

Fall 2023

TUT Section: T1 TBA Giuseppina Forte

ENVI 311 (S) Environmental Literature and Film in Latin America (DPE) (WS)

Cross-listings: COMP 311 / RLSP 304

Secondary Cross-listing

What use are aesthetics when the world is (literally) on fire? We will take up this question and others in a critical engagement with Latin American cultural production of the twentieth and twentieth centuries, especially works of literature and film that directly or indirectly engage with environmental crisis. Students can expect to explore a variety of media, forms and genres, including works that range from (more or less) mainstream to cutting edge. Our examinations of literature and film will be supported by theoretical writings produced in the Americas and other places. Writers and directors whose work may be considered include, but are not limited to: Lucrecia Martel, Ciro Guerra, Rafael Barrett, Samanta Schweblin, Ernesto Cardenal, Juan Rulfo, María Luisa Bombal, Eduardo Gudynas, Silvia Rivera Cusicanqui, Eduardo Viveiros de Castro, Isabelle Stengers.

Requirements/Evaluation: This course will be conducted seminar-style. Students will be expected to prepare thoroughly and be active, engaged participants in class discussions. In addition to day to day preparation and participation, other graded assignments will include discussion-leading, one short (5-7 page) essay and a longer (15-20 page) paper combining research and original analysis.

Prerequisites: One college literature or film course at the 200-level or above.

Enrollment Limit: 19

Enrollment Preferences: Envi majors and concentrators, Comp Lit majors, Spanish majors and those working towards the Spanish certificate.

Expected Class Size: 12

Grading: no pass/fail option, yes fifth course option

Distributions: (D1) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

COMP 311(D1) RLSP 304(D1) ENVI 311(D1)

Writing Skills Notes: All students in the course will write (and rewrite) no less than 20 pages. Major writing assignments will be scaffolded, with explicit discussion of the writing process (pre-writing, drafting, revision) and consultation.

Difference, Power, and Equity Notes: The works of literature and film that we will be examining challenge North American conceptions of climate change (and environmental crisis more broadly) by making visible (often uncomfortably so) the colonial and neocolonial history of extractivism.

Attributes: ENVI Humanities, Arts + Social Science Electives

Spring 2024

SEM Section: 01 Cancelled

ENVI 316 (F) Governing Cities by Design: the Built Environment as a Technology of Space (DPE)

Cross-listings: ARTS 316

Primary Cross-listing

Like in the classic era, cities of the 19th century were metaphors for government: good government could not exist without good governance of the city. This creative seminar charts the transformation of the built environment (architecture and urbanism) as a technology of space to govern cities and citizens from the mid-19th century until the present. Through debates and case studies across geographies and historical timeframes, we will analyze how regimes of government shape and are shaped by the built environment. The seminar has a studio component that consists of an urban project where students will apply theories and approaches to a real case study using digital art (2D and 3D modeling).

Class Format: Because this seminar is cross-listed with ARTS, there is a studio component (short assignments and final project)

Requirements/Evaluation: Active presence in class discussions and presentations, willingness to experiment, contributions to a collaborative seminar/studio environment, quality of work, depth and quality of the investigative process.

Prerequisites: ENVI 101 or instructor permission

Enrollment Limit: 15

Enrollment Preferences: Envi majors and concentrators, Studio Art majors

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Materials/Lab Fee: \$300-\$450 lab fee charged to term bill. Lab and materials fees for all studio art classes are covered by the Book Grant for all Williams financial aid recipients.

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 316(D2) ARTS 316(D1)

Difference, Power, and Equity Notes: Using theoretical perspectives from urban studies, this seminar/workshop explores how the built environment, as a technology of space, contributes to the production of difference, the establishment of certain regimes of power, and the erasure of specific urban histories--mainly those of underrepresented groups. Students will engage in multimedia place-based projects to imagine and create more equitable built environments.

Attributes: ENVI Humanities, Arts + Social Science Electives

Fall 2023

SEM Section: 01 TR 8:30 am - 9:45 am Giuseppina Forte

ENVI 318 (S) Myths and the Making of Latine California (WS)

Cross-listings: REL 318 / AMST 318 / LATS 318 / COMP 328

Secondary Cross-listing

California is home not only to the largest ethnic Mexican population in the USA but also to the largest Central American population, while also being home to long-standing Latine communities hailing from Chile to Cuba. Since the era of Spanish colonization, especially starting in 1769, California has been woven into fantastic imaginations among many peoples in the Americas. Whether imagined as Paradise or Hell, as environmental disaster or agricultural wonderland, as a land of all nations or a land of multiracial enmity, many myths have been inscribed onto and pursued within the space we call California. In a state whose name comes from an early modern Spanish novel, how did certain narratives of California come to be, who has imagined California in certain ways, and why? What impact have these myths had on different Latine populations in the history of California, and how have different Latines shaped, contested, and remade these myths as well as the California landscape that they share with other peoples? In this course, we consider "myth" as a category of socially powerful narratives and not just a simple term that refers to an "untrue story." We examine myths by focusing on a few specific moments of interaction between the Latine peoples who have come to make California home and the specific places in which they have interacted with each other. Of special interest are select creation stories (found in Jewish, Christian, and Indigenous traditions), imaginations of the Spanish missions, the Gold Rush, agricultural California, wilderness California, California as part of Greater México, California as "sprawling, multicultural dystopia," and California as "west of the west," including its imagination as a technological and spiritual "frontier."

Requirements/Evaluation: this course will be mostly discussion oriented, with grading based upon participation, short writing exercises, one 3-page review essay with mandatory revision, one 5- to 8-page midterm review essay, and a final 10- to 15-page comparative review essay

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Latina/o Studies concentrators, Religion majors, American Studies majors, Environmental Studies majors and concentrators, Comparative Literature majors

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

REL 318(D2) AMST 318(D2) LATS 318(D2) COMP 328(D1) ENVI 318(D2)

Writing Skills Notes: The students are expected to engage in regular writing of response papers, a mandatory revision of their first essay after receiving instructor feedback, a second essay, and a scaffolded final project with instructor and peer feedback at different stages. Attention to writing and the ways that writing interacts with myths, peoples, and place-making is part of the practice and the theoretical orientation of the course.

Attributes: AMST Comp Studies in Race, Ethnicity, Diaspora AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives LATS Core Electives

Spring 2024

SEM Section: 01 Cancelled

ENVI 322 (F) Waste and Value

Cross-listings: ANTH 322 / GBST 322

Secondary Cross-listing

What is trash and what is treasure? In what ways does value depend upon and necessitate waste, and how is the dialectic between the two inflected by culture? When we 'throw away' things at Williams College, where exactly do they go, and who handles them 'down the line'? What are the local and global economies of waste in which we are all embedded and how are they structured by class, race, caste, gender and nation? In this seminar we critically examine the production of waste - both as material and as category - and its role in the production of value, meaning, hierarchy and the environment. Readings include ethnographic accounts of sanitation labor and social hierarchy; studies of the political and environmental consequences of systems of waste management in the colonial period and the present; and theoretical inquiries into the relation between filth and culture, including work by Mary Douglas, Dipesh Chakrabarty and Karl Marx. Geographically the foci are South Asia, Japan, and the United States. There is also a fieldwork component to the course. In fieldtrips we follow the waste streams flowing out of Williams - to an incinerator, a sewage treatment plant, recycling and composting facilities and other sites - and students explore in individual, participant-observation-based research projects the everyday social life of waste in our communities.

Requirements/Evaluation: regular posting of critical response papers, field notes on waste streams, research-based final paper

Prerequisites: none

Enrollment Limit: 12

Enrollment Preferences: majors in ANSO, ENVI, ASST

Expected Class Size: 12

Grading: yes pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ANTH 322(D2) ENVI 322(D2) GBST 322(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 331 (F) Geomorphology

Cross-listings: GEOS 301

Secondary Cross-listing

Geomorphology is the study of landforms, the processes that shape them, and the rates at which these processes change the landscape in which we live. The course is designed for Geosciences majors and for environmental studies students interested in the evolution of Earth's surface and the ways our activities are changing the planet. We will examine the ways in which climatic, tectonic, and volcanic forces drive landscape evolution over relatively short periods of geologic time, generally thousands to a few millions of years. More recently, the impacts of human activity in reshaping landscapes, determining the movement of water, and changing climate could not be clearer. We will also examine how these impacts are affecting communities, including causes and possible solutions to environmental injustice. We will learn a range of practical skills for describing physical environments and for predicting how they change, including field surveys, GIS analysis, and numerical modelling. This course is in the Sediments and Life group for the Geosciences major.

Class Format: lecture, three hours per week and laboratory, three hours per week

Requirements/Evaluation: weekly lab exercises, a research project, and a midterm and final exam

Prerequisites: At least one 100-level and one 200-level GEOS or ENVI course or permission of instructor

Enrollment Limit: 18

Enrollment Preferences: GEOS and ENVI majors

Expected Class Size: 18

Grading: yes pass/fail option, yes fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

GEOS 301(D3) ENVI 331(D3)

Attributes: AMST Space and Place Electives ENVI Natural World Electives EVST Environmental Science EXPE Experiential Education Courses

Fall 2023

LEC Section: 01 MWF 10:00 am - 10:50 am José A. Constantine

LAB Section: 02 M 1:00 pm - 4:00 pm José A. Constantine

LAB Section: 03 W 1:00 pm - 4:00 pm José A. Constantine

ENVI 332 (F) (De)colonial Ecologies (DPE) (WS)

Cross-listings: AFR 347 / AMST 332

Secondary Cross-listing

What is the relationship between race, colonialism, and capitalism? How do such structures organize nature, including human nature? How do ideas of "nature" and "the human" come to structure race, colonialism, and capitalism? From the "discovery" and plunder of the "New World," to 18th-century claims that climate determined racial character, to the 21st-century proliferation of DNA tests underwriting claims to Indigenous ancestry, it is clear that race, colonialism, capitalism constitute asymmetric world ecologies, and give rise to interconnected liberation struggles. Anchored in the contexts of U.S. colonialism and racial capitalism, and drawing on environmentalist, Black Marxist, and feminist works, this course aims to expose students to a world history of colonial and decolonial ecologies. By the end of this course, students should be able to describe the historical foundations of dominant ideas, attitudes, and practices toward human and non-human natures. Students should also be able to analyze how such orientations toward human and non-human natures mediate the ways in which colonial, racial, gender, and sexual categories and structures inform and are (re)produced by U.S. institutions and in public areas such as the law, public policy, and property. Finally, students should be able to interpret how racialized and colonized peoples' visions, representations, and practices of liberation constitute decolonial ecologies that contend with, and exceed normative political, economic, and social categories of governance and systems of dispossession and exploitation.

Requirements/Evaluation: Participation: 25%; Weekly Response (350-500 words): 25%; Final Essay--Research proposal (2-3 pgs.): 10%; Final Essay--Peer review and feedback (2 pgs.): 10%; Final Essay--Presentation: 10%; Final Essay--Paper (15 pgs.): 20%

Prerequisites: AMST 101, AFR 200, and/or ENVI 101

Enrollment Limit: 15

Enrollment Preferences: AMST, AFR, ENVI

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

AFR 347(D2) AMST 332(D2) ENVI 332(D2)

Writing Skills Notes: One thesis paper at 15 pages. The writing process is staggered, with each part graded, and with critical feedback from professor and peers. Specifically, one research proposal (including thesis outline and annotated bibliography of primary texts) with feedback from professor; one thesis paper draft with feedback from peers; one letter of revision explaining the student's revision process; one final draft with critical feedback from professor; and student presentation and discussion.

Difference, Power, and Equity Notes: The course addresses issues of difference, power, and equity, and offers theoretical tools and perspectives to understand these issues. Specifically, students learn how to interpret how racialized and colonized peoples' visions, representations, and practices of liberation with regard to relations with non-human natures and the materiality of land precede, contend with, and exceed normative political, economic, and social categories of governance and systems of dispossession and exploitation.

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 335 (F) The Nile (DPE)

Cross-listings: AFR 350 / HIST 308 / GBST 320 / ARAB 308

Secondary Cross-listing

For millennia, the Nile River has sustained civilizations in eastern and northern Africa. It was on the banks of this river that the great Egyptian empires were founded that led to the building of some of humanity's most astounding structures and artworks. While the Nile seems eternal and almost beyond

time and place, now in the 21st century, the Nile River is at a historical turning point. The water level and quality is dwindling while at the same time the number of people who rely on the river is ever increasing. This alarming nexus of demography, climate change, and economic development has led to increasingly urgent questions of the Nile's future. Is the Nile dying? How has the river, and people's relationship with it, changed over the last century? This course will consider the history of the Nile and its built and natural environment. After a brief overview of the role of the river in ancient Egypt, we will explore the modern political and cultural history of the Nile. By following an imaginary droplet flowing from tributaries until it makes its way into the Mediterranean Sea, we will learn about the diverse peoples and cultures along the way. We will evaluate the numerous attempts to manage and control the Nile, including the building of big dams, and the continuous efforts to utilize the river for economic development such as agriculture and the tourism industry. At the end of the semester we will consider the relationship of the major urban centers with the Nile and whether the tensions among Nile riparian states will lead to "water wars" in East Africa and the Middle East.

Requirements/Evaluation: short papers and final project/paper

Prerequisites: none, though background in Middle East history is preferable

Enrollment Limit: 19

Enrollment Preferences: History and Arabic Studies majors

Expected Class Size: 15

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 335(D2) AFR 350(D2) HIST 308(D2) GBST 320(D2) ARAB 308(D2)

Difference, Power, and Equity Notes: The course fulfills the DPE requirement because it evaluates the differing experiences of the Nile among different cultural groups. It will evaluate how the central government is constantly trying to change how people use their water and therefore over-determine how people interact with their natural environment.

Attributes: HIST Group E Electives - Middle East HIST Group P Electives - Premodern

Fall 2023

SEM Section: 01 TR 11:20 am - 12:35 pm Magnús T. Bernhardsson

ENVI 339 (F) Conservation Biology

Cross-listings: BIOL 329

Secondary Cross-listing

Conservation Biology focuses on protection of the Earth's biodiversity. This course starts with an overview of biodiversity including patterns of species richness, causes of species loss (extinction), and the critical contributions of biodiversity to ecosystem function and human welfare. Then we analyze ways to conserve biodiversity at the genetic, population, species and community/ecosystem levels. Labs are field oriented, and focus on local New England communities and ecosystems. Labs emphasize knowing the dominant species in each system; they also stress how to collect and analyze the field data on ecological community structure and function that are critical to test hypotheses that relate to different conservation goals.

Class Format: lectures, discussions, and a weekly lab.

Requirements/Evaluation: Evaluation will be based on lab assignments and reports, discussion participation, two exams and an independent project.

Prerequisites: BIOL 203/ENVI 203 or BIOL 220 or BIOL 305 or permission of instructor.

Enrollment Limit: 24

Enrollment Preferences: Biology majors, Environmental Studies majors, seniors, and juniors

Expected Class Size: 15

Grading: no pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 339(D3) BIOL 329(D3)

Attributes: ENVI Natural World Electives

Fall 2023

LEC Section: 01 MWF 9:00 am - 9:50 am Gordon P. Smith

LAB Section: 02 W 1:00 pm - 3:50 pm Gordon P. Smith

LAB Section: 03 R 1:00 pm - 3:50 pm Gordon P. Smith

ENVI 346 (F) Environmental Psychology

Cross-listings: PSYC 346

Secondary Cross-listing

This is a course on contemporary social psychology as it pertains to the natural environment. Our two primary questions in this course are: (1) how can research and theory in social psychology help us understand the ways in which people engage with threats to the natural environment?, and (2) how can social psychology help us encourage environmentally responsible behavior and sustainable practices? Because human choice and behavior play such an important role in environmental problems, a consideration of human psychology may therefore be an important part of environmental solutions.

Requirements/Evaluation: a series of papers, two essay exams, written and oral reports of research

Prerequisites: PSYC 242 recommended, PSYC 201, or a comparable course in statistics and research methodology, is also recommended.

Enrollment Limit: 19

Enrollment Preferences: Psychology majors, Environmental Studies majors, and Environmental Studies concentrators

Expected Class Size: 19

Grading: yes pass/fail option, yes fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

PSYC 346(D3) ENVI 346(D3)

Attributes: AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives PSYC Area 4 - Social Psychology

Not offered current academic year

ENVI 349 (S) Race, Development, and Food Sovereignty (DPE) (WS)

Cross-listings: AMST 342 / AFR 349

Secondary Cross-listing

What does it mean to "settle" land? What racial encounters and acts of survival took place around the plantation? How have farmworkers and landowners faced off against government policies and "agribusiness" corporations? What was the "Green Revolution" and why did it happen? Agriculture as a relation to land based on domestication, enclosure, and commerce has long been a means of and justification for racial and colonial dispossession and exploitation across the Americas, including what is now the United States. At the same time, an array of embodied practices in relation to the land and one another complicate and contest these histories of racial and colonial dispossession. Broadly, this course aims to familiarize students with the historical and present-day entwining of colonial and racial dispossession, exploitation, and resistance at the heart of U.S. economies of agriculture. By the end of this course, students should be able to analyze how the historical foundations of U.S. agriculture have entailed and intertwined the taking of lands and removal of Indigenous peoples, the enslavement of African peoples, mass migration, and various forms of exploitative labor. Students should also be able to assess how these historical foundations continued to serve as the material conditions reproduced throughout the course of the 19th and 20th centuries under discriminatory government policies and powerful "agribusiness" corporations, as well as the possibilities and limits of redress and reform through state and corporate action. Finally, students should be able to interpret how embodied practices in relation to the land and one another precede, exceed, and push against the logics and histories of racial and colonial dispossession. The course is organized around three units that interrogate economies of agriculture within and beyond the U.S. nation-state. Each unit interrogates a key period of time from the founding of the United States, through 20th-century Pax Americana, and on into the present. Finally, each unit does so while attending to the emergence and enactment of "food sovereignty" movements--efforts to foster a new international trade regime, agrarian reform, a shift to agroecological production practices, attention to gender relations and equity, and the protection of intellectual and indigenous property rights.

Requirements/Evaluation: Participation: 25%; Weekly Response (350-500 words): 25%; Final Essay--Research proposal (2-3 pgs.): 10%; Final Essay--Peer review and feedback (2 pgs.): 10%; Final Essay--Presentation: 10%; Final Essay--Paper (15 pgs.): 20%

Prerequisites: AMST 101, AFR 200, and/or ENVI 101

Enrollment Limit: 15

Enrollment Preferences: AMST, AFR, ENVI

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 349(D2) AMST 342(D2) AFR 349(D2)

Writing Skills Notes: One thesis paper at 15 pages. The writing process is staggered, with each part graded, and with critical feedback from professor and peers. Specifically, one research proposal (including thesis outline and annotated bibliography of primary texts) with feedback from professor; one thesis paper draft with feedback from peers; one letter of revision explaining the student's revision process; one final draft with critical feedback from professor; and student presentation and discussion.

Difference, Power, and Equity Notes: The course addresses issues of difference, power, and equity, and offers theoretical tools and perspectives to understand these issues. Specifically, students learn how to interpret how racialized and colonized peoples' visions, representations, and practices of liberation with regard to relations with non-human natures and the materiality of land precede, contend with, and exceed normative political, economic, and social categories of governance and systems of dispossession and exploitation.

Not offered current academic year

ENVI 351 (F)(S) Marine Policy (DPE) (WS)

Cross-listings: PSCI 319 / MAST 351

Secondary Cross-listing

Coastal communities are home to nearly 40% of the U.S. population, but occupy only a small percentage of our country's total land area. Intense population density, critical transportation infrastructure, significant economic productivity, and rich cultural and historic value mark our coastal regions as nationally significant. But, coastal and ocean-based climate-induced impacts such as sea level rise, ocean warming and acidification pose extraordinary challenges to our coastal communities, and are not borne equally by all communities. This seminar considers our relationship with our ocean and coastal environments and the foundational role our oceans and coasts play in our Nation's environmental and economic sustainability as well as ocean and coastal climate resiliency. Through the lens of coastal and ocean governance and policy-making, we critically examine conflict of use issues relative to climate change, climate justice, coastal zone management, fisheries, ocean and coastal pollution and marine biodiversity.

Class Format: This class is taught only at Williams-Mystic in Mystic, Connecticut and includes coastal and near-shore interdisciplinary field seminars, and 10 days offshore.

Requirements/Evaluation: Weekly Readings; Class Participation; Small and large group strategy exercises (written and oral); Written Research Project: issues paper and draft research paper; Final Research Project: multiple formats available

Prerequisites: none

Enrollment Limit: 23

Enrollment Preferences: must be enrolled at Williams-Mystic in Mystic, Connecticut

Expected Class Size: 22

Grading: no pass/fail option, no fifth course option

Unit Notes: must be enrolled at Williams-Mystic in Mystic, Connecticut

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 351(D2) PSCI 319(D2) MAST 351(D2)

Writing Skills Notes: Each student will write one 3-5 page research issues paper and one 8-10 page draft research paper as well as a final project with written components equaling 5-8 pages. Each submission receives written feedback from the professor, including research guidance, input on grammar, structure, language, analysis. Students also receive verbal feedback in individual conferences to discuss research paper organization, analysis, structure and grammar as well as final project input.

Difference, Power, and Equity Notes: Coastal and ocean policy issues relating to climate change, coastal zone management, fisheries, ocean pollution and marine biodiversity impact environmental and climate justice. Students examine coastal governance while considering the disproportionate burdens on underrepresented populations in U.S. coastal communities caused by climate change and coastal policies. Students

analyze multi-disciplinary evidence and work to strengthen their integrative, analytical, writing, and advocacy skills.

Attributes: ENVI Environmental Policy EXPE Experiential Education Courses POEC Depth

Fall 2023

SEM Section: 01 F 9:00 am - 12:00 pm Catherine Robinson Hall

Spring 2024

SEM Section: 01 F 9:00 am - 12:00 pm Catherine Robinson Hall

ENVI 354 (F) Drugs, Empire, & Environment in Historical Perspective

This course considers the political economy & environmental impacts of licit & illicit drugs. We begin with the premise that drugs are commodities that gained global significance in the context of liberalism & empire. Imperial nations--notably Britain--consolidated political & economic power in the 19th century by promoting the opium trade against the wishes of Chinese & Indian officials. Most illicit drugs originated as plants--cannabis, poppies, & coca. The production of these internationally traded agricultural commodities helped transform rural livelihoods & landscapes in the 19th century; attempts at suppressing drug crops in the 20th century have also had environmental impacts. After the turn of the 20th century, the United States led an international movement to end the opium trade. Since then, the War on Drugs has expanded as a means for the United States to exercise domestic & global power. Our focus is primarily illicit drugs, but historical shifts in the categories of licit/illicit are a key theme. Other themes include race & racism in drug policy, imperialism, agriculture, & debates over toxicity. The course is divided into four units, stretching from the 19th century through the present. First, we discuss British colonialism in India & China through the lens of the opium trade. Next, we study the emerging drug control regime, focusing on coca, cocaine, & Indigenous producers in the Andes in the 1940s & 1950s. The third unit looks at environmental justice activists who oppose pharmaceutical companies' waste disposal in Puerto Rico. Finally, we evaluate the environmental impacts of the recent cannabis boom. We ask whether the legal architecture on which the industry is built can overcome the colonial & racist legacies of drug control. Readings include works by historians, novelists, anthropologists, & public policy experts.

Requirements/Evaluation: 2-3 short papers on assigned topics, final research paper, class discussion and participation

Prerequisites: ENVI 101 or instructor permission

Enrollment Limit: 19

Enrollment Preferences: environmental studies majors and concentrators; juniors and seniors

Expected Class Size: 19

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 363 (F) Environmental Organic Chemistry

Cross-listings: CHEM 363

Secondary Cross-listing

This course introduces students to the methods used to assess the risks posed by organic chemicals to human, animal, and ecosystem health. Our goal is to develop a quantitative understanding for how specific features of organic molecular structure directly dictate a given molecule's environmental fate. We will begin by using thermodynamic principles to estimate the salient physiochemical properties of molecules (e.g., vapor pressure, solubility, charging behavior, etc.) that impact the distribution, or partitioning, of organic chemicals between air, water, soils, and biota. Then, using quantitative structure activity relationships, we will predict the degradation kinetics resulting from natural nucleophilic, photochemical, and biological processes that determine chemical lifetime in the environment.

Class Format: lecture, three hours per week and laboratory, four hours per week

Requirements/Evaluation: weekly problem sets, laboratory exercises, two midterm exams, a final exam, participation in lecture and lab

Prerequisites: CHEM 155 or CHEM 256 and CHEM 156; or CHEM 200 and CHEM 201

Enrollment Limit: 16

Enrollment Preferences: junior and senior Chemistry and Environmental Studies majors with a demonstrated interest in environmental chemistry

Expected Class Size: 16

Grading: no pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

CHEM 363(D3) ENVI 363(D3)

Attributes: ENVI Natural World Electives EVST Environmental Science

Fall 2023

LEC Section: 01 TR 9:55 am - 11:10 am Anthony J. Carrasquillo

LAB Section: 02 R 1:00 pm - 5:00 pm Anthony J. Carrasquillo

ENVI 364 (S) Instrumental Methods of Analysis

Cross-listings:

Secondary Cross-listing

Instrumental methods of analysis provide scientists with different lenses to observe and elucidate fundamental chemical phenomena and to measure parameters and properties at the atomic, molecular, and bulk scales. This course introduces a framework for learning about a variety of instrumental techniques that typically include chromatography, mass spectrometry, thermal methods, atomic and molecular absorption and emission spectroscopy, X-ray diffraction, and optical and electron microscopies. Students complete laboratory projects and gain hands-on experience and project planning skills to study molecules and materials of interest. This practical experience is complemented by lectures that cover the theory and broader applications of these techniques. Students also explore the primary literature and highlight recent advances in instrumental methods that address today's analytical questions. The skills learned are useful in a wide variety of scientific areas and will prepare you well for research endeavors.

Class Format: lecture, two times per week and laboratory, four hours per week

Requirements/Evaluation: Weekly data analysis, laboratory assignments and reports, readings for class, problem sets, one oral presentation of an application of instrumental methods, a final independent literature project and presentation; demonstrated progress in research skills, and project engagement.

Prerequisites: CHEM 155 or CHEM 256 and CHEM 251 (may be taken concurrently with CHEM 256 with permission of instructor)

Enrollment Limit: 16

Enrollment Preferences: Chemistry and Environmental Studies majors

Expected Class Size: 16

Grading: no pass/fail option, no fifth course option

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 364(D3)

Attributes: BIMO Interdepartmental Electives ENVI Natural World Electives EVST Methods Courses MTSC Courses

Not offered current academic year

ENVI 376 (F) Economics of Environmental Behavior (QFR)

Cross-listings: ECON 477

Secondary Cross-listing

A community maintains a fishery; a firm decides whether to get a green certification; you choose to fly home or stay here for spring break: behaviors of people and firms determine our impact on the environment. We'll use economics to model environmental behavior and to assess how policies can help or hurt the environment. Topics may study include: common pool resources, voluntary conservation, social norms and nudges, discrimination and justice, rationality, firm responses to mandatory and voluntary rules, voting and public opinion, and boycotts and divestment. We'll also build familiarity with the main methodologies of modern economic research: theoretical modeling, empirical analysis of observational data, and experiments.

Class Format: Class sessions will largely consist of presentations and discussions of academic research papers, as well as lab sessions to work on empirical exercises; we may break the class into groups for some discussions

Requirements/Evaluation: regular reading markup, empirical exercises, class participation, 2 oral presentations, and a final original research paper

using an experiment, existing data, or theory

Prerequisites: ECON 251 and (ECON 255 or STAT 346)

Enrollment Limit: 19

Enrollment Preferences: senior Economics majors

Expected Class Size: 19

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 376(D2) ECON 477(D2)

Quantitative/Formal Reasoning Notes: The research students will consume and produce in the class will be based on math-based theory and/or econometric-based empirical analysis.

Attributes: ENVI Humanities, Arts + Social Science Electives MAST Interdepartmental Electives POEC Comparative POEC/Public Policy Courses

Not offered current academic year

ENVI 380 (F) Animals and Society

Cross-listings: STS 379

Primary Cross-listing

How do humans and animals shape each other's lives? People encounter animals in farms, laboratories, zoos, wildernesses, and backyards, on purpose and by chance. They treat animals as family members, entertainment, food, vectors of disease, and objects of scientific wonder. Drawing on the works of biologists, philosophers, and feminist science and technology studies scholars, this seminar will examine our relationships with animals and help clarify our responsibilities to them. We will ask: What are the social and environmental consequences of consuming animals? Should humans swim with dolphins, feed manatees, use gene-editing to create species that can survive climate change? Should moral standing depend upon the ability to communicate or the ability to experience emotions like grief and joy? What can animal models tell us about human health and society, and when is animal otherness too large a gap to bridge? What might human violence toward animals tell us about sexism, racism, or capitalism, and what will human-animal relationships look like in the future?

Requirements/Evaluation: short essays, final portfolio

Prerequisites: none

Enrollment Limit: 18

Enrollment Preferences: juniors and seniors

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 379(D2) ENVI 380(D2)

Attributes: ENVI Humanities, Arts + Social Science Electives

Fall 2023

SEM Section: 01 W 1:10 pm - 3:50 pm Laura J. Martin

ENVI 387 (S) Economics of Climate Change (QFR)

Cross-listings: ECON 522 / ECON 387

Secondary Cross-listing

This course introduces the economic view of climate change, including both theory and empirical evidence. Given the substantial changes implied by the current stock of greenhouse gases (GHGs) in the atmosphere, we will begin by looking at impacts on agriculture, health, income, and migration. We will consider the distribution of climate damages across poor and wealthy people, both within and across countries. Next we will study adaptation, including capital investments and behavioral changes. We will examine the sources of climate change, especially electricity generation and

transportation, and think about optimal policies. Throughout the course we will discuss the limits of the economic approach, pointing out normative questions on which economic theory provides little guidance.

Requirements/Evaluation: problem sets, midterm, group presentation, final exam

Prerequisites: ECON 251, familiarity with statistics

Enrollment Limit: 25

Enrollment Preferences: Junior/Senior Economics majors and CDE fellows

Expected Class Size: 25

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

ECON 522(D2) ENVI 387(D2) ECON 387(D2)

Quantitative/Formal Reasoning Notes: The course involves simple calculus-based theory and applied statistics.

Attributes: ENVI Environmental Policy MAST Interdepartmental Electives POEC Comparative POEC/Public Policy Courses

Not offered current academic year

ENVI 390 (F) The Nature of Nature

Cross-listings: ENGL 394

Secondary Cross-listing

"Nature" is one of the most common words in English. And yet what does it mean? Is it primarily descriptive (all living things), or normative ("natural" foods, "human nature")? This course will consider some of the richly incoherent ways we think about the living world, paying particular attention to the difficulty of narrating processes that are too big, too small, too quick, or too slow for direct human apprehension. We'll explore the way popular nature writing mingles scientific reporting with implicit and explicit judgments about human identity, and take up the insoluble problem of our proper relation to animals. Considerable attention will be paid to the racial, cultural and class dimensions of contemporary forms of environmental consciousness. Writers studied will include Elizabeth Kolbert, Jem Bedell, William Cronon, and Charles Darwin. We'll also consider the intermediations of nature and technology in documentaries by David Attenborough and Lynette Wallworth, among others.

Requirements/Evaluation: Several short written exercises, an eight page comparative midterm essay, and a final twelve to fifteen page essay incorporating audiovisual materials. Active participation in class.

Prerequisites: a 100-level ENGL course, or a score of 5 on the AP English Literature exam, or a score of 6 or 7 on the Higher Level IB English exam

Enrollment Limit: 25

Enrollment Preferences: English majors; Environmental Studies majors and concentrators; Philosophy majors.

Expected Class Size: 25

Grading: no pass/fail option, no fifth course option

Distributions: (D1)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 390(D1) ENGL 394(D1)

Attributes: ENGL Criticism Courses ENVI Humanities, Arts + Social Science Electives

Fall 2023

SEM Section: 01 TF 1:10 pm - 2:25 pm Shawn J. Rosenheim

ENVI 395 (F) Black Reparations Within/Beyond Borders (DPE)

Cross-listings: AFR 395 / GBST 395 / WGSS 395

Secondary Cross-listing

Generations of Black people around the world have demanded restitution for the harms and legacies of enslavement, indigenous genocide and colonialism in order to advance social justice, new ways of living and freedom. In this way, freedom fighters, Black Power leaders, abolitionist movements, Pan-Africanists, maroons, Rastafarians, Black politicians, climate justice leaders, and revolutionary anti-capitalists have all put forward

ideas on and approaches to reparations and reparatory justice. This course will analyze '*geographies of Black struggle*', the differences and commonalities among these approaches, the political strategies and movements, including responses to global climate change and socio-environmental disasters that advance reparations as a just remedy *within* and *beyond* borders. We give particular attention to Pan-Africanist and Black feminist perspectives, as well as liberal and popular struggles for reparations within the African diaspora across space and time. Do Pan-Africanism and Black feminism offer new visions for reparations movements in the 21st century? Employing speeches, writings, audio-visual content and documentary film from and about these earlier and emerging movements and their leaders, we will draw long lines between historical circumstances and drivers, and examine Black (un)freedoms within the context of calls for reparation today.

Requirements/Evaluation: Attendance and Participation including serving as a class discussion leader (20%); Written double-spaced essay about and the legacies and role that Pan-Africanism or Black Feminist perspectives play in contemporary global reparations movement (8 pages plus bibliography) (25%); Research and creatively present using written text, flyer, video, audio-visuals or poster a profile of Pan-African feminist leader focusing on her ideas, movement activities, and role in the reparations movement including innovative ideas (max. 5 pages or 10 minutes) (25%); Final project: simulation activity of a Pan-African Congress on Reparations (30%)

Prerequisites: None

Enrollment Limit: 15

Enrollment Preferences: If over-enrollment, preference to AFR, GBST and HIST students

Expected Class Size: 10

Grading: no pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 395(D2) AFR 395(D2) GBST 395(D2) WGSS 395(D2)

Difference, Power, and Equity Notes: This course encourages students to think, articulate and engage with social difference, social movements and the gendered power relations that underpin struggles for reparations among people racialized as Black. It helps students appreciate and assess how power dynamics around reparations have shifted over space and time, and how these struggles intersect with actions toward and from the state, within and across Black communities and popular movements, and other powerful groups in society.

Attributes: AFR Core Electives ENVI Humanities, Arts + Social Science Electives GBST African Studies Electives WGSS Racial Sexual + Cultural Diversity Courses

Not offered current academic year

ENVI 397 (F) Independent Study of Environmental Problems

Individuals or groups of students may undertake a study of a particular environmental problem. The project may involve either pure or applied research, policy analysis, laboratory or field studies, or may be a creative writing or photography project dealing with the environment. A variety of nearby sites are available for the study of natural systems. Ongoing projects in the College-owned Hopkins Forest include ecological studies, animal behavior, and acid rain effects on soils, plants, and animals. Students may also choose to work on local, national, or international policy or planning issues, and opportunities to work with town and regional planning officials are available. Projects are unrestricted as to disciplinary focus. Students should consult with faculty well before the start of the semester in which they plan to carry out their project.

Prerequisites: approval by the Chair of Environmental Studies

Grading: yes pass/fail option, yes fifth course option

Distributions: No divisional credit

Fall 2023

IND Section: 01 TBA José A. Constantine

ENVI 398 (S) Independent Study of Environmental Problems

Individuals or groups of students may undertake a study of a particular environmental problem. The project may involve either pure or applied research, policy analysis, laboratory or field studies, or may be a creative writing or photography project dealing with the environment. A variety of nearby sites are available for the study of natural systems. Ongoing projects in the College-owned Hopkins Forest include ecological studies, animal behavior, and acid rain effects on soils, plants, and animals. Students may also choose to work on local, national, or international policy or planning issues, and opportunities to work with town and regional planning officials are available. Projects are unrestricted as to disciplinary focus. Students

should consult with faculty well before the start of the semester in which they plan to carry out their project.

Prerequisites: approval by the Chair of Environmental Studies

Grading: yes pass/fail option, yes fifth course option

Distributions: No divisional credit

Spring 2024

IND Section: 01 TBA José A. Constantine

ENVI 402 (F) Environmental Planning Workshop: Community Project Experience

Cross-listings: AMST 406

Primary Cross-listing

In this class you apply your education to effect social and environmental change in the Berkshires. Students work in small collaborative groups to address pressing issues facing the region. Class teams partner with community organizations and local & regional governments to work with clients to develop solutions. You will learn while doing and contribute to the community. The field of environmental planning encompasses the *built environment*, such as housing, zoning, transportation, renewable energy, waste, neighborhood design; the *natural environment*, such as open space, farmland, habitat and species protection, natural resource protection, air and water pollution and climate change, and the *social environment*, such as racial zoning, recreation, placemaking, ecojustice, food security, and healthy communities. Skills taught include basic land use planning, GIS mapping, developing and conducting surveys, interview techniques, community-based research, project management, public presentations and professional report-writing. The class culminates in public presentations to the client organizations. The class hours include time for team project work, client meetings and team meetings with the professor. Recent project topics: <https://ces.williams.edu/environmental-planning-papers/>

Class Format: The weekly conference session (1 hour) is dedicated to site visit field trips, team project work, client meetings and team meetings with professor.

Requirements/Evaluation: Response papers (three 1-page papers), in-class exercises, class discussion, small group work, public meeting attendance, project work, final report (due in segments during semester) and final presentation.

Prerequisites: ENVI 101 recommended; open to juniors and seniors.

Enrollment Limit: 16

Enrollment Preferences: Environmental Studies majors and concentrators, American Studies majors, Maritime Studies concentrators.

Expected Class Size: 16

Grading: no pass/fail option, no fifth course option

Unit Notes: Course fulfills senior seminar requirement for Environmental Studies Majors, Environmental Studies Concentrators, and Maritime Studies Concentrators. American Studies Space & Place elective. Course is an Environmental Studies Concentration elective (ENVI Policy and ENVI Humanities, Arts + Social Science) and Environmental Studies Major elective.

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 402(D2) AMST 406(D2)

Attributes: AMST Space and Place Electives ENVI Core Courses ENVI Humanities, Arts + Social Science Electives ENVI Environmental Policy ENVI Senior Seminar EVST Core Courses EVST Senior Seminar EXPE Experiential Education Courses MAST Senior Seminar

Fall 2023

SEM Section: 01 W 1:10 pm - 3:50 pm Sarah Gardner

CON Section: 02 T 1:10 pm - 2:00 pm Sarah Gardner

CON Section: 03 R 1:10 pm - 2:00 pm Sarah Gardner

ENVI 404 (F) Coastal Processes and Geomorphology (QFR)

Cross-listings: MAST 404 / GEOS 404

Secondary Cross-listing

Can people live safely along the coast? Recent events like SuperStorm Sandy and the Tohoku Tsunami have shown us how the ocean can rise up suddenly and wreak havoc on our lives and coastal infrastructure. Only educated geoscientists can evaluate the risks and define informed strategies to prevent future coastal catastrophes. Currently almost half the global population lives within 100 km of the coast, with a large percent of those living in densely populated cities (e.g., New York, New Orleans, Los Angeles, Shanghai, Hong Kong, Cape Town, Sydney, Mumbai). Despite the growing risks and challenges associated with climate change and rising sea levels, the coastal population continues to grow rapidly. To help ensure these growing populations can live safely along the coast requires a detailed understanding of the processes that shape the coastal zone. These processes act across a variety of scales, from deep-time geologic processes that dictate coastal shape and structure, to decadal-scale processes that determine shoreline position and evolution, to weekly and daily processes such as storms and tides. This course will provide an in-depth look at the forces--wind, waves, storms, and people--that shape the coastal zone, as well as the geologic formations--sandy beaches, rocky cliffs, barrier islands, deltas, and coral reefs--that are acted upon and resist these forces. Coastal dynamics are strongly affected by human interventions, such as seawalls, dredged channels, and sand dune removal, as well as by sea level rise and changes in storm frequency and magnitude associated with climate change. Finally, the course will provide students with a perspective on how the U.S. seeks to manage its coastal zone, focusing on sea level rise and coastal development. This class will include a quantitative lab that will use MATLAB software to model and evaluate various coastal processes. Students will gain a basic understanding of MATLAB functionality, and will be asked to independently apply what they have learned to various data sets provided by the instructor.

Class Format: lecture two times a week with a lab one time per week

Requirements/Evaluation: lab reports, quizzes, and an independent research project

Prerequisites: Either GEOS 104 or GEOS 210; or permission of instructor. No prior knowledge is necessary, but this course does build on principles used to explore complex scientific challenges.

Enrollment Limit: 12

Enrollment Preferences: senior Geosciences majors, then juniors

Expected Class Size: 10

Grading: yes pass/fail option, yes fifth course option

Unit Notes: As a 400-level seminar, this capstone course is intended to build on and extend knowledge and skills students have developed during previous courses in the major. This course counts toward the GEOS Group B Electives - Sediments + Life.

Distributions: (D3) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 404(D3) MAST 404(D3) GEOS 404(D3)

Quantitative/Formal Reasoning Notes: This course will involve the use of MATLAB software to quantitatively analyze coastal process and geomorphological data.

Attributes: ENVI Natural World Electives GEOS Group B Electives - Sediments + Life

Not offered current academic year

ENVI 410 (S) The Cryosphere

Cross-listings: GEOS 410

Secondary Cross-listing

The Earth's climate system is often described in terms of its spheres, including the atmosphere, biosphere, lithosphere, oceans, and the cryosphere. The cryosphere is the naturally occurring ice on Earth in all its many forms: snow, glaciers, ice sheets, sea ice, frozen lakes and rivers, and permafrost (frozen soil). These parts of the climate system may seem remote, but have implications for climate and weather around the world. Melting glaciers and ice sheets have already contributed to sea level rise, and are projected to do so even more in the future. This course will explore the cryosphere, including snow, sea ice, permafrost, and glaciers through lectures, hands-on and data analysis labs, reading journal articles, and a final project. A spring break field trip to Alaska offers the opportunity to get boots-on-the-snow experience with glaciers, sea ice, and permafrost. As a 400-level seminar, this capstone course is intended to build on and extend knowledge and skills students have developed during previous courses in the major.

Class Format: Class periods and lab periods will be used interchangeably based on the weather. The spring break trip to Alaska is optional.

Requirements/Evaluation: Evaluation will be based on short papers, labs responses, and a research project

Prerequisites: GEOS 215 or GEOS 255 or GEOS 309 or MAST 311 or permission of instructor

Enrollment Limit: 10

Enrollment Preferences: Senior GEOS majors, then other GEOS majors and senior ENVI majors

Expected Class Size: 10

Grading: yes pass/fail option, yes fifth course option

Unit Notes: As a 400-level seminar, this capstone course is intended to build on and extend knowledge and skills students have developed during previous courses in the major

Materials/Lab Fee: Labs will be outside during the winter: students should be prepared to dress appropriately for the weather.

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

GEOS 410(D3) ENVI 410(D3)

Attributes: ENVI Natural World Electives

Not offered current academic year

ENVI 412 (S) Senior Seminar: Perspectives on Environmental Studies (WS)

Cross-listings: MAST 402

Primary Cross-listing

The Environmental Studies and Maritime Studies programs provide students with an opportunity to explore the myriad ways that humans interact with diverse environments at scales ranging from local to global. The capstone course for Environmental Studies and Maritime Studies, this seminar brings together students who have specialized in the humanities, social studies and the sciences to exchange ideas across these disciplines. Over the course of the seminar, students will develop a sustained independent research project on a topic of their choice, and they will have opportunities throughout the semester to meet with guest speakers to discuss environmental work outside the academy.

Requirements/Evaluation: active participation, discussion leading, several smaller assignments and multi-step capstone project

Prerequisites: declared major/concentration in Environmental Studies or Maritime Studies, ideally to be taken in final semester at Williams

Enrollment Limit: 14

Enrollment Preferences: Environmental Studies majors and concentrators, Maritime Studies concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Unit Notes: required course for students wishing to complete the Maritime Studies concentration

Distributions: No divisional credit (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 412No divisional credit MAST 402No divisional credit

Writing Skills Notes: This course is focused on building up cross-disciplinary writing and communication skills. There will be a multi-step capstone project that emphasizes writing, and there will be opportunities to revise and resubmit work.

Attributes: ENVI Core Courses EVST Core Courses EVST Senior Practicum

Not offered current academic year

ENVI 413 (F) The Big Ideas: Intended and Unintended Consequence of Human Ambition (DPE) (WS)

Cross-listings: HIST 413 / ARAB 413 / GBST 413

Secondary Cross-listing

What have been the most consequential ideas of the last 100 years? This course will explore some of the more audacious and ambitious plans to alter natural and urban environments in the late 19th century to the early part of the 21st, specifically those that sought to improve the human condition through science, engineering, and technology. By building big bold things, politicians around the globe sought to bring prosperity to their nation and embark on a path of modernity and independence. Through an intellectual, political and environmental history of major construction projects such as the building of the Suez Canal and the Aswan Dam, extensive river valley developments in Iran, Turkey and Iraq, and utopian and futuristic city planning in western Asia, students will consider how, with the benefit of hindsight, to best evaluate the feasibility of such bold schemes. Who has benefitted and who has not, what have been some of the unanticipated consequences, what was sacrificed or neglected, and what do these projects tell us about the larger processes of global capitalism, decolonization, and climate change?

Requirements/Evaluation: A presentation, shorter writing assignments and a longer research paper (20-25 pages) in the end. Students will submit shorter drafts of final paper in order to receive constructive feedback prior to final submission.

Prerequisites: None

Enrollment Limit: 15

Enrollment Preferences: Seniors, especially History, Arabic and Environmental Studies majors.

Expected Class Size: 15

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 413(D2) HIST 413(D2) ARAB 413(D2) GBST 413(D2)

Writing Skills Notes: A 20-25 page research paper will be required at the end of the semester. Prior to getting to that point, students will submit an annotated bibliography, a two page proposal, a five and eventually a 10 page draft. Each draft will receive extensive comments and suggestions from peers and instructor. In this way, the student will think about the process of writing and the best way to set themselves up for success.

Difference, Power, and Equity Notes: This course examines how a number of different nations in Africa and Asia sought to improve the living conditions of the masses through major construction project. Though ostensibly these schemes were supposed to improve the livelihood of all, often they primarily benefitted the few - the urban elite - and not the general population. This course will therefore explore how certain class, gender and racial lines were solidified and maintained through economic development plans.

Attributes: HIST Group E Electives - Middle East

Not offered current academic year

ENVI 420 (F) Architecture and Sustainability in a Global World (WS)

Cross-listings: ARTH 420 / GBST 420

Secondary Cross-listing

What does it mean to create a sustainable built environment? What do such environments look like? Do they look the same for different people across different times and spaces? This course takes these questions as starting points in exploring the concept of architectural sustainability, defined as "minimizing the negative impact of built form on the surrounding landscape," and how this concept can be interpreted not only from an environmental point of view, but from cultural, political, and social perspectives as well. Over the course of the class, students will explore different conceptualizations of sustainability and how these conceptualizations take form in built environments in response to the cultural identities, political agendas, social norms, gender roles, and religious values circulating in society at any given moment. In recognizing the relationship between the way things are constructed (technique of assembly, technology, materials, process) and the deeper meanings behind the structural languages deployed, students will come to understand sustainability as a fundamentally context-specific ideal, and its manifestation within the architectural environment as a mode of producing dialogues about the anticipated futures of both cultural and architectural worlds.

Requirements/Evaluation: weekly reading discussion question posts on GLOW, leading class discussions, and a final project/paper (15-20 pages) with presentation

Prerequisites: none, although a course in art/architectural history or environmental studies would be advantageous

Enrollment Limit: 12

Enrollment Preferences: Art History majors, Environmental Studies majors, History and Studio majors

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Distributions: (D1) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 420(D1) ARTH 420(D1) GBST 420(D2)

Writing Skills Notes: This course develops writing proficiency using a series of sequenced assignments that culminate with the formation of a well-articulated, compelling final project. Students will receive extensive feedback on these assignments via a progression-oriented evaluative system that involves both instructor and peer feedback, and will take part in a writing seminar towards gaining the necessary tools for drafting work, formulating ideas, organizing sections, and crafting an abstract.

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 430 (S) Race, Identity, Nature (DPE) (WS)

Cross-listings: AFR 390 / AMST 430

Secondary Cross-listing

From 18th-century claims that climate determined character to the 21st-century proliferation of DNA tests underwriting claims to Indigenous ancestry, race, colonialism, identity, and "nature" operate as interconnected terrains of power. Anchored in the contexts of U.S. colonialisms, racialization, and accumulation, this course aims to expose students to the cultural politics of "nature" as a way of "doing" American Studies. Specifically, this course investigates formations of and struggles against U.S. colonialisms, racialization, and accumulation via the many symbolic and material iterations, negotiations, and contestations of the contingent relations between and among human and non-human natures. Organized around a significant research paper and weekly written responses, this course ultimately aims to foster students' critical writing, reading, analytical thinking, and comparative inquiry skills across such contexts and sites of contestation, and across texts of different genres and media. We will work with a wide range of primary sources, including published fiction and poetry, legal documents, newspaper articles, speeches, recorded songs, and films, photos, paintings and other visual culture. By the end of this course, students should be able to describe the historical foundations of dominant ideas, attitudes, and practices toward non-human natures, as well as analyze how ideas of "nature" mediate the ways in which colonial, racial, gender, and sexual categories and structures inform and are (re)produced by U.S. institutions and in public areas such as the law, public policy, and property. Finally, students should be able to interpret how racialized and colonized peoples' visions, representations, and practices of liberation with regard to relations with non-human natures and the materiality of land precede, contend with, and exceed normative political, economic, and social categories of governance and systems of dispossession and exploitation.

Requirements/Evaluation: Evaluation will be based upon the following: Class Participation: 25%; Weekly Responses (350-500 words): 25%; Final Research Essay: 50%, broken down by Research Proposal (2-3 pgs, 10%), Peer Review and Feedback (2 pgs, 10%), Presentation (10%); Essay (15 pgs): 20%.

Prerequisites: none

Enrollment Limit: 12

Enrollment Preferences: American Studies majors will be given preference; secondary preference given to students specializing in Native American and Indigenous Studies, as well as Africana and Environmental Studies majors.

Expected Class Size: 12

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

AFR 390(D2) ENVI 430(D2) AMST 430(D2)

Writing Skills Notes: Emphasis on revision and writing process includes: One thesis paper at 15 pages (receiving critical feedback from professor and peers); one thesis paper revision with critical feedback from professor and peers, including one letter of revision explaining the student's revision process; one research proposal (including thesis outline and annotated bibliography of primary texts) with critical feedback from professor; student presentations and roundtable discussion based on the final paper.

Difference, Power, and Equity Notes: By the end of this course, students should be able to interpret how racialized and colonized peoples' visions, representations, and practices of liberation with regard to relations with non-human natures and the materiality of land precede, contend with, and exceed normative political, economic, and social categories of governance and systems of dispossession and exploitation. In order to address such issues of difference, power, and equity, this course provides students with the necessary th

Attributes: AMST 400-level Senior Seminars ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

ENVI 450 (F) Senior Seminar: Environmental Ethnography

A key question orients this course: What can the embodied, place-based, and detailed approach of ethnographic study bring to our understandings of the environment? This upper-level seminar will explore this question through classroom discussions and a semester-length research project. Students will engage different styles of environmental ethnography while undertaking their own ethnographic projects involving the Williams College community and surrounding areas. Students will learn to work across different kinds of evidence as they draft fieldnotes, code fieldwork data, extrapolate key ideas from their fieldwork materials, and discover new ways of building environmental knowledge. Students will use these materials to collectively assemble an edited volume of ethnographic snapshots to be presented to the wider Environmental Studies community at Williams.

Requirements/Evaluation: Participation in seminar discussions; Weekly fieldnotes (2-3 pages per week); Mid-term Coded fieldwork notes and summary statements (8-10 pages); Final ethnographic snapshot/presentation (13-15 pages)

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Environmental Studies majors and concentrators; Juniors and Seniors

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

Attributes: ENVI Environmental Policy EVST Senior Practicum

Not offered current academic year

ENVI 454 (F) Climate Change Physiology

Cross-listings: BIOL 454

Secondary Cross-listing

Animals are increasingly faced with rapid climate change driven by human activities across the globe. How do they cope with challenges imposed by increasing temperature? And, how might physiological mechanisms at the organismal level scale up to influence population processes? This course uses an integrative approach to understand the impacts of climate change at multiple levels of biological organization in both terrestrial and aquatic environments. We examine physiological mechanisms underlying animal responses and the role of acclimation versus adaptation in coping with rapidly shifting thermal environments. We then consider the impacts of these mechanisms on whole organism performance and their consequences for population persistence. Finally, we learn the analytical tools used to incorporate physiological mechanisms into ecological models to predict future responses to global climate change. Class discussions will focus on readings drawn from the primary literature.

Requirements/Evaluation: Evaluation will be based on class participation and several short papers.

Prerequisites: BIOL 203 or BIOL 205, or permission of instructor

Enrollment Limit: 10

Enrollment Preferences: Biology seniors who have not yet taken a 400 level course

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Unit Notes: Satisfies the distribution requirement for the Biology major.

Distributions: (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

BIOL 454(D3) ENVI 454(D3)

Attributes: ENVI Natural World Electives

Not offered current academic year

ENVI 460 (S) Communicating Climate Change

Long-term, probabilistic thinking about scary scenarios is hard. When the relevant time frames extend to centuries and millennia, it is really hard. And when the degree of scariness is determined by sciences that very few people understand, it is really, really hard. This describes the challenge of climate communication. No matter what your interests or career paths might be, you will need to be able to communicate effectively about environmental problems, often with people who see them very differently from you. It is difficult to communicate about any problem across social, political, and cultural divides. But environmental problems present special challenges. For one thing, they typically involve complicated, contested science. For another, their effects are often difficult to perceive yet potentially devastating in their consequences, especially for future generations and marginalized people. For yet another, their solutions often seem hopelessly difficult to implement. And finally, they are thoroughly entangled with almost every other problem we face, from pandemics to racism to wealth inequality. How do we communicate clearly, persuasively, and responsibly about something so complex? This seminar brings together students with interests in the humanities, arts, social sciences and sciences to seek answers to this fundamental question. Over the course of the seminar, we will explore research on climate change communication in a diverse array of fields while seeking to put our findings into practice locally, working together as a team to solve concrete climate communication problems here in our

community.

Requirements/Evaluation: One 5-7-page paper; final collaborative project; participation.

Prerequisites: Environmental Studies 101.

Enrollment Limit: 19

Enrollment Preferences: Environmental/Maritime Studies majors and concentrators.

Expected Class Size: 12

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

Attributes: ENVI Core Courses EVST Core Courses MAST Senior Seminar

Not offered current academic year

ENVI 465 (S) Solutions to the Biodiversity Crisis

The biodiversity crisis is one of the greatest challenges of our century. Faced with climate change, persistent pollution, and habitat fragmentation, species are declining locally and globally. In this upper-level seminar we will integrate knowledge from the natural sciences, social sciences, policy, arts, and the humanities to design and implement biodiversity interventions. Through readings, discussions with experts, and applied projects, we will learn how biodiversity conservation and restoration can be socially just; how spaces can be designed to promote the flourishing of life; and how much local environmental management can alter global trends. We will also envision what the biotic world might look like in 10, 100, and 1000 years and consider who gets to decide which species live and which die, and who *should* decide.

Requirements/Evaluation: One 5-7-page paper; final collaborative project

Prerequisites: Environmental Studies 101 and 102

Enrollment Limit: 19

Enrollment Preferences: Environmental/Maritime Studies majors and concentrators; seniors

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

Attributes: ENVI Senior Seminar EVST Senior Seminar MAST Senior Seminar

Spring 2024

SEM Section: 01 W 1:10 pm - 3:50 pm Thursday Org Mtg 7:30 pm - 7:55 pm Laura J. Martin

ENVI 470 (S) Science for Environmental Justice (DPE)

Cross-listings: GEOS 470

Secondary Cross-listing

Economically challenged communities and communities of color are disproportionately affected by environmental contamination and disturbance. Although environmental racism caused by industrial pollution has been made clear in scholarship for some time, the integrated stresses of climate change and industrial contamination are now triggering new challenges to life in underprivileged communities. Resolving environmental injustice will require meaningful engagement from scientists across a range of disciplines, from chemistry and the geosciences to ecology and public health. In this senior seminar, you will learn about the history of the environmental justice movement while examining how science has been used to address cases of environmental contamination and mismanagement. You can expect experiences in field data collection, laboratory analyses, and numerical modeling, skills that are required to assist communities suffering from environmental injustice. And we will work in partnership with residents of Tallevast, Florida, who have long suffered from the impacts of groundwater contamination and governmental neglect. This partnership will involve a residential field trip to Tallevast during spring break, where you will undertake an environmental study in support of the community.

Class Format: Weekly lectures, paper discussions, and hands-on labs. Required week-long spring break field trip.

Requirements/Evaluation: weekly lab exercises and seminar presentations; a research project; a final presentation; and a spring break field trip

Prerequisites: At least one 200-level Division III course and at least one 300-level Geosciences or Environmental Studies course or permission of instructor.

Enrollment Limit: 12

Enrollment Preferences: Fourth year, and then third year, Geosciences majors and Environmental Studies majors or concentrators

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Unit Notes: As a 400-level seminar, this capstone course is intended to build and extend knowledge and skills that students have developed during previous courses in either the Geosciences or Environmental Studies majors.

Materials/Lab Fee: The spring break field trip is being funded by the Freeman Foote Field Trip Fund for the Sciences.

Distributions: (D3) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ENVI 470(D3) GEOS 470(D3)

Difference, Power, and Equity Notes: The course will examine the history of the environmental justice movement, unraveling the roles of governmental neglect and complicity in fostering the harm of vulnerable communities. We will review strategies of collective action in fighting climate and environmental injustice and the complicated role that scientists have played in this pursuit. We will then leverage scientific skills and perspectives to imagine ways that scientists can become responsible agents of change.

Attributes: GEOS Group B Electives - Sediments + Life

Spring 2024

LEC Section: 01 Cancelled

LAB Section: 02 Cancelled

ENVI 478 (S) Cold War Landscapes

Cross-listings: HIST 478 / AMST 478

Secondary Cross-listing

The Cold War between the United States and the Soviet Union set in motion dramatic changes to the natural and built environments of many nations between 1945 and 1991. Nuclear test and missile launch sites, naval installations, military production operations, and border securitizations are just a few of the most obvious ways in which the stand-off between the two countries altered rural and urban landscapes around the world. But one can also see the Cold War as setting in motion less immediately direct but nonetheless profound changes to the way that many people saw and planned for the environments around them, as evidenced, for instance, by the rise of the American suburb, the reconstruction of postwar Europe, and agricultural and industrial initiatives in nations across the globe. We will begin this seminar by exploring several distinct "Cold War landscapes" in the United States and North America. We will then move on to examining others in Europe and the Soviet Union. Our approach to our topics will be interdisciplinary throughout the semester, with the additional goal of helping students frame their final projects. Students are encouraged to write their research papers on any geographical area of the world that interests them.

Requirements/Evaluation: class participation and semi-weekly critical writing on the reading; students will also be expected to keep up through the stages of the research paper process, which will involve submitting a short research plan, annotated bibliography, outline, and a rough draft, as well as the final 20- to 25-page paper.

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: History, ENVI, and AMST majors if over-enrolled

Expected Class Size: 10

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

HIST 478(D2) ENVI 478(D2) AMST 478(D2)

Attributes: AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives HIST Group C Electives - Europe and Russia HIST Group F Electives - U.S. + Canada

Not offered current academic year

ENVI 491 (S) The Suburbs (WS)**Cross-listings:** HIST 491 / AMST 490**Secondary Cross-listing**

The suburbs transformed the United States. At the broadest level, they profoundly altered spatial residential geography (especially in terms of race), consumer expectations and behavior, governmental policies, cultural norms and assumptions, societal connections, and Americans' relationship to nature. More specifically, the different waves of post-World War II suburban development have both reflected large-scale shifts in how power and money have operated in the American political economy; and set in motion deep-seated changes in electoral politics, in Americans' understandings of how their income should be used, and in how the built landscape should be re-imagined. This tutorial will explore the rich historical literature that has emerged over the last twenty years to provide students with a history of the suburbs, to see the suburbs as more than simply collections of houses that drew individual homeowners who wanted to leave urban areas. We will focus most of our attention on the period from 1945 through the 1980s. Some of the questions we will consider will include: how did the first wave of suburban development bring together postwar racial and Cold War ideologies? Is it possible, as one historian has argued, that suburbs actually created the environmental movement of the 1960s? And how have historians understood the role that suburbs played in America's conservative political turn, leading to the election of Ronald Reagan?

Class Format: Students will be assigned a tutorial partner, and tutorial pairs will meet with the professor for one hour each week at a regularly scheduled meeting time.

Requirements/Evaluation: typical tutorial format; every other week, students will write and present orally a 5- to 7-page essay on the assigned readings; on alternate weeks, students will write a 2-page critique. During two of the weeks of the semester (around the middle of the semester and at the end), all students will write papers that explore a common question or theme.

Prerequisites: none

Enrollment Limit: 10

Enrollment Preferences: History majors and students with previous coursework in History

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

HIST 491(D2) ENVI 491(D2) AMST 490(D2)

Writing Skills Notes: Students will reflect on what their writing goals are for the semester, and they will receive weekly feedback on their writing from the professor and from their tutorial partner. The final writing assignment will afford students the chance also to reflect back on their previous papers and the semester's course content.

Attributes: AMST Space and Place Electives ENVI Humanities, Arts + Social Science Electives HIST Group F Electives - U.S. + Canada

Not offered current academic year

ENVI 493 (F) Senior Research and Thesis: Environmental Studies

Environmental Studies senior research and thesis; this is part of a full-year thesis (493-494).

Prerequisites: approval by the Chair of Environmental Studies

Grading: yes pass/fail option, yes fifth course option

Distributions: No divisional credit

Fall 2023

HON Section: 01 TBA José A. Constantine

ENVI 494 (S) Senior Research and Thesis: Environmental Studies

Environmental Studies senior research and thesis; this is part of a full-year thesis (493-494).

Prerequisites: approval by the Chair of Environmental Studies

Grading: yes pass/fail option, yes fifth course option

Distributions: No divisional credit

Spring 2024

HON Section: 01 TBA José A. Constantine

Winter Study -----

ENVI 18 (W) Environmental Advocacy Skills in a Climate Changed World: A Berkshires Wind Project Case Study

In this course, students will experience what it is like to advocate for or against a proposed clean energy project—a wind project—in the Berkshires and confront the range of critical trade-offs involved in addressing climate change. After being provided with some basics of wind power technology and impacts, through a combination of research and advocacy exercises students will alternate between advocating for the project and against it, thereby gaining insights into competing sides of controversy while also learning a range of environmental policy and legal issues as they proceed. Students will draft and orally present to their classmates a newspaper-style op-ed; will interview (using Zoom) someone working in the field of clean energy and then present to the class a summary of what was learned; will conduct in class a short examination of a witness on scenic or wildlife impact issues; and in the last class, present a closing argument that can use any combination of video, posters, slides, or other media. To gain insight into competing perspectives, each student alternates representing one side or the other exercise-by-exercise. Readings and videos will be from live links in the course syllabus, and some handouts provided by the Instructor by email or in-person. The readings will provide a concise overview of wind power technology and impacts; the legal process for review and either approval or denial of a wind project; and advocacy strategies for both written and oral efforts. There may be a field trip to a nearby (25 miles away) operating windfarm, weather and owner permitting.

Requirements/Evaluation: Paper(s) or report(s); Presentation(s)

Prerequisites: None

Enrollment Limit: 12

Enrollment Preferences: Preference to Environmental Studies majors and concentrators; after that, by lottery

Expected Class Size: NA

Grading: pass/fail only

Unit Notes: Jeff Thaler, a nationally recognized clean energy and environmental lawyer, also teaches at the undergraduate, graduate and law school levels. He has handled a wide range of clean energy projects, including on-and-offshore wind power.

Attributes: EXPE Experiential Education Courses STUX Winter Study Student Exploration

Winter 2024

LEC Section: 01 Cancelled

ENVI 24 (W) Farming New England: A Deep Dive Into the Regional Food System

Farmers feed us all. In this intensive experiential course, students will learn how. New England produces about 10 percent of its own food: 90 percent of the food is imported from outside the region. Farming in this region has been in decline for decades and farms face a range of challenges, from flood, drought, and debt, to farmland loss, social isolation, and aging infrastructure. With innovation, investment, creativity, and sustainable solutions, New England farms can succeed, but only with effective policies, financial support, and a younger generation of capable farmers. This class examines the complexities of the regional food system from multiple perspectives: farming, agronomy, finances, climate change, food insecurity, food systems planning, agricultural policy, agricultural economics, markets, social justice, land use and planning. Five overarching questions shape the class: What are the challenges and opportunities for farming in New England? How can New England's agriculture succeed and expand? How is sustainable/regenerative farming part of the solution? What will it take for the region to produce more of its own food and create regional food security? How can farming be more socially just and racially equitable? Students will learn through immersion in the agricultural world for the month. Class meets three days a week: two days a week of farm work on a variety of farms (livestock, cow & goat dairy, cheesemaking, diversified farms, vegetable & greenhouse, and hops farm/brewery, and the Food Bank), and one day a week meeting with experts: agronomists, extension workers, migrant workers/advocates, farmland planners, agricultural/food system policymakers, and elected officials. Students will learn through hands-on work, conversation with farmers and others in the agricultural/food systems field, class reading, independent research, group discussion, reflection, and writing. The class culminates at the New England Organic Farm Assoc conference. Interested students should complete the following application by November 1st: <https://forms.gle/ZjDvNqjgEsbjbWr96>

Requirements/Evaluation: Short paper and final project or presentation; Article suitable for publication in a regional newspaper + public class presentation.

Prerequisites: None

Enrollment Limit: 6

Enrollment Preferences: Environmental Studies majors and concentrators; students with a demonstrated interest in agriculture.

Expected Class Size: NA

Grading: pass/fail only

Attributes: EXPE Experiential Education Courses

Winter 2024

LEC Section: 01 TR 10:00 am - 2:00 pm Sarah Gardner

ENVI 31 (W) Senior Research and Thesis: Environmental Studies

To be taken by students registered for Environmental Studies 493-494.

Class Format: thesis

Grading: pass/fail only

Winter 2024

HON Section: 01 TBA José A. Constantine

ENVI 99 (W) Independent Study: Environmental Studies

Open to upperclass students. Students interested in doing an independent project (99) during Winter Study must make prior arrangements with a faculty sponsor. The student and professor then complete the independent study proposal form available online. The deadline is typically in late September. Proposals are reviewed by the pertinent department and the Winter Study Committee. Students will be notified if their proposal is approved prior to the Winter Study registration period.

Class Format: independent study

Grading: pass/fail only

Winter 2024

IND Section: 01 TBA José A. Constantine