

A-Z COURSE LIST

SUS 205 Sustainable Ecology (3)

During this course we will gain an understanding of many kinds of interactions, both biotic and abiotic, that regulate ecological population size and community structure. The overarching goal of this course is to be able to identify and characterize the diversity of non-human life, and to understand the patterns and processes that support this diversity. Students will learn the fundamental principles of ecology through studying a diverse mosaic of ecosystems, habitats, and species along elevation gradients, succession gradients, and geomorphic features. Online asynchronous only.

SUS 296 Special Topics in Sust Mngmnt (1-3)

Online asynchronous. Experimental and developmental courses in new areas of sustainability management not covered in regularly scheduled courses. A detailed course description will be presented as the topic areas is identified and developed. Fall, Spring and Summer.

SUS 300 Sus Systems: Eco, Econ, & Soc (3)

Online This course defines sustainability and sustainable development, introduces the United Nations Sustainable Development Goals and helps the student begin to understand the complex interactions between the environment, the economy, and society, and their implications for sustainable development. Fall, with Spring and Summer as needed Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 310 Human & Soc Dim Sustainability (3)

Online SUS 310: Human and Social Dimensions of Sustainability; Online; This course explores how social systems and systems of governance, individual and collective human behaviors, attitudes, values, and ethics influence sustainability. It considers examples of the forces and factors which may or may not foster sustainable human and natural communities and ecosystems. In essence, this course seeks to define "what is a sustainable society?" Fall, with Spring and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 320 Eco. Dim. Of Sustainability (3)

Online This course will expand on the interconnected nature of biophysical systems and cycles, and human dependence upon the sustainable use of resources in these systems. Our atmosphere, water, mineral, energy, and biological resources are all limited in ways which demand understanding and stewardship to sustain human and natural communities. Fall, with Spring and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 330 Intro Sustain. Data Analysis (3)

Online This course will introduce students to various types of metrics and analyses to assess sustainability outcomes/results. The course provides students with an overview of analytical methods and tools including spreadsheets and statistics. Specific examples of how these methods and tools are applied to sustainability solutions are included. Fall, with Spring and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 335 Applied Stats for Sustainability (3)

Online asynchronous. This course introduces students to many commonly used statistical tests that allow them to answer questions about the population with which they are working. Students will be able to estimate population values, determine if there have been significant changes to the variables you are studying, compare these population values between groups, and create models that will help you to track and predict changes within your population. Fall, with Spring and Summer as needed

SUS 340 Principles Sustainable Development (3)

Online Concepts of sustainable development, specifically focusing on the drivers of change and the roles and limitations of the private and governmental sectors in supporting sustainable alternatives. Spring, with Fall and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 345 Solar Power: Photovoltaic Design (3)

An introduction to the basic concepts of photovoltaics including assessing energy load, photovoltaic function, on-grid design, and residential installation. Students will investigate integration of site design, financial planning, safety, building code, and electrical code. Successful participants should have a basic understanding of wiring and circuitry prior to starting the course. A capstone project includes design of PV system. Online asynchronous only.

SUS 350 Intro. Spatial Analysis & GIS (3)

Online SUS 350: Introduction to Spatial Analysis & Geographic Information Systems; Online; This course will introduce students to various types of spatial analyses, and provide students with an overview of GIS technology and applications, including the uses and limitations of geospatial data, remote sensing, and GIS software & associated tools. Specific examples of how GIS may be applied to sustainability solutions are included. Spring, with Fall and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 355 Conservation Biology & Landscape Ecology (3)

Online. This course introduces essential concepts in conservation biology, focusing on a system that has created a global crisis for people, wildlife, and ecosystems. We will study the principles underlying older and newer approaches to conservation biology, as well as explore evidence that may illuminate when, and under what conditions, approaches to each may be successful. The paradigm is shifting towards the integration of human communities in the management and conservation of protected areas, and the valuation of ecosystem services. Innovative ways are needed to integrate human communities with conservation efforts, while adding value to ecosystem services. Through this lens we will assess the relationship of people and protected areas, investigate the role economics and politics plays in decision making, and debate the costs and benefits of a new paradigm shift away from traditional conservation. Fall, with Spring and Summer as needed

SUS 360 Climate Change & Sustainability (3)

Online This course will introduce the basic science of climate change and the social, economic, and environmental implications of climate change. Students will compare climate model projections, and evaluate various climate adaptation and mitigation strategies in global, regional and local environments. Pre-requisites: SUS 330: Introduction to Sustainability Data Analysis or equivalent, or permission of program advisor Spring, with Fall and Summer as needed. Note:

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SUS 375 Environmental Economics (3)

Online. This course provides an introduction to the basic principles of environmental economics. It seeks the application of economic theory and models to examine how environmental resources are managed, the way people make decisions that lead to environmental destruction and/or environmental improvements. Topics covered include the current state of the environment, economic incentives, market failures, economic valuation, environmental policy analysis in the United States and global environmental issues. Spring, with Fall and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor is required.

SUS 385 Green Building (3)

This is a multidisciplinary course focus on LEED® (Leadership in Energy and Environmental Design) as the most widely used green building rating system in the world, and reviews its credit categories, prerequisites, requirements, total possible points, and four (4) levels of certifications. It will equip students to understand how different benchmarks and standards for green buildings have evolved over time and how they, as future green building leaders, can participate in that process. The course will use various materials including readings, videos, online discussions and case-based assignments to engage students in learning and provide opportunities for them to move from consumers to creators. Successful course completion can prepare the student for LEED Green Associate exam or becoming a LEED Accredited Professional. Online asynchronous only.

SUS 400 Analysis Sustainable Systems (3)

Online This course will introduce students to analysis methods and tools used by private and public sector organizations to determine the effectiveness and sustainability potential of products and systems. (e.g., Life Cycle Assessment ecological models, economic models, energy and sustainability audit). Pre-requisites: SUS 330: Introduction to Sustainability Data Analysis or equivalent. Fall, with Spring and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 410 Sustainable Urbanism (3)

Online This course will discuss the unique ecological, economic and social considerations of the human nature dimension in urban and regional environments, and explore best practices for fostering sustainability in these settings. Specific topics include transportation, food systems, urban wildlife and green infrastructure. Fall, with Spring and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 415 Sustainable Agriculture (3)

Online asynchronous. This course examines the social, economic, and environmental dimensions of sustainable agriculture and the emerging global challenges and constraints on modern (conventional) farming. Students examine farming systems and approaches worldwide to improve sustainability, including integrated crop management, conservation agriculture, organic farming, regenerative, and permaculture among others. The course emphasizes the principles and practices of sustainable agriculture and drivers and constraints affecting the adoption of

ecologically based farming practices. Students assess agricultural operations concerning crops, animals, soil, and pest management. Spring, with Fall and Summer as needed

SUS 420 Sust Enrgy: Tech,Systms&Policy (3)

Online This course explores concepts and various technologies in sustainable energy production, consumption, storage, environmental and social impact, and explores the ways in which these relate to sustainability. Topics cover a wide range of energy systems, including nuclear, fossil fuels, wind, solar, biofuels, and biomass. Fall, with Spring and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 430 Managerial Ecnmcs for Sustblty (3)

Online Every manager of a for-profit or not-for-profit organization must answer the question: "How do we use economic information to make better business and resource management decisions given a sustainability objective?" These decisions require identifying alternative means of achieving given sustainability and other objective(s) and then selecting the alternative that accomplishes the stated objective(s) in the most resource efficient manner given the goals of the organization. Pre-requisites: SUS 330: Introduction to Sustainability Data Analysis and an Introduction to Economics class, or permission of program advisor. Fall, with Spring and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 440 Env Justice:Pol, Law & Society (3)

Online This course examines political, economic and social conditions that promote environmental inequality and explores the modern history of environmental exploitation of marginalized populations in the U.S. This course introduces students to the principles of environmental justice. Students will evaluate relevant environmental law and policy, examine prominent case studies related to the environmental justice literature and movement and apply appropriate tools to assess environmental inequality. Pre-requisites: SUS 350: Introduction to Spatial Analysis & Geographic Information Systems or equivalent, or permission of Sustainability Management program advisor. Spring, with Fall and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 450 Civic Engagement&Particip Plng (3)

Online This course entails an analysis of civic engagement and participatory planning processes. Students will identify the purposes and best practices for empowering communities and organizations to participate in the informed design and management of sustainability projects and processes. Students will examine social theories and evaluate the dynamics, strategies and motivations of various stakeholders such as government institutions, public and private organizations, and individual participants. Students will apply skills and knowledge to create a planning process around a sustainability topic of their choice. Spring, with Fall and Summer as needed. Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor, is required.

SUS 480 Sustainability Mngmnt Capstone (3)

Online This course will focus on the application of learned knowledge to sustainability management problems and workplace skills. Spring, with Fall and Summer as needed. Note: Enrollment in the Sustainability Management Program, or permission of Sustainability

Management program advisor, is required. This course should be taken during a student's final semester of enrollment in the Sustainability Management program.

SUS 499 Internship/Sustainability Mgmt (1-12)

Online. Supervised office or field experience in a professional working environment. Students shall report their activities to their instructor on a weekly basis for the duration of the course. Fall, Spring, and Summer. Note: Enrollment in the sustainability management major and permission of Sustainability Management program coordinator are required.