

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

Joanne Douglas

Visiting Instructor of Environmental Studies

Joshua Moses

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

Helen White

The William H. and Johanna A. Harris Professor in Environmental Studies and Chemistry; Associate Provost for Curricular Development & Research; Professor of Chemistry and Environmental Studies

Jonathan Wilson

Associate Professor 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

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

Affiliated Faculty at Haverford

Craig Borowiak

Professor of Political Science

Thomas Donahue

Visiting Assistant Professor of Political Science

C. Stephen Finley

Professor of English

Benjamin Le

Associate Provost for Faculty Development; Professor of Psychology

Graciela Michelotti

Associate Professor of Spanish

Robert C. Scarrow

Professor of Chemistry

Erin Schoneveld

Associate Professor of East Asian Languages and Cultures and Visual Studies

Kristen Whalen

Associate Professor of Biology

Affiliated Faculty at Bryn Mawr

Victor Donnay

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

Robert Dostal

Rufus M. Jones Professor and Chair of Philosophy

Jonas Goldsmith

Associate Professor of Chemistry

Karen Greif

Professor Emeritus of Biology

Yonglin Jiang

Associate Professor of East Asian Languages and Cultures

Shiamin Kwa

Assistant Professor of East Asian Languages and Cultures

Gary McDonogh

Helen Herrmann Chair and Professor of Growth and Structure of Cities

Tom Mozdzer

Assistant Professor of Biology

Sydne Record

Assistant Professor of Biology

Michael Rock

Samuel and Etta Wexler Professor Emeritus of Economic History

Nathan Wright

Chair and Associate Professor of Sociology

Program Committee at Swarthmore

Susan Barton

Visiting Assistant Professor of Environmental Studies

Adrienne Benally

Assistant Professor of Environmental Studies

Betsy Bolton

Alexander Griswold Cummins Professor of English

Giovanna Di Chiro

Professor of Environmental Studies and Coordinator of Environmental Justice and Climate Resiliency

Josh Ellow

Assistant Visiting Professor of Environmental Studies

Carr Everbach

The Isaiah V. Williamson Professorship of Civil and Mechanical Engineering; Environmental Studies

Chris Graves

Associate Professor of Synthetic Inorganic Chemistry and Environmental Studies

Rhonda Hilt

Instructor in Biology and Environmental Studies

Eric Jensen

Professor of Astronomy

José-Luis Machado

Associate Professor of Ecology

James Padilioni

Visiting Assistant Professor of Religion

Jennifer Peck

Associate Professor of Economics and Environmental Studies

Jennifer Pfluger

Visiting Assistant Professor of Environmental Studies and Biology

Christy Schuetze

Associate Professor of Anthropology

Mark Wallace

Professor of Religion; James Hormel Professor of Social Justice

Courses at Haverford

Africana Studies Courses

AFST H136 BLACK ECOLOGIES (1.0 Credit)

This course engages writings and cultural works about Black eco-literary and ecological traditions. Black Ecologies focuses on the multiple ecological and spatial conditions that have over-determined Black life and relationships to nature including the middle passage, slavery, racial segregation, food apartheid, gentrification and even incarceration. All these phenomena have produced unequal access to natural resources, space, food and land through systems that racialize, gender and commodify space. By exploring Black cultural and land based worker's literary, cultural, and community responses to anti-Black environmental conditions, we will consider how Black communities reclaim spatial autonomy through creative modes of collective liberation. Student's critical and creative writing will be based on course texts and outdoor experiences of observation and laboring collectively at Haverfarm. Open only to first-year students as assigned by the Director of College Writing. Crosslisted: AFST,ENVS.

Anthropology Courses

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

Biology Courses

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

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

Kristen Whalen

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: TOXIC HEAVY METALS (0.5 Credit)

Robert Scarrow

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 H222 (or other organic chemistry course such as CHEM B211)

English Courses

ENGL H243 THE PLANETARY PREMODERN (1.0 Credit)

Danielle Allor

Division: Humanities

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

This course will explore how poets, philosophers, and early scientists imagined the planet from antiquity to the early modern period. We will investigate medieval and early modern representations of the planet Earth, from descriptions of the natural world to representations of the planet in space. We will examine these works from the perspectives of the fields of literary studies, environmental humanities, animal and plant studies, and history of science. Prerequisite(s): Completion of the Writing Requirement Lottery Preference: English and Environmental Studies majors
(**Offered:** Spring 2024)

ENGL H304 DREAMING THE MEDIEVAL LANDSCAPE (1.0 Credit)

Danielle Allor

Division: Humanities

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

This course enters the imagined landscapes of the medieval period through one of its most popular genres: the dream vision. We'll explore visions of strange forests, mystical gardens, glass temples, and jeweled cities; visions that offer potential for divine insight into the natural order of the universe but also possess surprising specificity in their plant, animal, and inanimate inhabitants. In addition to literary texts, we'll read selections from medieval natural philosophy and contemporary ecocritical theory. Lottery Preference: English majors by seniority

ENGL H305 THE PREMODERN LIFE OF TREES: INTERDISCIPLINARITY AND LITERARY STUDY OF THE PAST (1.0 Credit)

Danielle Allor

Division: Humanities

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

This course seeks to examine premodern literary representations of the natural world alongside historical, scientific, and experiential ways of understanding the environment. Our case study will be the figure of the tree. In collaboration with the Haverford College Arboretum, we will study literature from the premodern world that depicts trees, forests, and gardens while cultivating botanical, artistic, and historical knowledge about the trees of Haverford. Pre-requisite(s): One English course or ENVS 101, 202, or 203 Lottery Preference: English majors (**Offered:** Fall 2023)

ENGL H356 STUDIES IN AMERICAN ENVIRONMENT AND PLACE (1.0 Credit)

Stephen Finley

Division: Humanities

Texts mostly 19th and 20th-c. American, but beginning earlier, with colonial New England; then Thoreau, Maclean, Snyder, Dillard, Least Heat Moon, Ammons, Mary Oliver, E. O. Wilson. Topics: cultural production of landscape (rural and urban), environmental history, place studies, landscape painting, ecology. Prerequisite(s): Two 200-level HU courses or instructor consent

Environmental Studies Courses

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

Talia Young

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:** Spring 2024)

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

ENVS H136 BLACK ECOLOGIES (1.0 Credit)

Staff

This course engages writings and cultural works about Black eco-literary and ecological traditions. Black Ecologies focuses on the multiple ecological and spatial conditions that have over-determined Black life and relationships to nature including the middle passage, slavery, racial segregation, food apartheid, gentrification and even incarceration. All these phenomena have produced unequal access to natural resources, space, food and land through systems that racialize, gender and commodify space. By exploring Black cultural and land based worker's literary, cultural, and community responses to anti-Black environmental conditions, we will consider how Black communities reclaim spatial autonomy through creative modes of collective liberation. Student's critical and creative writing will be based on course texts and outdoor experiences of observation and laboring collectively at Haverfarm. Open only to first-year students as assigned by the Director of College Writing. Crosslisted: AFST,ENVS.

ENVS H201 ENVIRONMENTAL SCIENCE (1.0 Credit)

Jonathan Wilson

Division: Natural Science; Quantitative

Domain(s): C: Physical and Natural Processes

A survey of environmental science, focusing on key issues in the solid, living, and fluid Earth, using campus as a living lab. Exploration of analytical techniques, scientific knowledge production, application-oriented scientific reporting, and historical context for sites of study. Includes field-based research, long-term monitoring, analysis of multiple datasets, laboratory analysis, and communication of findings to diverse audiences, where appropriate. Prerequisite(s): ENVS 101

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

Jonathan Wilson

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 2023)

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 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

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

ENVS H328 BOTANY (1.0 Credit)

Jonathan Wilson

Division: Natural Science

Domain(s): C: Physical and Natural Processes

This course is a multidisciplinary approach to the biology of plants through their development, physiology, anatomy, and growth and their consequent effects on human society. Course

topics include plant biology, anatomy, diversity, morphology, physiology, and ecology, followed by case studies of plants, from cacao to apples. Prerequisite(s): ENVS 101 and ENVS 201 or ENVS 101 and 200-level ENVS, GEO, BIO or ENVS 101 and permission of instructor. Lottery Preference: Senior ENVS majors, junior ENVS majors, senior ENVS minors, junior ENVS minors, then seniors, followed by juniors, followed by all other students. If this course is tied to a 360 or study tour, that section will be closed to further enrollment. **(Offered:** Fall 2023)

ENVS H350 ADV TOPIC ENVIRONMENTAL STUDIES: FRACTALS TO THE FUTURE: PATTERNS IN MYTH, MEDIA, NATURE, COSMOS (1.0 Credit)

Division: Humanities

Domain(s): A: Creative Expression

This course engages students in the theory and investigation of ancient and emergent patterns in life and human nature through multiple field perspectives. In an urgent time of climate crisis and environmental injustice, this class centers the myths, visions and voices of black and indigenous peoples disproportionately impacted by climate change, and (un)natural disasters. Prerequisite(s): Successful completion of one of ENVS 201, ENVS 202, ENVS 203, or ENVS 204; or permission of instructor and introductory coursework in Environmental Studies. Lottery Preference: Senior ENVS majors, then junior ENVS majors, then sophomore students who have completed the prerequisites.

ENVS H358 TOPICS IN ENVIRONMENTAL CHEMISTRY: TOXIC HEAVY METALS (0.5 Credit)

Robert Scarrow

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 H222 (or other organic chemistry course such as CHEM B211)

ENVS H397 SENIOR SEMINAR IN ENVIRONMENTAL STUDIES (1.0 Credit)

Jonathan Wilson

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
(**Offered:** Spring 2024)

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

Kristen Whalen

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 (1.0,0.50 Credits)

Jonathan Wilson, Talia Young

(**Offered:** Fall 2023)

ENVS H480 INDEPENDENT STUDY (1.0,0.50 Credits)

Jonathan Wilson, Talia Young

(**Offered:** Fall 2023)

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.

Health Studies Courses

HLTH H215 SACRIFICE ZONES: EMPIRES, EPIDEMICS, AND CLIMATE CHANGES (1.0 Credit)

Lauren Minsky

Division: Social Science

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

Global health environments have been shaped by human activities of imperialism and globalization since antiquity. Explore the relationships between intensive agriculture and the cultivation of disease; trade and disease spread; industrial capitalism, metabolic disorders and cancers; and differential racial, gendered and class entitlements and life expectancy. Participate in debates over how to address humanity's current existential crisis, and learn about alternative approaches to "healing" global health environments that can be recycled from our global past. Pre-requisite(s): Intro to Health Studies (HLTH H115/HLTH B115) or permission of instructor. Lottery Preference: (1) Declared Health Studies minors, (2) Environmental Studies and/or History majors/minors
(**Offered:** Fall 2023)

HLTH H219 BREATHING TOGETHER: AIR, CAPITALISM, AND HEALTH (1.0 Credit)

Anna West

Division: Social Science

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

This course explores the history of public health approaches to the properties, pathogenic potential, and politics of shared air. We ask what it means to breathe together—as humans in a global economic system—at multiple scales, from interpersonal to institutional, industrial, and imperial. Topics include miasma, tuberculosis, industrial pollution, occupational health and gendered labor, household fuels, secondhand smoke, incinerators, megacities. Texts are drawn from history, public health, science and technology studies, geography, and anthropology. Pre-requisite(s): HLTH H/B115, a health-related writing seminar, or at least one course in the humanities or social sciences Lottery Preference: In descending order: 1. declared Health Studies minors 2. Sophomores 3. Anthropology majors and minors 4. Environmental Studies majors and minors
(**Offered:** Spring 2024)

HLTH H318 TRADITIONAL MEDICINE: HISTORIES AND ETHNOGRAPHIES (1.0 Credit)

Lauren Minsky

Division: Social Science

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

What is "traditional medicine" and why is it simultaneously revered, reviled and suppressed? How does traditional medicine relate to "antique" senses and sensibilities of an enchanted cosmos, seasonality and stewardship? How have people translated and transformed traditional medicine for a "modern" world? Does traditional medicine have relevance for the climate crisis and billionaires' efforts to conjure transhumanism? Readings include TCM; Kampo; Talmudic Medicine; Ayurveda; Unani-

tibb; Homeopathy; Sufi, Saint and Goddess cults; Yoga; and Nature Cure. Pre-requisite(s): HLTH 115, or any course in History, Anthropology or Religion, or permission of the instructor Lottery Preference: (1) Declared Health Studies seniors; (2) Declared Health Studies juniors; (3) History, Anthropology, Environmental studies, or Religion majors; (4) Everyone else.
(Offered: Fall 2023)

Philosophy Courses

PHIL H218 ENVIRONMENTAL PHILOSOPHY (1.0 Credit)

Division: Humanities

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

In this course, we study various arguments in environmental ethics and environmental aesthetics in order to think more clearly about the value of living and non-living things. We do so through a close reading of contemporary and historical philosophical texts. Pre-requisite(s): One course in Philosophy or Environmental Studies 101

Visual Studies Courses

VIST H305 ART AND THE ENVIRONMENT IN EAST ASIA (1.0 Credit)

Erin Schoneveld

Division: Humanities

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

This course examines the relationship between environment and the arts in China and Japan. In particular, how artists engage with and respond to nature through varied modes of artistic production and exhibition. Crosslisted: East Asian Languages & Cultures, Environmental Studies, Visual Studies
(Offered: Spring 2024)

Writing Program Courses

WRPR H112 INTERACTION RITUAL: THE NOVEL AND SOCIOLOGY, GLOBAL SOLIDARITY AND LOCAL ACTIONS: INTERDEPENDENCE, SOCIAL CHANGE, AND HAVERFORD (1.0 Credit)

Eric Hartman

Division: First Year Writing

In this course, we will read a range of texts devoted to dissecting the interaction in British and American society and culture. These texts explore how the social interaction functions when it goes smoothly—and how it can go wrong. Prerequisite(s): First-year students as assigned by the Director of College Writing. Enrollment Limit: 12, This course embraces global interdependence while considering how individual identities relate to appropriate local civic actions. Participants review ideas and methods relevant for co-creating more just, inclusive, sustainable communities, advancing inquiry

in dialogue with community-based partners of Haverford College.
(Offered: Spring 2024)

WRPR H136 BLACK ECOLOGIES (1.0 Credit)

Staff

This course engages writings and cultural works about Black eco-literary and ecological traditions. Black Ecologies focuses on the multiple ecological and spatial conditions that have over-determined Black life and relationships to nature including the middle passage, slavery, racial segregation, food apartheid, gentrification and even incarceration. All these phenomena have produced unequal access to natural resources, space, food and land through systems that racialize, gender and commodify space. By exploring Black cultural and land based worker's literary, cultural, and community responses to anti-Black environmental conditions, we will consider how Black communities reclaim spatial autonomy through creative modes of collective liberation. Student's critical and creative writing will be based on course texts and outdoor experiences of observation and laboring collectively at Haverfarm. Open only to first-year students as assigned by the Director of College Writing. Crosslisted: AFST, ENVS.

Courses at Bryn Mawr

Anthropology Courses

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

Melissa Pashigian

Division: Humanities

This course is designed for students interested in learning ethnographic and qualitative social science methods, and how to analyze qualitative results. Through hands on fieldwork, students will learn and practice ethnographic field methods, for example, observation, participant observation, interviewing, use of visual media and drawing, life stories, generating and analyzing data, and ways to productively transform qualitative data into contextual information. Ethics in ethnographic research will be a central theme, as will envisioning and designing projects that protect human subjects. The purpose of this course is to provide anthropology majors and students in social sciences, humanities, as well as STEM majors with interests in multi-method research, an opportunity to learn methods in advance of their thesis proposal and research, Hanna Holborn Gray summer research, and other social science independent research opportunities during their undergraduate experience, and post-graduation.

(Offered: Fall 2023)

Biology Courses

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 2023)

BIOL B225 BIOLOGY AND ECOLOGY OF PLANTS (1.0 Credit)

Joni Baumgarten

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.

(Offered: Fall 2023)

BIOL B250 COMPUTATIONAL METHODS IN THE SCIENCES (1.0 Credit)

Alison Weber

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 analyzing, modeling, and visualizing scientific data through hands-on programming exercises. Content will draw on examples from across the life sciences. This course will use the Python programming language. Six hours of combined lecture/lab per week.

(Offered: Fall 2023)

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.

BIOL B262 URBAN ECOSYSTEMS (1.0 Credit)

Joni Baumgarten

Division: Natural Science

Cities can be considered ecosystems whose functions are highly influenced by human activity. This course will address many of the living and non-living components of urban ecosystems, as well as their unique processes. Using an approach focused on case studies, the course will explore the ecological and environmental problems that arise from urbanization, and also examine solutions that have been attempted. Prerequisite: BIOL B110 or B111 or ENVS B101.

(Offered: Spring 2024)

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.

(Offered: Spring 2024)

Growth and Structure of Cities Courses

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

Dirk Kinsey

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

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: Fall 2023, Spring 2024)

CITY B345 ADVANCED TOPICS IN ENVIRONMENT AND SOCIETY (1.0 Credit)*Min Kyung Lee*

This is a topics course. Topics vary.

East Asian Languages and Cultures Courses**EALC B355 ANIMALS, VEGETABLES, MINERALS IN EAST ASIAN LITERATURE & FILM (1.0 Credit)***Shiamin Kwa***Division:** Humanities

This semester, we will explore how artists question, explore, celebrate, and critique the relationships between humans and the environment. Through a topics-focused course, students will examine the ways that narratives about environment have shaped the way that humans have defined themselves. We will be reading novels and short stories and viewing films that contest conventional binaries of man and animal, civilization and nature, tradition and technology, and even truth and fiction. "Animals, Vegetables, Minerals" does not follow chronological or geographical frameworks, but chooses texts that engage the three categories enumerated as the major themes of our course. We will read and discuss animal theory, theories of place and landscape, and theories of modernization or mechanization; and there will be frequent (and intentional) overlap between these categories. We will also be watching films that extend our theoretical questions of these themes beyond national, linguistic, and generic borders. You are expected to view this course as a collaborative process in which you share responsibility for leading discussion. There are no prerequisites or language expectations, but students should have some basic knowledge of East Asian, especially Sinophone, history and culture, or be willing to do some additional reading (suggested by the instructor) to achieve an adequate contextual background for exploring these texts.

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 2024)

English Courses**ENGL B204 NATIVE LAND, AMERICAN LITERATURES, 1607-1899 (1.0 Credit)***Bethany Schneider*

This course will explore Anglophone narratives by white and Indigenous writers, between the arrival of the British in Jamestown and the Philippine-American War. We will examine narratives of conquest that understand colonial and US expansion across Indigenous lands as "manifest destiny," and narratives of resistance that understand the same history as imperial conquest and genocide. It took a lot of storytelling, a lot of literary labor, to invent a destiny and to make it manifest on landscapes, peoples and nations. This class asks how certain ingredients of the master-narrative of colonial expansion and the American "wild west" – bloodthirsty, sexually dangerous tribal people, violent white outlaws, hard-working normative white families, empty landscapes, easy money – came to be essential to the American myth. And how were those stories resisted and rewritten even as they were being formed? Ultimately, we will interrogate the so-called "frontier," exposing it as a vastly diverse network of Native-, African- Asian- and Euro-American peoples whose landscapes were already inhabited, already historied, already multinational. Materials examined may include early Indigenous narratives and anonymous writings by white and Indigenous people, and texts and narratives by John Smith, William Bradford, Mary Rowlandson, Tituba (Carib), Samson Occom (Mohegan), William Apess (Pequot), Lydia Maria Child, Catharine Maria Sedgwick, James Fennimore Cooper, Jane Johnston Schoolcraft (Ojibwe), Mary Jemison (Seneca), Black Hawk (Sauk), John Rollin Ridge (Cherokee), Sarah Winnemucca Hopkins (Paiute), Wovoka (Paiute), Stephen Crane, Rudyard Kipling and Mark Twain.

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.

(Offered: Spring 2024)

Environmental Studies Courses

ENVS B101 INTRODUCTION TO ENVIRONMENTAL STUDIES (1.0 Credit)

Carol Hager

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, 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: Fall 2023)

ENVS B202 ENVIRONMENT AND SOCIETY (1.0 Credit)

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. Pre-requisite ENVS B101 or ENVS H101 or instructor's permission.

(Offered: Fall 2023, Spring 2024)

ENVS B203 ENVIRONMENTAL HUMANITIES: ENVIRONMENTAL FUTURES WRITING WORKSHOP. (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 2023, Spring 2024)

ENVS B350 ADVANCED TOPICS IN ENVIRONMENTAL STUDIES (1.0 Credit)

Sara Grossman

This is a topics course. Course content varies.

(Offered: Fall 2023)

ENVS B397 SENIOR SEMINAR IN ENVIRONMENTAL STUDIES (1.0 Credit)

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 2023)

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 2023)

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, GEOL B108, or GEOL B209.
(Offered: Fall 2023)

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 2023)

GEOL B209 NATURAL HAZARDS (1.0 Credit)

Katherine Marengo

Division: Natural Science; Quantitative

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 2024)

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 2023)

Philosophy Courses

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

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.

PHIL B240 ENVIRONMENTAL ETHICS (1.0 Credit)

Michael Gadomski

Division: Humanities

This course surveys rights- and justice-based justifications for ethical positions on the environment. It examines approaches such as stewardship, intrinsic value, land ethic, deep ecology, ecofeminism, Asian and aboriginal. It explores issues such as obligations to future generations, to nonhumans and to the biosphere.

(Offered: Fall 2023)

Political Science Courses

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.

(Offered: Fall 2023)

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.

Courses at Swarthmore

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