Ithaca College Sustainability Content Courses – 2015-16

(courses listed in 2015-2016 Undergraduate and Graduate Catalogs and Homer Connect)

All-College Educational Opportunities

Ithaca College Seminars

ICSM 10587: Healthy Psyches, Healthy Planet

Ecopsychologists believe that humans are part of a vast interconnected system that is the natural world. Whether we feel this connection or not is of vital importance to our emotional, cognitive and even physical well-being. Moreover, western contemporary societal structures and economic philosophies often serve to disconnect us from the natural world and therefore play a role in our mental and physical "dis-ease". The ecosystem in turn, suffers from our disconnection. Taking a primarily psychological perspective, we will explore these ideas, and critically evaluate the research literature that supports these views as well as the limitations of that research. We will look to other perspectives, finding out what poets, philosophers, ecologists and artists have to say on the subject. We'll mine for our own insights through active learning, nature jaunts, mindful meditations, artistic immersions, lively discussions and reflective journaling (via blogs). Learning about ourselves and reflecting on our societal structures, we will apply these insights to propose solutions for helping the planet and people live in better harmony and health. U/G

ICSM 10553: Living with the Land: A Personal Approach to a Sustainable Life

In this seminar we will learn how humans have come to dominate the earth's ecosystems and the resultant risks to the biosphere. From this starting point we will explore sustainable and environmentally friendly solutions involving individual actions and lifestyle choices. From the Nearings' Forest Farm to Harlan Hubbard's Payne Hollow we will look at different strategies to living with the land instead of just on it. Efforts will be made to investigate varied approaches to living with the land including ecovillages, sustainable agriculture, green building, renewable energy, permaculture, and the localization movement. Students in this course will

explore living with the land through readings, in-class discussions, simulations, research projects, videos, and examinations. The course culminates with students designing their own 20 acre homestead. U/G

ICSM 10552: Coming of Age in an Age of Limits?

Learning Objectives: Do we live in an age of limits? Or have some civilizations solved the "problem" of limits? Do some people in our society and in the world more broadly face more limits than others? What are the ecological, economic, social, political, and technological forces that impose limits? These are a few of the questions that we will be exploring in this seminar through a variety of readings (including a graphic novel), films, and writing assignments (including a blog). At the end of the semester you will have wrestled with the question that is the title of this course, though I can't promise that you will have an answer. And that will be okay! U/G

ICSM 10551: Make Better Stuff

Learning Objectives: In this course students will review the technologies and the social and environmental impacts of mass manufacturing and distribution of products, and then they will survey recent trends in local production, 3D printing, and the sharing economy—all through a sustainability lens. Students will then use this knowledge to write about, redesign, prototype, and test an existing product or system. (Please note there will be a \$10 lab fee to purchase materials for this course. U/G

ICSM 10507 Death of Nature: Mourning Environmental Losses

Our capacity to address present and pending environmental challenges may depend on how adequately we have mourned the ecological losses we have already sustained. Religious traditions around the globe have constructed and conveyed historically-conditioned cultural wisdom and culturally-specific practices for mourning and memorializing human deaths. We will explore five of these traditions – West African (Dagara) funerals, Tibetan Buddhist sky burials, Jewish kaddish, Shi'ite Ashura, and Franciscan Transitus – and draw analogies from these examples to the challenge of mourning and remembering "natural" deaths, such as the death of pets, loss of the family farm, extinction of species, and the "death of nature" due to anthropogenic climate change. U/G

ICSM 10588 The Power of Water: Sustaining our Future

Understand water sustainability issues through an interdisciplinary approach to topics from the personal to global level. Emphasis is on the complex interrelationships of water for individuals, cultures, countries and the global environment. U/G

ICSM 10589 Global Warming - It's a Hot Topic

We will explore global warming and the resulting climate change through the lens of power and justice. We will look at the power and limitations of science to explain current climate change and to predict what we will see in the future. And we will look at climate justice. Students will take on the roles of scientists and policy makers in various countries to understand the global differences in the impact of climate change and their power to prevent or adapt to it. U/G

ICSM 10595: Indy and Durable: Independent Media and Dependent Ecologies
Learning Objectives: If media is not independent than it is dependent, but
dependent on what? Is it dependent on what you want to be
hearing/reading/watching, what information will make your life better and your
world healthier? Or is it dependent on what a profit-hungry corporation thinks you
should be consuming and what you should know about your health and the health
of the communities around you? The media we consume frames our reality, and
our social and natural ecologies are inexorably bound to the picture we see in that
frame. The durability of our cultures and ecosystems will be built on a foundation
of independent minds producing and consuming independent media, and we will
do both. We will discuss the role of independent media in a sustainable and durable
world, focusing on sustainability as both ecological and social. U/G

Honors Ithaca Seminar (HNRS)

HNRS 20030: The Rise and Fall of the Modern Self

Learning Objectives: Is it a problem that we value the individual as much as we do? Are we each as unique as we've been told we are? How might we behave (or write) differently if we believed differently about the sanctity of the individual? This course is an exploration of the predominant Western concepts of selfhood since the Renaissance. In addition to studying our subject traditionally by reading theorists and writers and writing analytical papers in response to them, the course invites you to write poems and essays that explore these concepts from a personal perspective and workshop them in class. So half our class-time will be devoted to the study of concepts of the self in Political History, Buddhism, Economic Behavior, Neuroscience, Happiness Studies, and Literature and Literary History (not to mention Writing Pedagogy), and the other half to workshopping your creative writings written in response to our thinking on our subject. U/G

HNRS 20037: The Challenges of Prediction

Learning Objectives: To quote baseball sage Yogi Berra, "It's tough to make predictions, especially about the future." Despite this, we are bombarded with predictions ranging from Netflix and Facebook predicting what movies and friends we might be interested in to vitally important predictions about our economic, political and environmental futures. This course will explore both the art and science of prediction. The quantitative science of handling "Big Data" gives us potentially powerful predictive tools, while Chaos Theory and the idea of the Butterfly Effect gives insights to some fundamental limitations to these tools. Central also to the course will be investigations of the human art of prediction. There are contexts when human intelligence and insight do better at prediction; other times biases and misunderstandings of human forecasters have resulted in dramatic failures of prediction. The course will explore prediction in many contexts with special emphasis on predictions of human health, political and economic forecasting and the prediction of climatic and environmental change. U/G

HNRS 23006: Natural Disasters

Why do two extreme events with identical physical properties (eg earthquakes) have drastically different effects on different groups of people in different places? Perhaps natural disasters are not so natural after all. This seminar brings together the physical and social dimensions of environmental hazards. Students in all

majors will understand more clearly what's so dangerous about the environment we live in U/G

HNRS 23019 - Eating Well in the 21st Century: the Whole Food Plant-Based Feast

Food is one of the basic necessities of life, but how do we satisfy this need in a sustainable fashion? Part cooking class, part academic investigation of food and sustainability, this course will immerse students in all aspects of food. Activities will involve learning how to cook simple vegan meals, how to bake bread from scratch, and how to choose healthy and environmentally friendly ingredients. The ethics of food choice will be investigated. The organic, locavore, and slow food movements will be explored as well as vegetarian versus vegan approaches to eating. Transportation will be necessary for several of the class sessions as we visit local farms and kitchens. Expect food to be provided at each class session. Eating well is not just eating to satiation. Eating well means eating food that is right for the planet, that fits the pocketbook, and that will lead to enhanced personal health. U/G

School of Business

Accounting (ACCT)

ACTT 2250 Financial Accounting

Introduction to the basic measurement and reporting concepts underlying the accounting system for communicating financial information to users external to the organization and to internal managers. Topics include information processing, preparation of financial statements, the role of ethics in accounting decisions, analysis of financial data, and valuation and reporting issues for assets, liabilities, stockholders' equity, revenues, and expenses. Projects require team activities and written reports. U/G

MBA Program (BGRD)

BGRD 66000 Sustainable Practices in Operations and Technology

An integrated view of the operations management in organizations from a senior management application perspective. Covers topics such as sustainable

development, lean operations, business modeling, theory of constraints, life cycle design, six sigma, and advanced technologies. Focuses on the application of these concepts to problem-solving and case analyses. Graduate

Finance (FINA)

FINA 31100 Business Finance

Foundations of financial theory and techniques of financial decision making; time value of money; bond and stock valuation; ratio analysis; financing decisions; capital budgeting; cost of capital; capital structure; risk and return; dividend policy; operating and financial leverage; working capital management. U/G

General Business (GBUS)

GBUS 20400 Legal Environment of Business II

Continuation of GBUS 20300 Legal Environment of Business. This course focuses on business organizations and the regulation of business. Topics covered include agency and issues in employment law, forms of business organizations, partnerships, corporations, securities regulation, environmental law, antitrust law, corporate social responsibility, the Uniform Commercial Code, debtor-creditor relations, and selected current topics in law. Emphasis is on case analysis, including the social, ethical, political, and economic considerations of the impact of law on business and society. Emphasis is also placed on the application of legal concepts to solve problems. U/G

International Business (INTB)

INTB 49000 Seminar in International Business

A capstone course in international business that analyzes a number of cases using knowledge and skills from previous courses in international business or those with global/comparative content. The main objective is to develop a clear understanding of problems and practices of decision making in international business operations. U/G

Legal Studies (LGST)

LGST 30700 Environmental Law and Policy

A survey of environmental law and the policies and goals of key federal environmental statutes. Students will examine the role of the Environmental Protection Agency in implementing and enforcing environmental standards, as well as significant case law developments. U/G

Management (MGMT)

MGMT 345: Operations Management

An introduction to the operations function in business for managing the resources (including people, facilities, inventories, processes, and systems) that create value (in the form of a product or a service) for an organization. The qualitative and quantitative aspects of managing a supply chain will be covered through topics such as product/process design, quality management, inventory control, and scheduling. Students will use computer technology and library resources to analyze issues, often in teams. U/G

Marketing (MKTG)

MKTG 31200 Principles of Marketing

Study of concepts, activities, and decisions related to the exchange process, management of the marketing mix, and development of marketing strategy for profit and not-for-profit organizations. Addresses the sociocultural, legal and regulatory, technological, economic, ethical, political, and social responsibility dimensions to marketing in the global environment. U/G

School of Communications

Cinema and Photography (CNPH)

CNPH 21012: Activists and Environmental Media

Study of the cinema production process using significant works representative of important historic and contemporary ideas and movements. Screenings and readings guide discussions and analysis geared toward providing familiarity with a broad range of production models and connecting them to larger questions of culture production and artistic expression. Students in the B.S. cinema production

concentration and B.F.A. degree in film, photography and visual arts may repeat the course once. U/G

Television and Radio (TVR)

TVR 29302: Minicourses in Communications: Water Issues

Enter the world of water through viewing documentaries, animations and PSA's about water issues. You will develop concepts and approaches for creating media that can help expand water awareness among diverse people, including here at Ithaca College. The only media experience needed is your own film-tv-internet viewing and awareness! U/G

School of Health Sciences and Human Performance

Health (HLTH)

HLTH 20100: Food and Society

Explores the significance of food in human life across time and across cultures. Examines the relationship of food to sociocultural, psychobiological, and ecological aspects of human life. Determinants of food choices, food systems, and socioeconomic and ecological implications are explored. Students emerge with insight and appreciation for the role of food as a means of self-expression and social exchange. U/G

HLTH 20200: Human Nutrition

An introduction to the field of human nutrition. Includes the study of human nutritional needs and the attainment of health through an adequate diet. Topics such as obesity, sport nutrition, eating disorders, and the use of nutritional supplements are critically reviewed. Issues relating to diet, ethnicity and health, world hunger, nutrition, and disease prevention are explored. The use of a computerized diet analysis database enables students to assess the adequacy of their own diets. U/G

HTH 21400: Sustainable Living: A Holistic Approach to Health

This liberal arts course on holistic health focuses on the environmental sustainability approaches with multi-disciplinary perspectives involved in sustainability and its relation to human health. Personal, social, economic, and environmental aspects of making sustainable choices in everyday life will be explored based on the data-based inquiry. The principles and practices of behavior change and pedagogies ingrained in theory and models regarding sustainability will be explored. The methods used to assess and evaluate the consequences of consumption (besides food) and lifestyle decisions will be discussed. Students will work individually and in groups by using experiential learning approaches to examine how to make sustainable choices, exercise personal accountability, and promote health. U/G

Health - Graduate (HPEG)

HPEG 58900 Environmental Dimensions in Health Education

Explores current environmental problems and issues related to public health. Topics include health risk assessment, management, and communication; sources of pollution; environmental and health effects of war; food safety; and other environmental health areas. Emphasis is placed upon individual and community responsibilities for promotion of environmental health. Graduate

Occupational Therapy (OTBS)

OTBS 10600: Introduction to Occupational Science

An overview of the science of human occupation and theoretical models that are used to describe the impact of occupation on individuals. Includes the personal, physical, psychosocial, cultural, and environmental factors of work, self-care, and play/leisure. An introduction to the domain of occupational therapy is included

OTBS 30600: Occupational Apartheid

Expands on content from OTBS 10600. The premise of occupational justice will be explored: personal, political, historical, sociological, cultural, and environmental influences on individual. Engagement in occupation will be analyzed in relation to occupational apartheid. Application of methods to ameliorate identified problems will be incorporated. U/G

Recreation and Leisure Studies (RLS)

RLS 13700 Leisure Travel

Develops an understanding of tourism and its social, economic, and environmental impact as one of the world's largest and fastest-growing industries. Examines travel motivation, travel trends including ecotourism, and the distinctive conditions that attract visitors to different regions of the world. Enables students to discover interesting places to visit and prepares them to deal with logistical concerns related to climate, monetary exchanges, customs, time changes, health, and safety. The role of intermediaries to facilitate travel arrangements and provide information is also examined. U/G

RLS 22000 The Wilderness Experience

Exploration of the complexity of a wilderness experience. Focuses on wilderness values and the relationship humanity has with shaping the natural environment as well as the effects wilderness has on human relationships. This is an extended field experience. U/G

RLS 22300 Wilderness Literacy

Survey of works in a variety of media that focuses on the theme of wilderness as a metaphor. Examination of the important ideas, people, cultures, and deep intellectual history of the wilderness movement. U/G

RLS 27700 Ecotourism and Natural Resource Management

Examines ecotourism from an international perspective. Emphasis is placed on management of the natural resources necessary in delivering a variety of ecotourist attractions (wildlife, plant life, scenery). Additionally, cultural resources associated with aboriginal cultures are explored. A majority of the course is spent traveling to various private and public ecotourism ventures (e.g., whale watching, hiking, sea kayaking). Students engage in the ecotourism ventures, as well as meet leisure service personnel who own, operate, and direct these ventures. U/G

RLS 37000 Recreational Land Use Ethics

Examination of the people and social forces that have influenced land use related to designated wilderness. Focus on philosophical and historical basis for wilderness management. Emphasizes development and promotion of a personal recreational land-use ethic. Includes an extended field experience. U/G

School of Humanities and Sciences

Anthropology (ANTH)

ANTH 14600: Hawaiian Culture in Anthropological Context

Provides an anthropological approach to understanding Hawaiian history, Native Hawaiian perspectives, and contemporary issues in Hawaii such as tourism, sustainability and cultural revitalization. The concept of service learning will be introduced in preparation for the winter field course in Hawaii. U/G

ANTH 15400 Crossing Cultures: The Anthropology of International Travel

Examines tourism and travel in their various forms and the issues raised, including tourism's social impact and role in globalization, and introduces an anthropological perspective on the process of crossing cultures. In addition, the course explores such anthropological concepts as culture, ethnocentrism, cultural relativism, value conflict, and culture shock, relying on both first-person and novelistic accounts by anthropologists and other travelers, as well as analyses by tourism professionals. In the process, students consider the qualitative difference between tourism and travel -- from the perspective of both hosts and guests -- with a goal of becoming more introspective tourists and travelers. U/G

ANTH 24000 Environmental Archaeology

This course examines the interrelationship between humans and their environments from a long-term archaeological perspective. This course emphasizes archaeological, geological, and botanical methods and analytical techniques used for long-term environmental reconstruction. U/G

ANTH 25100 People, Plants, and Culture: Ethnobotany and Archaeobotany

This course is an examination of the present and past interrelationships between people and plants. Students study plants as food, medicine, materials, and religion throughout the human experience, focusing on non- Western peoples. Topics include plant domestication and developmental trajectories, ethnopharmacology, Native American plant use, oral histories, and shaman-hallucinogen complexes.

Also explored are the roles plants play in shaping culture and cultural change, defining social boundaries, and creating status. The final portion of the class considers important current topics and debates, such as bioprospecting, genetic modification, and intellectual property rights. U/G

ANTH 29010: Ethnography: Culture, Sex, and Gender

Focus on particular geographic areas not generally covered in other upper-level regional courses, such as Polynesia, Latin America, and the Middle East. U/G

ANTH 37500 Environmental Anthropology

Examination of the cultural dimensions of the sustainable use and management of natural resources in the context of global efforts to effect social change and economic development. Much of the focus is on less- developed countries' indigenous peoples, rural peasants, urban underclass, and their ethnoecologies. Critical attention is also paid to industrialized nations' impact on peoples and cultures of the third world and to their role as dominant forces in establishing global environmental policy. Included in the course are case studies of the United States' "culture of consumption," an examination of the relationship between development and the environment, and a discussion of public policy alternatives. U/G

ANTH 48200 Ethnoarchaeology

Ethnoarchaeology is the study of living societies from an archaeological perspective. It is particularly concerned with patterned variability in material culture (architecture, artifacts, and material byproducts) and its relation to human behavior and organization. This "living archaeology" is an important component of a growing body of middle-range theory that archaeologists use to give voice to the mute archaeological record. At the same time, it provides a deeper appreciation of the technological, economic, and symbolic roles of material culture in today's societies. Class work may include both campus and community projects that examine and illustrate the theory, methods, and results of ethnoarchaeology. U/G

Art (ART)

ART 18200: Sustainability in 3D Design

Introduction to the principles and elements of design and the creative work process, as related to the realization and fabrication of three-dimensional works of

art and design. Independent and collaborative group work to create singular objects and designed spaces. Focus on analysis of processes and artworks that use sustainable and/or low impact practices and materials, as well as activist artworks that promote messages about these issues. U/G

Art History (ARTH)

ARTH 23300 Great Spaces: An Introduction to Urban Design

Introduction to the history of open space design, with an emphasis placed on the city. Examination of the principles that generate successful spaces at several scales, from pocket parks and public squares to ceremonial sites and ideal cities. Analysis of the cultural meanings embedded in urban space. Regions covered include Western Europe and Russia, the Americas, and Asia. Chronological scope ranges from ancient to contemporary. U/G

Biology (BIOL)

BIOL 10400 Environmental Biology

Blends general ecological concepts with evaluations of several environmental problems. Topics include the growth and regulation of natural populations compared to human populations; our use and future supplies of energy, from food to nuclear power; and the preservation of wildlife. The pollution of our environment by human activities is emphasized. U/G

BIOL 10600 Plants, People, and Food Production

Major emphasis is placed on the structure and function of plants; the use of plants in food production; the structure of agricultural technology; the relationship between world food supply and the population problem; scientific, social, and economic aspects of food production. U/G

BIOL 11010 History of Life on Earth

The eminent evolutionary biologist and author Stephen Jay Gould once proclaimed that if the tape of life were rewound and played again, a completely different evolutionary outcome would result. This makes the history of life on Earth a truly unique and amazing story! Throughout life's nearly four-billion-year past, countless forms have evolved, diversified, and ultimately gone extinct. From the earliest bacteria, to the most spectacular of dinosaurs, to our modern flora and

fauna, the history of life tells a story of not only an ancient planet, but the roots of our own ancestry. All life is related and all life has a history. This course is designed to help you understand how we know about our planet's past, the evergrowing tree of l ife, humanity's ancestry and our current biodiversity crisis. U/G

BIOL 12000 Fundamentals of Biology

A survey of biology for physical and occupational therapy, exercise science, and other health-related majors. Meets the biology requirement for environmental studies majors. Covers microevolution, macroevolution (patterns of evolution of the kingdoms, of phyla of plants and animals, and of classes of vertebrates), and ecology (general and human) at the level of populations, communities, and ecosystems. U/G

BIOL 20401-01 Biology of Oceanic Islands

This course will include a combination of biological and cultural components pertaining to islands in general, and using the Caribbean as a special case study. The course prepares students for a 10-day trip in January 2014 aboard the SSV Corwith Cramer, a 134 foot steel brigantine owned and operated by our affiliates at SEA Semester. During the Fall academic semester, students will learn about various aquatic systems (e.g. estuaries, mangroves, coral reefs, lagoons, beaches, intertidal zones, and open water), the flora and fauna of coral reefs, and the impacts of climate change and other anthropogenic effects on these systems. We will also examine the interplay between human and the environment through history; for example, understanding the impacts of human movement through the introduction of diseases and non-native organisms to islands. Students will learn basic aquatic sampling and measurement techniques in upstate New York on Seneca Lake in preparation for similar such measurements aboard the SEA vessel in the Caribbean. Through independent projects within the course, students will generate knowledge on a specific subtopic and will be responsible for learning and presenting information on that topic. U/G

BIOL 27100 General Ecology

Presents the basic concepts of ecology with balanced treatment of plant and animal examples. Topics include the interactions among individuals of a population, interactions in their abiotic environment, and interactions with other species. Also discussed are growth, regulation, diversity, and stability of populations, and the interactions among populations at the community and ecosystems levels. Laboratories include field and laboratory work and statistical analyses of data. U/G

BIOL 27500 Field Biology

Survey of the ecosystems of central New York. Areas of emphasis are direct experience of the diversity of ecosystems and their structure and function; adaptations of organisms to specific ecosystems; recognition of dominant and indicator species; human impact on ecosystem function and species diversity; and the methods used to measure these parameters. Lectures emphasize the unique attributes of different ecosystems and the techniques of data gathering and analysis. Analyses of societal impact and management of ecosystems are included. U/G

BIOL 30500: Invasive Species

Examines the ecology and evolution of invasive species through discussion of current literature and field cases. Considers community vulnerability to invasion, characteristics of invaders, and the process, impact, and potential management responses for biological invasion. U/G

Center for the Study of Culture, Race & Ethnicity (CSCR)

CSCR 12300 Introduction to Culture, Race & Ethnicity Concepts

Introduces students to key concepts in culture, race, and ethnicity studies. Drawing from cultural studies, comparative ethnic studies, and gender and sexuality studies, it investigates how racial and ethnic identity politics shape institutional and social policies, cultural expressions and aesthetics, and resistance movements. Particular attention will be paid to the ways communities of color have negotiated oppression, generated knowledge, and secured dignity and self-determination. U/G

Economics (ECON)

ECON 12100: Principles of Macroeconomics

Introduction to economics as a discipline and as an analytical approach to problem solving. Macroeconomics includes the following topics: production-possibilities frontiers, determination and measurement of national income, business cycles, money and banking, federal reserve system, fiscal and monetary policies, schools of economic thought, business organizations, taxation, social versus private goods, price levels, and applications to current economic problems. Prerequisite: Passing score on QL readiness exam. U/G

Education (EDUC)

EDUC 22900 - Second Language Acquisition: Its Nature and Meaning for Educators

A comparison of first- and subsequent-language learning as it affects the schoolage population. The sociocultural nature of language and language acquisition is addressed, as well as specific needs in the multicultural classroom. The multifaceted fundamentals surrounding the nonnative speaker and second-language learning are provided to prepare the student to understand the paradigm shifts that have resulted from demographic changes in this country. This course requires 8-10 hours of field experience. U/G

EDUC 36000 Education for Social Change

Examination of schools and teaching as forces for constructive social change, investigating how educators can create learning experiences in schools, classrooms, youth programs, and communities that will contribute to the school success of all youth and the development of a more equitable and just society. Particular attention paid to democratic approaches to teaching and learning; multicultural education; critical reflection; experiential learning; youth activism; community-based education; and innovative uses of technology. The course reflects in its process many of the topics studied. Students participate in the design of the syllabus and engage in project-centered learning, including a combination of individual and group work. Class discussion and weekly volunteer projects. U/G

English (ENGL)

ENGL 19417 - Earth Works: Literature, Nature, and the Environment

Introductory study of literary and cinematic representations of nature and the ethical challenges posed by the construction of human habitats. Authors and directors to be discussed include Cather, Carson, DeLillo, Malick, and Herzog. U/G

Environmental Studies and Sciences (ENVS)

ENVS 10400-01 Gardening Principles and Practices

Learning outdoors in the student-run organic and permaculture gardens, this handson course will enable you to work with soil and plants, and to learn about the conscious design of landscapes and social networks that care for them. U/G

ENVS 17500 Introduction to Environmental Seminar

Seminar course exposes students in the environmental studies or science program to environmentally relevant research, examples of careers in the environmental field, and opportunities to meet local and regional professionals. U/G

ENVS 11000 The Environmental Crisis: Causes and Solutions

Course provides basic literacy to understand the current environmental crisis, covering such topics as energy, population growth, climate change, biodiversity loss, resource exploitation, food production, and toxics. Course also investigates potential solutions to minimize impact on the personal, regional, national, and international scales. U/G

ENVS 11200 Sustainability Principles and Practice

This course is designed to introduce students to the history and principles of sustainability as a new approach to addressing complex societal and environmental issues. The class will use a broad definition of sustainability, considering ecological, social, economic, political issues, and community and individual health. These components will be examined using a systems perspective that stresses their interrelatedness. U/G

ENVS 11900 Introduction to Environmental Humanities

Introduction to the ways that humanistic disciplines (literature, religion, philosophy, history, art history) contribute to an understanding of human-environment relationships. Explores how human values toward the natural world are developed and expressed; the importance of language and storytelling in guiding human attitudes and behavior toward the environment; and the ways that the humanities can inform the theory and practice of the sciences and social sciences. U/G

ENVS 12000 Environmental Sentinels

Field-based course that focuses on natural history, biodiversity, and development

of the ability to perceive subtle changes in the environment. Primitive technology skills (friction fires, natural rope, medicinal plants, tracking, etc.) and field identification will be emphasized. Blending these skills and the approaches of deep wilderness awareness, students develop an ability to read land-use history and an appreciation for modern ecological science and natural resource management. U/G

ENVS 12100 Environmental Science & Technology

Focus on the scientific principles and technological advances fundamental to understanding human impact on the environment. Discussion of how human activities modify the environment and how technology contributes to, as well as reduces, this impact. Topics include applications of biotechnology to biodiversity loss, chemical and biological waste remediation, water treatment and purification, and renewable energy sources and technologies. An interdisciplinary approach ties together the political, social, economic, and ethical aspects of environmental studies and science. Strong global perspective. U/G

ENVS 23000 Earth System Science

Lab-based course that takes a whole-systems approach to understanding the physical, chemical, biological, and human interactions that determine the past, current, and future states of the earth. Students will describe key components, interactions, and concepts that characterize the earth system. The course emphasizes the generation and analysis of quantitative data. U/G

ENVS 14000 Introduction to Herbalism

Introduction to the principles of herbal medicine in the western herbalist tradition. Exploration of the conceptual models inherent in orthodox western modern medicine and in the vitalist medical traditions. Discussion of herbs and wellness, and experiential opportunities to engage in plant identification, ethical harvesting, and wildcrafting techniques. U/G

ENVS 20100 Environmental Research: Introductory

An introductory course for students who desire hands-on research in environmental studies projects but who have limited experience with research. Research will typically involve participation in continuing projects, though new, student-proposed projects may be possible if the instructor approves. Students will work closely with a faculty member to guide their study. U/G

ENVS 20400 Rainforests, Reefs, and Ruins: Belize Case Study

Focus on the environment and culture in Belize as a case study to explore topics including: structure and function of tropical ecosystems and Mayan civilization, factors leading to high biodiversity in the tropics, importance of biodiversity to human civilization, and threats to these ecosystems. U/G

ENVS 22000 Human-Environment Geography

This course uses natural science, social science, and humanistic approaches to study the complex relationships between human physical and cultural systems through time and space. This course has a strong focus on the perspectives and methods current in human-environment geography, and incorporates exercises in asking and answering geographical questions. Students will examine the relationships between ecosystems and food production, urban and rural relationships, the role of corporations, globalization, warfare, and religion. U/G

ENVS 22100 Interdisciplinary Physical Science

This course takes concepts from Chemistry, Earth System Science, and Physics to study a number of different environmental issues, all the way from how we insulate our houses to how global climate change works. This is a problem-based, hands-on course that will require both a quantitative and qualitative analysis of data collected by students. U/G

ENVS 22500 Fundamentals of Permaculture

Investigation of the basics of permaculture design including permaculture ethics, principles, strategies and techniques. Students apply the whole-systems permaculture design process to envision a human-scale, sustainable landscape. U/G

ENVS 24000 Environmental Archaeology: Human Impact in the Past and Present

This course examines the interrelationship between humans and their environments from a long-term archaeological perspective. This course emphasizes archaeological, geological, and botanical methods and analytical techniques used for long-term environmental reconstruction. U/G

ENVS 25000 Environmental Geology

We will start with an investigation of the formation and history of the earth along with the minerals and rocks that make up the solid planet. We will then further explore the details of different tectonic regimes. Interactions between water and the solid earth will be covered and we will explore how this affects the human environment and how humans impact these processes. Lab will be used to explore concepts introduced during lecture with a focus on outdoor work. U/G

ENVS 30100 Environmental Research: Intermediate

For intermediate students who desire hands-on research in issues relating to sustainability and the environment. Research can involve participation in continuing faculty research projects or in new, student- proposed projects. Students will work closely with a faculty member to guide their study. U/G

ENVS 34000 Topics in Pollution

Intermediate course with a different focus each semester. Topics may include environmental toxicology, environmental health and medicine, aquatic pollution, pollution remediation, hazardous waste, or pollution policy. May be repeated for maximum of 8 credits. U/G

ENVS 34001 Topics in Pollution

Intermediate course with a different focus each semester. Topics may include environmental toxicology, environmental health and medicine, aquatic pollution, pollution remediation, hazardous waste, or pollution policy. May be repeated for maximum of 8 credits. U/G

ENVS 35000 Topics in Natural Resources and Ecology: Non-Timber Forest Products

Be prepared to go outside and get your hands dirty doing something real! In this hands-on Learning-by-Doing experience students will manage, produce and sell maple syrup, edible mushrooms, honey, edible and medicinal plants, and other non-timber forest products. You will gain valuable experience working in all aspects of our student-run businesses. U/G

ENVS 36000 Topics in Environmental Humanities

We will read, discuss and apply environmental ethics theory focused on the human

connection with nature. We apply those value-based theories to case studies and also hold a few debates throughout the semester. Topics are intended to drive at decisions you may encounter in the environmental field, arming you with the tools to see multiple sides of controversial topics. You will also have an opportunity to explore issues that interest you personally. U/G

ENVS 37500 + 01: Technical Solutions to Environmental Problems (and 1-credit Lab)

Consideration of appropriate and available technologies that can be used to address environmental problems, including nanotechnology, DNA technology, drones, robots, computerization and automation, energy production and storage, and 3D printing. Explores differences of appropriate and effective technologies in developing vs. developed countries. U/G

ENVS 38200: Topics in Environmental Policy: US Environmental Policy

Intermediate course with a different focus each semester. Topics may include local and regional policy, select national issues, or the role of indigenous peoples in national and international agreements. U/G

ENVS 38201 + 02: Topics In Environmental Policy: Planning for Sustainable Communities (and 1-credit Lab)

Intermediate course with a different focus each semester. Topics may include local and regional policy, select national issues, or the role of indigenous peoples in national and international agreements. This classed discussed planning and designing sustainable cities. U/G

ENVS 47500 Advanced Environmental Seminar

Seminars, discussion, and readings in environmental studies and science. Required of environmental studies and environmental science majors. U/G

ENVS 40200 Environmental Research: Advanced

For advanced students who desire hands-on research in issues relating to sustainability and the environment. Research can involve participation in

continuing faculty research projects or in new, student-proposed projects. Students will work closely with a faculty member to guide their study. U/G

History (HIST)

HIST 27000: North American Environmental History

A pervasive theme in the occupancy of North America is the changing and often conflicting perception of the environment. This course focuses on the history of environmental ideas, values, behaviors, and attitudes. Topics include capitalist, Romantic, and ecological thinking; the goals of conservation and preservation; recent rethinking of primitive experience and the idea of wilderness; and today's dialogue between mainstream environmentalism and deep ecology, the latter including ecofeminism, sustainable development, and biodiversity. Students examine the profound impact each of the paradigms has had on human-environment relations in America. This course counts toward the U.S. history requirement for history department majors. U/G

HIST 29204: Studies in Global History: From Sugar to Oil in the Americas: A History of Commodities

This course covers the history of commodities in the Americas and the environmental, social, political, and economic factors surrounding them. U/G

Mathematics

MATH 11100: Calculus 1

Calculus of functions of one variable. Topics include limits, continuity, derivatives, applications of derivatives (problems of motion, graphing, and optimization), antiderivatives, and an introduction to the definite integral. Functions covered include polynomial, rational, exponential, logarithmic, trigonometric, and piecewise-defined functions. U/G

Philosophy (PHIL)

PHIL 2300: Bioethics

Bioethics focuses on moral questions about life, human and non-human. It explores the reasoning and moral principles at stake in medical decisions, including, for example, abortion, euthanasia, medical experimentation, and distribution of health care. The moral dimensions of broader life issues, such as cloning and reproductive technology, are also relevant. Such practical topics in bioethics force us to reflect on fundamental ethical matters, including the nature of morality, rights, and the value of life U/G

PHIL 25000 Environmental Ethics

A critical examination of various moral problems raised when considering environmental issues. Questions regarding the moral status of animals, future generations, and the environment as a whole are explored. Also taken up are the moral aspects of famine relief, population control, and resource use. These issues and others generate challenging and fundamental questions of moral philosophy: What is the basis of obligation? Do animals have rights? What does it mean to say something is intrinsically valuable? U/G

Physics (PHYS)

PHYS 243: Sustainable Energy

Survey of energy. Topics include solar, wind, geothermal, electricity, fossil fuels, heat transfer, and the economic and environmental opportunities created by energy efficiency and sustainable energy systems. The course culminates with a final Energy Design Project. U/G

Politics (POLT)

POLT 12900: Exploration into Global Comparative Studies

Examines global issues, including culture and identity formation, globalization, human rights, the environment, and militarism. National and international public policies are examined critically and policy alternatives are explored, as are individual responses and responsibilities. Utilizes country case studies, international simulations, literature and film and emphasizes global awareness. U/G

POLT 19501 Food & Water: Challenges to Sustainability

At some level, we may think we know what it means to eat and drink sustainably. This course will challenge conceptions by examining different, and often conflicting definitions of sustainability. Then, even if we do agree to eat and drink differently, we face challenges in changing individual behavior and social patterns in more sustainable directions. This course will look at the many actors and obstacles involved in defining and shaping our choices regarding food and water. Political systems privilege certain ideas and also specific interests. Economic structures and patterns limit our choices. Anthropological, cultural, and sociological backgrounds structure our options. Biological and psychological predispositions affect our ability to eat and drink sustainably. Students will consider the "simple" acts of eating and drinking from all of these perspectives. Students will be challenged to understand the potential for changing patterns of consumption, examining their own choices, their communities, and the sociopolitical system in which we are embedded. U/G

POLT 36600 Environmental Politics

Examines environmental protection (and destruction) from numerous political perspectives and in relation to various political ideologies. Looks at policy-making aspects of environmental protection. Traces the development of national and international environmental movements. Considers environmental issues in terms of race, gender, and class politics. U/G

Psychology (PSYC)

PSYC 23500: Conservation Psychology: Psychology for a Sustainable World

Application of psychological science to understanding and mitigating human-caused environmental problems, exploring how our connection with the natural world contributes to our psychological well-being and engenders greater desire to live harmoniously with the natural world. Focus on experiential learning, with a lab component including field trips and a service learning project. U/G

Religious Studies

RLST 23500 - Religion and Nature

Explores interrelationships between aspects of the natural world and the beliefs and practices of diverse world religions. Topics may include sacred space and time, natural symbols, animals and animality, and religious environmentalism. U/G

Sociology (SOCI)

SOCI 24700 Environmental Sociology

In this course students examine how ideas about the environment are socially constructed and explore how different values and beliefs contribute to conflicts about conservation, preservation, and the well-being of humans and non-human beings. The course emphasizes the environment as a social issue and as a social problem. U/G

SOCIO 25000: Gender, the Environment, and Global Change

Explores interconnections between gender and the environment. Studies patriarchy, colonialism, capitalist development, globalization, and environmental crises. Special focus on case studies of social movements that challenge gender hierarchies and environmental degradation, including feminist, indigenous, and environmental justice movements. U/G

SOCIO 43601: Select Topics in Social Change: Globalization of Food

Courses offered within the core areas of sociological inquiry. U/G

Number of Sustainability-focused courses: 14

Number of Sustainability-related courses: 81

Total number of courses: 93

Number of academic disciplines represented: 25 out of 42 non-clinical/professional

disciplines