

EARTH SCIENCES (ERTH)

ERTH 1000E. The Human Epoch: Living in the Anthropocene. (3 Credits)

Introduction to geoscience focusing on human activities as agents of geologic change. Examines human planetary processes in our current epoch, the Anthropocene. Provides a novel frame for contemporary environmental issues such as climate change, sustainability, mass extinctions, land use, and waste disposal. Interaction between earthly processes and human affairs. CA 3.

Skill Codes: COMP: Environmental Literacy

Content Areas: CA3: Science & Technology

Topics of Inquiry: TOI4: Environmental Literacy, TOI6: Science & Empirical Inq

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%201000E>)

ERTH 1010. Dinosaurs, Extinctions, and Environmental Catastrophes. (3 Credits)

A reconstruction of the Mesozoic world of the dinosaurs based on paleontological and geological evidence. Past and present environmental catastrophes leading to mass extinctions and changes in biodiversity. Fundamental concepts of geology, stratigraphy, historical geology, and paleoclimatology. CA 3.

Enrollment Requirements: Not open for credit to students who have passed ERTH 1050, 1051, 1055, or 1070.

Content Areas: CA3: Science & Technology

Topics of Inquiry: TOI6: Science & Empirical Inq

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%201010>)

ERTH 1050. Earth's Dynamic Environment. (4 Credits)

Origin and history of planet Earth, emphasizing how rock, air, water, and life interact at different scales to produce the earth's crust, landforms, life systems, natural resources, catastrophes, and climatic regimes. Provides a scientific context for human-induced global change. CA 3-LAB.

Enrollment Requirements: Not open for credit to students who have passed ERTH 1010, 1051, 1055, or 1070.

Content Areas: CA3LAB: Science & Tech Lab

Topics of Inquiry: TOI6L: Science Emp Inq (Lab)

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%201050>)

ERTH 1051. Earth's Dynamic Environment (Lecture). (3 Credits)

Origin and history of planet Earth, emphasizing how rock, air, water, and life interact at different scales to produce the earth's crust, landforms, life systems, natural resources, catastrophes, and climatic regimes. Provides a scientific context for human-induced global change. Students who complete both ERTH 1051 and 1052 may request that ERTH 1051 be converted to a CA 3 Laboratory course. CA 3.

Enrollment Requirements: Not open for credit to students who have passed ERTH 1010, 1050, 1055, or 1070.

Content Areas: CA3: Science & Technology

Topics of Inquiry: TOI6: Science & Empirical Inq

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%201051>)

ERTH 1052. Earth's Dynamic Environment (Laboratory). (1 Credit)

Laboratory complement to ERTH 1010, 1051, 1055, and 1070. Provides an opportunity to work with specimens (minerals, fossils, rocks), terrain images, maps, physical models, and simulation experiments. Includes local field trips. Students who complete both ERTH 1052 and one of ERTH 1010, 1051, 1055 or 1070 may request that the prerequisite be converted to a CA 3 Laboratory course.

Enrollment Requirements: ERTH 1010 or 1051 or 1055 or 1070, any of which may be taken concurrently. Not open to students who have passed ERTH 1050.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%201052>)

ERTH 1055. Geoscience and the American Landscape. (3 Credits)

An Honors Core course. Foundation course in geology linked to the American Landscape through readings from American history and literature. Students who complete both ERTH 1055 and ERTH 1052 may request that ERTH 1055 be converted to a CA 3 Laboratory course. CA 3.

Enrollment Requirements: Open only to Honors students. Not open for credit to students who have passed ERTH 1010, 1050, 1051, 1070.

Grading Basis: Honors Credit

Content Areas: CA3: Science & Technology

Topics of Inquiry: TOI6: Science & Empirical Inq

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%201055>)

ERTH 1070. Natural Disasters and Environmental Change. (3 Credits)

(Also offered as GEOG 1070.) Climate change, global warming, natural hazards, earth surface processes, and the impact these have on human populations now and in the past. Students who complete both ERTH 1070 and ERTH 1052 may request that ERTH 1070 be converted to a CA 3 Laboratory course. CA 3.

Enrollment Requirements: Not open for credit to students who have passed ERTH 1010, 1050, 1051, 1055.

Content Areas: CA3: Science & Technology

Topics of Inquiry: TOI4: Environmental Literacy, TOI6: Science & Empirical Inq

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%201070>)

ERTH 2050W. Communicating Earth and Environmental Science. (3 Credits)

An exploration of different aspects of Earth and environmental science involving human planetary impacts that hones the writing skills used for different modes of communication. Geoscience topics will involve climate change, natural hazards, natural resources, earth history, geo-education, and landscape interpretation. Modes of communication will include some combination of field notes, oral presentations, interviews, videos, podcasts, websites, essays, opinions, reviews, and technical articles.

Enrollment Requirements: ENGL 1007 or 1010 or 1011 or 2011.

Skill Codes: COMP: Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%202050W>)

ERTH 2310E. Creating and Sustaining National Parks. (3 Credits)

(Also offered as GEOG 2310E.) Geologic processes that create the Earth's iconic landscapes through the study of National Parks, Monuments, and Seashores. Plate tectonics, climate and biotic change, natural hazards, Earth materials and resources, environmental conservation, and the interactions between human society and the natural world.

Skill Codes: COMP: Environmental Literacy

Topics of Inquiry: TOI4: Environmental Literacy

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%202310E>)

ERTH 2500. Earth System Science. (3 Credits)

Introduction to earth system science, geoscience research methods, and professional practice through lab work, field work in UConn Forest, visits to faculty labs, and culminating project.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or GEOG/ERTH 1070.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%202500>)

ERTH 2800. Our Evolving Atmosphere. (3 Credits)

An introduction to atmospheric science, including a history of the field, features of the atmosphere, weather forecasting, a geologic history of climate change, and the impact of anthropogenic systems. CA 3.

Enrollment Requirements: Not open for credit to students who have passed NRE 3145 or 3146.

Content Areas: CA3: Science & Technology

Topics of Inquiry: TOI4: Environmental Literacy, TOI6: Science & Empirical Inquiry

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%202800>)

ERTH 3010. Earth History and Global Change. (3 Credits)

Reconstruction of earth history from geological data. Processes and events responsible for the stratigraphic record, and techniques used to decipher it. An integrated survey of earth history. One or more weekend field trips may be required.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%203010>)

ERTH 3020. Earth Surface Processes. (3 Credits)

Processes responsible for the formation of the unconsolidated materials, landforms, and soils which constitute the Earth's surface. Introduction to surface-water and groundwater hydrology, geological hazards and the effects of climatic change. One or more weekend field trips may be required.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%203020>)

ERTH 3030. Earth Structure. (3 Credits)

Description and interpretation of geological structures; stress and strain; contractional, extensional, and strike-slip tectonics; survey of New England geology; and application of principles of structural geology to environmental issues. One full-day field trip on a weekend may be required.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%203030>)

ERTH 3040. Earth Materials. (3 Credits)

Principles of symmetry and crystal chemistry and the identification of minerals by hand sample, petrographic and x-ray methods. Description of the mineralogy and texture of igneous, sedimentary and metamorphic rocks and the application of contemporary petrogenetic models to the interpretation of the geologic environments they record. One or more weekend field trips may be required.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070. Recommended preparation: CHEM 1124-1126 or 1127 and 1128.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%203040>)

ERTH 3230. Beaches and Coasts. (3 Credits)

(Also offered as MARN 3230.) Introduction to the processes that form and modify coasts and beaches, including tectonic setting, sediment supply, coastal composition, energy regimes and sea level change; tools and techniques utilized in marine geologic mapping and reconstruction of submerged coastal features; field trips to selected coastal features.

Enrollment Requirements: MARN 1002 or MARN 1003 or ERTH 1050 or ERTH 1051, or consent of instructor.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%203230>)

ERTH 3710. Engineering and Environmental Geology. (3 Credits)

(Also offered as CE 3530.) Application of geological principles to engineering and environmental problems. Topics include site investigation, geologic hazards, slope processes, earthquakes, subsidence, and the engineering properties of geologic materials. Course intended for both geoscience and engineering majors.

Enrollment Requirements: Recommended preparation: ERTH 1050 or 1051.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%203710>)

ERTH 4050W. Geoscience and Society. (3 Credits)

Application of fundamental geological principles to issues of concern to society such as global climate change; wildfires; drought and water resources; earthquake, volcano, and tsunami hazards; medical geology; energy resources; sustainability; and coastal processes.

Enrollment Requirements: ERTH 1050 or 1051; at least two 2000-level or above ERTH courses one of which may be taken concurrently; ENGL 1007 or 1010 or 1011 or 2011; or instructor consent; open to juniors or higher.

Skill Codes: COMP: Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204050W>)

ERTH 4110. Sedimentology and Stratigraphy. (3 Credits)

Principles of sedimentology and stratigraphy. Physical processes of sediment transport and deposition. Characteristics of sediments and sedimentary rocks. Facies models for terrigenous clastic, chemical, and biochemical sediments. Stratigraphic frameworks and methodologies. One or more weekend field trips may be required.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070. Recommended preparation: ERTH 3020.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204110>)

ERTH 4120. Paleobiology. (4 Credits)

(Also offered as EEB 4120.) Ancient life, including the preservation of organisms as fossils, evolution, ecology, geobiology, biostratigraphy, and major events in the history of life. Includes microorganisms, animals, and plants.

Enrollment Requirements: ERTH 1050; or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070; or BIOL 1108.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204120>)

ERTH 4130. Geomicrobiology. (3 Credits)

(Also offered as MARN 4130.) Microbial diversity and biogeochemistry in aquatic ecosystems, microbe-mineral interactions, fossil record, atmospheric record, microbialites, and research methodology in geomicrobiology. A weekend field trip may be required.

Enrollment Requirements: CHEM 1124Q, 1125Q and 1126Q; or CHEM 1127Q and 1128Q; or ERTH 2500; or permission of instructor.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204130>)

ERTH 4140. Sedimentary Basin Analysis. (3 Credits)

Tectonic and environmental controls on the development and evolution of sedimentary basins. Emphasis on mechanisms of formation, characteristic depositional patterns, and sediment composition in modern and ancient tectonic settings. Basin analysis methods include sedimentology, stratigraphy, geochemistry, provenance and paleocurrent analysis, subsidence modeling, and interpretation of geophysical data. Formerly offered as GSCI 4140.

Enrollment Requirements: ERTH 1010 and 1052, or ERTH 1070 and 1052, or ERTH 1051 and 1052, or ERTH 1050.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204140>)

ERTH 4150. Applied Data Analysis in Earth Science. (3 Credits)

(Also offered as GEOG 4150.) Multivariate spatial analysis methods and statistical inference in earth science, emphasizing how to translate conceptual understanding into computer code.

Enrollment Requirements: Recommended preparation: STAT 1000Q or 1100Q, GEOG 3500Q; open to juniors or higher.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204150>)

ERTH 4160. Carbonate Platforms and Reefs. (3 Credits)

Carbonate platforms and reefs. Physical, chemical, and biological controls on the nature of carbonate depositional environments and their distribution in time and space. Characteristics and classification of carbonate sediments, limestones, and dolostones. Petrographic and geochemical techniques. Facies models for depositional systems. Stratigraphic frameworks and methodologies. One or more weekend field trips may be required.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070. Recommended preparation: ERTH 3020.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204160>)

ERTH 4210. Glacial Processes and Materials. (3 Credits)

The climates and dynamics of glaciers, the geologic processes responsible for the materials and landforms of glaciated regions, and the applications of glacial geology to paleoclimatology, paleoecology, land use history, hydrology, engineering, and natural resources. Includes two weekend days of field trips to be scheduled.

Enrollment Requirements: Recommended preparation: ERTH 3020.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204210>)

ERTH 4230. GIS and Remote Sensing for Geoscience Applications. (3 Credits)

(Also offered as GEOG 4230.) Application of Geographic Information Systems, remote sensing, and image interpretation to problems in geoscience. Data acquisition, processing and analysis of Digital Elevation Models and satellite imagery. Geologic materials, processes, landforms and landscapes.

Enrollment Requirements: GEOG 2300E; or ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204230>)

ERTH 4240. Watersheds and Environmental Change. (3 Credits)

Introduction to watershed processes, lake systems, late Pleistocene to present environmental change, the environmental impacts of dams, and the application of sediment coring. Includes field trips to lakes and reservoirs in eastern Connecticut.

Enrollment Requirements: Recommended preparation: ERTH 3020.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204240>)

ERTH 4330. Active Tectonics. (3 Credits)

Tectonic processes that shape the Earth's surface, particularly its landforms. Emphasis on short-term processes that produce disasters and catastrophes and affect human society.

Enrollment Requirements: ERTH 1050; or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070; or GEOG 2300E; or consent of instructor. Recommended preparation: ERTH 3020 and 3030.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204330>)

ERTH 4430. Stable Isotope Biogeochemistry. (3 Credits)

Fundamentals of stable isotope biogeochemistry. Origin of elements and stable isotopes; equilibrium and kinetic fractionation; isotope systematics of carbon, nitrogen, hydrogen, oxygen, and sulfur; biogeochemical systems; isotopes as a forensic tracer; and isotopes in paleoclimate and paleoenvironmental research.

Enrollment Requirements: CHEM 1127Q. Recommended Preparation: MATH 1110Q or 1131Q or 1151Q.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204430>)

ERTH 4440. Dates and Rates in Earth and Environmental Science. (3 Credits)

Introduction to the principles, materials, and diverse applications of commonly used geochronologic methods in geologic, environmental, archeological, and planetary studies. Topics may include the timing and tempo of planetary formation, Earth processes, natural hazards, formation of natural resources, biotic evolution, and environmental change.

Enrollment Requirements: ANTH 2501; or CHEM 1127Q and 1128Q; or EEB 2245; or ERTH 1050; or ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or 1070 or GEOG 1070; or permission of instructor.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204440>)

ERTH 4510. Applied and Environmental Geophysics. (3 Credits)

Principles of imaging the Earth's interior using observations of electric, magnetic, and gravity fields, with applications to environmental problems.

Enrollment Requirements: PHYS 1230 or 1402Q or 1502Q or 1602Q, which may be taken concurrently; MATH 1122Q or 1132Q or 1152Q, which may be taken concurrently.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204510>)

ERTH 4520. Exploration Seismology. (3 Credits)

Principles of seismic methods for imaging the interior of the earth, with applications to resource exploration and environmental problems.

Enrollment Requirements: PHYS 1230 or 1402Q or 1502Q or 1602Q, which may be taken concurrently; MATH 1121Q or 1131Q or 1151Q, which may be taken concurrently.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204520>)

ERTH 4550. Physics of the Earth's Interior. (3 Credits)

(Also offered as PHYS 4100.) The composition, structure, and dynamics of the Earth's core, mantle, and crust inferred from observations of seismology, geomagnetism, and heat flow.

Enrollment Requirements: PHYS 1230 or 1402Q or 1502Q or 1530 or 1602Q, any of which may be taken concurrently; MATH 1122Q or 1126Q or 1131Q any of which may be taken concurrently. Recommended preparation: MATH 1132Q.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204550>)

ERTH 4560. Fundamentals of Planetary Science. (3 Credits)

(Also offered as PHYS 4130.) Evolution of the solar system, celestial mechanics, tidal friction, internal composition of planets, black-body radiation, planetary atmospheres.

Enrollment Requirements: PHYS 1230 or 1402Q or 1502Q or 1530 or 1602Q, any of which may be taken concurrently; MATH 1122 or 1126Q or 1131Q, any of which may be taken concurrently.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204560>)

ERTH 4710. Environmental Site Assessment. (3 Credits)

Introduction to hydrogeological environmental site assessments (ESAs), emphasizing southern New England. Identification of areas of concern; determination of sources of groundwater pollution; and characterization of contamination extent, sampling, modeling, and interpretation.

Enrollment Requirements: Not open for credit to students who have passed ERTH 4998 when offered as "Environmental Site Assessment."

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204710>)

ERTH 4720. Environmental Geochemistry. (3 Credits)

Introduction to geochemistry of terrestrial and aqueous environmental systems. Chemical weathering and water-rock interactions; geochemistry of natural waters; chemical systems of the geosphere, biosphere and atmosphere; and geochemistry and climate.

Enrollment Requirements: CHEM 1127Q. Prerequisite or Corequisite: MATH 1110Q or 1131Q or 1151Q. Recommended Preparation: one semester of BIOL or PHYS.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204720>)

ERTH 4735. Introduction to Ground Water Hydrology. (4 Credits)

(Also offered as NRE 4135.) Basic hydrologic principles with emphasis on ground water flow and quality, geologic relationships, quantitative analysis and field methods. Occasional field trips.

Enrollment Requirements: Open to juniors or higher. Recommended preparation: ERTH 1050, or both ERTH 1052 and one of ERTH 1010, 1051, 1055, or 1070.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204735>)

ERTH 4740. Energy Resources: Past, Present, and Future. (3 Credits)

Overview of energy resources, both fossil fuel and renewable, underground fluid storage, and greenhouse gas sequestration. Subsurface geoscientific exploration and extraction methods.

Enrollment Requirements: ERTH 1050 or both ERTH 1052 and one of ERTH 1010 or 1051 or 1055 or ERTH/GEOG 1070. Recommended preparation: 12 credits of ERTH at the 3000 level or higher.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204740>)

ERTH 4810. Modeling the Changing Atmosphere and Ocean. (3 Credits)

Modeling past and future climate, with an emphasis on conceptual understanding of the earth system and simulation results from climate models of different complexities.

Enrollment Requirements: Open to juniors or higher. Recommended preparation: MATH 1060 or MATH 1131, or PHYS 1201 or PHYS 1202.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204810>)

ERTH 4850. Paleoclimatology. (3 Credits)

Introduction to the geological evidence, research methods, and hypotheses associated with major climatic events in Earth's history through a combination of lectures, discussions of scientific papers, and a climate modeling project.

Enrollment Requirements: Recommended preparation: ERTH 1010, 1050, 1055, or 1070.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204850>)

ERTH 4989. Undergraduate Research in Geoscience. (3 Credits)

Independent research for the advanced undergraduate student interested in investigating a special problem involving field and/or laboratory observations in geoscience. The student is required to give an oral presentation in a departmental seminar at the end of the semester.

Enrollment Requirements: Open to juniors or higher.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204989>)

ERTH 4990. Internship in Geoscience Field Study. (1-3 Credits)

An internship program under the direction of Geoscience faculty. Students will be placed with government agencies or businesses where academic training will be applied in a program of activities to be planned and agreed upon in advance by the job site supervisor, the faculty coordinator, and the intern. One credit may be earned for each 42 hours of pre-approved activities up to a maximum of three credits. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory.)

Enrollment Requirements: ERTH 3010 and 3020 and 3030 and 3040, all of which may be taken concurrently. Must be taken concurrently with ERTH 4991.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204990>)

ERTH 4991. Internship in Geoscience Research Paper. (1 Credit)

Preparation of written report and oral presentation to Department summarizing internship experience and evaluating the applicability of academic experience to job situations and the impact of the internship experience on academic and career plans.

Enrollment Requirements: ERTH 3010 and 3020 and 3030 and 3040, all of which may be taken concurrently. ERTH 4990 must be taken concurrently.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204991>)

ERTH 4995. Special Topics. (1-6 Credits)

Investigation of special topics related to, but not ordinarily covered in the undergraduate offerings; emphasis on laboratory projects.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204995>)

ERTH 4996W. Undergraduate Research Thesis in Geoscience. (3 Credits)

Writing of a formal thesis based on independent research conducted by the student.

Enrollment Requirements: ERTH 4989; ENGL 1007 or 1010 or 1011 or 2011; open to juniors or higher.

Skill Codes: COMP. Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204996W>)

ERTH 4998. Variable Topics. (3 Credits)

May be repeated with a change in topic.

Enrollment Requirements: Prerequisites and recommended preparation vary.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204998>)

ERTH 4999. Independent Study. (1-6 Credits)

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=ERTH%204999>)