|            |   | Sustainability Course Inventory                               |    |   |  |
|------------|---|---|----|---|--|
| Department | Course Number   | Course Title  |    |   | Course Description   |
| Total:     |   |   | 37 | 81  |  |
|            | INTRODUCTOR   | Y   |    |   |  |
| ASTR       | 101   | Solar System Astronomy  |    | Х   | The course includes a module on climate change   |
| AMST       | 105   | Introduction to Native American Studies                       |    | Х   | This course examines inequalities within the current Western ideologies and highlights how Native people are triumphing over colonization.   |
| ART        | 160   | Art and Social Change in the United States                    |    | x   | In this first-year writing seminar, we explore relationships between art, visual culture, and social change in the United States. Focusing on<br>twentieth and twenty-first century social movements, we study artists and communities who have sought to inspire social change–to cultivate<br>awareness, nurture new ideas, offer fresh visions, promote dialogue, encourage understanding, build and strengthen community, and inspire<br>civic engagement and direct action–through creative visual expression.  |
| ANTH       | 100   | Archaeology   |    | x   | This course surveys contibutions archaeologiest are making to social issues such as sustainable cities, poverty and homelessness, and warfare.   |
| ANTH       | 170   | Anthropology of Water (1)                                     |    | x   | Water Projects considers state, corporate, and activist discourses about water with attention to anthropological studies of social and<br>environmental impacts.   |
| BIOL       | 105   | Biology in a Changing World (1)                               |    | x   | Recently, organisms on this planet have been faced with some very abrupt and significant agents of change. Humans are one of the agents responsible for a plethora of these changes, including pollution, habitat loss, invasive species introductions and climate change.   |
| BIOL       | 105   | Wild canids and domestic dogs (1)                             |    | х   | Covers issues of climate change, habitat loss, preservation of biodiversity, ecosystem services  |
| BIOL       | 105   | Life in the Sea (1)   |    | x   | Covers topics related to how marine ecology is changing and how it both affects and is affected by climate change and other human activities   |
| BIOL       | 106   | Introduction to Biological Investigation (1)                  |    | х   | Covers causes of biodiversity loss, ecosystem services, climate change   |
| CHEM       | 125   | Chemical Principles (1)                                       |    | х   | Chemical reaction module on gasoline vs. biofuel and CO2 emissions   |
| ENST       | 107   | Global Change and Sustainability (1)                          | x  |   | This class offers an interdisciplinary introduction to the climate, ecosystem and sustainability principles needed to understand human impact<br>on the natural environment. We discuss the issue of global change prediction and the scientific basis for global change assessments and<br>policy measures. Key topics are the physical climate system and its variability, the carbon cycle and related ecosystem processes, land use<br>issues, nutrient cycles, and the impact of global change on society.  |
| ENST       | 124   | Essentials of Environmental Science (1)                       | x  |   | This course treats the following topics: energy sources and waste products, atmospheric patterns and climate, biogeochemical cycles,<br>properties of soils and water, and ecological processes. Using these topics as a platform, this course examines the impact humanity has on<br>the environment and discusses strategies to diminish those effects.  |
| ENST       | 125   | Environmentalisms in Perspective (1)                          | x  |   | This multidisciplinary course examines significant approaches to the theory and practice of environmentalisms past and present. Students<br>explore possible connections between the ethical, aesthetic, social, economic, historical, and scientific concerns that comprise<br>environmental studies.   |
| ENST       | 185   | Endangered Islands: Climate Change, Rising Sea Levels, and En | x  |   | This multidiciplinary course examines the environmental crises and responses on islands faced by rising sea level.   |
| ENST       | 187   | A Prehistoric Perspective on Climate Change                   | х  |   | This course evaluates climate change in the course of past changes and examines parallels between the past and present.  |
| ESCI       | 109   | Hot Topics in Earth Science and the Media (1)                 |    | x   | This course examines human activities such as fracking, mountaintop removal, invasive species, and global warming in regards to scientific literature and media portrayals of the same subjects.   |
| ESCI       | 135   | Volcanoes and Civilization (1)                                |    | x   | Through accounts of volcanic events, such as Plato's account of the legend of Atlantis, recent scientific analysis of the eruption of Vesuvius<br>and the destruction of Pompeii, or news media coverage of current eruptions, this course studies the role volcanoes have played in society<br>as it traces the historical development of volcanological study using sources such as classical literature, nineteenth century treatises in<br>natural science, modern scientific journals, and the popular media.   |
| ESCI       | 111   | Science and Justice in the Anthropocene                       |    | х   | This course examines how humans are acting as geologic agents transforming the Earth on a global scale.  |
| ESCI       | 151   | Earth, Environment, and Humanity (1)                          | x  |   | This course explores three intertwined questions: 1) How do Earth's different systems (lithosphere, hydrosphere, atmosphere, biosphere) function and interact to create the environment we live in? 2) What are the causes of, and how can we protect ourselves from, geologic hazards such as earthquakes, flooding, and landslides? 3) How are human activities modifying the environment through changes to the composition of the atmosphere, biogeochemical cycles, and soil erosion, among other factors? While serving as an introduction to the Earth Science major, this course emphasizes those aspects of the science that everyone should know to make informed decisions such as where and where not to buy a house, whether to support the construction of an underground nuclear waste repository, and how to live more lightly upon the Earth. |
| ESCI       |   | Special Projects in Earth Science (1/2 or 1)                  |    | х   | Execution and analysis of field, laboratory, or library study. Project to be arranged with individual instructor.  |
| GEOG       |   | Global Geography: People, Places, and Regions (1)             | x  |   | In this course we study the making of the modern world at different scales, ranging from the local to the global—through case studies drawn from the Hudson Valley and around the world—with an emphasis on the ways people, places, and regions relate to socio-economic inequalities. In addition to learning about specific places and regions, we focus on major themes and debates in geography, including mapping and cartographic communication, culture and landscape modification, population and sustainable development, agriculture and urbanization, and political divisions of the globe.  |
| ENGL       |   | Special Topics: Imagining the City                            |    | x   | We consider a diverse array of depictions: the ethnic underground of Chang-rae Lee's Queens; the forlorn Baltimore depicted in the television show The Wire; the midnight wanderings of Teju Cole and Junot Diaz; the global bustle of Jessica Hagedorn's Manila; present-day grafiti artists and urban farmers reclaiming their "right to the city."  |
|            |   |   |    |   | Commentators tell us that we live in "a global age," but dramatic increases in worldwide contacts—economic and social, political and cultural—are not unique to our time. In the late nineteenth century, for example, steamships, telegraphs, railroads, and even movies fostered   |
| HIST       | <ul> <li>132 Globalization in Historical Perspective</li> <li>110 Mexico Today: An Exploration through Material, Expressive, and Culinary Cultures</li> </ul> |   | x  | an increase of interaction across national boundaries and across oceans that was every bit as remarkable as today's<br>Through the mediums of food, expressive, and material cultures this course explores the making of a modern Mexican nation and national<br>identity, and the challenges posed by regionalism, out-migration, globalization, and neoliberal policies. Among questions students address<br>are: What are the impacts of urbanization and migration upon food production and consumption? How has migration affected the division of<br>labor around food, especially as it relates to women's roles? What is the relation between cultural sovereignty and the Mexican state? How<br>are governmental mandates regarding tourism and cultural production, for example, negotiated at the local level? |  |
|            |   |   |    |   | I (the professor) construct subject specific problems that pertain to the student's interests. I included problems of pollution accumulation and   |
| MATH       | 121   | Single Variable Calculus (1)                                  |    | Х   | species persistence.   |

| PHIL          | 106 Philosophical and Contemporary issues (1)                         |   | Х | This course explores different enviornmenatal philosophies.   |
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|               |   |   |   | An examination of major issues in international politics, including national and international security and production and distribution of wealth,  |
| POLI          | 160 Internation Politics (1)  |   | х | along with selected global issues such as human rights, ethnic nationalism and ethnic conflict, migration and refugees, environmental<br>degradation and protection, and the impact of developments in communication and information technologies.  |
| RUSS          | 153 Russian Sci-Fi Cinema   |   | х | Subjects include futuristic fantasies of the 1920s and 1930s, scientific experiments gone astray, post-apocalyptic visions, space travel and journeys of the mind, intergalactic romance and humorous takes on the genre.   |
| SOCI          | 151 Introductory Sociology (1)  |   | x | Topic Two: The flavor of this class will come from the impact of the classical debates on the current discourse of sociology, specifically debates on social problems and interpretations of our everyday life. Our special focus will be the challenges of food production and consumption in the 21st century.<br>Topic Three: The flow of this class will be from the impact of the classical debates on the current discourse of sociology, specifically the debate on social problems and the interpretations of our everyday life. Our special focus will be the challenges of water consumption and distribution in the 21st century.<br>Topic Eight: This course aims to introduce you to a sociological perspective through an exploration of social justice. Sociology has a long tradition of commitment to social justice issues and we will consider a wide variety of them including: issues of power, how social advantages are distributed, the relationship between social location and inequality, and the practice of reducing the gap between them at the local, national, and global levels. |
| SOCI          | 183 Disaster and Disorder: The New Normal (1)                         |   | x | Disasters have been much in the news these days, and the evidence suggest their frequency is increasing. Hurricanes, droughts, floods,<br>earthquakes, and heat waves are among the natural disasters we have gone through - while "unnatural" man-made catastrophes are many -<br>including economic meltdowns, nuclear power plant accidents, and toxic contamination. Disasters force us to confront the very nature of our<br>society, including problems of poverty, race, ethnicity, age, and gender. They test the relative strength of our safety net, the viability of our<br>institutions, the elasticity of our resources, and the capacity of our technologies. In this course, we look at a variety of case studies, such as<br>Hurricane Katrina, 9/11, Chernobyl, Bhopal, The Guif Oil Spill, Fukishima, Three Mile Island, and The Great Recession.   |
| STS/CHEM      | 124 The Culture and Chemistry of Cuisine (1)                          |   | x | This course develops the basic chemistry, biochemistry and microbiology of food preparation; explores the biochemical basis of certain<br>nutritional practices; covers social and political aspects of foods throughout world history. It covers controversies like genetically modified<br>organisms, the production of high-fructose corn syrup, and the historic role of food commodities such as salt, rum, and cod in the world<br>economy.   |
| URBS          | 100 Introduction to Urban Studies                                     |   | x | As an introduction to urban inquiry, this course focuses on the historical evolution of cities, socio-spatial conflicts, and changing cultural meanings of urbanism. We examine the formation of urban hierarchies of power and privilege, along with their attendant contradictions and social movements of contestation, in terms of the rights to the city and the prospects for inclusive, participatory governance.  |
|               | RMEDIATE  |   | ~ | social movements or contestation, in terms of the rights to the city and the prospects for inclusive, participatory governance.   |
| INTER         | RMEDIATE  |   |   |   |
| AFST/ECON     | 273 Development Economics   |   | x | A survey of central issues in the field of Development Economics, this course examines current conditions in less developed countries using<br>both macroeconomic and microeconomic analysis. Macroeconomic topics include theories of growth and development, development<br>strategies (including export-led growth in Asia), and problems of structural transformation and transition. Household decision-making under<br>uncertainty serves as the primary model for analyzing microeconomic topics such as the adoption of new technology in peasant agriculture,<br>migration and urban unemployment, fertility, and the impact of development on the environment.  |
| AFRS          | 258 Environment and Culture in the Carribean                          | х |   | The course traces the history of the relationship between ecology and culture from pre-Columbian civilizations to the economies of tourism.<br>Among the specific topics of discussion are: Arawak and Carib notions of nature and conservation of natural resources; the impact of<br>deforestation and changes in climate; the plantation economy as an ecological revolution; the political implications of the tensions between<br>the economy of the plot and that of the plantation;  |
| ANTH          | 232 Topics in Biological Anthropology                                 |   | х | Bioanthropology conceptualizes cultural behavior as an integral part of our behavior as a species.  |
| AFST/GEOG/INT | 242 Brazil in Crisis: Continuity and Change in Portuguese America (1) |   | x | Brazil, a giant of Latin America and the Global South, has long been known as the "land of the future." Yet frustrating political-economic<br>crises have repeatedly followed periods of rapid growth and social progress. Taking current crises as a point of departure, this course<br>examines Brazil's contemporary evolution in light of the country's historical geography, the distinctive cultural and environmental features of<br>Portuguese America, and the political-economic linkages with the world system. Specific topics for study include: the legacies of colonial<br>Brazil; race relations, Afro-Brazilian culture, and ethnic identities; issues of gender, youth, violence, and poverty; processes of urban-<br>industrial growth; regionalism and national integration; environmental devastation and sustainability; controversies surrounding the<br>occupation of Amazonia; and long-run prospects for democracy and equitable development in Brazil.   |
| ART           | 256 The Arts of China (1)   |   | х | Among the issues we confront are art's relationship to environmental change   |
| ASTR          | 230 Planetary and Space Science (1)                                   |   | х | Disscusses the physics of the greenhouse effect.  |
| BIOL          | 208 Plant Diversity and Evolution (1)                                 |   | х | Includes discussion of biodiversity loss, invasive species, and plant conservation.   |
| BIOL          | 238 Molecular Genetics (1)  |   | х | Includes discussion of GMOs.  |
| BIOL          | 241 Ecology (1)   | x |   | Population growth, species interaction, and community patterns and processes of species or groups of species are discussed. The course<br>emphasizes these interactions within the framework of evolutionary theory. Local habitats and organisms are used as examples of how<br>organisms are distributed in space, how populations grow, why species are adapted to their habitats, how species interact, and how<br>communities change.  |
| BIOL          | 248 Evolutionary Genetics (1)   |   | х | Topics include conservation biology, GMOs, and climate change.  |
| BIOL/ESCI     | 275 Paleontology and the Fossil Record (1)                            |   | x | Includes discussion of how paleontology can be used to understand how species adapt to change and conditions neccessary for the preservation of modern fauna.   |
| BIOL          | 276 PLants and Plant Communities of the Hudson Valley                 |   | x | You will learn to recognize the characteristic plant communities of the Hudson Valley. This course is structured around weekly field trips to<br>local natural areas. Locations are chosen to illustrate the typical plant species and communities of the region, the ecosystem services<br>provided by plants, environmental concerns, and conservation efforts.   |
| ECON          | 260 Political Economy   |   | х | Covered Units on Environmental Regulation, Activism, Environmental NGOs, Corporate Social Responsibility, Ethics  |
| ECON          | 267 Environmental and Natural Resource Economics (1)                  | Х |   | This course views enviornmental issues through economic lenses with the goal of developing a framework for understanding policy actions   |
| ECON          | 273 Development Economics (1)   |   | х | A survey of central issues in the field of development economics. Topics include economic growth, the role of institutions, trade, poverty, inequality, education, child labor, health, the environment, conflict and impact evaluation.  |
| ESCI          | 221 Soils (1)   |   | х | This course examines sustainble soil practices and the effects that soils may have on food production.  |
| ENGL          | 265 Selected Author: Octavia Spencer (1)                              |   | х | Environmental and societal destruction are among the many themes explored   |

| ENST      | 260 Issues in Environmental Studies (1)                               | x |   | Topic for 2016/17b: Ethics, Economics, and the Environment. This course engages economic and philosophical questions related to the<br>environment, focusing on climate change. Topics addressed may include the economics and ethics of cost-benefit analysis, time<br>discounting, fairness, valuation of life, valuation of ecosystems, risk and uncertainty, climate negotiations, public attitudes toward climate<br>change, government policy making, activism, responsibility, behavioral nudges, recycling, tragedy of the commons and game theory, social<br>entrepreneurship, fossil fuels.  |
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| ENST      | 254 Envrionmental Science in the Field (1)                            | х |   | This course describes how nature and humans interact including issues with fire ecology, water, and other topics.  |
| ENST      | 262 Consuming Paradise: A Global Pre-History of Environmentalism      | x |   | Today's fundamental topics of environmental justice and sustainability are not new. Likewise, our contemporary concerns with invasive<br>species, wildlife conservation, and environmental degradation have deep histories. We trace the early development of these topics and<br>concerns through the lens of imperial production and consumption, centered on the Global South, from the beginnings of European<br>colonialism through the twentieth century.  |
| ENST      | 270 Topics in Environmental Studies (1)                               | x |   | This course examines the ways in which Americans have approached the natural world as both a source of revelation and an object of<br>contemplation. Drawing on a wide range of literary, environmental and religious texts, we explore the dynamic relations between concepts of<br>the natural, the human, and the divine in American and Native American experience. We also consider the American landscape tradition in<br>painting and photography, as well as certain forms of folk music. We take field trips to local sites, including parks, farms, museums and<br>monasteries, and host class visits from educators and artists. Techniques of contemplation play a role in the course.   |
| ENST      | 284 Global Climate Change: Harvey, Jose, Irma, Maria and Next? (0.5   | х |   | This class, by focusing on climate science, history, economics, politics, cultural and social studies, examines the impact of the recent devastation of hurricanes, the possible future that they indicate for the US and the Caribbean, and the possibility of developing alternative policies to confront the growing risk and un-insurability of tomorrow.  |
| ENST      | 291 Field Experiences in the Hudson Valley (1/2)                      | х |   | The course emphasizes project-based learning that, rather than beginning with established divisions or disciplines, focuses on problems or<br>questions to which students can bring all the resources of their previous classes in a truly multidisciplinary fashion.  |
| ENST/PHYS | 254 Environmental Science in the Field: Renewable Energy in German    | ( |   | Renewable energy systems are central to reducing climate change, as outlined in contributions to the Paris climate agreement of 2015.<br>Renewable energy systems are also a central theme in environmental science because they integrate environmental resources,<br>environmental quality, technology, and environmental policy. Understanding how these systems function and how they are implemented is of<br>value to students of environmental studies and environmental science. While innovation is widespread in the United States, Germany is the<br>global leader in implementation of renewables, including Energiewende policies in recent years. Germany's policy innovations are widely<br>credited with kick-starting the solar and wind energy industries in China, which have accelerated global renewable installations. |
| PHIL      | 238 Social and Political Philosophy                                   |   | х | Tracing economic and political transformations in the nineteenth century United States, this course explores struggles over industrialization,<br>sectional interests, continental conquest, and nation-building. Key topics include the "white man's democracy" of the Jacksonian era; rise of<br>the Republican Party; the Civil War; Emancipation and national Reconstruction; expansion and conflict in the trans-Mississippi West; the<br>emergence of modern corporate capitalism; and labor and agrarian protest. Particular attention is given to electoral politics and public policy.  |
| GEOG      | 256 Food and Farming  | ( |   | One key strategy for understanding these connections is to examine the biogeographic patterns that shape food production. In this course,<br>we focus first on the physical environmental factors (including water resources, climate patterns, and biodiversity) that characterize<br>agricultural regions of North America. As part of this discussion, we consider ethical, political, and cultural aspects of food production.   |
| GEOG      | 220 Cartography (1)   |   | х | Includes sustainability related projects and examples.   |
| GEOG      | 224 GIS (1)   |   | х | Includes sustainability related projects and examples.   |
| GEOG      | 228 Web Mapping (0.5)   |   | х | Includes sustainability related projects and examples.   |
| GEOG/INTL | 238 Environmental China: Nature, Culture, and Development (1)         | Х |   | This course focuses on environmental degredation in China and the role that they will play as the largest economy on earth.  |
| GEOG      | 258 Sustainable Landscapes: Bridging Place and Environment in Pouc    | х |   | Increasingly we consider landscape aesthetics in the context of sustainability and environmental quality. How do these contrasting sets of<br>priorities meet in the process of landscape design and land use analysis? In this course we begin by examining regional and local histories<br>of landscape design and land use planning and their relationship to concepts of place, territory, and identity. We consider landscape<br>ecological approaches to marrying aesthetic, land use planning, and environmental priorities in landscapes   |
| GEOG/ESCI | 260 Conservation of Natural Resources                                 | x |   | This course provides a geographic perspective on natural resource conservation, using local examples to provide deeper experience with<br>resource debates. We focus particularly on forest resources: biodiversity, forest health, timber resources, forest policy, and the ways people<br>have struggled to make a living in forested ecosystems. We discuss these issues on a global scale (such as tropical timber piracy and forest<br>conversion), and we explore them locally in the Adirondacks of New York.   |
| GEOG/INTS | 276 Economic Geography: Spaces of Global Capitalism (1)               | x |   | This course analyzes the shifting economic landscape of globalization. It covers classic location theories in economic geography, but also the recent trends of industrial reorganization in agriculture, manufacturing and services. Two areas of focus in this course are the globalization of the world economy and regional development under the first and third world contexts. We analyze the emergence of the global capitalist system, the commodification of nature, the transformation of agriculture, the global spread of manufacturing and the rise of flexible production systems, and restructuring of transnational corporations and its regional impacts.  |
| GEOG/INTS | 266 Population, Environment, and Sustainable Development (1)          | х |   | This course engages these debates via an examination of environmental change, power and inequality, and technology and development.<br>Case studies include: water supplies, fishing and agriculture and the production of foodstuffs. Being a geography course, it highlights<br>human-"nature" relations, spatial distribution and difference, and the dynamic connections between places and regions.   |
| GEOG/URBS | 250 Urban Geography: Space, Place, Environment (1)                    | х |   | This course focuses on the making of urban spaces, places, and environments at a variety of geographical scales. We examine<br>entrepreneurial urban branding, sense of place and place making, geographies of race and class, urbanization of nature, environmental and<br>spatial justice, and urban risk and resilience in facing climate change.   |
| GEOG      | 272 Geographies of Mass Violence (1)                                  |   | x | Violence has been an integral part of the making of landscapes, places, and the world political map. This course examines theories of<br>violence, explanations of why it happens where it does, and how mass violence has come to shape local, national, and international<br>geographies. In doing so, it analyzes how violence becomes embedded in geographical space and informs social relations. The course<br>draws upon various case studies, including incidents of mass violence in Rwanda, Cambodia, Vietnam, and the United States.  |
| GEOG      | 288 Political Geography (1)   |   | x | In the class, we look at political-economic processes of globalization, the relationship between the nation-state and markets, and the various ways that politics and spatial scales interact, are mutually constituted, and reproduced. Concepts of 'the global,' locality, nationalism, borders, scale, hegemony, and geopolitics are paired with case studies from history and from the present day.  |
| HIST      | 276 Democracy in America? US Politics and Power, 1828-1896            |   | X | Tracing economic and political transformations in the nineteenth century United States, this course explores struggles over industrialization,<br>sectional interests, continental conquest, and nation-building. Key topics include the "white man's democracy" of the Jacksonian era; rise of<br>the Republican Party; the Civil War, Emancipation and national Reconstruction; expansion and conflict in the trans-Mississippi West; the<br>emergence of modern corporate capitalism; and labor and laprana protest. Particular attention is given to electoral politics and public policy.   |
| HISP      | 229 Postcolonial Latin America: Latin American Literature and the Env | х |   | The course explores the links between history, the environment, and literature in Latin America. It follows the environmental history of the continent from pre-Columbian societies to the present through its representation in salient works of Latin American literature, from Amerindian texts to 21st –century literature and film.   |

| INTL      | 265 Global Political Economy (1)  | x | This course explores competing visions of economic globalization, and uses these distinct frameworks to analyze the meaning, causes, extent, and consequences of globalization, with a particular focus on the relationships among global, national and local economic phenomena. What do we mean by globalization? What are the effects of globalization on growth, inequality, and the environment? How might international economic policy and the particular form(s) of globalization that it promotes help to explain the pace and form of urbanization? Who benefits from globalization, and who might be hurt? Why do economists and others disagree about the answers to these and related questions? This course explores some of the ways that interdisciplinary analysis might enrich our understanding of economic globalization.  |
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| LALS/SOCI | 251 Development and Social Change in Latin America (1)                                | x | This course examines the ways in which Latin American and Caribbean nations have defined and pursued development and struggled for<br>social change in the post World-War II era. We use country studies and development theories (including Modernization, Dependency, World-<br>Systems, Feminist and Post-Structuralist) to analyze the extent to which development has been shaped by the tensions between local,<br>national, and international political and economic interests. Within this structural context we focus on people and their relationships to each<br>other and to a variety of issues including work, land, reproductive rights, basic needs, and revolution. Integrating structural analysis with an<br>analysis of lived practice and meaning making allows us to understand development as a process that shapes, but is also shaped by, local<br>actors.  |
| MED       | 266 Indigenous and Oppositional Media   | x | As audiovisual and digital media technologies proliferate and become more accessible globally, they become important tools for indigenous<br>peoples and activist groups in struggles for recognition and self-determination, for articulating community concerns and for furthering social<br>and political transformations. This course explores the media practices of indigenous peoples and activist groups, and through this<br>exploration achieves a more nuanced and intricate understanding of the relation of the local to the global.  |
| MATH      | 228 Ordinary Differential Equations (1)   | х | This course covers the basic methods to solve problems, that I introduce, on the harvest of growing populations, maximum sustainable yield, etc  |
| PHYS      | 240 Electromagnetism  | х | A study of electromagnetic forces and fields. Topics include electrostatics of conductors and dielectrics, electric currents, magnetic fields, and the classical theories and phenomena that led to Maxwell's formulation of electromagnetism.   |
| PHYS      | 245 Introduction to Statistical Mechanics and Thermodynamics                          | х | Probability distributions, statistical ensembles, thermodynamic laws, statistical calculations of thermodynamic quantities, absolute temperature, heat, entropy, equations of state, kinetic theory of dilute gases, phase equilibrium, quantum statistics of ideal gases.   |
| ASIA/POLI | 255 Subaltern Politics  | x | What does it mean to understand issues of governance and politics from the perspective of non-elite, or subaltern, groups? How do<br>subalterns respond to, participate in, and/or resist the historically powerful forces of modernity, nationalism, religious mobilization, and<br>politico-economic development in postcolonial spaces? What are the theoretical frameworks most appropriate for analyzing politics from the<br>perspective of the subaltern?   |
| POLI      | 252 The Politics of Modern Social Movements   | x | This course examines continuities and transformations in both the study and practice of modern political and social movements. The course explores why movements emerge, how they develop, and what they accomplish. We study several dimensions of collective action, including their organization, leadership, ideadership, |
| POLI      | 268 Politics of Globalization   | х | This course introduces students to some of the more prominent ways of theorizing globalization and explaining the politics underlying the economic, social and cultural effects it generates.  |
| RELI      | 207 Christian Ethics and Modern Society (1)   | х | We devote special attention to how Christian thinkers have dealt with the environment.   |
| SOCI      | 261 "The Nuclear Cage": Environmental Theory and Nuclear Power X                      |   | This course examines the interactions between beings and capitalism focusing on the production and consumption of nuclear power.   |
| STS       | 200 Conceptualizing STS: Theories and Practice (1)                                    | x | In this class we think critically about science and technology as they are practiced and used within society. One of the four core books we<br>are engaging with in this class is Oreskes and Conway's "Merchants of Doubt." The book deals with how some scientists and industries have<br>leveraged scientific doubt to move their particular agendas forward. In particular the book focuses on those that have peddled denial of<br>anthropogenic climate change.  |
| STS       | 268 Current and Emerging Issues in Public Health                                      | Х | The course considers how environmental degradation affects human health.   |
| ART       | 273 Modern Architecture and Beyond  | х | European and American architecture and city building (1920 to the present); examination of the diffusion of modernism and its reinterpretation by corporate America and Soviet Russia. Discussion of subsequent critiques of modernism (postmodernism, deconstruction, new urbanism) and their limitations. Issues in contemporary architecture.   |
| ART       | 276 Architectural Design II   | х | A studio-based course aimed at further developing architectural drawing and design skills. Employing a variety of digital and non-digital techniques students record, analyze and create architectural space and form in a series of design exercises.   |
| URBS      | 200 Urban Theory  | x | This course reviews the development of theories regarding human behavior in cities and the production of space. The course spans the twentieth century, from the industrial city to the themed spaces of contemporary cities. Literature and topics examined to include the German school, urban ecology, debates in planning and architecture, political economy, and the cultural turns in urban studies.  |
| URBS      | 230 Making Cities (1)   | x | This course surveys the production of urban space, from the mid 19th century industrial city to today's post-bubble metropolis. Theories of<br>urban planning and design, landscape architecture, infrastructure and real estate development are discussed in the context of a broad range<br>of social, cultural, political and economic forces that have shaped urban space.   |
| URBS      | 252 Cities of the Global South: Urbanization and Social Change in the Developing Work | x | This course looks at urbanisation and environmental justice in the context of expanding cities.  |
| WMST      | 254 Bio-Politics of Breast Cancer   | x | We examine the basic scientific, clinical and epidemiological data relevant to our current understanding of the risks (including environmental, genetic, hormonal and lifestyle factors), detection, treatment (including both traditional and alternative approaches), and prevention of breast cancer. In trying to understand these data in the context of the culture of the disease, we explore the roles of the pharmaceutical companies, federal and private foundations, survivor and other activist groups, and the media in shaping research, treatment and policy strategies related to breast cancer.  |
| AD        | VANCED  |   |  |
| AMST      | 389 From the Natural History Museum to Ecotourism: The collection of nature           | х | This course investigates how American consumerism extends into ecotourism.   |
| BIOL/ENST | 381 Topics in Ecosystem Ecology - Ecosystem Structure and Function X                  |   | This course explores how ecosystems, both aquatic and terrestrial, are assembled (structured) and how different ecosystems process energy and matter (function). We use our understanding of structure and function to explore how different ecosystems respond to changes in the environment (including climate change, invasive species introductions, loss of biodiversity and pollution).  |

| BIOL         | 389 Sensory Ecology (1)  | x |   | There are many behaviors that are critical to the survival and reproduction of animals including finding food, avoiding predators, attracting mates, and raising offspring. The ability to successfully engage in these behaviors is dependent on the ability of organisms to acquire and respond to information in their environment. In this course we discuss the concept of information, the types of information available in the environment, the diversity of sensory systems animals have evolved to exploit that information, and how sensory information and processing influence behavior.  |
|--------------|--|---|---|--|
| ECON         | 342 Public Finance (1)   |   | x | Topics include the effect taxes have on consumption and employment decisions, the U.S. income tax system, income redistribution, budget deficits, environmental policy, health care, voting, and social security.  |
| ECON         | 382 Economics of Disasters (1)                                       |   | х | Includes discussion of the economics of climate-change induced disasters.  |
| ECON/LALS    | 388 Latin American Economic Development (1)                          |   | x | This course examines why many Latin American countries started with levels of development similar to those of the U.S. and Canada but were not able to keep up. The course begins with discussions of various ways of thinking about and measuring economic development and examines the record of Latin American countries on various measures, including volatile growth rates, high income and wealth inequality, and high crime rates. We then turn to an analysis of the colonial and post-Independence period to examine the roots of the weak institutional development than could explain a low growth trajectory. Next, we examine the post WWII period, exploring the import substitution of 1970s, the debt crises of the 1980s, and the structural adjustment of the 1990s. Finally, we look at events in the past decade, comparing and contrasting the experience of different countries with respect to growth, poverty and inequality. |
| ESCI         | 321 Advanced Topics in Environmental Geology (1)                     |   | х | This course investigates geologic controls on environmental issues and includes a group project related to the topic   |
| ESCI/ENST    | 335 Paleoclimatology: Earth's History of Climate Change              |   | х | Includes discussion of how paleoclimatology can aid our understanding of anthropogenic climate change.   |
| ENGL         | 320 Transatlantic Romanticism: Ecology & the Sublime                 |   | x | This course looks at nineteenth-century British and American romanticism from the dual perspective of the sublime (in mind and nature) and the environment (as it intersects with issues of democracy and pluralism).  |
| FREN         | 332 Early Modern Écologies: A French Environmental Thought           | х |   | Most people consider ecology to be a recent endeavor, just like the Anthropocene – the current geological period during which human activity has been the dominant influence on climate and the environment – is seen mostly as a modern epoch. Some scholars, however, date the start of the Anthropocene to 1600. What happened between the environment and human beings around that date that could justify such a theory? We analyze the extent to which human beings envisioned, cared for, and worried about their environment over the course of three centuries.   |
| ENST         | 301 Senior Seminar (1)   | х |   | In the Senior Seminar, Environmental Studies majors bring their disciplinary concentration and their courses in the program to bear on a problem or set of problems in environmental studies. Intended to be an integration of theory and practice, and serving as a capstone course for the major, the seminar changes its focus from year to year.   |
| GEOG/URBS    | 303 Memory, Planning, and Placemaking (1)                            |   | x | Urban memory and heritage are increasingly important sources of cultural identity, tourism, community development, and political symbolism<br>in our globalized world. Cities recognize heritage sites, historic districts, monuments and landmarks, memorials, nature preserves and other<br>special areas as strategies of placemaking – the social, spatial, and symbolic processes by which distinctive places are planned and<br>authorized by governmental authority. This seminar focuses on the role of place memory in the planning and governance of global cities. We<br>consider both official historic designations and grassroots efforts of "counter-memory" to recognize underappreciated and marginalized<br>groups. By examining the continuities and ruptures of collective memory in cities, this seminar explores how processes of remembrance<br>(and forgetting) affect society, space, politics, community, and identity.      |
| GEOG         | 340 Advanced Urban and Regional Studies (1)                          | x |   | Topic B: Arctic Environmental Change: This course takes a biogeographic and landscape ecological approach to examining how this region<br>contributes to global biodiversity, and why it contributes disproportionately to the regulation and change of the earth's climate system. What<br>characteristics define these environments and make them especially unlerable to positive feedbacks in a changing climate? How night<br>climate changes alter landscape structure and composition, and what are the implications of these changes for the distribution of plants and<br>animals in the region? What are global implications of these changes? We examine current literature and data to explore these questions<br>about ongoing and anticipated environmental change in arctic regions.  |
| GEOG         | 372 Topics in Human Geography (1)                                    | x |   | Topic for 2016/17b: Political Ecology. The relationship between environmental change and the livelihoods of peoples across the planet has<br>long been a central concern of geographers. Political ecology is a particular, albeit multifaceted, approach to such matters. Broadly<br>concerned with the dialectical ties between nature and society, it centers its analysis on social relations, power and difference; geographic<br>unevenness; positionality, and issues of social justice. Course readings explore myriad themes that political ecologists focus on: resource<br>exploitation, conflict and violence, race and gender, governmentality, rural development, and urban and industrial phenomena. In engaging<br>such themes, the course interrogates vari- ous theoretical approaches ranging from actor network theory, to cultural studies, to Marxism and<br>post-coloniality  |
| GEOG         | 304 Senior Seminar: Issues in Geographic Theory and Method (1)       | х |   | A review of the theory, method, and practice of geographical inquiry. The seminar traces the history of geographic thought from early episodes of global exploration to modern scientific transformations. The works and biographies of major contemporary theorists are critically examined in terms of the changing philosophies of geographic research. Both qualitative and quantitative approaches are discussed, along with scientific, humanist, radical, feminist, and other critiques in human geography. Overall, alternative conceptions of geography are related to the evolution of society and the dominant intellectual currents of the day.  |
| HISP         | 387 Latin American Seminar: Art, Film, Literature and Climate Change | х |   | This seminar addressed the toll climate change is taking on Latin America through its expression in art, film and literature. Melting glaciers,<br>coral bleaching, changing rainfall patters, rising sea levels, water and food insecurity are among the topics addressed eloquently through the<br>arts in the region. The course will examine the central role artists and writers have played as key environmental activists through the<br>LatinAmerica, focusing on literary work by Gabriel García Márquez (Colombia) and Homero Aridijis (Mexico), artists like Tomás Sánchez<br>(Cuba), Alejandro Durán (Mexico), and Ruby Rumié (Colombia), and films like Even the Rains (2011), The Motorcycle Diaries (2004), A<br>Place in the World (1992), The Naked Jungle (1954), and The Towrope (2012).  |
|              |  |   |   | This class aims to look at the construction of the future and how present debates, including those of urbanization and movements on the  |
| INTL         | 368 Toxic Futures: From Social Theory To Environmental Theory (1)    | Х |   | environment, relate to that construction.<br>In this class we cover a great deal of applications in the biological and environmental sciences. We cover maximum sustainable yields,<br>pollution build up, and touched on optimal control of environments assuming derived ecoservices. Students did self-selected class projects  |
| MATH         | 381 Mathmatical Biology (1)  |   | х | and one worked on colony collapse disorder and another on damn density impacts on anadromous fish.   |
| SOCI         | 384 Prophetic Praxis of Liberation (1)                               |   | x | In the West, teachings of liberation have transcended their geographic, religious, and cultural origins. Liberation theology, nonviolence,<br>sustainability, yoga and mindfulness emerge out of intersections between American and African indigenous traditions, Eastern and Western<br>religious traditions, and secular visions of liberation. In the face of strident demagogues, desperate fundamentalist takeovers, massive<br>cultural disruption, human displacement, faceless wars, and planetary crisis prophetic traditions give voice to new imaginations of power and<br>justice.  |
| STS/ANTH/ENS | 331 Topics in Archaeological Theory and Method (1)                   |   | х | Topic: Technology, Ecology, and Society: Examines the interactions between human beings and their environment as mediated by technology, focusing on the period from the earliest evidence of toolmaking approximately up to the Industrial Revolution.  |

| STS          | 340 Controversies in Context: Technoscientific Futures (1) |   | x | In this seminar we grapple with our technoscientific future. One of the primary controversies that will shape this future is without doubt, our response to climate change. As such, this topic becomes an important driver in our critical examinations. For example, the midterm paper is a deconstruction and analysis of Robert Pollin's "Greening the Global Economy."  |
|--------------|--|---|---|--|
| URBS         | 303 Advanced Debates in Urban Studies (1)                  |   | x | In this seminar we ask: How did the world become a design problem? What does it mean to approach urban inequality, social injustice,<br>public health failures, and political disenfranchisement in terms of design? How do DIY urban movements such as Tactical and Everyday<br>Urbanism track within the broader trajectory of design-driven social intervention? How might we intervene in the emerging doxa of Design<br>Thinking itself? How might we critically disrupt the expanding field of design strategy toward deepening democracy and fostering the just<br>city?  |
| URBS         | 369 Social Citizenship in an Urban Age                     |   | х | Explores how the development of the welfare state affected Americans of different social, racial, ethnic backgrounds, and gender.  |
| BIOL         | 352 Conservation Biology                                   | x |   | Conservation Biology uses a multidisciplinary approach to study how to best maintain the earth's biodiversity and functioning ecosystems. We examine human impacts on biodiversity and ecosystem function and discuss how to develop practical approaches for mitigating those impacts. We start the semester by assessing the current human footprint on global resources, asking questions about what we are trying to preserve, why we are trying to preserve in and how we can accomplish our goals.   |
| ESCI         | 379 Conservation Paleobiology                              | x |   | Humans currently and pervasively impact many (if not all) of Earth's ecosystems. Two major challenges in modern conservation efforts are<br>our lack of a well-defined baseline for pre-disturbance ecological conditions and an incomplete understanding of the natural range of<br>variability for different systems. This discussion based course explores how paleontological data in both terrestrial and marine environments<br>(e.g., varved lake deposits, rodent middens, marine fossil deposits, and archaeological material) can be used to help set restoration targets<br>and inform conservation practices by filling in these knowledge gaps. |
| GEOG/URBS/EN | 356 Environment and Land Use Planning                      |   | x | This seminar focuses on land-use issues such as open-space planning, urban design, transportation planning, and the social and<br>environmental effects of planning and land use policies. The focus of the course this year is impacts of planning policies (such as<br>transportation, zoning, or growth boundaries) on environmental quality, including open space preservation, farmland conservation, and<br>environmental services   |
| POLI         | 358 State, Market, and Development                         |   | x | The turmoil in the global economy has ignited a fierce debate about the proper role of government across the world. Does this mark the end<br>of the free market ideology? Are governments going to take over more responsibilities in managing the economy and society? To engage<br>these important questions, this course embarks on an intellectual journey to explore similar debates in the past and examine a variety of<br>choices countries have made in different time periods and in different regions of the world   |
| ART          | 375 Architectural Design III                               |   | x | An examination of a number of visual constructs, analyzing the ways architects and urbanists have employed maps, models and projections to construct particular, partial views of the physical world.  |
| WMST         | 385 Women, Culture, and Development                        |   | x | This course examines the ongoing debates within development studies about how integration into the global economy is experienced by<br>women around the world. Drawing on gender studies, cultural and global political economy, we explore the multiple ways in which women<br>struggle to secure wellbeing, challenge injustice, and live meaningful lives.  |

| Department                       |
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| Africana Studies                 |
| American Studies                 |
| Art                              |
| Asian Studies                    |
| Astronomy                        |
| Athropology                      |
| Biology                          |
| Chemistry                        |
| Earth Science                    |
| Economics                        |
| English                          |
| Environmental Studies            |
| French and Francophone Studies   |
| Geography                        |
| Hispanic Studies                 |
| History                          |
| International Studies            |
| Latin@ American Studies          |
| Math                             |
| Media Studies                    |
| Philosophy                       |
| Physics                          |
| Political Science                |
| Russian                          |
| Science, Technology, and Society |
| Sociology                        |
| Urban Studies                    |
| Women Studies                    |