ENVIRONMENTAL STUDIES (EVST)

EVST 10100: INTRO TO SOCIO-ENV STUDIES:ES: 4 Hour(s)
INTRODUCTION TO SOCIO-ENVIRONMENTAL STUDIES:ES ~ All living things depend on and influence their environments, but humans do so in a unique way. This course examines interactions between human and non-human nature through the study of specific biophysical processes and systems, human social systems, socio-environmental problems, and more. Students will integrate and apply diverse knowledge from the physical, biological, and social sciences, as well as ethical, legal, and other perspectives, to understand complex systems and be able to identify entry points, at multiple scales, for addressing problems. Fulfills the Ethics and Social Responsibility (ES) core requirements.
Core: Meaning/Ethics/Soc Responsibil

EVST 18000: WKSP.: 1 Hour(s)
WORKSHOP. ~ Workshops may be taken Pass/No Credit only. Students may take no more than nine workshops for credit toward graduation. Workshops can be used as elective credit only.

EVST 20100: PERMACULTURE BASICS: 3 Hour(s)
PERMACULTURE BASICS: BEYOND SUSTAINABILITY~ Permaculture is a set of principles and decision-making strategies for organizing human settlements in ways that work with, rather than against, nature. Using the best of traditional, local, and scientific knowledge; careful observation of natural patterns; and techniques that integrate principles of ecology, permaculture provides guidance in designing systems that are intended to be not only sustainable but resilient and regenerative. Through a variety of class activities the course will explore applications of permaculture within the contexts of water, soil, food, energy, sociocultural, and other systems. Students will acquire the knowledge and skills necessary to apply permaculture principles in their own lives and communities.

EVST 20500: ENVIRONMENTAL EDUCATION: 4 Hour(s)
ENVIRONMENTAL EDUCATION ~ The goal of this course is to provide students, including those interested in classroom and environmental education, naturalists, and youth leaders, with the skills, experiences, and understandings necessary to help audiences interpret their natural surroundings and define their relationship and interactions with nature and the environment. This will be accomplished by emphasizing an understanding of natural history and fundamental environmental concepts, and providing opportunities to plan, teach and evaluate nature and environmental education based on best practices and developmentally appropriate strategies. The James H. Barrow Field Station and surrounding park districts and environmental education centers will be our classroom as we attempt to develop a foundation for conceptual understanding of environmental concepts. The course will focus on environmental literacy and current research in environmental education. Students will develop skills to foster learning through experiences teaching children, adults and families at the Hiram College Field Station, local schools and nearby natural areas. Assessment of learning outcomes and program evaluation strategies will be practiced. Students will be certified to teach national curricula, such as project WILD and Project WILD Aquatic. A segment of the course will be taught at Hiram's Northwoods Field Station in the Upper Peninsula of Michigan. Surrounded by 100,000 acres of national forest, lakes, streams and bogs, Northwoods provides the ideal location to develop a land ethic and reflect on the many ways people change nature and nature changes people. At Northwoods, we will live communally – sleeping in cabins – and each of us will be responsible for camp maintenance, daily chores, and cooking. Field trip fee. This course is also listed as EDUC 20500.

EVST 20900: ENVIRONMENTAL GEOLOGY-W/LAB:SM: 4 Hour(s)
ENVIRONMENTAL GEOLOGY-W/LAB:SM ~ An introduction to the relationship between humans and their physical environment in the field of geology. Topics covered include plate tectonics, earthquakes, volcanoes, soil weathering and pollution, landslides and mass wasting, subsidence and collapse, surface and ground water pollution, and solid and hazardous waste management. Laboratory exercises include basic rock and mineral identification, interpretation of topographic and geological maps, earthquakes, surface and ground water processes, and several field trips to local areas of interest. Student must also register for a EVST 20900 lab. The breakdown between lecture and lab hours is for administrative office use only. This course may only be taken as 4 credit hours.
Core: Experimental Scientific Method

EVST 21500: HUMAN SETTLEMENTS:CA: 4 Hour(s)
HUMAN SETTLEMENTS:URBANIZATION, SPRAWL, AND TRANSITIONS:CA ~ For the vast majority of human history, people have lived in small groups. Urbanizing processes, which began millennia ago, have accelerated rapidly in recent centuries and have brought about some dramatic changes in how people live. With reference to biological evolution, we will identify fundamental human needs in order to establish a basis for assessing the degrees to which different kinds of settlements (e.g., foraging societies, early and industrial cities, and sprawl) meet those needs and for discerning the ways they influence quality of life. We give special consideration to the environmental and social consequences of settlement design and land use and explore some novel alternatives intended to aid the transition to a more sustainable model. Elective: fits within "human social systems" emphasis. Cross-listed with SOCI 21500
Prerequisite: SOCI 15500 or EVST 10100
Core: Social/Cultural Analysis Meth

EVST 21600: EARTH & SPACE SCIENCE: 3 Hour(s)
UNCOVERING EARTH AND SPACE SCIENCE ~ This course provides a hands-on, field-based approach to learning about Earth and Space science. Through lectures, demonstrations, and field trips, students will develop a working knowledge of geology, including geologic history, plate tectonics, the hydrologic cycle and how thermal energy transfers throughout Earth's spheres. Also, the solar system and Earth-Sun-Moon complex with be explored. Field trips will allow us to explore local natural resources to collect rocks and learn about geologic history and astronomy. Cross-listed with EDUC 21600.

EVST 22000: COMMUNITY:CA: 3 Hour(s)
COMMUNITY:CA ~ Focusing on the nature of human communities, we examine the essential role they have played in societal and individual development, historical changes in their structures and functions, and the social and environmental implications of those. We consider which qualities of community are present or lacking today and how to cultivate those which generally support human well-being, environmental health, and quality of life. Also listed as SOCI 22000.
Core: Social/Cultural Analysis Meth

EVST 24000: AMERICAN ENVRNMENTAL HIS:CA,UD: 4 Hour(s)
AMERICAN ENVIRONMENTAL HISTORY:CA,UD ~ This course will introduce students to the history of environmental issues and environmental activism in North America. Students will consider how Native Americans interacted with the natural environment prior to the European arrival; how the Europeans who entered North America looked upon the natural environment and how their views and practices differed from those of the Native Americans; and how the European settlement in North America affected the natural environment. Students will also explore how the growth of industrial capitalism and westward expansion affected the natural environments, and how Americans view the "wilderness" and the environment in the nineteenth century. Finally, students will explore the rise of a conservation movement and social activism to protect and preserve the environment, and they will study closely the rise and growth of a modern environmental movement in the late twentieth century. Also offered as HIST 24000.
Core: Social/Cultural Analysis Meth; Understanding Diversity Home

EVST 24100: PRINCIPLES OF ECOLOGY-W/LAB:SM: 4 Hour(s)
PRINCIPLES OF ECOLOGY-W/LAB:SM ~ Ecology is the study of species interactions with their environment. In this course we will examine the ecology of plants and animals from the level of the individual to the ecosystem. Important areas of focus will include adaptation to the environment, habitat use, the behavior of populations, community structure and function, and the movement of energy and nutrients through ecosystems. The course will be taught at the J. H. Barrow Field Station and will include weekly field laboratories and independent research projects. This course is designed and required for the environmental studies major or minor, and it fulfills the lab science distribution requirement, but does not count toward a biology major. Prerequisite: permission of instructor.
Core: Experimental Scientific Method

EVST 24500: INTRODUCTION TO GRANT WRITING: 3 Hour(s)
INTRODUCTION TO GRANT WRITING ~ This is a writing-intensive course where we examine the different components of a grant proposal, discuss different grant formats, identify potential sources of grant funding, critically evaluate an actual grant proposal, and write a finalized draft of a grant. For the critical grant evaluation, we assess a proposal that was initially submitted and not funded, analyze its reviewers' criticisms, and assess the revisions made to the proposal that resulted in its resubmission and funding. Although the grants used as examples and in the critical review are environmental grants, this course provides the basics for grant writing that are applicable to other disciplines. Individual students will choose a project or idea for which they will write a grant. As we go over each grant component, students will draft that portion of their grant. Feedback will be provided for draft improvements at each step so that students will have written a complete grant proposal by the end of the course.

EVST 25000: INTRO WILDLIFE MGMT-W/LAB:SM: 4 Hour(s)
INTRODUCTION TO WILDLIFE MANAGEMENT AND TECHNIQUES-W/LAB:SM ~ Human population, attitudes, land use and climate changes are explored in relation to wildlife. Game and non-game species management plans are reviewed. Laws, values, ethics, endangered species, zoos, and poaching are a few of the topics studied. Major substantive questions regarding future habitat and species decline are examined. The student will develop a better understanding of the relationships between wildlife and humans for food, space, habitat and, ultimately, survival. Laboratories will cover management techniques and wildlife identification, and will include field experience. Must also register for a lab. Prerequisites: none. Also listed as BIOL 25000.
Core: Experimental Scientific Method

EVST 25900: ENVIRONMENTAL ART:CM: 3 Hour(s)
ENVIRONMENTAL ART:CM ~ This course will incorporate environmental awareness with creative artistic responses to issues through the contemporary visual arts. It is intended to stimulate students seeking to learn about art placed in natural environments, art originating from natural objects, as well as to express statements on the environment through art. The primary studio focus will be on students creating their own art work in response to the study of environmental issues as well as what is learned from readings about contemporary environmental artists and their works. This course is also offered for four (4) credit hours as EVST 26000. Also listed as ARDE 25900.
Core: Creative Methods

EVST 27000: ENVIRONMENTAL ETHICS:ES: 4 Hour(s)
ENVIRONMENTAL ETHICS:ES ~ The questions that have developed over the last century concerning our use of resources and our effects on our environment require raising fundamental conceptual and theoretical questions about our moral obligations. The discipline of environmental ethics aims at developing the necessary conceptual frameworks for addressing these questions and at the application of these frameworks both to questions of environmental policy and to questions concerning individual behavior. In this course, we will examine various attempts to include nature and natural objects within the realm of our moral obligations and the attempts to apply these ethical theories to particular environmental problems such as pollution, global warming, wilderness preservation, biodiversity. Also listed as PHIL 27000.
Core: Meaning/Ethics/Soc Responsibil

EVST 27100: SYSTEMS THINKING/SOCIAL CHANGE: 3 Hour(s)
SYSTEMS THINKING AND SOCIAL CHANGE ~ Examines the status of social change theories relative to the demand for systemic social changes in the context of acute social and environmental crises. Provides an overview of systems thinking and opportunities to apply systems concepts and principles to complex real-world challenges.

EVST 27800: ECOLOGY-W/LAB:SM: 4 Hour(s)
ECOLOGY-W/LAB: ~ In this introductory course we explore the relationships of organisms to one another and their environment. Topics may include climatology, biomes, terrestrial and aquatic ecosystems, biogeography, species interactions, population biology, community structure and dynamics, niche theory, energy flow and nutrient cycles, landscape ecology, and other relevant concepts that provide a basis for ecological understanding and investigation. The course includes lecture and laboratory components. Labs emphasize the application of the scientific method and the development of skills related to sampling and data interpretation, and will include outdoor field work. Also listed as BIOL 27800.
Prerequisite: INTD 22500 or EVST 10100 or BIOL 15100
Core: Experimental Scientific Method

EVST 28000: SEM:: 4 Hour(s)
SEMINAR ~ Offered to examine specific topics such as Contemporary Environmental Issues; Bioregions and Georegions of the Planet; Nature Interpretation; Biological Environmental Monitoring; Conserving Ecology.

EVST 28100: INDEPENDENT STUDY: 1-4 Hour(s)
INDEPENDENT STUDY ~ Prerequisites. Permission and Sophomore standing.

EVST 28600: NATURE INTERPRETATION:SM: 4 Hour(s)
NATURE INTERPRETATION:SM ~ This course deals with making observations about the natural world around us and developing and communicating resultant explanations of its structure, composition, and dynamics based on available scientific information. Specifically, exploration of regional geological history, the structural features it produced, regional climates, and past and present ecosystems are studied through relevant field trips to areas of interest. Field trip locations include Lake Erie, local rivers, forests, bogs, rock outcrops, marshes, and many areas of the Hiram College Field Station. Additionally, various nature education facilities and organizations will be visited to study how the public is informed and how natural resources are managed at each site. Each student will be required to develop her or his own nature education presentation. This course is also offered in a revised format for 3 credit hours as EVST 28500.
Core: Experimental Scientific Method

EVST 29800: FIELD EXPERIENCE: 1-4 Hour(s)
FIELD EXPERIENCE ~

EVST 30300: ENVIRONMENTAL SOCIOLOGY:CA: 4 Hour(s)
ENVIRONMENTAL SOCIOLOGY:CA~ While humans are distinct in their capacity to create culture, they remain always a part of, and dependent on, nature. This course is an examination of the ongoing dialogue between human social processes and the biophysical environment within which they take place. Readings will highlight the ways in which social structures and the individual behaviors that reflect them both shape and are shaped by the environment. We will study “environmental problems” through a sociological lens, focusing on the cultural, economic, political, and other social systems and processes that give rise to them. In particular, we will examine the ways in which these systems and processes organize patterns of everyday life and consider strategies for re-organizing those patterns in the effort to respond to and mitigate socio-ecological problems. Some sections of this course may be considered service learning (SL). This course is also offered as SOCI 30300.
Prerequisite: EVST 10100 or SOCI 15500
Core: Social/Cultural Analysis Meth

EVST 30500: AVIAN BIOLOGY: 1 Hour(s)
AVIAN BIOLOGY ~ Avian Biology encompasses the whole of ornithology from evolution and systematics to physiology and neurobiology to behavior and ecology. Birds have been the most well-studied and documented group of non-primate animals throughout human history. Birds have been the subjects of ground-breaking research from Darwin’s proposal of the theory of evolution to the very recent flood of neuroscience discoveries of brain plasticity and growth. With the acute studies of scientists like Rachel Carson, birds have helped us change the way we look at the environment. In this course, we will survey the state of knowledge of bird biology using ornithological research as an entry point into the fields of evolution, anatomy and physiology, neuroscience, ecology, behavior, and conservation. We will emphasize evolution, phylogenetics, physiology, life history, and behavior. We will begin to build identification and field observation skills. This is the first of two companion courses and provides the foundation for further study of birds in Field Ornithology. Also listed as BIOL 30500.
Corequisite: EVST 30600

EVST 30600: FIELD ORNITHOLOGY:SM: 4 Hour(s)
FIELD ORNITHOLOGY:SM ~ Field Ornithology involves the active study of birds in the wild and builds on a foundational knowledge of avian biology and evolution. This class focuses on mastering field identification skills (recognizing birds by sight, sound, and behavior) and observing and describing avian diversity, ecology, behavior and conservation. This is a study away course with an extended field trip to ornithological hotspots within the southeastern United States. Also listed as BIOL 30600.
Corequisite: EVST 30500
Core: Experimental Scientific Method

EVST 31000: INTRO TO GIS-W/LAB:MM: 4 Hour(s)
INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS)-W/LAB:MM ~ This course provides an introduction to Geographic Information Systems (GIS) computational systems that manage, analyze, and display geographic knowledge. The course covers fundamental concepts in geography, mapping, and spatial analysis as applied to GIS. It combines lectures, associated readings, and discussions with practical lab-based instruction on basic tools and techniques for managing, processing, displaying, and interpreting spatial data using the current ArcGIS software suite of tools from ESRI (Environmental Systems Research Institute). The broad applicability of this technology to analyze processes occurring on the surface of the planet make this course particularly useful for students who are interested in investigating natural (e.g., environmental, biological, geological) and human-driven (demographic, economic, historical, transportation, etc.) processes.
Core: Modeling Methods

EVST 32000: GIS APPLICATIONS-W/LAB: 4 Hour(s)
GEOGRAPHIC INFORMATION SYSTEMS (GIS) APPLICATIONS-W/LAB ~ Geographic information systems (GIS) allow us to manage, manipulate, generate, analyze, and display spatial data about the world around us (land use, hydrology, soils, road/street networks, populations, etc.), past and present, and apply these functions in studies and decision-making and planning efforts. In this course, students will increase their understanding about GIS and the use of digital data through theoretical and practical components. We will apply this technology in a variety of lab exercises and in a course project, supported by lectures and relevant readings and discussions. Practical work will be conducted utilizing the current ArcGIS software package from ESRI (Environmental Systems Research Institute). This course builds upon knowledge and skills developed in an introductory GIS course. Practical activities use spatial data and advanced GIS functions in spatial analyses applicable to various disciplines (ecology, conservation, economics, political science, marketing, history, etc.) and will develop working knowledge of GIS for real-world situations. Here, students identify real-world problems, research the variables associated with the problem, and compile and analyze spatial datasets to communicate or propose solutions to real-world problems. Prerequisite: Must have taken Introduction to GIS course (with minimum grade of C), or have equivalent experience and obtain permission. Must also register for a lab.
Prerequisite: EVST 31000

EVST 32500: ENV CONFLICT MGMT:UD: 4 Hour(s)
ENVIRONMENTAL CONFLICT MANAGEMENT:UD ~ Environmental problems exist at a crossroads of natural science and human society. While science can help identify environmental problems and recommend actions that may provide remedies, creating solutions to these problems requires navigating the complex landscape of human social, political, and economic systems. Often, the process of creating successful solutions in the environmental realm is fraught with conflicts between competing values and worldviews that lead to deadlock and inaction, jeopardize human health and biodiversity, and weaken both natural systems and human communities. There is a real need for skilled and knowledgeable professionals to mediate such conflicts and help resolve these “wicked” environmental problems. This course will use a case study approach to examine real-world problems and provide students with a theoretical and practical introduction to conflict management skills and tools including problem assessment, collaborative problem-solving, and structured decision-making.
Core: Understanding Diversity Home

EVST 33800: ENVIRONMENTAL ACTIVISM &POLICY: 4 Hour(s)
ENVIRONMENTAL ACTIVISM & POLICY ~ While the direct environmental impacts of certain human activities are obvious, the effects of social policies are less visible. Environmental policies, however, exert powerful environmental influences by shaping the social context within which people act—encouraging certain behaviors and discouraging others. Environmental policies, like all social policies, are shaped by competing interests and forms of activism. In this course, we will explore the relationships between various rival interests and the kinds of activism they motivate, the creation and modification of environmental policies, and the socio-environmental consequences of those interacting processes. Prerequisite or permission of instructor. Offered alternating years.
Prerequisite: EVST 10100

EVST 34300: CONSERVATION BIOLOGY-W/LAB: 4 Hour(s)
CONSERVATION BIOLOGY-W/LAB ~ Conservation Biology is the study of species diversity in human-impacted landscapes. As human populations grow and the demand for natural resources increases human activities inevitably erode the integrity of natural ecosystems. This erosion leads to the loss of species, both locally and globally. In this course we will study what biodiversity is, how it arises and why it is important both for ecosystem functions and human well-being. We will also examine how human economic activities impact the natural world, the ecological mechanisms at work in the process of species extinction, and how research in conservation biology has led to the development of ways to halt or even reverse species loss. A revised version of this course is offered as EVST 34400 or BIOL 34400 for three (3) hours. This course is also listed as BIOL 34300. Student must also register for a EVST 34300 lab. Prerequisite or permission. The breakdown between lecture and lab hours is for administrative office use only. This course may only be taken as 4 credit hours.
Prerequisite: BIOL 24100 or EVST 24100 or BIOL 34100 or BIOL 27800 or EVST 27800

EVST 35500: WETLANDS, RIVERS & COAST AREAS: 4 Hour(s)
WETLANDS, RIVERS, AND COASTAL AREAS ~ The geological origins, structure, functional dynamics, and species ecology of wetland, fluvial, and coastal ecosystems. Historic relationships of human cultures and civilizations to surface waters. Current human impacts, legislative protection, and management procedures will be considered. Field trips and practical experiences will be conducted to areas that exemplify concepts studied. Prerequisites: sophomore standing.

EVST 38000: SEM:: 1-4 Hour(s)
SEMINAR ~

EVST 38100: SPC TPC:: 1-4 Hour(s)
SPECIAL TOPICS ~

EVST 38700: FOOD:EATERS,EATING& THE ENV:CA: 4 Hour(s)
FOOD:EXAMINING EATERS, EATING, AND THE ENVIRONMENT:CA ~ Food is a principal ingredient in sociocultural systems and conveys much about a society and its relationship with the biophysical world. This course explores the social significance of food, including: the determinants of what and how people in a society eat, the meanings associated with certain foods, how food norms reflect and perpetuate certain kinds of social inequality, changes in food production and consumption processes, and the consequences of these for the health of people and the environment. Also listed as SOCI 38700.
Prerequisite: EVST 10100 or INTD 22500 or SOCI 15500 or SOAN 15500
Core: Social/Cultural Analysis Meth

EVST 48000: SENIOR SEMINAR: 4 Hour(s)
SENIOR SEMINAR ~ Through this capstone seminar, students pursue independent, interdisciplinary research on a topic strongly tied to their individual Area of Emphasis. This research culminates in a formal paper and public presentation. The seminar meetings act as a gathering place for students and faculty to focus on the development of specific skills, share ideas, and discuss questions and challenges related to their research. Offered each spring.
Prerequisite: (EVST 10100 or INTD 22500)

EVST 48100: INDEPENDENT RESEARCH: 1-4 Hour(s)
INDEPENDENT RESEARCH ~ Provides an on-campus alternative to the internship (EVST 498000). Students investigate an environmental concern through library research, personal investigation, interviews, etc., and produce a paper, report, or brochure that assembles findings and conclusions. Students must receive approval from the Environmental Board before registering for this course. Prerequisites: Environmental studies core courses, senior standing, and permission of environmental studies advisor(s).

EVST 49800: INTERNSHIP: 1 Hour(s)
INTERNSHIP ~ Students register for this course after having completed the 120-hour internship. The internship requirement ensures that EVST students have a structured opportunity to engage in experiential learning and to reflect on the connection between academic scholarship and experience in a professional environment. Students gain perspective on a particular path within environmental studies as they apply their academic knowledge, gain new knowledge and develop new skills, and explore their professional and personal interests. In this course, students are guided through reflection and professional development exercises. Prerequisites: junior or senior standing. Offered each spring.