

## *Spring 2019 Courses Relating to Sustainability & Environmental Awareness*

### Africana Studies

#### **ASRFX2006 Introduction to African Diasporas**

This course on archival and contemporary responses to colonialism, slavery, and their legacies directs students toward discerning the signs of the environmental impact of these compulsions and forces of history. Students read increasingly the current environmental issues that face women, in particular, in such areas as mining in South Africa (tailings, water pollution, & food consumption). Students read and listen to speeches about environmental justice by local women. Other aspects of my teaching draw upon new areas of Prof. Christianse's research and membership with the Oceanic Humanities for the Global South initiative at the University of Witwatersrand. Her current contribution to this initiative is to discern how 19th Century archival materials can be read for signs of environmental impacts of slavery within the continent and, especially, along its shorelines. This research enters her courses.

**Professor:** Yvette Christianse

**Credits:** 3 points

**Offering:** Spring semesters

### Architecture

#### **ARCH UN3101 Representation Abstraction**

Core Design Studio in the architecture program. Students create drawings and architectural models in response to design challenges offered by the instructor. There is a material aspect to most things created in the course. Students are encouraged to think about choice of materials used. Material considerations might include: organic vs. inorganic, recycled materials or recyclability of material and material source. Furthermore based on cost and available storage space students are encouraged to recycle and re-used their own material resources throughout the semester.

The content of the projects for my section of the course focus on social issues in public places - the urban environment. The projects specifically focus on shared public use of resources, with an emphasis on designs that expand the conventional boundaries of 'community' and 'public'. This places a critic emphasis on environmental justice, esp. in the context of NYC.

**Professor:** Richard Todd Rouhe

**Credits:** 4 points

**Offering:** Spring semesters

## **Biology**

### **BIOL BC2851 Plants and Profits**

The course focuses on plant biodiversity, especially plants that can be used by humans for subsistence and exploited by humans for profit. It addresses how biodiversity is distributed around the world, how that distribution has changed historically, and how it may change in the future. In history and in the future, this is definitely an issue of environmental justice, and one that is affected by climate change among other global trends (urbanization, new transportation technologies, data acquisition through remote and near-earth sensing technologies, data access, increases in human population).

**Professor:** Hilary Callahan

**Credits:** 4 points

**Offering:** Spring semesters

## **English**

### **English 3130 The American Cowboy and the Iconography of the West**

We spend a week on the maintenance of the frontier, the establishment of the National Parks, viewing "Dances with Wolves" as an ecological western, and reading two essays on the exploitation of nature. This seminar encounters issues of "virgin" nature vs. the plans and protocols of capitalist civilization throughout the term--in Turner's "Frontier Hypothesis," in Theodore Roosevelt's plans for the National Park System, in viewing "environmental western" movies, and in reading critical essays.

**Professor:** Peggy Ellsberg

**Credits:** 3 points

**Offering:** Spring 2019

## **Environmental Science**

### **EESC3012 Brownfields**

Hands-on exploration of a simulated brownfield using the award winning simulation Brownfield Action to research and write Phase 1, 2, and 3 environmental site assessments for the eventual remediation and revitalization (sustainable management) of contaminated sites. Many of these sites are in inner cities where revitalization of these sites is an environmental justice issue.

**Professor:** Peter Bower

**Credits:** 3 points

**Offering:** Spring semesters

### **Environmental Science**

#### **BC3025 Hydrology**

Hands-on study and discussion of the basic physical principles of the water cycle (evaporation, condensation, precipitation, runoff, and subsurface flow), as well as environmentally relevant applications based on case studies. Special focus on the New York City area, the arid Southwest, and the developing world. Coverage of contemporary global water resources issues, including pollution control, sustainable development, and climate change.

**Professor:** Martin Stute and Christian Braneon

**Credits:** 3 points

**Offering:** Spring semesters (alternate years)

### **Environmental Science**

#### **BC3001 Conservation and Preservation**

Conservation and preservation is an interdisciplinary study of earth materials, their transformation into art objects and architectural structures, and the philosophy and analytical techniques required to prepare conservation and preservation strategies for these objects and structures. The course is Beyond Barnard, hands-on and field trip oriented with a focus on the Metropolitan Museum of Art and local geology and infrastructure.

**Professor:** Peter Bower

**Credits:** 3 points

**Offering:** Spring semesters

### **Environmental Science**

#### **BC3040 Environmental Law**

Process-oriented introduction to the law and its use in environmental policy and decision-making. Origins and structure of the U.S. legal system. Emphasis on litigation process and specific cases that elucidate the common law and toxic torts, environmental administrative law, and environmental regulation through application and testing of statutory law in the courts. Emphasis also on the development of legal literacy, research skills, and writing.

**Professor:** Peter Bower and Elena D Neascu

**Credits:** 3 points

**Offering:** Spring semesters

### **Environmental Science**

#### **EESC3026 Bird, Plant and Land-use Dynamics**

This class looks at the response of wildlife (birds and plants) to land-use and climate change from the end of the last glaciation to the present, with an emphasis on getting students into the field. We start with the local environment in NYC and then travel along the urban-suburban-rural gradient visiting wildlife refuges. Students observe and write about nature at parks, museums and preserves in field journals, worksheets and scientific reports; identify the local flora and fauna in wetlands and woodlands; master field survey techniques in order to collect, quantify and analyze field data; discover the underlying ecological concepts; witness the impacts of land-use and climate change on natural habitats and the usefulness of birds and plants as indicators of environmental change. The class format includes lecture, student presentations, field trips and data collection/analysis.

**Professor:** Terryanne Maenza-Gmelch

**Credits:** 3 points

**Offering:** Spring semesters

### **First-Year Seminar**

#### **FYSBX1466\_001\_2017\_1 First Year Seminar: Sustainability**

Sustainability is being hailed as the solution that is going to link activists, citizens, and corporations to solve the world's environmental problems. However, there are many ways to define the term and assess the longterm effects of so-called "sustainable" measures. In this course, we will examine current and historical writings about human interactions with the environment in order to understand and identify our most profound environmental challenges and the most appropriate responses. Responding critically to the ideas of the past, we will also ask how our views have changed over time and what it might take to tackle the current large scale environmental issues facing society. Projects for the course include a critical essay, a political opinion piece, and a survey of environmental attitudes which is informed by the data studied and collected in class.

**Professor:** Brian Mailloux

**Credits:** 3 points

**Offering:** Spring semesters

### **First-Year Seminar**

#### **BC1713 Things and Stuff**

How do our material choices shape our cultural and individual narratives? How do the things we make, buy, use, keep, and discard tell stories, impact our environment, and help define who we are? Americans create over 125 million tons of landfill every year, and up to 60%-80% of global greenhouse gas emissions have been traced to household consumption (food, stuff, and transport). With this contemporary reality as our reference point, we will examine how designed and built objects contribute to the human story over time, and how our decisions about “things and stuff” might change our stories moving forward.

**Professor:** Sandra Goldmark

**Credits:** 3 points

**Offering:** Spring semesters

### **First-Year Seminar**

#### **FYSB1107 First-Year Seminar Workshop: Race, Science, and Reproductive Justice**

This course is about reproduction -- a biological and social process that is often the target of deep-seated ideas about nation, culture, conflict, and definitions of life. Looking at the relationships between reproduction, science, health, and identity formation, we will explore a variety of literary works, films, journalism, public health studies, and policy/legal texts, all of which differently narrate, debate, script, and theorize about reproduction. Questions we will ask include: what is reproduction -- scientifically, culturally, politically, and rhetorically? How does reproduction intersect with other health and policy issues, such as environmental justice, immigration reform, and social and economic justice? How do different historical and geopolitical contexts shape our understandings and management of reproduction, from ancient Egyptians who used pebbles as IUDs, to in-vitro fertilization and so-called “DIY” abortions, to population and development projects all over the world? How do long histories of reproductive violence shape modern definitions of reproductive health, rights, and justice, and what is the role of recent medical/technological/pharmaceutical developments in (re)configuring radically disparate reproductive experiences? Our conversations will both reveal and challenge the way we understand reproduction and the contradictory beliefs and actions associated with it.

**Professor:** Cecelia Lie-Spahn

**Credits:** 3 points

**Offering:** Spring semesters

## Urban Studies

### **URBS UN 3450 Neighborhoods and Community Development**

This course traces the history of the community development movement in the US from its roots in the early Progressive Era settlement house movement where reformers worked to address social and environmental impacts of rapid urbanization and poverty. It examines labor community organizing campaigns in the 1930s-40s which often included environmental conditions in their platforms. It examines the roots of community development in relation to the community control movements of 1950-70s often responded to hazardous environments instigated by local land use, segregation and planned shrinkage. We move forward to examine the environmental justice movements that organize around noxious neighborhood conditions and the sighting of undesirable land uses in low income neighborhoods. In the 21st century, we examine the work of community development to promote and plan sustainable communities that are resilient and inclusive. The course addresses the interconnection between the built environment and community which requires attention to issues of sustainability, resilience and environment in the context of neighborhoods.

**Professor:** Mary Rocco

**Credits:** 3 points

**Offering:** Spring semesters

## ***Courses Relating to Sustainability and Environmental Awareness, All Semesters***

\*\*indicates that the course is offered during Spring 2019

### **\*\*Africana Studies**

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**Professor:** Yvette Christianse

**Credits:** 3 points

**Offering:** Spring semesters

### **Anthropology**

#### **ANTH V3861 Anthropology of the Anthropocene**

This course focuses on the political ecology of the Anthropocene. As multiple publics become increasingly aware of the extensive and accelerated rate of current global environmental change, and the presence of anthropogenesis in ever expanding circumstances, we need to critically analyze the categories of thought and action being developed in order to carefully approach this change. Our concern is thus not so much the Anthropocene as an immutable fact, inevitable event, or definitive period of time (significant though these are), but rather for the political, social, and intellectual consequences of this important idea. Thus we seek to understand the creativity of "The Anthropocene" as a political, rhetorical, and social category. We also aim to examine the networks of capital and power that have given rise to the current state of planetary change, the strategies for ameliorating those changes, and how these are simultaneously implicated in the rhetorical creation of "The Anthropocene".

**Professor:** Paige West

**Credits:** 4 points

**Offering:** Fall semesters

### **Architecture**

#### **ARCH UN3120 City, Landscape & Ecology**

City, Landscape, Ecology is a thematically driven course which examines issues and polemics related to landscape, land settlement and ecology over the past two centuries. The course examines our changing attitudes of nature from the 18th century to the present, focusing on the artistic and architectural responses to these perceptions. It aims to demonstrate the important role that artists and architects have played, and are to play, in making the sources of, and solutions to, environmental degradation visible.

**Professor:** Ralph Ghoche

**Credits:** 3 points

**Offering:** Fall semesters

### **\*\*Architecture**

#### **ARCH UN3101 Representation Abstraction**

Core Design Studio in the architecture program. Students create drawings and architectural models in response to design challenges offered by the instructor. There is a material aspect to most things created in the course. Students are encouraged to think about choice of materials used. Material considerations might include: organic vs. inorganic, recycled materials or recyclability of material and material source. Furthermore based on cost and available storage space students are encouraged to recycle and re-used their own material resources throughout the semester.

The content of the projects for my section of the course focus on social issues in public places - the urban environment. The projects specifically focus on shared public use of resources, with an emphasis on designs that expand the conventional boundaries of 'community' and 'public'. This places a critic emphasis on environmental justice, esp. in the context of NYC.

**Professor:** Richard Todd Rouhe

**Credits:** 4 points

**Offering:** Spring semesters

### **Architecture**

#### **ARCH UN3400 ENVIRONMENTAL VISUALIZATIONS OF NYC: Toxic Territories and Future Possibilities**

The goal of this seminar + workshop course is to develop new visual representations of the impact of environmental issues on New York City. We will focus on two catastrophic events and sites: Greenpoint Oil Spill (1978), Newtown Creek; and Hurricane Sandy (2012), Lower Manhattan; and examine related toxic histories, environmental damage, impacted communities, clean-up and protection efforts and planning and design possibilities for sustainable futures. Resourcing historical maps, on-site documentation and future design proposals, the class will explore environmental crises and their impact on the built environment and on the social, cultural and political life of the city. Based on this research, students will use digital mapping techniques and 360 video filming and editing technologies to create compelling experiential, spatial, analytical, critical, and reflective reconstructions of catastrophic events and remediation.

**Professor:** Kadambari Baxi

**Credits:** 4 points

**Offering:** Spring semesters

### Art History

#### **AHISGU4000 Native American Art**

Presents Indigenous environmental knowledge and stewardship by looking at how works of art depict and sustain relationships with the non-human world. Highlights the work of contemporary artists who address the impact of displacement and resource extraction on the health of the land and the people.

**Professor:** Elizabeth Hutchinson

**Credits:** 3 points

**Offering:** once every two years

### Biology

#### **BIOL BC3311 Laboratory in Cell Biology**

This class pursues cell biology through weekly lab exercises which will demonstrate some key cell biological techniques used to investigate structural, molecular, and physiological aspects of eukaryotic cells. We will also spend time thinking about theoretical and practical aspects of how we should think about and perform experiments, data collection, and scientific writing and presentation. As we focus on cell biology, we will also consider how a better understanding biology at this level might contribute to our understanding of honey bee health and toward helping pollinators more broadly. We will be using tissues of various bee species in addition to the *Drosophila* S2 cell line to examine signal transduction, specifically focusing on signaling pathways involved in cellular homeostasis that are part of the unfolded protein response (UPR) centered in the endoplasmic reticulum. Techniques include microscopy, cell culture, reporter assays, molecular analysis, protein electrophoresis and Western Blot analysis. This class culminates in a 4-week independent project, during which students will use what they've learned to answer a directed question about UPR pathways in bees and beyond.

**Professor:** Jonathan Snow

**Credits:** 3 points

**Offering:** Fall semesters

### \*\*Biology

#### **BIOL BC2851 Plants and Profits**

The courses focuses on plant biodiversity, especially plants can be used by humans for subsistence and exploited by humans for profit. It addresses how biodiversity is distributed around the world, how that

distribution has changed historically, and how it is may change in the future. In history and in the future, this is definitely an issue of environmental justice, and one that is affected by climate change among other global trends (urbanization, new transportation technologies, data acquisition through remote and near-earth sensing technologies, data access, increases in human population).

**Professor:** Hilary Callahan

**Credits:** 4 points

**Offering:** Spring semesters

### **Biology**

#### **BIOL BC1002 Global Health and Ecology**

This is a lecture and lab course which includes a survey of basic ecological concepts. As part of this course, students learn about human perturbations that adversely affect the environment. They learn what is meant by a sustainable society and how they can contribute to sustainability, both on a personal and global scale.

Students participate in civic engagement projects where they volunteer at a local organization that has a positive impact on the environment. Projects run the gamut from composting, bicycle and clothing recycling to coastal cleanups. Students collect sustainability data during their volunteer experience and present what they learned to their classmates, focusing on how their particular project promotes responsible resource usage and how personal ecological footprints could be impacted by specific lifestyle changes.

**Professor:** Diana Heller (lecture) / Jessica Goldstein (lab)

**Credits:** 4.5 points

**Offering:** Fall & Spring semesters

### **Chemistry**

#### **BC 1050 From Forensics to Art Restoration - The Jazz of Chemistry**

This course examines the key role chemistry plays in unexpected fields. Environmental discussions come in through the impact of climate change on art (sculptures, buildings, ancient artifacts included), with an emphasis on the chemical reactions between and acid rain (other gasses emitted by industries) and the material of art in discussion. The course also covers the dangers of radiation that can be emitted as a result of accidents in Nuclear plants.

**Professor:** Meenakshi Rao

**Credits:** 3 points

**Offering:** Fall semesters

## Chemistry

### **CHEM BC2001 General Chemistry**

This introductory chemistry course uses examples from renewable energy production and storage and talks about the chemistry and context of lead poisoning.

**Professor:** Rachel Narehood Austin

**Credits:** 4 points

**Offering:** Fall semesters

## Chemistry

### **CHEM BC3272 Advanced Inorganic Chemistry: Chemical Solutions for a Sustainable Future**

The future of human society will rely on sustainable new technologies for energy, food production, and chemical synthesis. This course will explore how contemporary research in the field of inorganic chemistry seeks to address such problems.

**Professor:** Michael Campbell

**Credits:** 3 points

**Offering:** Fall semesters

## Dance

### **BC3566 Composition: Site Specific and Experimental Methods**

This course cultivates an awareness of the dynamic relationship between our dancing body and the world we inhabit. Students develop individual and collaborative movement based projects that respond to physical sites and ecological concepts. Readings include historical and contemporary examples of site-specific performance, theories of art, ecology, climate change, and practices of resistance. Students utilize experimental compositional methods to challenge static notions of time, space, and the illusion of the discrete self. The course delves into conversations and practices around making site-work in the anthropocene and the age of climate change.

**Professor:** Jody Sperling

**Credits:** 3 points

**Offering:** Occasional offering

## Economics

### **ECON BC3063 Senior Seminar: Logic and Limits of Economic Justice**

What is economic justice? What does economics have to do with ethics? And how should a society concerned with the wellbeing of its members choose between multiple ‘equally efficient outcomes’? These are some of the main questions we’ll be tackling in this course.

This course is, in part, an advanced introduction to welfare economics: the branch of economics concerned with understanding how to assess and improve wellbeing of members of society. It incorporates debates and insights from other fields of economics and philosophy and has influenced theory and practice in many fields of economics, including political economy, public economics, development economics, environmental economics, labor economics and feminist economics, to name a few. The goals of this course then are to ensure that by the end of it, you are able to understand, assess and critically examine the philosophical origins of contemporary economic theory and ideas, the debates among them and the implications of these theories and debates for considerations of welfare, equality, justice and freedom across a variety of economic events and policy topics.

Within the course we discuss climate change and its issues within the context of welfare and efficiency and distributive justice.

**Professor:** Belinda Archibong

**Credits:** 3 points

**Offering:** Fall semesters

### Economics

#### **ECON BC3039 Environmental and Natural Resource Economics**

How do we apply economic theory to solve environmental issues? What is and should be the role of government in environmental regulation? Should we subsidize low-carbon or tax fossil energy? Environmental and natural resource economics deal with these and many more questions. One economist defines environmental economics as “concerned with the impact of the economy on the environment, the significance of the environment to the economy, and the appropriate way of regulating economic activity so that balance is achieved among environmental, economic, and other social goals.” (Kolstad, 3). In answering the aforementioned questions in this field, a wide range of topics will be examined in this course including, ‘Links between economic behavior and environmental quality: valuation of non-market benefits of pollution abatement; climate change policy and emissions standards; taxes; and transferable discharge permits. Specific problems of hazardous waste; relationships between pollution and health, the exploitation of commonly owned natural resources; and the links between the environment, income distribution, and economic development.’

A goal of this course is to ensure that you are able to connect theories in environmental economics with real world problems and practical applications. As such, tools like ArcGIS for spatial analysis will be used in answering homework questions and for the final class project as well.

**Professor:** Belinda Archibong

**Credits:** 3 points

**Offering:** Spring semesters

### English

#### **AFENX3134 Unheard Voices**

In this course about the political, racial, social and other contexts in which African women write and are written, students are directed toward the archival and contemporary responses to colonialism, slavery, and their legacies, and the environmental impacts of these compulsions in history. Students read increasingly the current environmental issues that face women, in particular, in such areas as mining in South Africa (tailings, water pollution, & food consumption). Students read and listen to speeches about environmental justice by local women. Other aspects of my teaching draw upon new areas of Prof. Christianse's research and membership with the Oceanic Humanities for the Global South initiative at the University of Witwatersrand. Her current contribution to this initiative is to discern how 19th Century archival materials can be read for signs of environmental impacts of slavery within the continent and, especially, along its shorelines. This research enters her courses.

**Professor:** Yvette Christianse

**Credits:** 4 points

**Offering:** Fall semesters

### \*\*English

#### **English 3130 The American Cowboy and the Iconography of the West**

We spend a week on the maintenance of the frontier, the establishment of the National Parks, viewing "Dances with Wolves" as an ecological western, and reading two essays on the exploitation of nature. This seminar encounters issues of "virgin" nature vs. the plans and protocols of capitalist civilization throughout the term--in Turner's "Frontier Hypothesis," in Theodore Roosevelt's plans for the National Park System, in viewing "environmental western" movies, and in reading critical essays.

**Professor:** Peggy Ellsberg

**Credits:** 3 points

**Offering:** Spring 2019

### Environmental Science

#### **EESCX3050\_001\_2017\_3 Big Data with Python**

The course teaches students how to perform environmental data analyses

**Professor:** Brian Mailloux

**Credits:** 3 points

**Offering:** Fall semesters

### Environmental Science

#### **EESCX3016\_001\_2017\_3 Environmental Measurements**

The course teaches students how to perform environmental measurements.

**Professor:** Brian Mailloux

**Credits:** 3 points

**Offering:** Fall semesters

### Environmental Science

#### **EESCX3043\_001\_2017\_1 Water, Sanitation, and Health**

We learn about water, sanitation, and health.

**Professor:** Brian Mailloux

**Credits:** 3 points

**Offering:** Spring semesters

### Environmental Science

#### **EESC 3014 Field Methods**

Students do research and write a research paper about carbon storage in trees on 80-year old plots at Black Rock Forest and relate this to the global carbon cycle. In the only large mammal wildlife management class on campus students study sustainable practices in managing overpopulation of the white-tailed deer.

**Professor:** Peter Bower

**Credits:** 3 points

**Offering:** Fall semesters

### Environmental Science

#### **EESC 3033 Waste Management**

A study of sustainable practices in recycling and waste management including impact on global warming.

**Professor:** Peter Bower

**Credits:** 3 points

**Offering:** Fall semesters

**\*\*Environmental Science**

**EESC3012 Brownfields**

Hands-on exploration of a simulated brownfield using the award winning simulation Brownfield Action to research and write Phase 1,2, and 3 environmental site assessments for the eventual remediation and revitalization (sustainable management)of contaminated sites. Many of these sites are in inner cities where revitalization of these sites is and environmental justice issue.

**Professor:** Peter Bower

**Credits:** 3 points

**Offering:** Spring semesters

**Environmental Science**

**EESC3019 Energy Resources**

Energy use and policy have major impacts on the chemistry of the atmosphere and thus on global climate. Energy conservation is a key to energy sustainability. This course utilizes the physical campuses of Barnard and Columbia to engage students in a real life policy study on energy resources. Students work as a team and discuss with college faculty, administration, and staff to produce a professional level policy report describing existing usage of energy, analyzing where change is needed.

**Professor:** Peter Bower

**Credits:** 3 points

**Offering:** Fall semesters

**\*\*Environmental Science**

**BC3025 Hydrology**

Hands-on study and discussion of the basic physical principles of the water cycle (evaporation, condensation, precipitation, runoff, and subsurface flow), as well as environmentally relevant applications based on case studies. Special focus on the New York City area, the arid Southwest, and the developing world. Coverage of contemporary global water resources issues, including pollution control, sustainable development, and climate change.

**Professor:** Martin Stute and Christian Braneon

**Credits:** 3 points

**Offering:** Spring semesters (alternate years)

**\*\*Environmental Science**

**BC3001 Conservation and Preservation**

Conservation and preservation is an interdisciplinary study of earth materials, their transformation into art objects and architectural structures, and the philosophy and analytical techniques required to prepare conservation and preservation strategies for these objects and structures. The course is Beyond Barnard, hands-on and field trip oriented with a focus on the Metropolitan Museum of Art and local geology and infrastructure.

**Professor:** Peter Bower

**Credits:** 3 points

**Offering:** Spring semesters

**\*\*Environmental Science**

**BC3040 Environmental Law**

Process-oriented introduction to the law and its use in environmental policy and decision-making. Origins and structure of the U.S. legal system. Emphasis on litigation process and specific cases that elucidate the common law and toxic torts, environmental administrative law, and environmental regulation through application and testing of statutory law in the courts. Emphasis also on the development of legal literacy, research skills, and writing.

**Professor:** Peter Bower and Elena D Neascu

**Credits:** 3 points

**Offering:** Spring semesters

**\*\*Environmental Science**

**EESC3026 Bird, Plant and Land-use Dynamics**

This class looks at the response of wildlife (birds and plants) to land-use and climate change from the end of the last glaciation to the present, with an emphasis on getting students into the field. We start with the local environment in NYC and then travel along the urban-suburban-rural gradient visiting wildlife refuges. Students observe and write about nature at parks, museums and preserves in field journals, worksheets and scientific reports; identify the local flora and fauna in wetlands and woodlands; master field survey techniques in order to collect, quantify and analyze field data; discover the underlying ecological concepts; witness the impacts of land-use and climate change on natural habitats and the usefulness of birds and plants as indicators of environmental change. The class format includes lecture, student presentations, field trips and data collection/analysis.

**Professor:** Terryanne Maenza-Gmelch

**Credits:** 3 points

**Offering:** Spring semesters

### **First-Year Seminar**

#### **FYS 1296 The Hudson: America's River**

Traces environmental history alongside human history, giving students in-depth information about the ecosystem of this tidal estuary and its surroundings. Includes a unit relating Hudson River School painting to the deforestation and other unsustainable extractive practices in the nineteenth century, a second unit on the Storm King power plant case of the 1960s that led to the Clean Water Act, and another about the environmental justice issues raised by the history and establishment of Riverbank State Park over a waste treatment plant in Harlem.

**Professor:** Elizabeth Hutchinson

**Credits:** 3 points

**Offering:** periodically (next up in 2019-20)

### **First-Year Seminar**

#### **FYSB BC1474 Think Like a Scientist: From Plato to Hawking**

This course will examine the “scientific worldview” throughout the history of the Western world. Key questions will include: how do science and philosophy intersect to influence our views of nature?; how does science help us to understand our place in the world and in the universe?; what happens when objective scientific inquiry clashes with political and societal interests?; how does popular opinion affect the way that science is conducted? In attempting to answer these questions, we will reflect on what it means to use what we have learned (from both science and history) to synthesize new viewpoints that can have a positive impact on our future.

**Professor:** Michael Campbell

**Credits:** 3 points

**Offering:** Fall semesters

### **\*\*First-Year Seminar**

#### **FYSBX1466\_001\_2017\_1 First Year Seminar: Sustainability**

Sustainability is being hailed as the solution that is going to link activists, citizens, and corporations to solve the world’s environmental problems. However, there are many ways to define the term and assess the longterm effects of so-called "sustainable" measures. In this course, we will examine current and historical writings about human interactions with the environment in order to understand and identify our most profound environmental challenges and the most appropriate responses. Responding critically to the ideas of the past, we will also ask how our views have changed over time and what it might take to tackle the current large scale environmental issues facing society. Projects for the course include a critical essay, a political opinion piece, and a survey of environmental attitudes which is informed by the data studied and collected in class.

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**Professor:** Sandra Goldmark

**Credits:** 3 points

**Offering:** Spring semesters

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**Professor:** Cecelia Lie-Spahn

**Credits:** 3 points

**Offering:** Spring semesters

**History**

## **HIST BC 2380 Social and Cultural History of Food in Europe**

The course examines changing patterns of production and consumption of food in Europe from prehistoric to modern times. Coverage begins and ends with an examination of European food in a global perspective. For most of the semester, we focus on the cultural context of Europe as a site of modernizing technologies and patterns of consumption. Students will consider the development of settled agriculture in the history of food; the use of grains, fish, and dairy in diets across Europe; the significance of geographical location, exploration and colonialism; the impact of social stratification and ideologies of taste on food consumption; changing knowledge about health and hygiene; the involvement of the state in food security; changing modes of production of basic food commodities; changes in transport and technology in the fostering of global consumer culture and commodification; the rise of the scientist in the regulation of food safety by governments; mass production of food and its impact on the environment; and finally, the globalization of food markets and dietary norms, responses to problems created by modern agriculture, and local movements for food justice.

**Professor:** Deborah Valenze

**Credits:** unknown

**Offering:** Spring semesters

### **History**

## **HIST BC 2861 Chinese Cultural History**

I've just revamped this survey of Chinese history from the 15th to 18th centuries, using ecology as one of the analytic frames. One-third of the lectures and readings (about four weeks) deal with environmental history, farming, and ecology. Topics include the link between environmental factors and ethnic identities of the Manchus and Mongols in the Qing empire.

**Professor:** Dorothy Ko

**Credits:** unknown

**Offering:** Spring semesters

### **Psychology**

## **PSYC BC2154 Hormones and Behavior**

One topic I cover in this class is endocrine disrupting compounds (EDC). These are exogenous chemicals found in our environment that can mimic natural hormones in our bodies. There are numerous EDCs found in plastics. After reviewing the science of EDCs, students are encouraged to restrict use of plastics. This is presented as a benefit for personal health as well as for environmental sustainability.

**Professor:** Kara Pham

**Credits:** 3 points

**Offering:** Fall semesters

## Religion

### **[To come] Unknown**

I am considering mounting a seminar in fall 2019 on the well-known pilgrimage town of Vrindavan, in northern India. The concept of the town is that it is to be a paradise away from the rest of the world, especially the urban world, but it has been subject to very rapid population growth and construction growth and construction. The water in the River Jamuna, on which it is built is now not drinkable; people no longer even bathe in it. Etc., etc. The seminar would be devoted to examining this oxymoron from many sides, and I am thinking of linking it to an after-the-semester segment in which students could come to Vrindavan, see for themselves, and pursue projects they would have developed in the course of the term.

**Professor:** Jack Hawley

**Credits:** Unknown

**Offering:** Fall 2018?

## Religion

### **UN2306 Introduction to Judaism**

This course offers an introduction to the history, literature, and religion of Jews and Judaism. It presumes no prior study of the topic or knowledge of Hebrew. One session is devoted to Jewish environmental and animal ethics.

**Professor:** Beth Berkowitz

**Credits:** 3 points

**Offering:** Fall semesters

## \*\*Urban Studies

### **URBS UN 3450 Neighborhoods and Community Development**

This course traces the history of the community development movement in the US from its roots in the early Progressive Era settlement house movement where reformers worked to address social and environmental impacts of rapid urbanization and poverty. It examines labor community organizing campaigns in the 1930s-40s which often included environmental conditions in their platforms. It examines the roots of community development in relation to the community control movements of 1950-70s often responded to hazardous environments instigated by local land use, segregation and planned shrinkage. We move forward to examine the environmental justice movements that organize around noxious neighborhood conditions and the sighting of undesirable land uses in low income neighborhoods. In the 21st century, we examine the work of community development to promote and plan sustainable communities that are resilient and inclusive. The course addresses the interconnection between the built

environment and community which requires attention to issues of sustainability, resilience and environment in the context of neighborhoods.

**Professor:** \*

**Credits:** 3 points

**Offering:** Spring semesters

### **Women's & Gender Studies**

#### **WS BC 3132 Gendered Controversies**

The course explores how gendered social relations are imbricated with climate change and how gender justice and environmental justice intersect.

**Professor:** Janet Jakobsen

**Credits:** 4 points

**Offering:** Fall semesters, Spring semesters