

GEOGRAPHY (GEOG)

GEOG 1000. Introduction to Geography. (3 Credits)

Principles, concepts and methods of modern geography are developed both in general form and specific case studies. Examples pertaining to both the human and physical environment will be discussed. CA 2.

Content Areas: CA2: Social Science

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

GEOG 1010. New Digital Worlds of Geographic Information Science. (3 Credits)

An overview of geospatial data and emerging technologies that are common in our everyday lives and how they are shaping society. Topics include the use of geospatial technologies like GPS, Google Earth, Satellite Imagery, and GIS, and how these technologies address environmental, societal, and political issues. Discussion of career opportunities in GIScience. Formerly offered as GEOG 2410. CA 3.

Content Areas: CA3: Science & Technology

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

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

(Also offered as EARTH 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 EARTH 1070 and EARTH 1052 may request that EARTH 1070 be converted to a CA 3 Laboratory course. CA 3. Formerly offered as GSCI 1070. Not open for credit to students who have passed EARTH 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=GEOG%201070>)

GEOG 1093. International Study. (1-6 Credits)

Special topics are taken in an international study program. Consent of Department Head or advisor may be required prior to the student's departure.

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May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%201093>)

GEOG 1200. Global Urbanization. (3 Credits)

(Also offered as URBAN 1200.) A broad discussion of the role and structure of cities around the world from the first cities to contemporary times.

Special emphasis will be placed on the mechanisms by which cities and ideas about them have been diffused from one place to another and on the changing forces that have shaped cities over time and across space. CA 1. CA 4-INT.

Content Areas: CA1: Arts & Humanities, CA4INT: Div & Multi Intl

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%201200>)

GEOG 1300E. Climate, Weather, and the Environment. (3 Credits)

Interactions between weather and climate and the human and natural environment. Emphasis on understanding the linkages between natural processes and societal/environmental issues. 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=GEOG%201300E>)

GEOG 1302. GIS Modeling of Environmental Change. (4 Credits)

An introduction to environmental processes and patterns, especially assessing change in environmental systems using spatial analysis techniques. Students will map field sites using Global Positioning System technology and aerial photographs, collect field data on various environmental systems, and build and test a Geographical Information System-based environmental model. CA 3-LAB.

Content Areas: CA3LAB: Science & Tech Lab

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%201302>)

GEOG 1700. World Regional Geography. (3 Credits)

Study of geographic relationships among natural and cultural environments that help to distinguish one part of the world from another. Analysis of selected countries as well as larger regions, with specific reference to the non-western world. CA 2. CA 4-INT.

Content Areas: CA2: Social Science, CA4INT: Div & Multi Intl

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%201700>)

GEOG 2000. Globalization. (3 Credits)

Globalization as a complex-multidimensional process. Linkages and interconnectedness between spatial processes and social, cultural, economic, political, and environmental change around the world today. Theory and impacts of economic, social, political, and cultural globalization through case studies at the local, regional, national, and international scales. CA 2. CA 4-INT.

Content Areas: CA2: Social Science, CA4INT: Div & Multi Intl

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202000>)

GEOG 2100. Economic Geography. (3 Credits)

Examination of the relationship among economic, cultural, and geographic processes which affect the patterns, structure, and growth or decline of economic activities. The global extent of the agricultural, manufacturing, and service sectors is presented with particular emphasis on the interdependency of non-western and western economies. CA 2.

Content Areas: CA2: Social Science

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202100>)

GEOG 2200. Introduction to Human Geography. (3 Credits)

Geographic perspectives on the relationships between human behavior/activities, and the physical, economic, and cultural environments. CA 2. CA 4-INT.

Content Areas: CA2: Social Science, CA4INT: Div & Multi Intl

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202200>)

GEOG 2300E. Introduction to Physical Geography. (3 Credits)

The physical elements and processes of the lithosphere, hydrosphere, atmosphere, and biosphere in relation to one another and to the distribution of the world's environments. Emphasis on the basic concepts and theories of physical geography and relationships between humans and the physical environment they interact with every day. CA 3. May not be taken out of sequence after passing GEOG 4300.

Skill Codes: COMP Environmental Literacy

Content Areas: CA3: Science & Technology

Topics of Inquiry: TO14: Environmental Literacy, TO16: Science & Empirical Inq

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202300E>)

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

(Also offered as EARTH 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: TO14: Environmental Literacy

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

GEOG 2320E. Climate Change: Current Geographic Issues. (3 Credits)

The science, impacts, and politics of climate change from a geographic perspective. Examination of physical mechanisms, extreme weather events, impacts on water, food and energy systems, impacts on polar regions, energy strategies and solutions, policy and negotiations, and mitigation and adaptation strategies. CA 2.

Skill Codes: COMP Environmental Literacy

Content Areas: CA2: Social Science

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202320E>)

GEOG 2350E. Geography of Energy for Sustainability. (3 Credits)

Introduction to energy solutions for global sustainability. Topics may include the geographic context of global and local energy use, energy transition, renewable energy, solar, offshore wind, and energy justice. CA 2. CA 4-INT.

Skill Codes: COMP Environmental Literacy

Content Areas: CA2: Social Science, CA4INT: Div & Multi Intl

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202350E>)

GEOG 2400E. Introduction to Sustainable Cities. (3 Credits)

Pathways to make cities more sustainable from social, economic, and environmental perspectives. Topics include sustainable transportation, renewable energy, recycling of waste, and green infrastructure in contemporary metropolitan areas in developed and developing nations. CA 2. CA 4-INT.

Skill Codes: COMP Environmental Literacy

Content Areas: CA2: Social Science, CA4INT: Div & Multi Intl

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202400E>)

GEOG 2500. Introduction to Geographic Information Systems. (4 Credits)

(Also offered as CE 2500.) Fundamental principles of geographic information systems (GIS). Topics include history of the field, components of a GIS, the nature and characteristics of spatial data, methods of data capture and sources of data, database models, review of typical GIS operations and applications. Laboratory exercises provide experience with common computer-based systems.

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

GEOG 2505. Applications of Geographic Information Systems. (3 Credits)

Applications of geographic information systems. Particular attention to land use planning and resource management.

GEOG 2500.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202505>)

GEOG 2996. Research. (1-6 Credits)

Primary research under faculty supervision.

Instructor consent.

May be repeated for a total of 6 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%202996>)

GEOG 3000. Race, Sex, Space, and Place. (3 Credits)

Focuses on cities, sexualities, and race relations through a study of racial segregation in American cities; emergence of gay neighborhoods; globalization; migration; and human rights.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203000>)

GEOG 3200. Urban Geography. (3 Credits)

(Also offered as URBAN 3200.) Analysis of the growth, distribution, and functional patterns within and among Western cities. Application of urban geographical concepts to city planning problems.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203200>)

GEOG 3200W. Urban Geography. (3 Credits)

(Also offered as URBAN 3200W.) Analysis of the growth, distribution, and functional patterns within and among Western cities. Application of urban geographical concepts to city planning problems.

ENGL 1007 or 1010 or 1011.

Skill Codes: COMP Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203200W>)

GEOG 3240. Health Geography: Connecting People, Place, and Health. (3 Credits)

An exploration and understanding of the connection and interplay of physical and social geographies of places and their impact on physical and mental health. What we eat, the air we breathe, where we live, where we work, people we interact with, and the health services we have access to all play a part in our health.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203240>)

GEOG 3310. Fluvial Geomorphology. (3 Credits)

Physical forms and processes associated with rivers. Factors controlling open-channel flow, sediment transport, channel morphology, adjustments of rivers to environmental change, and human impacts.

GEOG 2300E or EARTH 1050 or both EARTH 1051 and 1052; open to juniors or higher.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203310>)

GEOG 3320W. Environmental Evaluation and Assessment. (3 Credits)

Concepts and methods of environmental analysis in contemporary geography. Emphasis on the ecological impact of human activities and on the evaluation and assessment of existing and future environments. ENGL 1007 or 1010 or 1011 or 2011; open to juniors or higher.

Recommended preparation: GEOG 2300 or 3410.

Skill Codes: COMP. Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203320W>)

GEOG 3340. Environmental Planning and Management. (3 Credits)

The basic elements of the conflict between human environments and natural systems are considered, along with the methods of analysis and resolution of problems caused by that conflict. Emphasis on public policy related to environmental issues.

Open to juniors or higher. Recommended preparation: GEOG 3410.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203340>)

GEOG 3350E. Global Change, Local Action: A Geography of Environmentalism. (3 Credits)

A systems thinking approach exploring global-local linkages of environmental politics and human-environmental interactions across scales using case studies and future modeling simulations. Emphasis will be placed on stakeholders and community-based initiatives to achieve environmental justice and sustainability.

Skill Codes: COMP. Environmental Literacy

Topics of Inquiry: TOI4: Environmental Literacy

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203350E>)

GEOG 3400. Climate and Weather. (3 Credits)

Analysis of atmospheric processes giving rise to weather systems and climatic patterns. The dynamic integration of atmospheric systems is emphasized.

Recommended preparation: GEOG 1300 or 2300E.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203400>)

GEOG 3410E. Human Modifications of Natural Environments. (3 Credits)

A geographical and historical interpretation of the changing relationships between culture and environment. Emphasis on the modifications of the natural environment by preagricultural, agricultural, and urban societies.

Skill Codes: COMP. Environmental Literacy

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

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203410E>)

GEOG 3420. Field Methods in Geography. (4 Credits)

Overview of field methods for collecting data relevant to physical, human, and technical areas of Geography. Methods include identification of existing data to support field studies, assessment of field sources for commonly used datasets, surveys, geospatial technologies, and integration of these data for further analysis.

Recommended preparation: GEOG 2300 and 2500.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203420>)

GEOG 3500Q. Geographic Data Analysis. (3 Credits)

An introduction to the use of quantitative methods in conducting research, with particular emphasis on the processing and analysis of geographic data.

Open to juniors or higher. Recommended preparation: 1000 level STAT course.

Skill Codes: COMP. Quantitative Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203500Q>)

GEOG 3505. Remote Sensing of Marine Geography. (3 Credits)

(Also offered as MARN 3505.) Introduction to remote sensing applications in oceans and seas. Applications include image analysis of sea surface temperature, winds, altimetry, sea ice, chlorophyll, primary productivity, and bathymetry.

Recommended preparation: GEOG 2300 or MARN 1002.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203505>)

GEOG 3510. Cartographic Techniques. (3 Credits)

A laboratory-oriented introduction to computer-based map design and compilation. Concepts of scale, symbolization, map balance, and layout are emphasized for both general and thematic mapping.

Recommended Preparation: GEOG 2500 and 2505.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203510>)

GEOG 3512. Introduction to Spatial Data Science. (3 Credits)

An introduction to the fundamentals of spatial data science. Application of a high-level programming language (R) for spatial data analysis, visualization, and modeling.

GEOG 2500 and GEOG 3500Q, or instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203512>)

GEOG 3530. Introduction to GeoComputing. (3 Credits)

Introduction to GIS programming and scripting to automate GIS and spatial analyses. Students will develop geospatial models using geoprocessing tools within ArcGIS, gain fundamental programming skills in the Python programming language, and employ Python scripting to solve geospatial problems.

GEOG 2500. Recommended preparation: GEOG 2505.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203530>)

GEOG 3600. Global Dynamics of the Shipping Industry. (3 Credits)

(Also offered as MAST 3600.) Introduction to the global shipping industry and the essential role it plays in the conduct of world trade and the growth of the global economy.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%203600>)

GEOG 4000W. Capstone Seminar in Geography. (3 Credits)

Techniques for, and practice in, research, writing, citation, and data presentation in geography.

ENGL 1007 or 1010 or 1011 or 2011; open to junior or higher Geography or Geographic Information Science majors, others by instructor consent. Prerequisite or corequisite: One Geography course at the 3000 level or higher.

Skill Codes: COMP. Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204000W>)

GEOG 4001W. Writing in Geography. (1 Credit)

Techniques for, and practice in, research, writing, citation, and data presentation in geography.

One Geography course at the 2000 level or higher; ENGL 1007 or 1010 or 1011 or 2011; open to junior or higher Geography and GIS majors. Corequisite: One Geography course at the 3000 level or higher.

Skill Codes: COMP. Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204001W>)

GEOG 4090. Internship in Geography: Field Study. (1-3 Credits)

A fieldwork internship program under the direction and supervision of the geography staff. Students will be placed in agencies or industries where their academic training will be applied. One eight-hour work day per week (or its equivalent) for the host agency during the course of the semester will be necessary for three academic credits. Hours by arrangement with hosting agency, not to exceed 16 hours per week. Only six credits of internship (between GEOG 4090 and 4091) may count towards the GEOG or GIS major. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Instructor consent; open to sophomores or higher; must be taken with at least one credit of GEOG 4091 if more than one internship credit is requested in a semester.

May be repeated for a total of 15 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204090>)

GEOG 4091. Internship in Geography: Seminar. (1-3 Credits)

Description, analysis, and evaluation of the fieldwork portion (GEOG 4090) of the internship. Written reports are required.

Must be taken with GEOG 4090; open to juniors or higher.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204091>)

GEOG 4093. International Study. (1-6 Credits)

Special topics are taken in an international study program. Consent of Department Head or advisor may be required prior to the student's departure.

Open to juniors or higher.

May be repeated for a total of 6 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204093>)

GEOG 4095. Special Topics. (1-6 Credits)

Open to juniors or higher.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204095>)

GEOG 4096. Senior Thesis. (3 Credits)

One advanced seminar in geography and/or three units of independent study in geography. Open to juniors or higher.

Grading Basis: Honors Credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204096>)

GEOG 4096W. Senior Thesis. (3 Credits)

ENGL 1007 or 1010 or 1011 or 2011; one 3000-level or above course in GEOG and/or 3 credits of independent study in geography; open to juniors or higher.

Skill Codes: COMP. Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204096W>)

GEOG 4098. Variable Topics. (3 Credits)

Open only to juniors or higher. Prerequisites and recommended preparation vary by section.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204098>)

GEOG 4099. Independent Study. (1-6 Credits)

Open to juniors or higher.

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204099>)

GEOG 4110W. Regional Development and Policy. (3 Credits)

A study of theory and practice in regional development and planning.

Emphasis on evaluation of regional problems and public policies designed to resolve them, with a primary focus on the United States.

GEOG 2100 or instructor consent; 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=GEOG%204110W>)

GEOG 4130. Geographical Analysis of Transportation. (3 Credits)

Investigation of the role of transportation in global trade, spatial organization, economic development, and the natural and built environment. Application of GIS to the study of transport systems and modeling.

Recommended preparation: GEOG 2100.

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

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

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

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

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

GEOG 4200W. Geographical Analysis of Urban Social Issues. (3 Credits)

Analysis of socioeconomic patterns and issues within urban areas, with emphasis on applied geographical research. Policy implications are stressed.

ENGL 1007 or 1010 or 1011 or 2011; open to juniors or higher.

Recommended preparation: GEOG 3200.

Skill Codes: COMP. Writing Competency

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204200W>)

GEOG 4210. Urban and Regional Planning. (3 Credits)

Urban and regional planning, with emphasis on duties of local planners, especially land use planning, and the political context for planners' work. Legal and political issues in communities and organizations. Open to juniors or higher. Recommended preparation: GEOG 2100 or instructor consent.

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

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

(Also offered as EARTH 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. Formerly offered as GSCI 4230.

GEOG 2300E; or EARTH 1050 or both EARTH 1052 and one of EARTH 1010 or 1051 or 1055 or 1070 or GEOG 1070.

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

GEOG 4240. Disaster Risk, Vulnerability, and Resilience. (3 Credits)

Overview of geographical perspectives on disaster risk, vulnerability, and resilience using an integrated environmental, social, and infrastructural approach. The theory, methods, metrics, and tools necessary to measure and understand risk, vulnerability, and the resilience of societies worldwide.

Recommended preparation: Introductory course on natural hazards and disasters.

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

GEOG 4300. Classic Papers in Climate Science. (3 Credits)

An examination of the defining primary literature in the evolution of climate science to the present state of knowledge. Topics may include the Greenhouse Theory of Climate, El Niño, Climate Prediction, and regional processes of interest (e.g., monsoons, storm tracks, desert dynamics).

GEOG 2300E or instructor consent; open to juniors or higher.

May be repeated for a total of 6 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204300>)

GEOG 4515. Web GIS. (3 Credits)

Introduction to Internet GIS. The basics of system architecture, geospatial web services, mashups, key elements of mobile GIS solutions, the functionality of geoportals and web technologies, web mapping interoperability using universal data standards such as OGC (Open Geospatial Consortium) web services, and the current state of e-business and e-government web mapping interests.

GEOG 2500, 2505 and consent of instructor.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204515>)

GEOG 4516. Fundamentals of Spatial Database Systems. (3 Credits)

The theories and principles behind the Spatial Database Systems. Students will learn how to design and implement spatial databases. GEOG 2500, or instructor consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204516>)

GEOG 4518. Mobile GIS. (3 Credits)

This course covers how to develop, test, and publish mobile GIS web and native apps across multiple mobile platforms (Android, iOS, etc.).

GEOG 2500 or instructor consent. Recommended preparation: GEOG 4515.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204518>)

GEOG 4519. Spatial Big Data Analytics. (3 Credits)

Covers the collection, analysis, and visualization of spatial big data to support better decision-making in geographic contexts.

GEOG 2500 or instructor consent. Recommended Preparation: GEOG 4515.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=GEOG%204519>)

GEOG 4710. Geography of Latin America. (3 Credits)

An integrative study of the physical, historical, social, political and economic geography of Latin America. Particular emphasis on patterns, processes and problems of spatial economic change in the region. Open to juniors or higher.

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