

ENVIRONMENTAL STUDIES (BI-CO)

Department Website:

<https://www.haverford.edu/environmental-studies>

Now and over the coming decades, human societies face daunting environmental challenges. Energy consumption is expected to rise sharply while even present-day carbon emissions intensify global warming, threatening the finely balanced marine and terrestrial ecosystems upon which we rely for food, water and shelter. Global population pressure and sea-level rise, along with weather extremes, will create climate refugees and resource conflicts on an unprecedented scale. Responding to these cascading environmental, socioeconomic, and political challenges will require all the creativity, expertise and compassion we can muster, but neither scientific arguments nor social appeals have succeeded in mobilizing adequate action. We must find rational, holistic and ethically grounded ways to focus intellectual attention on the human-nature nexus. This is an essential endeavor of the field of Environmental Studies (ENVS).

Guided by a commitment to addressing challenges on multiple scales—by a holistic vision of humans in the environment, and by the particular problem at hand—ENVS scholars, educators and activists utilize a variety of methods and tools, which are represented in college curricula in many different ways. Students have the opportunity to pursue a Major in Environmental Studies through a curricular collaboration between Haverford and Bryn Mawr Colleges, or pursue a Minor in Environmental Studies to complement another major. The ENVS department is dedicated to preparing students who have the environmental expertise needed for the world they will inherit.

The Bi-College ENVS major combines the strengths of our two liberal arts campuses to create an interdisciplinary program that teaches students to synthesize diverse disciplinary knowledge and approaches, and to communicate effectively across disciplinary boundaries as they engage with environmental issues. In addressing these issues, ENVS students will apply critical thinking and analytical skills within a holistic, systems framework that includes social justice as an essential component.

The ENVS introductory course offers in-depth investigation of the theoretical and applied foundations of the study of the environment from all divisions. The major incorporates praxis community-based learning and core courses that examine

the theoretical and empirical approaches that the natural sciences, social sciences, arts and humanities bring to local and global environmental questions. In addition, ENVS majors pursue an individually selected area of environmental expertise, a focus area, in order to gain a depth of knowledge, and to develop a sense of their own agency in addressing what most concerns them. To support these learning goals, the ENVS program provides opportunities for independent and collaborative research, including co-curricular learning, via local, national and international internships and opportunities to study abroad.

Haverford, Bryn Mawr, and Swarthmore also offer an interdisciplinary Tri-College ENVS minor, involving departments and faculty on all three campuses from the natural sciences, engineering, mathematics, the humanities, and the arts. The Tri-Co ENVS minor brings together students and faculty to explore interactions among earth systems, human societies, and local and global environments.

Both the Bi-Co ENVS major and the Tri-Co ENVS minor cultivate in students the capacity to identify and confront key environmental issues through a blend of multiple disciplines, encompassing historical, cultural, economic, political, scientific, and ethical modes of inquiry.

To declare the ENVS major or minor, students should contact the Environmental Studies chair or advisor at their home campus.

Learning Goals

The Bi-Co Environmental Studies major is an interdisciplinary program that teaches students to synthesize diverse disciplinary knowledge and approaches, and to communicate effectively across disciplinary boundaries as they engage with environmental issues. Students graduating with the ENVS major are adept at applying diverse modes of analysis to solve problems across a wide array of interconnected social and environmental challenges.

Environmental Studies students apply critical thinking and analytical skills within a holistic, systems framework that includes the following specific goals:

- Cultivation of environmental literacies, and the ability to read, analyze, and create products from the environmental social sciences, natural sciences, and humanities
- Experience with praxis activities in the context of intellectual work, with particular emphasis on experience working with community groups in a socially just and participatory framework

- Development and refining of written and oral communication skills for a variety of academic and non-academic audiences
- Knowledge of, and the ability to articulate, the role of different divisions of intellectual inquiry in environmental issues
- An understanding of the diverse modes of environmental theory, and experience translating complex environmental data into actionable conclusions or revised theory.

Haverford's Institutional Learning Goals are available on the President's website, at <http://hav.to/learninggoals>.

Curriculum

There are two curricular pathways through Environmental Studies: the ENVS major and ENVS minor.

ENVS Major (Bi-Co)

The ENVS major curriculum is designed to maintain a balance between cultivating broad environmental literacies and developing a focused area of expertise with associated skills. This program includes core classes and a self-designed "focus area" that can be completed with coursework from Haverford, Bryn Mawr, and Swarthmore.

ENVS Minor (Tri-Co)

The ENVS minor curriculum is designed to complement any major at Haverford, Bryn Mawr or Swarthmore, pending approval of the student's coursework plan by the home department and the ENVS chair.

Up to date information about the Environmental Studies department's activities can be found at the departmental website.

Major Requirements

Students are required to take a minimum of 11 courses in the Environmental Studies major.

I. Core courses (6 credits)

Six required courses are in the core program, which consists of:

- ENVS H101 or ENVS B101 or ENVS S001: Case Studies in Environmental Issues
- ENVS H201 or ENVS B201: Laboratory in Environmental Sciences
- ENVS H202 or ENVS B202: Environment and Society
- ENVS H203 or ENVS B203: Environmental Humanities
- ENVS H204 or ENVS B204: Environmental Studies Praxis

- ENVS H397 or ENVS B397 or ENVS S091: Environmental Studies Senior Capstone (during the fall or spring semester of the senior year)

Students interested in pursuing an ENVS major are strongly encouraged to take ENVS 101 during their first year of study.

ENVS 101 and 397 are each offered two times per year: once at Haverford and once at Bryn Mawr, frequently in alternate semesters. Students are welcome to take these courses on either campus.

II. Electives and focus area (5 credits)

In addition to the core courses, ENVS majors must complete five electives. A wide variety of environmentally themed courses may serve as ENVS electives, including many courses offered by other departments and programs. Each student's set of elective courses must fulfill the following requirements:

- A minimum of one course must come from each of two broad divisional groups:
 - Natural sciences, mathematics, and engineering;
 - Social sciences, humanities, and arts.
- At least two elective courses must be taken at the 300-level or equivalent.
- At least three elective courses must articulate a coherent intellectual or thematic focus (a "focus area") that students develop in consultation with their ENVS advisor;

III. Focus area

The possibilities of a focus area are many. A student's focus area may be organized by a specific perspective on the study of the environment, a particular interdisciplinary focus, or even a geographic region. Focus areas are designated in consultation with an ENVS advisor. Early planning for the ENVS major allows students to begin satisfying prerequisites for advanced focus area courses.

Sample focus area topics include, but are not limited to: Environment and Society, Environmental Policy, Earth Systems, Environmental Modeling, Environmental Art and Technology, and Environment in East Asia.

Courses taken as ENVS major electives need not be prefixed with "ENVS" in the course catalog. Advanced courses with appropriate thematic content offered by any program, from Africana Studies, through Mathematics, to Visual Studies, may be counted.

Upon declaration of the ENVS major, the coursework plan must be approved by a major advisor on the student's home campus. Courses approved for the

Environmental Studies major at Swarthmore can be taken for the Bi-Co ENVS major or substituted for requirements contingent upon the major advisor's approval.

Courses taken while studying abroad or off-campus may be approved for the ENVS major by the major advisor in consultation with the Bi-Co ENVS Department faculty.

Senior Project

Students majoring in Environmental Studies will pursue their capstone experience in any one of a number of ways, centered within the one-semester ENVS H397 or ENVS B397 course. In this course, students will design and complete a project under the supervision of a faculty member that builds upon methods learned in the ENVS 200-level sequence and elaborated on during the Focus Area. In most cases, ENVS 397 will involve collaborating with one or more outside organizations or groups, and senior projects will be an individual project designed in concert with the faculty member and these organizations. For example, senior projects could include, but are not limited to, digital mapping and annotation of green space, the design and implementation of an environmental education curricular module, or an environmental art project. Students are strongly encouraged to consider possible senior project topics or techniques they would like to use prior to their senior year, and to be in dialogue with their faculty advisors about possible senior projects during the third year of study.

Senior Project Learning Goals

- **Collaboration with others, including students, faculty and staff, and outside partners**
Each senior is expected to hone the skills required to collaborate in an effective fashion throughout the course of the senior project. These skills are likely to include working effectively outside of the campus space.
- **Application of techniques and methods acquired during the major sequence**
The senior project is an opportunity for each student to demonstrate and apply the skills that are acquired during the ENVS major sequence, from research skills to communication skills. Students are expected to bring their unique strengths, approaches, and prior coursework to bear on the senior project.
- **Independent knowledge and responsibility**
Each senior is responsible for their share of the project, even if it is part of a larger, team-based, collaborative effort. Students will demonstrate responsibility in the design and implementation of the project, in conversation with the faculty

advisor and outside voices. Careful planning and consistent work effort are essential to completing a senior project.

- **Ethical practices for campus and community-oriented work**

Students will build upon the knowledge acquired during the ENVS 200-level sequence to collaborate with on- and off-campus partners in an ethical and responsible way. This includes practicing ethical scholarship, sharing work effectively, and collaborating.

- **Creativity in approaches to major questions**

Students will address the central topic of their senior project in creative and original ways. This should include some element of creative risk or ambition, which is encouraged and supervised by the ENVS faculty.

Senior Project Assessment

At the conclusion of a Senior Project, students will be expected to present their final project in an oral form to their peers and faculty from the ENVS department. In addition, each student will also be expected to submit a written form of the final project that documents their project and reflects on the experience. The faculty member supervising ENVS H397 will evaluate student work based on the quality and effort brought to bear during the project, and will assign a final numerical grade for the Senior Project. This faculty member may consult with other members of the ENVS department to provide feedback to individual students prior to Commencement.

Minor Requirements

The Tri-Co ENVS minor consists of six courses, including an introductory course. Students may complete the introductory course at any of the three campuses. The six required courses are:

- A required introductory course to be taken prior to the senior year. This may be ENVS H101 at Haverford or ENVS B101 at Bryn Mawr or the parallel course at Swarthmore (ENVS S001). Any one of these courses satisfies the requirement, and students may take no more than one such course for credit toward the minor.
- Four elective course credits from approved lists of core and cognate courses, including two credits in each of the following two categories. Students may use no more than one cognate course credit for each category. (See the ENVS website for course lists and more about core and cognate courses.) No more than one of these four course credits may be in the student's major.
 - **Environmental Science, Engineering, and Math:** courses that build understanding and knowledge of scientific methods and

theories, and explore how these can be applied in identifying and addressing environmental challenges. At least one of the courses in this category must have a laboratory component.

- **Environmental Social Sciences, Humanities, and Arts:** courses that build understanding and knowledge of social and political structures as well as ethical considerations, and how these inform our individual and collective responses to environmental challenges.
- An advanced elective in Environmental Studies (300-level, or its equivalent at Swarthmore) that can be from either category.

Haverford students interested in the ENVS minor should plan their course schedule with the ENVS Chair in consultation with their major advisor. In choosing electives, students should aim to include mostly intermediate or advanced courses.

Affiliated Programs

For information about faculty and courses in Environmental Studies at Swarthmore, visit the website of that program.

Concentrations and Interdisciplinary Minors

Environmental Studies contributes to the following concentrations and interdisciplinary minors:

- Health Studies
- Peace, Justice, and Human Rights
- Visual Studies

Study Abroad

The Bi-Co ENVS Department strongly encourages students to study abroad if it fits with their career plans. Students planning to major or minor in ENVS may receive course credit by participation in programs which offer environmental content, including but not limited to programs in Australia, Costa Rica, Denmark, Ecuador, Germany, Iceland, Scotland and South Africa.

Students may receive course credit for elective courses, at the equivalent of the 200 level or above, that contribute to the major's "focus area" or the four non-core classes in the ENVS minor. Students majoring in ENVS are required to take ENVS 101 and ENVS 397 at Haverford or Bryn Mawr, or the equivalent courses at Swarthmore and strongly recommended to take the four 200-level core courses within the Bi-Co.

Environmental Studies Faculty at Haverford

David Backus

Visiting Professor

Elisabeth Evans

Visiting Assistant Professor of Environmental Studies

Joshua Moses

Assistant Professor of Anthropology and Environmental Studies; Visual Culture, Arts, and Media Faculty Fellow (2020-2022)

Helen White

Associate Professor of Chemistry and Environmental Studies; Director of KINSC

Jonathan Wilson

Associate Professor and Chair of Environmental Studies

Talia Young

Visiting Assistant Professor of Environmental Studies

Environmental Studies Faculty at Bryn Mawr

Don Barber

Associate Professor of Environmental Studies and Geology on the Harold Alderfer Chair in Environmental Studies

Carla May Dhillon

Assistant Professor of Environmental Studies

Sara Grossman

Assistant Professor of Environmental Studies on the Johanna Alderfer Harris and William H. Harris Professorship in Environmental Studies

Carol Hager

Professor of Environmental Studies and Political Science on the Clowes Professorship in Science, and Public Policy and Director of the Center for Social Sciences

Affiliated Faculty at Haverford

Jamie Becker

Visiting Assistant Professor of Biology

Craig Borowiak

Associate Professor of Political Science

Jacob Culbertson

Visiting Assistant Professor of Anthropology

Thomas Donahue

Visiting Assistant Professor of Political Science

C. Stephen Finley

Professor of English

David Higgins

Visiting Assistant Professor of Biology

Benjamin Le

Professor of Psychology

Graciela Michelotti

Associate Professor of Spanish

Robert C. Scarrow

Professor of Chemistry

Erin Schoneveld

Assistant Professor of East Asian Languages and Cultures and Visual Studies

Kristen Whalen

Assistant Professor of Biology

Affiliated Faculty at Bryn Mawr

Andrea Borghini

Visiting Associate Professor

Victor Donnay

Professor of Mathematics on the William R. Kenan, Jr. Chair

Jonas Goldsmith

Associate Professor of Chemistry

Yonglin Jiang

Associate Professor of East Asian Languages and Cultures

Shiamin Kwa

Assistant Professor of East Asian Languages and Cultures

Michael Rock

Samuel and Etta Wexler Professor of Economic History

David Ross

Associate Professor of Economics

Program Committee at Swarthmore

Betsy Bolton

English

Timothy Burke

History

Giovanna DiChiro

Environmental Studies

Carr Everbach

Engineering

Christopher Graves

Chemistry and Environmental Studies

Eric Jensen

Astronomy and Environmental Studies (Faculty Coordinator)

José-Luis Machado

Biology

Arthur McGarity

Engineering

Carol Nackenoff

Political Science

Elizabeth Nichols

Biology

Jennifer Peck

Economics and Environmental Studies

Christy Schuetze

Sociology & Anthropology

Mark Wallace

Religion

Courses at Haverford

Anthropology Courses

ANTH H112 THE ANTHROPOLOGY OF ARCHITECTURE (1.0 Credit)

Division: Social Science

Domain(s): B: Analysis of the Social World

A survey of anthropological approaches to architecture, with a particular interest in how architecture expresses senses of place. Readings will cover indigenous and vernacular architecture, the modernist movement, ecological design, and forms of housing.

ANTH H217 METHODS IN DESIGN ANTHROPOLOGY (1.0 Credit)

Staff

Division: Social Science

Domain(s): B: Analysis of the Social World

An introduction to research methods in Design Anthropology. Readings are drawn from Anthropology, Design, and Science and Technology Studies (STS), and the course will introduce fundamental concepts and methods in STS. Each student will conduct ethnographic research into a design practice of their choice. Prerequisite(s): An introductory course in Anthropology, Sociology, or Art History, or instructor consent

ANTH H281 INTRODUCTION TO ENVIRONMENTAL ANTHROPOLOGY (1.0 Credit)

Joshua Moses

Division: Social Science

Domain(s): B: Analysis of the Social World

An introduction to the ideas and methods central to environmental anthropology. Topics covered will

include political ecology, crises and uncertainty, indigeneity and community management.

ANTH H302 OIL, CULTURE, POWER (1.0 Credit)

Zainab Saleh

Division: Social Science

Domain(s): B: Analysis of the Social World

This course will examine the political, social, and cultural history of oil. As the single most important commodity in the world, the story of control over this highly prized resource is a complex and violent one. It will discuss the ways in which oil has defined the fates empires and nation-states, the rise and fall of local political movements, violence, neoliberal governmentality, and knowledge production. Prerequisite(s): One 100-level course in anthropology, political science, sociology, or history, or instructor consent

(Offered: Spring 2021)

Biology Courses

BIOL H102 PERSPECTIVES IN BIOLOGY: GENETIC ENGINEERING, FARMING, AND FOOD (1.0 Credit)

Division: Natural Science

Domain(s): C: Physical and Natural Processes

An examination of the science behind genetically engineered (GE) foods. The technology will be examined and compared to other plant breeding practices and the potential role of GE crops will be considered in the context of global food security. Does not count towards the Biology major. Crosslisted: Biology, Environmental Studies

BIOL H326 BIOCHEMICAL ADAPTATIONS (0.5 Credit)

Kristen Whalen

Division: Natural Science

Domain(s): C: Physical and Natural Processes

This course will cover the diversity of physiological mechanisms and biochemical strategies that help organisms, from microbes to mammals, adapt to various environmental conditions. Emphasis put on biochemical evolution in response to changing environmental conditions. Crosslisted: Biology, Environmental Studies Prerequisite(s): BIOL H200A and B with a grade of 2.0 or above, or instructor consent

(Offered: Spring 2021)

BIOL H456 ADVANCED TOPICS IN BIOLOGY OF MARINE LIFE (0.5 Credit)

Division: Natural Science

Exploration of marine metazoan evolution through the lens of behavioral, morphological, biochemical, and physiological adaptations to various ocean regimes. Readings from primary literature will cover physio-chemical properties of seawater, abiotic/

biotic organismal interactions, symbiosis, energy production, human impacts, and phylogenetic relationships. Crosslisted: Biology, Environmental Studies Prerequisite(s): BIOL H300 and BIOL H301 with a grade of 2.0 or above, or instructor consent

Chemistry Courses

CHEM H358 TOPICS IN ENVIRONMENTAL CHEMISTRY (0.5 Credit)

Helen White

Division: Natural Science

Domain(s): C: Physical and Natural Processes

This course will examine chemical processes that occur in natural waters, soils and the atmosphere. Specific topics will be chosen with input from enrolled students, who will be expected to share in discussion leadership. CHEM 358 may be repeated once for credit as long as the topical themes differ. Crosslisted: Chemistry, Environmental Studies Prerequisite(s): CHEM 304 or equivalent, or instructor consent

English Courses

ENGL H244 THE NOVEL AND CLIMATE CHANGE: ENVIRONMENTS IN FICTION SINCE 1900 (1.0 Credit)

Division: Humanities

Domain(s): A: Meaning, Interpretation (Texts)

Investigates how the novel creates and interrogates natural environments and how humans shape and are shaped by them in light of current theories of changing climate. Crosslisted: English, Environmental Studies Prerequisite(s): College Writing Requirement

Environmental Studies Courses

ENVS H101 CASE STUDIES IN ENVIRONMENTAL ISSUES: CONCEPTS, CONTEXTS, & CONUNDRUMS (1.0 Credit)

Elisabeth Evans, Jonathan Wilson

Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World; C: Physical and Natural Processes

The course offers a cross-disciplinary introduction to environmental studies. Tracing an arc from historical analysis to practical engagement, distinctive approaches to key categories of environmental inquiry are presented: political ecology, earth science, energy, economics, public health, ecological design, sustainability, policy, and environmental ethics. Basic concepts, such as thermodynamics, biodiversity, cost-benefit analysis, scale, modernization, enclosure, the commons, and situational ethics, are variously defined and employed within specific explorations of environmental challenges in the modern world. Prerequisite(s): Not open to students who have taken ENVS 101 at Bryn Mawr or Swarthmore

(Offered: Fall 2020)

ENVS H102 PERSPECTIVES IN BIOLOGY: GENETIC ENGINEERING, FARMING, AND FOOD (1.0 Credit)

Staff

Division: Natural Science

Domain(s): C: Physical and Natural Processes

An examination of the science behind genetically engineered (GE) foods. The technology will be examined and compared to other plant breeding practices and the potential role of GE crops will be considered in the context of global food security. Does not count towards the Biology major. Crosslisted: Biology, Environmental Studies

ENVS H118 PERSPECTIVES IN BIOLOGY: PLANTS AND PEOPLE (1.0 Credit)

Jonathan Wilson

Division: Natural Science

Domain(s): B: Analysis of the Social World; C: Physical and Natural Processes

A multidisciplinary approach to the co-evolution and co-domestication of plants and humans. Topics will include the biology, physiology, evolution, and cultivation of key plants, embedded within their social history and environmental effects. Intended for non-majors and meets in parallel with Biology 318. Crosslisted: Biology, Environmental Studies
(Offered: Spring 2021)

ENVS H201 LABORATORY IN ENVIRONMENTAL SCIENCES (1.0 Credit)

Jonathan Wilson

Division: Natural Science; Quantitative

Domain(s): C: Physical and Natural Processes

A lab-intensive introduction to environmental science research, exploring perspectives on scientific knowledge production, application-oriented scientific reporting, and historical context for sites of study. Includes field sampling and data collection, analysis of multiple datasets, and communication of findings to diverse audiences. Prerequisite(s): ENVS 101
(Offered: Fall 2020, Spring 2021)

ENVS H204 PLACE, PEOPLE AND COLLABORATIVE RESEARCH IN ENVIRONMENTAL STUDIES (1.0 Credit)

Joshua Moses

Division: Social Science

Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World

This course focuses on the ethics and practice of community collaboration and community based research in the context of environmental challenges. Students will gain grounding in both theory and practice incorporating themes related to race, class, gender and environmental justice. Students

will complete 4-5 hours of fieldwork per week.

Prerequisite(s): ENVS 101 and at least one of ENVS 201, 202, 203 or instructor's permission.

(Offered: Fall 2020, Spring 2021)

ENVS H218 INDUSTRY & THE ENVIRONMENT: UNDERSTANDING ENVIRONMENTAL RESPONSIBILITY WITHIN THE TEXTILE INDUSTRY (1.0 Credit)

Elisabeth Evans

Division: Natural Science

Domain(s): A: Meaning, Interpretation (Texts); C: Physical and Natural Processes

We will work towards understanding how the environment is impacted by industry. Parallel with gaining a foundational understanding of the processes used to generate products and how these processes interact with the environment, we will learn about industrial innovators and community organizations trying to transform industry to become more environmentally and socially responsible. Prerequisite(s): ENVS101 or instructor approval

ENVS H281 INTRODUCTION TO ENVIRONMENTAL ANTHROPOLOGY (1.0 Credit)

Joshua Moses

Division: Social Science

Domain(s): B: Analysis of the Social World

An introduction to the ideas and methods central to environmental anthropology. Topics covered will include political ecology, crises and uncertainty, indigeneity and community management.

ENVS H309 PEOPLE, PLACE, AND COLLABORATIVE RESEARCH IN THE URBAN ENVIRONMENT (1.0 Credit)

Joshua Moses

Division: Social Science

Domain(s): B: Analysis of the Social World

Taught in Philadelphia as part of the Tri-Co Philly Program, this transdisciplinary, Philadelphia-based, course focuses on critical urban environmental issues. With the blunt challenges of global warming and inequality in mind, we seek to apply theory to the practice of engagement with ongoing urban struggles. Collaborative environmental work with urban communities is inherently interdisciplinary, drawing on anthropology, urban planning, public health, ecology, and geography. Themes will include the intersections of race, class, and gender; environmental justice; rethinking bioregionalism; urban environmental social movements; urban farming/gardening; brownfields; radical municipalism; tactical urbanism; transformative education; Afrofuturism; action research; and ideas of place, home and nature. The course will focus on the ethics and practice of community collaboration and community-based research in environmental

work in urban settings. Students will work directly with community groups, developing relationships, and collaborating on research relevant to their efforts. As the course title indicates, the arts of collaboration—on multiple levels—are central to this course. Readings include: Joan Iverson Nassauer, Roger Sanjek, Peter Berg, Donald Schon, Anne Rademencher, Gregory Bateson, Jane Jacobs, Grace Lee Boggs Meredith Minkler, Baltimore Ecosystem Study, adrienne maree brown, Davydd Greenwood, Miles Horton; Eve Tuck, Kim Fortun, Julian Agyeman. Crosslisted: Anthropology, Environmental Studies

ENVS H311 GREEN LATIN AMERICA: CULTURE AND THE ENVIRONMENT (1.0 Credit)

Graciela Michelotti

Division: Humanities

Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World

An ecocritical approach to the study of the Latin American human and non-human environment, and the cultural practices that address this interdependence in the context of its economic, political and social realities. This course is conducted in Spanish. Crosslisted: Spanish, Environmental Studies. Prerequisite(s): One 200-level course or instructor consent.

ENVS H318 ECONOMIC BOTANY (1.0 Credit)

Jonathan Wilson

Division: Natural Science

Domain(s): B: Analysis of the Social World; C: Physical and Natural Processes

A multidisciplinary approach to the coevolution and co-domestication of plants and humans. Topics will include the biology, physiology, evolution, and cultivation of key plants, embedded within their social history and environmental effects, and explored at an advanced level. Meets in parallel with Biology 118. Prerequisite(s): 200-level course in Anthropology, Biology, Chemistry, or Geology or ENVS H101 and permission of instructor Crosslisted: Biology, Environmental Studies
(Offered: Spring 2021)

ENVS H326 BIOCHEMICAL ADAPTATIONS (0.5 Credit)

Kristen Whalen

Division: Natural Science

Domain(s): C: Physical and Natural Processes

This course will cover the diversity of physiological mechanisms and biochemical strategies that help organisms, from microbes to mammals, adapt to various environmental conditions. Emphasis put on biochemical evolution in response to changing environmental conditions. Crosslisted: Biology, Environmental Studies Prerequisite(s): BIOL H200A

and B with a grade of 2.0 or above, or instructor consent

(Offered: Spring 2021)

ENVS H358 TOPICS IN ENVIRONMENTAL CHEMISTRY (0.5 Credit)

Helen White

Division: Natural Science

Domain(s): C: Physical and Natural Processes

This course will examine chemical processes that occur in natural waters, soils and the atmosphere. Specific topics will be chosen with input from enrolled students, who will be expected to share in discussion leadership. CHEM 358 may be repeated once for credit as long as the topical themes differ. Crosslisted: Chemistry, Environmental Studies Prerequisite(s): CHEM 304 or equivalent, or instructor consent

ENVS H358D TOPICS IN ENVIRONMENTAL CHEMISTRY (0.5 Credit)

Helen White

Division: Natural Science

Domain(s): C: Physical and Natural Processes

This course will examine chemical processes that occur in natural waters, soils and the atmosphere. Specific topics will be chosen with input from enrolled students, who will be expected to share in discussion leadership. CHEM 358 may be repeated once for credit as long as the topical themes differ. Crosslisted: Chemistry, Environmental Studies Prerequisite(s): CHEM 304 or equivalent, or instructor consent

ENVS H397 SENIOR SEMINAR IN ENVIRONMENTAL STUDIES (1.0 Credit)

Joshua Moses

Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World; C: Physical and Natural Processes

This capstone Environmental Studies course is designed to allow Environmental Studies seniors to actively engage in environmental problem solving by bringing the perspectives and skills gained from their majors and applying them to collaborative, interdisciplinary projects. Enrollment Preference(s): Limited to seniors

ENVS H456 ADVANCED TOPICS IN BIOLOGY OF MARINE LIFE (0.5 Credit)

Staff

Division: Natural Science

Exploration of marine metazoan evolution through the lens of behavioral, morphological, biochemical, and physiological adaptations to various ocean regimes. Readings from primary literature will cover physio-chemical properties of seawater, abiotic/biotic organismal interactions, symbiosis, energy

production, human impacts, and phylogenetic relationships. Crosslisted: Biology, Environmental Studies Prerequisite(s): BIOL H300 and BIOL H301 with a grade of 2.0 or above, or instructor consent

ENVS H480 INDEPENDENT STUDY (1.0 Credit)
(Offered: Fall 2020, Spring 2021)

History Courses

HIST H253 THE HISTORY OF THE US BUILT ENVIRONMENT, 1870 TO THE PRESENT (1.0 Credit)

Andrew Friedman

Division: Social Science

Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World

This course looks at the history of the U.S. through its built environment, or the physical spaces & landscapes through which Americans constructed their habits, hopes, and divisions. We will investigate how struggles over the U.S. polity came to be reflected in the built world. Topics include the creation of property, the building of the metropolis, the making of the suburbs, electrification and the highways, urban crisis, and the postindustrial landscape.

Peace, Justice and Human Rights Courses

PEAC H104 HEALTH, JUSTICE, ENVIRONMENT: AN INQUIRY INTO PLANETARY HEALTH (1.0 Credit)

Eric Hartman

Division: Social Science

Domain(s): B: Analysis of the Social World
Planetary Health advances understanding of the interdependencies of human and natural systems. Through engagement with human rights, health studies, and environmental studies, students consider relevance to regional social sector organizations that work to advance human rights, health, and sustainability.

Spanish Courses

SPAN H311 GREEN LATIN AMERICA: CULTURE AND THE ENVIRONMENT (1.0 Credit)

Graciela Michelotti

Division: Humanities

Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World

An ecocritical approach to the study of the Latin American human and non-human environment, and the cultural practices that address this interdependence in the context of its economic, political and social realities. This course is conducted in Spanish. Crosslisted: Spanish, Environmental

Studies. Prerequisite(s): One 200-level course or instructor consent.

Courses at Bryn Mawr

Anthropology Courses

ANTH B244 GLOBAL PERSPECTIVES ON EARLY FARMERS AND SOCIAL CHANGE (1.0 Credit)

Casey Barrier

Division: Social Science

Domain(s): B: Analysis of the Social World

Throughout most of human history our ancestors practiced lifestyles focused upon the gathering and hunting of wild plants and animals. Today, however, a globalized agricultural economy supports a population of over seven billion individuals. This course utilizes information produced by archaeologists around the globe to examine this major historical transition while asking big questions like: What impact did the adoption of agriculture have on communities in the past, and how did farming spread to different world regions? We will also consider how the current farming system influences our own society. How does farming still affect our lives today, and how will the history of agricultural change shape our collective future? Counts toward Environmental Studies minor.

ANTH B254 ANTHROPOLOGY AND SOCIAL SCIENCE RESEARCH METHODS (1.0 Credit)

Casey Barrier, Melissa Pashigian

Division: Humanities

This course is designed for students interested in learning ethnographic methods, qualitative and quantitative social science methods, and how to learn from and write about quantitative and qualitative results. Students will learn and practice ethnographic field methods, for example, observation, participant observation, interviewing, generating and analyzing statistical data, and ways to productively transform qualitative and quantitative data into contextual information. An introduction to the basics of statistical methods for social scientists will also be covered. Ethics in ethnographic research will be a central theme, as well as ways to envision and design projects that protect human subjects. The purpose of this course is to provide anthropology majors and other students in the social sciences and humanities an opportunity to learn methods that can be used in their thesis research, Hanna Holborn Gray summer research, and other social science research opportunities. Anth 101 or 102, or permission of instructor.

Biology Courses

BIOL B210 BIOLOGY AND PUBLIC POLICY (1.0 Credit)

Karen Greif

Division: Natural Science

Domain(s): C: Physical and Natural Processes
A lecture/discussion course on major issues and advances in biology and their implications for public policy decisions. Topics discussed include reproductive technologies, the Human Genome project, environmental health hazards, bioterrorism, and euthanasia and organ transplantation. Readings include scientific articles, public policy and ethical considerations, and lay publications. Lecture three hours a week. This class involves considerable writing. Prerequisite: One semester of BIOL 110-111 or permission of instructor.

(Offered: Fall 2020)

BIOL B220 ECOLOGY (1.0 Credit)

Thomas Mozdzer

Division: Natural Science
A study of the interactions between organisms and their environments. The scientific underpinnings of current environmental issues, with regard to human impacts, are also discussed. Students will also become familiar with ecological principles and with the methods ecologists use. Students will apply these principles through the design and implementation of experiments both in the laboratory and the field. Lecture three hours a week, laboratory/field investigation three hours a week. There will be optional field trips throughout the semester. Prerequisite: One semester of BIOL B110 or B111 or permission of instructor.

(Offered: Fall 2020)

BIOL B225 BIOLOGY AND ECOLOGY OF PLANTS (1.0 Credit)

Sydne Record

Plants are critical to numerous contemporary issues, such as ecological sustainability, economic stability, and human health. Students will examine the fundamentals of how plants are structured, how they function, how they interact with other organisms, and how they respond to environmental stimuli. In addition, students will be taught to identify important local species, and will explore the role of plants in human society and ecological systems. One semester of BIOL 110/111.

BIOL B250 COMPUTATIONAL METHODS IN THE SCIENCES (1.0 Credit)

Sydne Record

Division: Natural Science
Domain(s): C: Physical and Natural Processes
A study of how and why modern computation methods are used in scientific inquiry. Students will learn basic principles of visualizing and analyzing scientific data through hands-on programming exercises. The majority of the course will use the R programming language and corresponding open

source statistical software. Content will focus on data sets from across the sciences. Six hours of combined lecture/lab per week.

BIOL B255 MICROBIOLOGY (1.0 Credit)

Monica Chander

Division: Natural Science
Domain(s): C: Physical and Natural Processes
Invisible to the naked eye, microbes occupy every niche on the planet. This course will examine how microbes have become successful colonizers; review aspects of interactions between microbes, humans and the environment; and explore practical uses of microbes in industry, medicine and environmental management. The course will combine lecture, discussion of primary literature and student presentations. Three hours of lecture and three hours of laboratory per week. Prerequisites: BIOL 110 and CHEM B104.

(Offered: Spring 2021)

BIOL B323 COASTAL AND MARINE ECOLOGY (1.0 Credit)

Thomas Mozdzer

An interdisciplinary course exploring the ecological, biogeochemical, and physical aspects of coastal and marine ecosystems. We will compare intertidal habitats in both temperate and tropical environments, with a specific emphasis on global change impacts on coastal systems (e.g. sea level rise, warming, and species shifts). Lecture three hours, laboratory three hours per week. In 2020 the course will have a mandatory field trip to a tropical marine field station and an overnight field trip to a temperate field station in the mid-Atlantic. Prerequisite: BIOL B220 or BIOL B225.

BIOL B332 GLOBAL CHANGE BIOLOGY (1.0 Credit)

Thomas Mozdzer

Global changes to our environment present omnipresent environmental challenges. We are only beginning to understand the complex interactions between organisms and the rapidly changing environment. Students will explore the effects of global change on ecosystems by critically reading and analyzing the primary literature and the latest IPCC report. In 2021, there will be a mandatory one-day field trip to the Smithsonian Global Change Research Wetland. Prerequisites: BIOL B220, BIOL 225 or BIOL B262, or permission of instructor.

(Offered: Spring 2021)

Growth and Structure of Cities Courses

CITY B201 INTRODUCTION TO GIS FOR SOCIAL AND ENVIRONMENTAL ANALYSIS (1.0 Credit)

Jennifer Hurley

Domain(s): B: Analysis of the Social World

This course is designed to introduce the foundations of GIS with emphasis on applications for social and environmental analysis. It deals with basic principles of GIS and its use in spatial analysis and information management. Ultimately, students will design and carry out research projects on topics of their own choosing. Prerequisite: At least sophomore standing and Quantitative Readiness are required (i.e. the quantitative readiness assessment or Quan B001). **(Offered: Spring 2021)**

CITY B250 TOPICS: GROWTH & SPATIAL ORGANIZATION OF THE CITY (1.0 Credit)

Jeffrey Cohen

Division: Social Science

This is a topics course. Course content varies.

(Offered: Fall 2020)

CITY B345 ADVANCED TOPICS IN ENVIRONMENT AND SOCIETY (1.0 Credit)

Min Kyung Lee

This is a topics course. Topics vary.

(Offered: Fall 2020)

Economics Courses

ECON B225 ECONOMIC DEVELOPMENT (1.0 Credit)

Sebastian Anti

Division: Social Science

Domain(s): B: Analysis of the Social World

Examination of the issues related to and the policies designed to promote economic development in the developing economies of Africa, Asia, Latin America, and the Middle East. Focus is on why some developing economies grow faster than others and why some growth paths are more equitable, poverty reducing, and environmentally sustainable than others. Includes consideration of the impact of international trade and investment policy, macroeconomic policies (exchange rate, monetary and fiscal policy) and sector policies (industry, agriculture, education, population, and environment) on development outcomes in a wide range of political and institutional contexts. Prerequisite: ECON B105.

(Offered: Spring 2021)

ECON B234 ENVIRONMENTAL ECONOMICS (1.0 Credit)

David Ross

Division: Social Science

Domain(s): B: Analysis of the Social World

Introduction to the use of economic analysis to explain the underlying behavioral causes of environmental and natural resource problems and to evaluate policy responses to them. Topics may include air and water pollution; the economic theory of externalities, public goods and the depletion of

resources; cost-benefit analysis; valuing non-market benefits and costs; economic justice; and sustainable development. Prerequisites: ECON B105.

ECON B242 ECONOMICS OF LOCAL ENVIRONMENTAL PROGRAMS (1.0 Credit)

David Ross

Division: Social Science

Domain(s): B: Analysis of the Social World

Considers the determinants of human impact on the environment at the neighborhood or community level and policy responses available to local government. How can economics help solve and learn from the problems facing rural and suburban communities? The instructor was a local township supervisor who will share the day-to-day challenges of coping with land use planning, waste disposal, dispute resolution, and the provision of basic services. Prerequisite: ECON B105.

English Courses

ENGL B204 LITERATURES OF AMERICAN EXPANSION (1.0 Credit)

This course will explore the relationship between U.S. narratives that understand national expansion as “manifest destiny” and narratives that understand the same phenomenon as imperial conquest. We will ask why the ingredients of such fictions—dangerous savages, empty landscapes, easy money, and lawless violence—often combine to make the master narrative of “America,” and we will explore how and where that master narrative breaks down. Critical readings will engage discourses of nation, empire, violence, race, and sexuality. Texts will include novels, travel narratives, autobiographies, legal documents, and cultural ephemera.

(Offered: Spring 2021)

ENGL B293 ANIMAL, VEGETABLE, MINERAL: MEDIEVAL ECOLOGIES (1.0 Credit)

Jamie Taylor

This course explores relationships between natural, non-human, and human agents in the Middle Ages. Reading natural philosophy, vernacular literature, and theological treatises, we examine how the Middle Ages understood supposedly ‘modern’ environmental concepts like climate change, sustainability, animal rights, and protected land.

Environmental Studies Courses

ENVS B101 INTRODUCTION TO ENVIRONMENTAL STUDIES (1.0 Credit)

The course offers a cross-disciplinary introduction to environmental studies. Tracing an arc from historical analysis to practical engagement, distinctive approaches to key categories of environmental inquiry are presented: political ecology, earth science, energy, economics, public

health, ecological design, sustainability, public policy, and environmental ethics. Basic concepts, such as thermodynamics, biodiversity, cost-benefit analysis, scale, modernization, enclosure, the commons, and situational ethics, are variously defined and employed within specific explorations of environmental challenges in the modern world. No divisional credit is awarded for this course at Haverford nor does the course satisfy any of the Bryn Mawr approaches to inquiry.
(**Offered:** Spring 2021)

ENVS B202 ENVIRONMENT AND SOCIETY (1.0 Credit)

Carla Dhillon

Division: Social Science

Domain(s): B: Analysis of the Social World

This course explores the intersections of natural and built environments with diverse societies. Students will encounter conceptual and analytical tools of the social sciences to inform environmental responses at individual, collective, and institutional levels. Environmental issues broadly understood are not merely problems for society, but stem from cultural patterns and how societies are organized. We will survey social origins of environmental problems across local to global situations. This class draws from environmental sociology, planning, geography, political theory, and environmental health and justice. Participants interact with an array of social science methods and environmental topics. Learning to apply social concepts to environments using multiple perspectives is a core component of the course. Focused segments cover environmental justice, Indigenous peoples' environmentalisms, and social movements of the Global Souths. Cross-Cultural Analysis (CC), Writing Attentive. Pre-requisite ENVS B101 or ENVS H101 or instructor's permission.
(**Offered:** Fall 2020, Spring 2021)

ENVS B203 ENVIRONMENTAL HUMANITIES: STORIES OF JUSTICE AND INJUSTICE (1.0 Credit)

Sara Grossman

Division: Humanities

Domain(s): A: Meaning, Interpretation (Texts)

Bringing the traditional focus of the humanities—questions of meaning, value, ethics, justice and the politics of knowledge production—into environmental domains calls for a radical reworking of a great deal of what we think we know about ourselves and our fields of inquiry. Inhabiting the difficult space of simultaneous critique and action, this course will re-imagine the proper questions and approaches of the humanities, asking how our accumulated knowledge and practice might be refashioned to meet current environmental challenges, to productively rethink

'the human' in more than human terms. In order to resituate the human within the environment, and to resituate nonhumans within cultural and ethical domains, we will draw on a range of texts and films, and engage in a range of critical and creative practices of our own. Critical Interpretation (CI); Cross-Cultural Analysis (CC). Writing in the major/Intensive. Prerequisite: ENVS H101 or B101. (hard check prerequisite). Enrollment cap: 18. Lottery Preference(s): Senior ENVS majors, Junior ENVS majors, Sophomores, first-year students. Minors and non-majors by instructor's permission.
(**Offered:** Fall 2020, Spring 2021)

ENVS B204 PLACE, PEOPLE AND PRAXIS IN ENVIRONMENTAL STUDIES (1.0 Credit)

Sara Grossman

Division: Social Science

Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World

This course offers a cross-disciplinary introduction to community-based learning. Working with local community groups, students will learn the fundamental skills of praxis work applied to environmental issues within an inquiry-based framework. Pre-requisite: ENVS B101 or ENVS H101 and (ENVS B202, H202, B203, or H203) or instructor's permission.

ENVS B350 ADVANCED TOPICS IN ENVIRONMENTAL STUDIES (1.0 Credit)

Staff

This is a topics course. Course content varies.
(**Offered:** Fall 2020)

ENVS B397 SENIOR SEMINAR IN ENVIRONMENTAL STUDIES (1.0 Credit)

Sara Grossman

This capstone Environmental Studies course is designed to allow Environmental Studies seniors to actively engage in environmental problem solving. Students bring the perspectives and skills gained from their ENVS focus area and from their preparatory work in the major/minor to collaborate on interdisciplinary projects
(**Offered:** Fall 2020, Spring 2021)

Geology Courses

GEOL B101 HOW THE EARTH WORKS (1.0 Credit)

Arlo Weil, Katherine Marenco

Division: Natural Science

Domain(s): C: Physical and Natural Processes

An introduction to the study of planet Earth—the materials of which it is made, the forces that shape its surface and interior, the relationship of geological processes to people, and the application of geological knowledge to the search for useful

materials. Laboratory and fieldwork focus on learning the tools for geological investigations and applying them to the local area and selected areas around the world. Three lectures and one afternoon of laboratory or fieldwork a week. One required one-day field trip on a weekend.

(Offered: Fall 2020)

GEOL B203 BIOSPHERE THROUGH TIME (1.0 Credit)

Katherine Marenco, Pedro Marenco

Division: Natural Science

We will explore how the Earth-life system has evolved through time by studying the interactions between life, climate, and tectonic processes. During the lab component of the course, we will study important fossil groups to better understand their paleoecology and roles in the Earth-life system.

Prerequisite: GEOL B101

(Offered: Fall 2020)

GEOL B206 ENERGY RESOURCES AND SUSTAINABILITY (1.0 Credit)

Staff

Division: Natural Science

An examination of issues concerning the supply of energy required by humanity. This includes an investigation of the geological framework that determines resource availability, aspects of energy production and resource development and the science of global climate change. Two 90-minute lectures a week. Suggested preparation: one year of college science.

(Offered: Fall 2020)

GEOL B209 NATURAL HAZARDS (1.0 Credit)

Katherine Marenco

Division: Natural Science

Domain(s): C: Physical and Natural Processes

A quantitative approach to understanding the earth processes that impact human societies. We consider the past, current, and future hazards presented by geologic processes, including earthquakes, volcanoes, landslides, floods, and hurricanes. The course includes discussion of the social, economic, and policy contexts within which natural geologic processes become hazards. Case studies are drawn from contemporary and ancient societies. Lecture three hours a week.

(Offered: Spring 2021)

GEOL B302 LOW-TEMPERATURE GEOCHEMISTRY (1.0 Credit)

Pedro Marenco

Division: Natural Science

Stable isotope geochemistry is one of the most important subfields of the Earth sciences for understanding environmental and climatic change.

In this course, we will explore stable isotopic fundamentals and applications including a number of important case studies from the recent and deep time dealing with important biotic events in the fossil record and major climate changes. Prerequisites: GEOL 101 or GEOL 102, and at least one semester of chemistry or physics, or professor approval.

(Offered: Fall 2020)

GEOL B314 MARINE GEOLOGY (1.0 Credit)

Staff

An introduction to oceanography, coastal processes, and the geomorphology of temperate and tropical shorelines. Includes an overview of the many parameters, including sea level change, that shape coastal environments. Meets twice weekly for a combination of lecture, discussion and hands-on exercises, including a mandatory multi-day field trip to investigate developed and pristine sections of the Mid-Atlantic US coast. Prerequisite: One 200-level GEOL course OR one GEOL course AND one BIOL course (any level), OR advanced BIOL major standing (junior or senior).

History Courses

HIST B212 PIRATES, TRAVELERS, AND NATURAL HISTORIANS: 1492-1750 (1.0 Credit)

Ignacio Gallup-Diaz

Division: Social Science

In the early modern period, conquistadors, missionaries, travelers, pirates, and natural historians wrote interesting texts in which they tried to integrate the New World into their existing frameworks of knowledge. This intellectual endeavor was an adjunct to the physical conquest of American space, and provides a framework through which we will explore the processes of imperial competition, state formation, and indigenous and African resistance to colonialism.

(Offered: Fall 2020)

Mathematics Courses

MATH B151 INTRODUCTION TO MATH AND SUSTAINABILITY (1.0 Credit)

Victor Donnay

Division: Natural Science; Quantitative

The world faces many sustainability challenges: climate change, energy, over-population, natural resource depletion. Using techniques of mathematical modeling including dynamical systems and bifurcation theory (tipping points), we will study quantitative aspects of these problems. No advanced mathematics beyond high school mathematics (pre-calculus) is required.

MATH B295 SELECT TOPICS IN MATHEMATICS (1.0 Credit)

Staff

Division: Does not satisfy Haverford QU; Natural Science

Domain(s): C: Physical and Natural Processes
This is a topics course. Course content varies. Not all topics are open to first year students.

(Offered: Fall 2020, Spring 2021)

Philosophy Courses

PHIL B238 SCIENCE, TECHNOLOGY AND THE GOOD LIFE (1.0 Credit)

Robert Dostal

Division: Humanities

'Science, Technology, and the Good Life' considers the relation of science and technology to each other and to everyday life, particularly with respect to questions of ethics and politics. In this course, we try to get clear about how we understand these domains and their interrelationships in our contemporary world. We try to clarify the issues relevant to these questions by looking at the contemporary debates about the role of automation and digital media and the problem of climate change. These debates raise many questions including: the appropriate model of scientific inquiry (is there a single model for science?, how is science both experimental and deductive?, is science merely trial and error?, is science objective?, is science value-free?), the ideological standing of science (has science become a kind of ideology?), the autonomy of technology (have the rapidly developing technologies escaped our power to direct them?), the politics of science (is science somehow essentially democratic?, and are 'scientific' cultures more likely to foster democracy?, or is a scientific culture essentially elitist and autocratic?), the relation of science to the formation of public policy (experts rule?, are we in or moving toward a technocracy?), the role of technology and science in the process of modernization, Westernization, and globalization (what role has science played in industrialization and what role does it now play in a post-industrial world?). To find an appropriate way to consider these questions, we look at the pairing of science with democracy in the Enlightenment project and study contemporary work in the philosophy of science, political science, and ethics.

Political Science Courses

POLS B222 ENVIRONMENTAL ISSUES: MOVEMENTS AND POLICY MAKING IN COMPARATIVE PERSPECTIVE (1.0 Credit)

Carol Hager

Division: Social Science

Domain(s): B: Analysis of the Social World

An exploration of the ways in which different cultural, economic, and political settings have shaped issue emergence and policy making. We examine the politics of particular environmental issues in selected

countries and regions, paying special attention to the impact of environmental movements. We also assess the prospects for international cooperation in addressing global environmental problems such as climate change.

POLS B256 GLOBAL POLITICS OF CLIMATE CHANGE (1.0 Credit)

Carol Hager

This course will introduce students to important political issues raised by climate change locally, nationally, and internationally, paying particular attention to the global implications of actions at the national and subnational levels. It will focus not only on specific problems, but also on solutions; students will learn about some of the technological and policy innovations that are being developed worldwide in response to the challenges of climate change. Only open to students in 360 program.

POLS B310 COMPARATIVE PUBLIC POLICY (1.0 Credit)

Carol Hager

Division: Social Science

A comparison of policy processes and outcomes across space and time. Focusing on particular issues such as health care, domestic security, water and land use, we identify institutional, historical, and cultural factors that shape policies. We also examine the growing importance of international-level policy making and the interplay between international and domestic pressures on policy makers. Writing attentive. Prerequisite: One course in Political Science or public policy.

POLS B339 BUREAUCRACY & DEMOCRACY IN AMERICA (1.0 Credit)

Marissa Golden

Division: Social Science

Domain(s): B: Analysis of the Social World

This course is an upper-level seminar designed primarily for juniors and seniors who want to spend the Semester reading about and discussing the role of the federal bureaucracy in the U.S. political system. Topics will include the history of the federal bureaucracy, the bureaucratic policymaking process & administrative law, the roles of expertise and politics in agency decision-making, the competition among the three constitutional branches to "control" the bureaucracy, and the normative goals of competence, responsiveness and representativeness. Discussion of current events - including the federal government's response to COVID and the role of race in public administration - will be a central part of the seminar. Attention will also be paid - and assignments oriented towards - preparing students for the Senior Experience.

(Offered: Fall 2020)

**POLS B354 COMPARATIVE SOCIAL
MOVEMENTS: POWER AND MOBILIZATION (1.0
Credit)**

Carol Hager

Division: Social Science

Domain(s): B: Analysis of the Social World

A consideration of the conceptualizations of power and “legitimate” and “illegitimate” participation, the political opportunity structure facing potential activists, the mobilizing resources available to them, and the cultural framing within which these processes occur. Specific attention is paid to recent movements within and across countries, such as feminist, environmental, and anti-globalization movements, and to emerging forms of citizen mobilization, including transnational and global networks, electronic mobilization via social media, and collaborative policymaking institutions. Writing Attentive. Prerequisite: one course in POLS or SOCL or permission of instructor.

Courses at Swarthmore

Visit the Tri-College Course Guide to view the list of courses at Swarthmore this year: <https://trico.haverford.edu>