

Approved Courses for Fall Semester 2012

Category I: Social Sciences/Humanities/Arts

HIST 290 Topics: Latin American Environmental History

The diversity of people, geography, and ecology in Latin America combine to make it one of the most diverse environments on the planet. Complementing the diversity is a rich history of human interactions with the environment. Knowing this history informs us about indigenous economic and cultural practices that offer alternative ways of thinking about how people relate to their environment. The history of conquest and colonization illustrate the dramatic, if not catastrophic, impact of European environmental practices, which helps us to further understand how modernity attempted to control nature, as well as the consequences of this effort. Learning the history also shows the troubled relationship between capitalism and the planet's resources, and how the troubles were important in shaping Latin America's social, political, economic, and cultural landscapes. The history is important for our thinking about the contemporary and future challenges we face, especially in the areas of climate change, resource extraction, food sovereignty, and disease, and energy. This course is discussion based, and will emphasize short analytical writing (take home essays) for evaluation. Students can expect between 50-75 pages of reading per class session.

PHIL 232 Environmental Ethics

An examination of the extent of, limits to, and grounds for individual and collective moral obligations with respect to the 'more-than-human world.' Discusses anthropocentric, zoocentric, biocentric and ecocentric value theories; ecofeminist, deep ecology, and environmental justice perspectives; and/or such topics as biodiversity, climate change, sustainable agriculture, and/or ethics of consumption. This course may include a community engagement/service learning project and required field trips.

POLS 290: Topics: Introduction to Environmental Policy

This course provides a brief introduction to the public policy process, as well as an overview of environmental policymaking. Our focus will be on the history and evolution of environmental policy in the United States, though at the end of the semester we will turn our attention to emerging problems of international and global environmental policy.

There are no prerequisites for enrolling in this course. This course does not take the place of U.S. Public Policy or Global Environmental Politics, both of which I will offer separately in the future. Our discussion of the policy process, American politics, and international politics will serve mainly to guide group discussion of an extensive range of case studies in environmental policy. Although there will be background information provided in readings and in lectures, these case discussions will be the primary pedagogical tool that we will use in this course.

Cases range in scope from community activism in response to local environmental conditions, and

threats, state-level environmental policy, federal environmental policy, and international policy coordination concerning transboundary resources and global environmental issues (e.g., climate).

Category II: Sciences

BIO 342 Ecology

Includes laboratory. The study of interrelationships between organisms and their environment, emphasizing fundamental concepts in ecology, natural history of local habitats and organisms, the process of ecological research, and current issues of interest in ecology. Prerequisites: BIO 135 and 145, or permission of instructor.

BIO 345 Conservation Biology

Includes laboratory. This course will address the impacts of humans on Earth's biodiversity, and strategies taken to conserve and protect global natural resources. Topics covered may include global patterns of biodiversity, ecological community structure, habitat exploitation and restoration by humans, genetics of small populations, design of nature reserves, problems associated with invasive species. Prerequisites: BIO 135 and BIO 145, or permission of instructor.

GEOS 110 Earth and the Environment

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 Introduction to 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 230 Environmental Geology

An intermediate examination of the processes that influence the physical and chemical nature of the Earth's surface with special attention given to the influence of human actions on the lithosphere, hydrosphere, and atmosphere. Students learn how the risks from natural hazards are assessed and minimized; understand the consequences of natural resource extraction; and consider the sources, transportation, fate, and remediation of waste and pollution in the environment. Real-world examples

emphasize the importance of these topics for solving environmental problems. *Prerequisite: GEOS 110 or permission of instructor.*

UNIV 170 Environmental Science Seminar

In this discussion-based course, students learn the interdisciplinary science behind environmental problems by reading current and classic papers from a variety of scientific journals. The specific topic or topics are chosen by the class during the first session and then are explored over the course of the semester. Scientific writing and speaking skills are developed throughout the semester.

The following are additional recommended courses that would be helpful for a graduate going on to an environmental career, but do not count toward the seven course requirement for the program.

-One or more courses in chemistry (e.g. CHEM 120, CHEM 130, CHEM 170)

-A course on statistics (BIO 275, ECON 350, MATH 141, PSY 214, SOC 401)