



WWC Sustainability Course Inventory 2014-15

SUSTAINABILITY COURSES

ANT*338*F00

Archaeology & Environment

This course explores the relationship or interaction between people and their environments through the disciplines of archaeology and anthropology. Among the topics that may be explored are "Garbology," Pleistocene extinction, human domestication of plants and animals, climate and culture, and Native Americans and their environments. Satisfies requirement for Cultural Archaeology Concentration.

BA.*294*F00

ST: Simple Living

Simplicity is much more than consumer habits and material minimalism. It encompasses how we order our life inwardly as well as what we do outwardly. In this class, we will explore the relationship between needs, wants, and social norms, and we will look at perceptions relating to consumption and quality of life. We will use inquiry as a way to examine our thought patterns and consider the influence that our thinking has on everyday decisions. For today's students, this is an opportunity to consider their personal belief structure and the implications that this has on their personal

BA.*415*F00

Sustainable Business Planning

This course deals with the many aspects involved in the business planning process. Students are divided into small groups organized around a common interest in a prospective sustainable venture. The bulk of their time is spent researching and developing a Business Plan. Teams generate ideas, research the market, develop financial statements, and perform impact analyses. Businesses are planned with an eye towards sustainability. Incorporating economic, ecological, and societal issues, groups submit their proposal to a committee of students, staff, administration, and outside professionals. The committee decides on the viability of the businesses and awards funding with which the groups can begin BA 416 Sustainable Business Start-up.

BA.*416*S00

Sustainable Business Start-Up

In this course, groups of students centered on a common interest in a sustainable venture bring their product or service to market. These groups have already had their proposed business plans (previously submitted in BA 415 Sustainable Business Planning) judged to be feasible by a committee of students, staff, administrators, and outside professionals. They will begin the steps of the start-up process which include: site selection, marketing, distribution, channel logistics, supply purchasing, asset allocation, and sales. By the end of the course, a successful team has planned, started, and begun operation of a sustainable small business.

ECO*291*F00

ST: Introduction to Sustainability and Economics

What is sustainability? Are you interested to understand the history of sustainability? How does economics contribute to our understanding of sustainability and our ability to achieve it? This course will help you answer these questions and also teach you the basic economic concepts that support our understanding of how to move our society toward sustainability. You will learn about concepts of efficiency, economic growth, market systems, globalization, environmental limits, and social justice. You will learn how we can measure economic, environmental and social performance exploring the data available for the U.S. and other countries. We will study how sustainability differs across cultures, social and economic systems.

ECO*380*S00

Environ/Ecolog Economics

In this course, students explore the relationship between human social and economic systems and the environment. We analyze how markets fail, causing many environmental problems, how markets can be harnessed, and how various government strategies can lead to better management of environmental resources and ecosystem services. Topics such as resource valuation, cost-benefit analysis, and multi-criteria analysis are discussed as well as alternative government policy approaches. Students complete a major class project on an issue selected in coordination with the instructor.

ECO*460*F00

Sustainability I

This course focuses on providing students with an understanding of sustainability and how to design decision tools in order to make sustainable choices. Multi-Criteria Decision Analysis, the method used for complex choices in decision theory, is the primary approach taught in this class. Topics include identification of goals and values for sustainable choices, clarification of these goals and values in the form of both quantitative and qualitative indicators, use of decision trees for resource or options assessment, application of the impact matrix, and alternative decision rules for making choices. Students are also introduced to participatory decision tools and methods for facilitating sustainable choices.

ENS*115*300

Perspectv Environ.Studies

In this introductory course, students examine the interrelated scientific, economic, social, ethical, and political dimensions of environmental issues. Students visit field sites demonstrating the variety and complexity of the problems and solutions in environmental and sustainability studies, and hear from a range of faculty and staff associated with the Environmental Studies program. This course is required for the Environmental Studies major.

ENS*116*100

Intro.to Environ.Studies

In this course, students examine the interrelated scientific, economic, social, and political aspects of environmental issues. The target audience is anyone interested in the environment and students majoring or minoring in Environmental Studies who are required to take this course.

ENS*249*F00

Intro.Sustainable Agric

This course explores the sustainability of contemporary farming systems through a study of the history of food production in the United States as it relates to the development of ecological agriculture. Students learn about the rise of industrial and ecological forms of U.S. agriculture in the 20th century and consider the ethical,

economic, ecological, and social dimensions of agricultural sustainability. The principles and practices of four distinctive methods of ecological agriculture - certified organic, biodynamic, biointensive, and permaculture - are investigated as examples of systems of food production that may be sustainable.

ENS*341*S00

Agroecology

This course presents an introduction to the science of agroecology with a focus on the principles and practices of ecological crop and livestock production. Students apply basic ecological concepts to assess the structure and function of soil, plant, animal, and pest processes in agricultural systems and practice the use of adaptive management strategies and sustainable decision-making to enhance agroecosystem resilience.

ENS*440*S00

Sustainable Farm Management

This course introduces the principles and practices of sustainable farm management using a whole farm planning perspective and adaptive management strategies. Students develop an understanding of sustainable farm management at the individual farm scale by completing a five-year start-up plan for a new farm business using whole farm planning principles: goal setting, resource assessment, enterprise analysis, goal-directed crop and livestock production, and marketing and monitoring system performance with sustainability indicators.

ENS*472*100

Wildlife Sampling:Field Methods

These rotating courses address timely and current issues in conservation biology. Different subjects are taught in different terms. Students explore the topic within the field of conservation biology and learn how the principles of conservation biology are applied to the topic and used in conservation on the ground. These courses combine the theoretical knowledge students gain in conservation and wildlife biology and applied work in conservation. May be repeated for credit as long as the topic has changed.

ENS*472*300

Topics:ClimateChg/Biodiversity

These rotating courses address timely and current issues in conservation biology. Different subjects are taught in different terms. Students explore the topic within the field of conservation biology and learn how the principles of conservation biology are applied to the topic and used in conservation on the ground. These courses combine the theoretical knowledge students gain in conservation and wildlife biology and applied work in conservation.

ENS*473*400

Topics:Animal Behavior/CnsvBio

These rotating courses address timely and current issues in conservation biology. Different subjects are taught in different terms. Students explore the topic within the field of conservation biology and learn how the principles of conservation biology are applied to the topic and used in conservation on the ground. These courses combine the theoretical knowledge students gain in conservation and wildlife biology and applied work in conservation.

FYS*120*F10

Water:Science &Politics

Water is the most common substance on earth, and the most important compound for all forms of life. It is what most distinguishes our planet from others. If one looks at the history of human settlement there is one common factor about where we build communities – our proximity to water. Whether for transportation,

drinking, irrigation, or power, water has been our most critical resource, and will always be. While we can find replacements for resources like oil and coal, we will always require clean, fresh water. In this course, we will look at water from an interdisciplinary perspective. In addition to scientific concepts such as hydrology, we will also try to understand the politics of water. Indeed, across the globe the control of water leads to political power. Topics to be covered include the unique properties of water; historical uses of water by humans; the hydrology of surface and groundwater; basic water chemistry; water pollution and treatment; water law; water for hydropower; water for recreation; and water shortages.

FYS*120*F11

Future Earth

Course Description Unavailable

GBL*117*F00

Intro.to Global Studies

This course provides an introduction to the broad scope of the interdisciplinary field of global studies. Students explore the unequal spatial distribution of humans, resources, wealth, and other phenomena across the globe and examine the root causes and local effects of these geographic patterns. By examining the many ways in which our world is portrayed - in text, on film, and especially with maps - students analyze the economic, cultural and political impacts of globalization on human-environment interactions.

GBL*190*F00

ST:Globalizing Latin America

This course provides an introduction to the geographical and cultural diversity of Latin America, emphasizing the region's ongoing transformation throughout the more than 500 years of globalization. Students will examine the broad geographical context of - and complex linkages between - such issues as migration, urbanization, environmental degradation, economic development, and political shifts that continue to shape this dynamic region of the world.

GBL*305*F00

Thinking Globally

Just how does one "think globally?" Globalization is arguably the key organizing construct of our time, yet understanding just what it is and what it means for people and places around the globe is a difficult undertaking. This course, designed for upper-level Global Studies majors, focuses on the concepts, theories, thinkers, and debates in contemporary globalization studies. The course provides a solid grounding in globalization thought for students preparing to undertake their own research in the Global Studies Capstone Seminar.

PHI*252*S00

Environmental Ethics

The central focus of this course is to develop an understanding of the proper relationship between humans and the non-human entities of the natural world. In so doing, the course explores the major Western approaches to environmental ethics and the central issues of the ethical status of plants and animals, the holism/individualism debate and the meaning of sustainability. A significant portion of this course is devoted to the Land Ethic, Deep Ecology, Ecofeminism and some Eastern approaches as well. This course fulfills the "Diverse Perspectives Requirement" within the Philosophy Program. A substantial part of its content includes diverse perspectives in terms of gender, race, ethnicity, and/or sexual orientation. At least one writing assignment includes one or more of these perspectives

PSC*245*S00

Environ.Politics:Global Persp

This course surveys the emerging global environmental legal structures, norms, and standards. It examines the role of international non-governmental organizations (NGOs) in creating international regimes, and monitoring and tracking compliance of different states. It will also look into the dynamics of interactions between IGOs and NGOs in creating new global discourse communities in an era of increased environmental awareness.

REL*213*F00

Religion & Environmntl Justice

This course explores the ethical responsibilities of people who work to ameliorate environmental degradation as well as end oppression of human beings. Students explore the religious tenets of environmental justice movements internationally and in the United States. Course topics focus on Theravada Buddhism in Thailand, indigenous East African beliefs in Kenya, Catholic social teachings in the United States farmworkers' movement, and black liberation theology in the United States movement against toxic waste dumping in politically marginalized communities. Finally, students gain understanding of the cultural symbols and negotiated relationships that are critical for successfully countering environmental degradation in complicated political contexts.

COURSES WITH SUSTAINABILITY CONTENT

ANT*139*F00

Native Americans of Southeast

This course is a cultural history that explores the Native American cultures of the southeastern United States through archaeology, ethnography, and ethnohistory. The class is designed as a survey course and includes major discussions of Native American prehistory (archaeology), the Contact period, ethnography and ethnohistory of the Colonial period, the Removal Era, and southeastern Native Americans in the 20th century.

ANT*145*S00

Archaeology of Wld Cultures

This course is a survey of world prehistory from the time of our earliest known human ancestors five million years ago to the rise of state-level societies, as exemplified by the civilizations of ancient Mesopotamia and Mesoamerica. Students explore cultural processes including the migration of our species throughout the world as hunter-gatherers, the beginning of settled life, and the evolution of cultural complexity with tribal and chiefly societies.

ANT*200*S00

Intro.Cultural Anthropology

This course takes a cultural approach to anthropology in order to provide an appreciation for the diversity of the human experience. This survey course addresses topics such as the nature of culture, language and communication, ecology and subsistence, economic systems, kinship and family, gender, race, and other forms of identity, religion and magic, colonialism and globalization, culture and politics, and applied anthropology. The course will also closely examine a small number of case studies from distant lands and from the United States. Students will learn basic ethnographic methods and write an ethnographic paper based on original research.

ANT*261*S00

Cultures of Sub-Saharan Africa

This is a thematic-based survey course covering the myriad cultures of sub-Saharan Africa. Students will become familiar with the geographic, historical, political, and social landscapes of the region as well as some

of the important theories and debates that emerge from African studies. The first part of the course focuses on major factors in the history of sub-Saharan Africa, including colonialism and the Trans-Atlantic slave trade. The course then examines the effects of these and other globalizing and modernizing processes on the cultures of contemporary Africa and challenges students to recognize and deconstruct stereotypes and misrepresentations of African cultures.

ART*280*S00

Materiality/Meaning in Fibers

Course Description Unavailable

ART*378*SWW

Ireland:Hand Held

Course Description Unavailable

BIO*202*600

Ecology

Ecology is the study of interactions of organisms with one another and with the physical world. This course covers the ways in which individual species, populations, communities, ecosystems and landscapes are characterized and analyzed, both quantitatively and qualitatively. Some of the various factors that affect the number and distribution of organisms are explored through a combination of lecture and regular laboratory exercise.

BIO*235*F00

Vertebrate Zoology

This course provides a taxonomic and evolutionary survey of all the vertebrate groups (fish, amphibians, reptiles, birds, and mammals) on a local and worldwide basis. Special consideration is given to salamanders and the conservation status of each vertebrate group. Students learn laboratory techniques and skills in field collection and identification through weekly labs.

BIO*349*F00

Herpetology

In this course, students become familiar with the study and diversity of amphibians and reptiles. The course covers the current understanding of amphibian and reptile taxonomy, taxonomic relationship, and placement within the vertebrate tree of life. During this time, students also become familiar with the unique characteristics of each group. Through the course, students learn important herpetology techniques, such as local species identification and proper survey and capture methods.

BIO*392*300

ST:Marine Biology Seminar

Course Description Unavailable

ENS*126*200

Intro.to Environmental Educ

Environmental education--is it science, civics, or propaganda? Through discussions, a workshop, readings and student presentations, students in this course explore the history, philosophies, approaches, and prospects for environmental education. The emphasis is on surveying the field of environmental education, rather than upon specific environmental issues or concepts.

ENS*201*F00

Applied Ecology

Ecology is the study of the interactions of organisms with one another and with the physical world. It represents one of the most synoptic disciplines since it integrates biological, chemical, physical, and mathematical concepts. In this course, the characteristics of individual species, populations, communities, and ecosystems are examined and those principles applied to real world environmental problems and natural resource management decisions. Emphasis is on field work, focusing on ecological sampling methods and organism identification. Examples of applied topics that are covered include composting, wetland delineation, water pollution assessment, soil analysis, fish and wildlife management, bioremediation, and environmental impact assessment.

ENS*204*S00

Intro.Envir.Engineering

This course provides an overview of both traditional and emerging engineering approaches to address environmental issues. Topics covered include solid and hazardous waste management; soil and groundwater remediation techniques including phytoremediation and mycoremediation; drinking water systems; sanitary and industrial wastewater treatment systems; and storm water management. The regulatory framework that governs environmental engineering approaches is integrated within specific topics. Lectures and field trips to local facilities and projects provide the contextual foundation. Activities include field and laboratory measurement of environmental parameters typically utilized in environmental engineering projects. Case studies are analyzed. Students taking this course must be prepared to be active participants rather than innocent bystanders.

ENS*228*F00

Geology of National Parks

Topics in this course focus on the geologic context of North America through study of representative national parks. Field trips visit several local parks.

ENS*230*F00

Geology

This course provides an overview of earth materials and processes such as planet formation, plate tectonics, landscape development, and rock formation. Exercises include map studies and rock and mineral classification. Although primary emphasis is placed on physical geology and the interpretation of geologic processes, an introduction to historical geology is also provided. A three hour lab period is included every other week.

ENS*233*F00

Forest Biology

This course focuses on the patterns and processes that make forested ecosystems unique biological communities. Topics for examination include forest structure, composition and dynamics, and biotic/biotic interactions at the species, stand, and landscape levels. The emphasis is on temperate forest systems of North America, especially those of the Southern Appalachians. Students spend considerable time in the field both during class periods and on their own learning woody plant identification and understanding the ecological context in which different species grow.

ENS*245*F00

Environ.Politics/Pol.Theory

This course investigates the various perspectives through which contemporary people view the relationship between human and non-human worlds. These alternative approaches define the parameters within which "acceptable" policy alternatives are debated and adopted. Environmental perspectives and policy options

ranging from cornucopian free-market growth to deep ecology and ecofeminism are investigated and critically analyzed. The goal is to help students become informed, rational, ethical judges of the competing claims of the eight major perspectives that join environmental politics and political theory.

ENS*303*S00

Hydrology

This course is a study of hydrologic conditions and principles relevant to environmental science. There is a strong field focus.

ENS*310*S00

Conservation & Wildlife Biology

Conservation biology is the applied science of maintaining the earth's biological diversity. The main focus of this course is biological, but it is cross-disciplinary and reaches into philosophy, economics, and sociology. Game, non-game, endangered species, and principles of wildlife management are included.

ENS*334*S00

Silviculture

Students examine the many silvicultural systems used in the United States with emphasis on the eastern U.S. forests. Each system is compared and analyzed with regard to silvics of the most important species, economics, management objectives, and environmental protection. A three-hour lab period is included every other week.

ENS*377*SWW

Nat.Hist/Ctr:Alaska

Students will learn about Alaska's natural and cultural history as it relates to environmental issues, focusing on the region's major natural resources and geological features and meeting with Native American communities, commercial fishermen and others in the region who rely on these resources for employment, cultural heritage or recreation. Participants will also gain an understanding of Alaska's unique geology and participate in gathering traditional foods of the region. Good physical condition, primitive camping experience, and flexible diet are required. Students must also be comfortable around water, boats and cool, wet weather.

ENS*421*S00

Environmental Policy

This course is a broad survey of the public policy process focusing on environmental policy as it is formulated at the federal level of government in the United States. The course is divided into three parts: an analysis of the policy process using the policy cycle model, an investigation of two case studies of important environmental issues (which vary from year to year), and individual student research on a particular policy concern culminating in the writing of a major research paper.

ENS*426*S00

Meth.&Mat.in Environ.Educ

The goal of this course is to give students experience, competence, and confidence as environmental educators. Students examine environmental education curriculum materials, try out various teaching methods, and discuss how the objectives of environmental education can be translated into programs and activities. Several teaching sessions in local schools and other educational settings are arranged.

ENS*479*S00

Adv.Conserv.Biol.Seminar

This course explores the primary literature in the conservation biology field. Students study important foundational articles as well as cutting edge research in the field of conservation biology. Topics covered may include animal behavior and conservation, conservation genetics, population viability analysis, management plans, biodiversity hotspots, fragmentation, and impacts of climate change. Students develop a presentation using primary literature to communicate current conservation research with a high school or middle school audience.

FYS*120*F08

Found.Adventure Educ

What is "adventure" and what roles does it play in a person's life? How do organizations use adventure, challenge, risk-taking, and experiential activities to empower and help people grow and learn? In this seminar we will explore pertinent issues in the field of adventure education such as philosophical and historical roots, risk-taking, ethics as they relate to leadership and the environment, and future trends in the field. The course will involve readings, discussions, guest speakers, written reflections, research assignments, service, experiential group activities, and adventure days. One of our adventure days includes an on campus overnight camping excursion (Andy Fest).

HIS*205*100

Environmental History of US

This course is a history of the American land, from before settlement by the first immigrants (from Asia) to the present. Emphasis is on the changes in vegetation and landscape that have resulted from human use and management. Agriculture, logging of the old-growth forest, disposal of the public domain, conservation movements, national forests and parks, forestry and natural resource professions, and the environmental movement are all covered.

HIS*251*F00

Appalachian History

This course concentrates on central and southern Appalachia from the point of earliest contact between Native Americans and Europeans to the turn of the twenty-first century, providing a cohesive narrative overview of Appalachian history. Students read primary documents that illustrate various topics and incidents in Appalachian history, while course lectures provide an overview of the region's historical development from the age of European colonialism to the present. Focused on the theme of people's relationships to the land, this course primarily explores the social and cultural implications of Appalachia's economic development.

HIS*377*SWW

Change &Continuity in China

China is both an ancient culture and one of the most important players on the modern world stage. This course explores change and continuity in modern China, with a particular emphasis on environmental issues. Focusing on both urban and rural areas, students will be exposed to China's broad, complex history through Mao's revolution and post-Mao developments, including recent environmental practices and concerns. Travel plans include several days in Beijing and homestays and service.

ODL*210*300

Backcountry Skills/Technique

The major goal of this course is to provide students the opportunity to learn and develop outdoor skills that assist them in living and traveling in a backcountry environment. This is not a survival skills/minimalist course. Students learn about and use specialized equipment associated with back country travel: clothing, backpacks, tents, stoves, and sleeping systems to develop and improve their outdoor living skills. Leave No Trace camping and travel techniques are employed. Students are asked to demonstrate a strong commitment to teach

backcountry skills to others in a group setting. Students are involved with the planning of a backcountry trip, including route selections, menu and food planning, and logistics. There are two required field trips that take place on two separate weekends.

ODL*226*100

Instr.Dvlpmnt for OutdrLdrshp

This is a field-based course with an extensive off-campus component. Students examine teaching, leadership, and safety issues pertaining to outdoor adventure education. The course is designed to provide students with the opportunity to learn and develop knowledge and skills that will assist them in teaching, living, and traveling in a backcountry environment. The course has a strong commitment to the Outward Bound philosophy and methodology. It emphasizes group process, effective communication, wilderness medicine, risk management, and basic technical skill development including wilderness skills, no trace camping, rock climbing, orienteering, canoeing, and trip planning. Students may not be enrolled in any other courses during the term that this course is offered because of the off campus component.

ODL*310*200

Leadership for Adv.Educ

This course is designed to examine the principles and practice of leadership in adventure education programs. Course time is spent on the examination of theories, practices, and problems of leadership in a backcountry environment. The course provides direct, firsthand experiences where students are expected to plan and be in a leadership position.

ODL*377*SWW

Armenia:Environ/Cultr/Adv.

Course Objectives:

1. To become familiar with some of the literature and writers of the region or of Armenian descent.
2. To acquire knowledge and experience in adventure travel.
3. To increase students' cross cultural knowledge and sensitivity.
4. To investigate the history, culture, and geography of present-day Armenia.
5. To deepen outdoor and environmental leadership skills in the context of group adventure travel in wilderness, rural and urban settings.

PSC*330*F00

Politics of Devel.States

This issue-oriented course examines important questions in the politics of developing states. Students look at the legacies of colonialism, neocolonialism, and nationalism in the developing state, as well as the impact of modernization, the WTO, IMF, World Bank, and other international institutions on the development of the third world countries. Population growth and its environmental impact will also be examined through different case studies.

SOC*100*S00

Intro.to Sociology

This course provides an introduction to the basic principles and procedures of sociology. Topics range from the micro-level analysis of everyday life (why don't we bump into each other when we cross the street?) to the macro-level analysis of inequality (will the poor always be with us?). Major topics include culture, socialization, deviance, and stratification both from local and global contexts.

SOC*291*F00

ST: Sociology of Health & Med.

Sociology of Health and Medicine explores the social production and distribution of health and illness. The course focuses on social factors in the U.S. that influence health and wellness, illness, and mortality, especially the meaning and production of illness, structure of healthcare systems, and implications of social inequalities.