

ENVIRONMENTAL STUDIES (ENST)

ENST 204 Landforms 3 Credit Hours

Processes and agents that shape the landscapes and landforms of the Earth's surface. The discussion of landforms is divided into two parts: (1) constructive processes and their spatial distribution and (2) gradational processes and their spatial distribution. (W).

ENST 300 Urban Geography 4 Credit Hours

The geography of human settlement and urbanization. Particular emphasis is placed on human transformation of the physical environment, and resource use throughout history from ancient civilizations to modern megalopolises. Universal urban challenges such as sprawl, pollution, congestion, crime, poverty, etc., are addressed. (YR).

ENST 301 Concepts of Environmentalism 3 Credit Hours

Designed to identify the underlying concepts of any environmental issue. The course will demonstrate the interdisciplinary nature of environmental problems solving through current readings, classical monographs and films. Students will conduct a system analysis of a household and a local community. This course will not be open to students who take ENST 105. (W).

ENST 305 Env Instrumentation and Analys 3 Credit Hours

This course will survey the parameters which must be measured in order to properly assess the environment. Methods for the analysis of the biophysical as well as the social, psychological, and political environment will be studied. (W).

Prerequisite(s): ENST 301

ENST 310 Economic Geography 3 Credit Hours

Spatial aspects of the ways people make their living. Discussion of the spatial distribution of resources and wealth at various scales. Introduction of site selection and location analysis. (W).

ENST 320 Global Climate Change 4 Credit Hours

This course explores concepts and current thinking on global climate change and environmental impacts. It covers the history of Earth's climate, causes of climate change and current research attempting to forecast change. The biotic, economic, and social implications of climate change are discussed. (F, AY).

Restriction(s):

Can enroll if Class is Freshman or Sophomore or Junior or Senior

ENST 325 Environmental Politics 4 Credit Hours

An examination of policy making about problems affecting the environment, at a global, national, and local scale. (AY).

ENST 326 Anth of Health and Environment 4 Credit Hours

Many of the major threats to human health are linked to environmental changes around the world. Population growth, globalization, and economic interests are creating increases in pollution, deforestation, water scarcity, urban sprawl, oil spills, and numerous other kinds of destructive environmental changes. This course explores how these environmental changes shape new illnesses and disease patterns, add to inequalities, and effects the health and wellbeing of individuals in particular communities, locations, and cultures. (W, YR).

ENST 330 Land Use Planning and Mgmt 4 Credit Hours

Environmental aspects of land use planning, park planning, and site planning. Consideration of soils, groundwater, topography, and sensitive natural features and their role in determining land-use suitability. Examination of the mechanics and effectiveness of the planning process. Lecture and recitation. (AY).

Prerequisite(s): ESCI 275 or (BIOL 130 and GEOL 118)

ENST 340 Remote Sensing 4 Credit Hours

This course introduces students to the basics of remote sensing, characteristics of remote sensors, and remote sensing applications in academic disciplines and professional industries. Students will explore the physical and mathematical principles underlying remote sensing techniques, and will practice the acquisition, processing, and visualization of remotely derived data. This course emphasizes hands-on learning through projects. (W, YR).

Restriction(s):

Can enroll if Class is Junior or Senior or Graduate

ENST 385 Environmental Internship 1 to 9 Credit Hours

A field assignment relating to the student's environmental interests. The student will work in an off-campus government or private business for a prescribed number of hours each week to be arranged by the advisor and employer. May be repeated up to three times. Written permission of instructor. (F, W, S, YR).

Restriction(s):

Can enroll if Class is Junior or Senior or Graduate

ENST 390 Topics in Environmental Stds 1 to 9 Credit Hours

Examination of problems and issues in selected areas of environmental studies. Title listed in the Schedule of Classes will change according to the content. Course may be repeated for credit when specific topics differ.

ENST 395 Sem on Environmental Issues 1 Credit Hour

Readings, discussions, and presentations which examine current environmental issues. One hour seminar. Permission of instructor. (F, W).

ENST 445 Environmental Law 3 Credit Hours

A survey of common law theories and analysis of environmental statutes from a functional perspective. The course also includes environmental law aspects of constitutional law, administrative law and criminal law, as well as the public trust doctrine and public lands. Student cannot receive credit for both ENST 350 and ENST/POL 445.

Restriction(s):

Cannot enroll if Class is Freshman or Sophomore

Can enroll if Level is Undergraduate

ENST 456 Ecological Economics 3 Credit Hours

A review of major theories and issues concerning the relationship between ecological and economic systems. Topics include these questions: What is the purpose of economics activity? How important is the preservation of the natural world compared to the production of economic goods? How do principles of social and intergenerational equity affect the use of resources and choice of goods to be produced? The course utilizes a transdisciplinary approach in the development of new models where conventional economics and ecology alone have been ineffective in addressing questions of sustainability and equity. (AY).

Prerequisite(s): (ECON 201* or ECON 202*) and ENST 301*

Restriction(s):

Can enroll if Class is Junior or Senior

Can enroll if Level is Undergraduate

ENST 474 Environmental Education 2 to 3 Credit Hours

An analysis of environmental education at both the elementary and secondary school level particularly stressing the environment as a teaching resource. Community resources as they relate to environmental education also are investigated.

Prerequisite(s): Apprenticeship I, TCERT Admit with a score of 1 and Minimum GPA with a score of 2.75 and MTTC Basic Math with a score of P and MTTC Basic Reading with a score of P and MTTC Basic Writing with a score of P and (Composition Placement Score with a score of 40 or Composition Placement Score with a score of 107 or COMP 105 or COMP 110 or COMP 280 or COMP 270)

Restriction(s):

Can enroll if Class is Undergrad Certification only or Post-baccalaureate Cert only or Junior or Senior

ENST 485 Seminar in Environ Topics 2 Credit Hours

A seminar course taken during the student's senior year to provide an opportunity for students with diverse environmental interests to interact and synthesize the information and skills acquired during their previous studies. (W).

ENST 486 Environmental Interpretation 2 to 3 Credit Hours

Course deals with the interpretation of the environment, its characteristics, and its presentation to school groups as well as to the general public. Intended to acquaint students with a variety of skills and techniques necessary for interpreting the environment to others. Extensive use is made of the UM-Dearborn Environmental Study Area. (AY).

ENST 487 Comparative Enviro Policy 4 Credit Hours

This course explores environmental policy as a result of political processes involving diverse participants and entailing movement through several stages - from defining an issue as an environmental problem to placing it on political agenda and then receiving a response at domestic governmental or international levels. This course analyzes environmental issues from a cross-cultural and comparative perspective, with a particular attention given to political institutions, political change, levels of development, political culture, public participation, and international commitments that shape the nature and dynamics of environmental politics and policy in different countries. Course POL 101 is recommended before taking this course.

Restriction(s):

Cannot enroll if Class is Freshman or Sophomore

ENST 488 Env Lit & Reps of Nature 3 Credit Hours

An interdisciplinary study of the ways in which the relationship between "nature" and humankind has been represented in literature and other forms of cultural expression. Emphasis on American and British texts of the 19th centuries, but assigned materials may include readings from other cultures and historical periods.

Prerequisite(s): (COMP 106 or Composition Placement Score with a score of 40 or Composition Placement Score with a score of 107 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 200 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 205 or ENGL 206 or ENGL 238)

ENST 490 Dir Research in Envir Studies 1 to 6 Credit Hours

This course will provide students with an opportunity to conduct an independent research investigation on topics in environmental studies under the direction of various faculty members. The results will be presented in a paper and public seminar. May be repeated.

ENST 491 Topics in Environmental St 3 Credit Hours

The examination of problems and issues in selected areas of environmental studies. The title listed in the Schedule of Classes will change according to the content. The course may be repeated for credit when the specific topic differs. Also offered for graduate credit. (OC).

ENST 491B Topics in Environmental Studies 3 Credit Hours

TOPIC: Comparative Environmental Policy. This course explores environmental policy as a result of political processes involving diverse participants and entailing movement through several stages—from defining an issue as an environmental problem to placing it on political agendas and then receiving a response at domestic governmental or international levels. This course will analyze various levels at which environmental issues occur and are being addressed politically.

ENST 491C Sustainable Cities 3 Credit Hours

In 2007, for the first time in human history, the world became an urban one with more than 50 percent of its population living in cities. The unseen influx of people into cities presents socio-ecological challenges of increasing scale. This course is a discussion of sustainability and resilience efforts (solutions-focused) in cities around the world. It follows a multi-disciplinary approach by integrating urban-focused concepts from history, sociology, ecology, geography, and architecture and planning. Topics include, for example, air pollution and climate change, sprawl and smart growth, alternative energy, public transportation, waste management, water management, green architecture, environmental and social (in)justice, cultural diversity, and forestry and farming.

ENST 497 Seminar in Environmental Sci 1 Credit Hour

Readings, discussions and presentation of research in selected areas of study. One hour seminar.

ENST 498 Independent Study 1 to 3 Credit Hours

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor, which shall not duplicate a formal course offering. Permission of instructor.

ENST 499 Independent Study 1 to 3 Credit Hours

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor, which shall not duplicate a formal course offering. Permission of instructor.

*An asterisk denotes that a course may be taken concurrently.

Frequency of Offering

The following abbreviations are used to denote the frequency of offering: (F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally