

Summary of 2012-2013 Sustainability Courses Taught

SUSTAINABILITY COURSES

("UG" = Undergraduate level, "G" = Graduate level)

Course I.D	Title	Department	Level	Description
BIOL 105	Environmental Biology	Biology	UG	A non-biology majors course which provides an introduction to ecological principles and concepts with an examination of the biological basis of contemporary environmental problems.
BIOL 401	Ecology	Biology	UG	Emphasis is placed on the structure, composition, and dynamics of ecosystems. Lab work primarily consists of field studies.
ECON 315	Economics of Sustainable Development	School of Business	UG	Economic causes and effects of pollution are discussed along with the issue of sustainable economic development. Government policy with respect to the environment and renewable energy will be surveyed. The framework connection between sustainability and the core functions of business for profit will be presented.
EGEO 100	Environmental Geology	Geography, Geology and the Environment Dept.	UG	The course examines problems of mineral, energy and water resources, waste disposal, soils and health, geologic hazards, and land use. Resources are the common property of all people. Sustainable use of resources is poised by equitable distribution of cost and benefits among diverse peoples.
EGEO 131	Oceanography	Geography, Geology and the Environment Dept.	UG	Introduction to the physical, chemical and biological aspects of the marine environment.
EGEO 340	Air Pollution Meteorology	Geography, Geology and the Environment Dept.	UG	A study of meteorological parameters of air pollution concentration, dispersion, and removal. Includes air pollution forecasting and modeling.
ENGL 410	Literature of the Environment	English	UG	Encourage those interested in the rhetoric of science, nature writing, and environmentalism to pose informed questions regarding the language, rhetoric, images, and ideas found in significant poetry and prose, fiction and nonfiction, that concern the environment.
ENGL 480	Literature Seminar	English	UG	This seminar focuses on a major author or pair of authors, a single literary genre, or a specific literary period. Focus on Wendell Berry and Margaret Atwood's Environmental Writing
ENVS 440	Science, Technology & the Environment	Geography, Geology and the Environment Dept.	UG	A scientific study of interactions of global systems in the geosphere and biosphere. Selected global problems, such as waste production and disposal, energy use, atmospheric warming, ozone depletion, and acid deposition are analyzed along with possible alternatives.
GES 135	Introduction to Environmental Problems	Geography, Geology and the Environment Dept.	UG	An introduction to some of the more crucial environmental problems and alternative solutions that are available.
GES 215	Rural and Urban Planning	Geography, Geology and the Environment Dept.	UG	An introduction to social and physical planning for rural areas, towns and cities. Interwoven throughout this course material is the central theme of how sensible and far-sighted planning can help our society achieve a sustainable future, and provide a better quality of life for its citizens.
GES 235	Conservation	Geography, Geology and the Environment Dept.	UG	An examination of the earth's complex resource base which places special emphasis on the geographic location of resources and on conservation/preservation practices.
GES 244	Environmental Justice	Geography, Geology and the Environment Dept.	UG	An examination of basic factors underlying the spatial allocation and development of resources.
GES 324	Environmental Law and Policy	Geography, Geology and the Environment Dept.	UG	The study of political control of the environment. Focus on the roles played by individuals and groups. Cross-listed with POLS 324.
GES 355	Earth's Changing Climate	Geography, Geology and the Environment Dept.	UG	This course examines the interrelationship between climate and human activities. We will study the processes that control Earth's climate with a focus on the flow of energy through the Earth system and a study of the interactions between the atmosphere, the ocean, and the land surface. We will investigate climate change on variable time scales with a focus on how climate affects humans and the environment. Further, we will examine which factors influence society's decision in response to climate change.
GES 356	Earth's Changing Climate Laboratory	Geography, Geology and the Environment Dept.	UG	This course examines Earth's climate changes through an investigation of climate data and climate models. We will investigate climate change on variable time scales and in different geographic regions with a quantitative focus.
MGMT 370	Sustainable Entrepreneurship and Innovation	School of Business	UG	This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.
MGMT 459	Sustainable Business Consulting	School of Business	UG	In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.
PREE 348	Natural History of Ecosystems I	Parks & Recreation Environmental Education	UG	This field oriented course is designed to integrate basic scientific inquiry and ecological field techniques to develop skills of analysis, synthesis and evaluation of scientific information for the purpose of environmental and resource management. Results of field investigations are then applied to relevant ecological problems and management objectives for the purpose of environmental decision making.
PREE 619	Environmental Grant Writing	Parks & Recreation Environmental Education	G	Grant writing is a specialized skill that can supplement and enhance projects and programming. This course is designed to provide basic information and skills in grant writing, with emphasis on the environmental and educational grant potential. Students will learn how to search for appropriate grant sources, the intricacies of grant writing from both the scientific and sociological venues, as well as grant-related nuances.
PREE 673	Ecosystem Ecology	Parks & Recreation Environmental Education	G	This course examines the principles and practices of ecosystem management. An examination of the ecological concepts and processes that underlie ecosystem integrity is followed by an analysis of the role of humans in shaping and managing ecosystems, including institutional and socioeconomic considerations.
PREE 681	Environmental Issues	Parks & Recreation Environmental Education	G	A course designed to develop skills in the identification, investigation, evaluation, and solution of environmental problems and issues. Students will learn how to use these skills, in formal and non-formal educational situations, in the development of an environmentally literate citizenry.
PREE 689	Applied Ecology	Parks & Recreation Environmental Education	G	This course is an integration of ecology, resource management, and environmental education to promote an understanding of the application of ecological principles as they relate to sustainability. Emphasis is placed on ecological principles that relate to social value orientations and directly apply to resource management practices.

Summary of 2012-2013 Sustainability-Related Courses Taught				
COURSES THAT INCLUDE SUSTAINABILITY COMPONENTS				
BIOL 102	Human Biology	Biology	UG	This non-biology majors course considers the human as a whole organism, with emphasis on the interrelationships of organ systems, the relationship to the environment, and human origins and genetics
BIOL 212	General Zoology/Lab	Biology	UG	The anatomy, physiology, ecology, and economic importance of representative animals with emphasis on the understanding of development and the evolutionary blueprint of the animal kingdom. Includes a lab.
BIOL 320	Ornithology / Lab	Biology	UG	Anatomy, physiology, taxonomy, ecology, and behavior of birds. Two weekend field trips are required. Includes a lab.
BIOL 325	Biometry / Lab	Biology	UG	An introduction to statistical techniques and experimental design as applied to biological problems. Descriptive methods, tests of significance, linear regression, correlation, analysis of variance and covariance, and non-parametric techniques are included. Use of PC and/or mainframe computer is required. Includes a lab.
BIOL 350	Evolution	Biology	UG	Stresses evolution as a process. Evidence of early theories, population genetics and ecology, modern synthetic theory, speciation, phylogeny, and the major features characteristic of organic evolution are included.
BIOL 357	Environmental Microbiology / Lab	Biology	UG	The interactions of microorganisms with their environment and with other organisms in nutrient cycles and environmental bioremediation, and the effects of microbial activity on plants and animals. Includes a lab.
CHEM 370	Water Quality Assessment	Chemistry	UG	Water quality assessment and water quality problems will be examined both in lecture discussions and in laboratory or field situations.
EGEO 360	Introduction to Hydrology	Geography, Geology and the Environment Dept.	UG	A study of the occurrence and movement of water and human's effect on this basic resource.
ELEC 460	Instructional Strategies for Science and Technology	Department of Elementary Education and Early Childhood	G	This course is designed to introduce the teaching techniques and strategies used by science educators to make science teaching, meaningful, motivating, and plausible for PK-4 students. The course includes activities received from Project WILD certification that are designed to teach PK-4 educators how to teach the concept of sustainability to PK-4 students.
ENGL 102	College Writing	English	UG	Students will develop a full understanding of rhetorical principles, including invention, organization, and audience, along with strategies for revising and editing their prose that emphasize clarity, coherence, support, and the standards of edited American English. They will learn to develop positions on selected issues and questions and compose strongly supported and reasoned arguments regarding those issues and questions. Finally, they will learn basic information literacy skills, which will include how to locate, evaluate, and incorporate a variety of sources into their writing. They will use these to conduct independent research and integrate it into a written essay. Includes component with focus on environmental impact of industrialization and other aspects of social responsibility.
ENGL 210	Interpreting Literature	English	UG	Students read, interpret, and write about texts from diverse genres, writers, and cultural perspectives, and learn ways of critical reading that speak to the human condition, including issues of diversity. Component focuses on literature that raises environmental themes, environmental crisis, or dystopias.
ENGL 403	Literary and Cultural Theory	English	UG	Selected literary and cultural theory from Plato to the present day, with application to critical analysis of literary arts. Components on post-colonialism, eco-criticism, animal studies as new directions for literary theory
ENGL 480	Literature Seminar	English	UG	This seminar focuses on a major author or pair of authors, a single literary genre, or a specific literary period. Caribbean Texts and Contexts; component deals with literature addressing the environmental impact of colonization and Cuba's environmental legacy due to isolation from capitalist development.
FIN 303	Issues in Global Business	School of Business	UG	This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace. The most common ethical issues in international business involve: employment practices, human rights, environmental pollution, corruption, and moral obligations. All of these ethical issues directly address sustainability. A separate module is also covered that covers the definition of sustainability, the triple bottom line, and the stakeholder approach to corporate decision making.
GES 150	The Natural Environment	Geography, Geology and the Environment Dept.	UG	An introduction to interrelationships among the physical elements of the environment, including the study of vegetation, soils and landforms.
GES 302	Cultural Geography	Geography, Geology and the Environment Dept.	UG	This course explores basic environmental and spatial approaches in the field of cultural geography. These approaches include cultural ecology, cultural history, cultural diffusion, cultural region, cultural integration and symbolism, and the cultural landscape. In Cultural Geography, we examine how cultural processes influence human relationships with the natural environment, and consider the role of cultural differences in debates over environmental policy.
HLTH 310	Environmental Health	Public Health	UG	Explores the ecologic, economic, ethical, toxicologic and epidemiologic bases for environmental health both globally and within the community setting. Emphasizes the relationship between biological, physical and chemical agents and disease/injury causation and the role of government.
HIST 344	The American City	Geography, Geology and the Environment Dept.	UG	This course explores the history of American cities from the colonial period through the present day, with particular emphasis on the late 19th and 20th centuries. Examines the formation and evolution of the physical urban environment; the city as a site of race, class, and ethnic interactions; urban political, economic, and cultural evolution; transportation and suburbanization; and the consequences of the "urban crisis" of post-World War II era. Issues of sanitation, energy use and building methods is discussed.
MGMT 456	Management and Society	School of Business	UG	This course will engage students in exploring the social, ethical, environmental, economic, and political/legal restraints on organizational decision-making that managers face today. Students will develop critical thinking, communication and managerial skills necessary to be effective in a business world, where multiple stakeholder interests must be addressed.
PHIL 326	Business Ethics	Philosophy	UG	A study of applied ethics about the conceptual and ethical dilemmas in the business professions. An examination of cultural challenges of social and moral responsibility in a technically sophisticated economic climate. The ethics of sustainable business practices is examined in relation to the priority given to profit in the business environment.
PHIL 351	Philosophy of Natural Science	Philosophy	UG	An in-depth examination of the nature of natural science, including its aims, methods, central concepts, and limits and a thoughtful appraisal of its significance for the modern age.
PREE 315	Recreation Resource Planning and Analysis	Parks & Recreation Environmental Education	UG	This course is designed specifically for student in the Park and Resource Management track. It is designed to provide the student with the application of a sustainable approach to the planning process, from site and program analysis into planning recreational facilities. Students will use a variety of planning tools and on-line analysis resources, as well as a variety of professional recreation planning frameworks.
PREE 412	Open Space Planning	Parks & Recreation Environmental Education	UG	Fundamentals of open space planning including feasibility studies, resource analysis, site analysis and sustainable planning and design fundamentals. Field trips required.
PREE 616	Aquatic Systems	Parks & Recreation Environmental Education	G	Using aquatic environments as a thematic focus, this course provides foundational information and teaching techniques related to aquatic systems. The course will cover resource related information, as well as formal and non-formal teaching techniques about amphibians, reptiles, aquatic macro invertebrates and fish, as well as concepts related to the sustainable management of aquatic resources. This course includes training in Aquatic Wild.
PREE 617	Terrestrial Systems	Parks & Recreation Environmental Education	G	This course focuses on resource management, sustainability and educational teaching techniques as they apply to terrestrial systems. Emphasis will be placed on forests, endangered systems, and the development of associated natural history skills. The course includes training in Project Learning Tree.
PREE 654	Natural and Cultural Resources Law	Parks & Recreation Environmental Education	G	Provides students with advanced knowledge of public land laws regarding natural and cultural resources. Topics of student include history and associated laws concerning water, mineral, timber, range, wildlife, recreation, and cultural resources.
PREE 675	Recreation Resources Management	Parks & Recreation Environmental Education	G	Recreation Resources Management is designed to provide each student with a working knowledge of the principles and practices useful in the management and planning of natural resources use for maximum recreational value, while preserving the ecological integrity and aesthetics of these wildland areas for future generations. The course involves investigating the relationship between visitor use, natural resources, the resulting impact that visitor use has on those natural resources, and management strategies to cope with those impacts in a sustainable way. Each student will utilize much of their previous learning in researching, identifying and then creating solutions for addressing the recreation and resource management challenges that face park and resource management professionals on a day-to-day basis.
PREE 677	Cultural Resource Management	Parks & Recreation Environmental Education	G	The course presents information on current cultural resource preservation efforts and protection strategies for wildland recreation areas. The course covers: current trends and strategies for identifying cultural resource looting and vandalism; protection strategies for managing cultural and historic resources; and methods for developing a proactive cultural and historic resources protection and management program.
PREE 680	Environmental Education	Parks & Recreation Environmental Education	G	A study of the history, philosophy, and theory of environmental education; problems and trends in environmental education; and relationships of environmental education to the total school program.
PREE 683	Parks and Recreation/Environmental Education Administration	Parks & Recreation Environmental Education	G	A study of educational administration and curricular development for programs and facilities; duties and responsibilities of the coordinator or director; and operation and administration of the areas and facilities focusing on the concept of sustainability.
PROF 103	Contemporary Social Problems	Professional Studies	UG	An analysis of major social problems confronting modern society, with particular focus on domestic and global population shifts, resource development/conservation/allocation/management, changing global governance, introduction of nano and other technological advances, information flow, shifts in conflict resolution, and global economic integration. This includes the impact of issues faced in contemporary society such as the environment, quality of life issues and changes in society.
PROF 105	Economics of Social Issues	Professional Studies	UG	As an introductory course, it is intended to provide an understanding of how our economic system works. It examines the forces that determine what, how much and who obtains the outputs of the economy, and explains the issues behind current economic problems. A framework of building blocks from micro, macro, and international economics is developed to enable students to comprehend the differences among alternative solutions and to understand the implications of policy issues constantly confronting a mixed dynamic economy. This includes addressing the environment, policies to address the environment and the policy implications for society.
PROF 120	Civic Engagement and Community Decision-Making	Professional Studies	UG	An introduction to the policy making process at the community level and the role each citizen plays in the formation and modification of those policies. Students will gain introductory skills in policy analysis, street level politics, and community organizing for social change that creates more livable and sustainable communities.
PROF 220	Introduction to Nonprofit Leadership	Professional Studies	UG	An introduction to the nonprofit sector; emphasis on leadership and decision-making in rapidly growing areas of health and human service, cultural, environmental, educational, charitable, and religious organizations. Students create a comprehensive plan for a nonprofit they would like to launch that create more humane, livable and sustainable communities.
PROF 304	Urban Sociology	Professional Studies	UG	: A sociological approach to urban life: considering the structural and cultural development, decline and transformation of urban life. Focus on urban issues like inequality, the environment, and crime.
PROF 320	Community Change and Development	Professional Studies	UG	This course surveys the field of community development within the context of community collaboration and civic leadership. Topics include social capital, asset-based community development, sustainable community programs, economic development programs, private/public partnerships, and the shared role of the private, public, nonprofit sectors and everyday citizens in community developments.