

Approved Courses for Spring Semester 2013

Category I: Social Sciences/Humanities/Arts

Arth 290A Topics: Ecology Medieval Art

This course examines the rapidly shifting period from 1200-1500 in Western European culture when the first urban explosions since the fall of the Roman Empire in the 5th century occurred, altering both the environment and its human subjects; when key inventions and advances such as the plow and the windmill changed the working relationship between nature and humanity; and when texts and images were first dedicated to try to understand the meaning and purpose of nature and the natural, and the relationship of humanity to both. In treating the *ecology* of medieval art, we will study not only art objects produced by and of the natural environment, but also the interaction of living beings to and within that environment produced by those objects. Three primary natural phenomena will guide our work: I list them and some examples of what we will study: **landscape** (garden (of Eden and beyond), forest, Holy Land), **rocks** (magical and real, gems and Stonehenge in the medieval imagination) and **animals** (dragons that soar, pelicans that symbolize Christ, pigs that go on trial). At stake in this course are the conceptualizations of nature and the natural, the role of memory and primitivism in articulating nature in conjunction with culture, and the symbiotic agency that nature and humanity have to each other.

CLST 300A Topics: Airs, Waters, Places

The course title, “Airs Waters Places: Classics and the Environment,” repurposes the title of a Hippocratic treatise on the influence of place upon human health. In line with the Hippocratic investigation into the relationship between environment and human health, this course explores how ancient Greek and Roman thinkers and poets conceive of the environment and its role in shaping human culture and how the environment, in turn, informs the ideas and art of ancient Greek and Roman writers. The course begins with an overview of the environmental history of ancient Greece and Rome, then moves through a series of topics—cosmos (ecology), wilderness, farming, and pastoral—that progresses both from macro to micro perspectives of the environment and through time from ancient Greece, to ancient Rome, to modern receptions of ancient environmental literature. The course will be highly interdisciplinary, integrating consideration of philosophical texts, literary texts, material culture, economics, and a subfield of Classical Studies called Classical Reception, which investigates how, and why, ancient Greek and Roman literature and art has influenced the history of literature, art, and ideas since antiquity.

ECON 290A Topics: Environmental Econ

Is zero water pollution better than a low level of pollution, from society's standpoint? How do economists put a dollar value on national parks and other resources that don't have price tags? If the government wants to reduce air pollution, what policy instruments can it use? Is "sustainable development" an oxymoron? Can you ever have too much recycling? How can market mechanisms improve environmental outcomes, and when do they make sense? These are just a few questions we can explore using a basic toolbox of economic methods and concepts. Environmental and natural resource economics consists primarily of using economics to make, understand, and inform decisions about our natural resources and the environment around us. In this course we will first hone our skills by reviewing and learning economic concepts at the core of environmental and natural resource economics, then apply these concepts to a range of cases, questions and topics. The course emphasizes the role of economics as a key analytical tool, but also incorporates scientific, political, and cultural aspects of environmental problems and policies.

ENG 155B Topics: American Lit of Place

Over time I have come to think of these three qualities--paying intimate attention; a storied relationship to a place rather than a solely sensory awareness of it; and living in some sort of ethical unity with a place--as a fundamental human defense against loneliness. If you're intimate with a place, a place with whose history you're familiar, and you establish an ethical conversation with it, the implication that follows is this: the place knows you're there. It feels you. You will not be forgotten, cut off, abandoned.

--Barry Lopez, "A Literature of
Place"

In this course, we will explore the role of place, or environment, in American literature. Narratives don't develop in a vacuum—they expand across time and space, whether real or imagined. This course takes as its core assumption that these places *matter*, that they perform a specific and unique function in the text. A focus on place doesn't exclude conversations about other important topics, such as race, class, and gender, and, in fact, it can open up new dimensions of these traditional lenses. As Lopez notes, a "specific and particular setting for human experience and endeavor is.... critical to the development of a sense of morality and human identity." As a guiding principle, we will use Barry Lopez's claim that we should "talk about geography as a shaping force, not a subject" as a means for asking questions about how our environment can shape our personal beliefs

and experiences as we investigate the power of place in American fiction, poetry, non-fiction and film. Three broad categories of place will structure the course: urban, rural, and wild. While we will examine texts that generally speak to these locations, the course also asks us to consider the ways in which some texts escape such rigid markers of place. The literature will serve as the foundation of the course, but it will also open up opportunities to explore and develop our own relationships to a specific place.

HIST 300B Topics: Environmental History of North America

Throughout this course, we will examine various ways in which humans have interacted with the natural environment in North America. From initial human contact with the continent to environmental justice movements, this class will give you a survey of the major themes in the field of environmental history. The course will also provide you with some insight into emerging topics of interest among environmental historians. In addition to studying the role of nature in North American history, we will examine the history of conservation, environmentalism, and the complicated relationship between science and society in the twentieth century. Each week we will discuss primary and secondary source material while exploring diverse perceptions of nature, wilderness, and ecology. Students will develop their written and oral skills through participation in class discussions, essays, an oral presentation, and a final research paper.

POLS 290B Topics: Intro to Global Environmental Policy

This course introduces students to the international politics of the global environment. It advances a social science framework for analyzing global environmental politics and then applies that framework to examine a number of specific environmental issues. Analytic topics include: (1) making and defending causal claims in political science, (2) defining global environmental problems, (3) sources of global environmental problems, (4) the international policy process, (5) the design and effectiveness of global institutions, and (6) ongoing challenges in global environmental governance. The course has no formal prerequisites, though previous coursework in international politics, international organization/law, and environmental politics may be helpful. Preference will be given to third- and fourth-year political science majors.

POLS 390B Topics: Political Economy of the Global Environment

This seminar focuses on the ways in which international economic processes shape global

environmental governance.

The first half of the course is a survey of global political economy, with a specific focus on the environment. Topics will include (1) the environmental consequences of current patterns of consumption, (2) the effect of international trade on global environmental issues, (3) the influence of foreign direct investment on environmental regulation (is there a "race to the bottom" in environmental regulation?), (4) the compatibility of environmental protection and economic growth, (5) whether current understandings of sustainable development are tenable, and (6) the effect of development finance on the environment.

We then examine a number of specific topics in greater detail, including (1) the political economy of the international climate regime, (2) the effectiveness of corporate self-governance (e.g., corporate social responsibility), (3) the use of market mechanisms to promote environmentally-beneficial behavior (e.g., eco-labelling), and (4) the conditions under which corporate interests can or cannot be harnessed to promote environmentally-beneficial outcomes.

This course has no formal prerequisites, though previous coursework in international politics, international trade, international development, and environmental politics may be helpful. Preference will be given to third- and fourth-year political science majors.

Category II: Sciences

BIO 145 Ecology and Evolution

This course examines the principles and practice of evolutionary biology, Mendelian and population genetics, and ecology at the individual, population, community, and ecosystem levels.

GEOS110 Earth and the Environment

Includes laboratory. An introduction to the materials that make up the earth and the interplay between constructive and destructive processes that shape the earth, including plate tectonics. Laboratories include mineral and rock identification, field trips, and topographic map interpretation.

GEOS 125 Intro/Environmental Science

An introduction to the study of environmental science. Topics include matter, energy, ecosystems, human populations, natural resources, and the impact of human activity on the natural environment. Special attention is given to current environmental problems including air and water pollution, acid rain, stratospheric ozone depletion, climate change, deforestation, and species extinctions.

GEOS EXPA Weather, Climate, and Change

This course is designed to provide an overview of the behavior of the Earth's atmosphere. The course is divided into three areas; weather, climate and climate change. Weather, the natural variability of atmospheric conditions locally, regionally and globally over periods of time ranging from hours, days, years, and even decades provides the foundational data necessary to determine longer term atmospheric conditions that scientists use to define climate. To provide a foundation for the study of climate, students will need to understand just what elements define weather (e.g., atmospheric pressure, temperature, and moisture) and what types of weather systems develop from these elements (e.g., extratropical cyclones, fronts, storms, etc.). In this course, students will carefully investigate what phenomena constitute weather and what phenomena constitute climate. To understand climate, students will examine how long-term atmospheric characteristics are measured and how statistics are used to understand atmospheric conditions. In addition, students will look at whether biota (including humans) can change short-term and long-term atmospheric phenomena. Ultimately, the class will learn how has climate changed over both short and long periods of the Earth's history, and, what evidence exists for these periods of climatic change. Currently, the climate of Earth is undergoing rapid change. To understand the origin and effects of this rapid climatic change, students will need to investigate and understand how the scientific community measures the elements and characteristics of climate (past and present), what evidence exists that the climate is rapidly changing, and whether this period of climate change is natural and/or human-induced. Finally, students will examine the societal response to rapid climate change, what the consequences of rapid climate change are, and what the models predict will occur in the future (short and long term).