

GEOGRAPHY (GEOG)

Geography, as the study of place, space, and environment, addresses the “why of where” by uniting social and biophysical sciences, humanities and technology to examine the factors that make a place or environment unique. Connecting academic inquiry to real-world problem solving, our courses teach critical thinking skills that prepare students to transfer classroom and field experience into a wide range of careers. With interests ranging from globalization to climate change and sustainability, urbanization to community development at home and abroad, geography majors gain the knowledge, techniques and perspectives needed to meet current and future challenges.

Geography at UNH is an undergraduate-only department offering both major and minor degree programs. With small class sizes, personalized advising by department faculty, and opportunities for independent study, our students receive a high degree of individual attention. UNH geography graduates are prepared to enter a variety of careers or professional and graduate degree programs.

<https://cola.unh.edu/geography>

Programs

- Geography Major (B.A.) (<http://catalog.unh.edu/archives/2018-2019/undergraduate/liberal-arts/programs-study/geography/geography-major-ba>)
- Geography Minor (<http://catalog.unh.edu/archives/2018-2019/undergraduate/liberal-arts/programs-study/geography/geography-minor>)

Courses

Geography (GEOG)

GEOG 401 - Regional Geography of the Western World

Credits: 4

An introduction to the people, places, and problems of six Westernized regions of the world – Europe, Russia, Latin America, the Caribbean, North America, and Australia and Oceania. The course emphasizes five themes: environmental geography, population and settlement, cultural coherence and diversity, geopolitical framework, and economic and social development.

Attributes: World Cultures(Discovery)

GEOG 401H - Honors/Regional Geography of the Western World

Credits: 4

An introduction to the people, places, and problems of six Westernized regions of the world – Europe, Russia, Latin America, the Caribbean, North America, and Australia and Oceania. The course emphasizes five themes: environmental geography, population and settlement, cultural coherence and diversity, geopolitical framework, and economic and social development.

Attributes: World Cultures(Discovery)

GEOG 402 - Regional Geography of the Non-Western World

Credits: 4

Major culture areas of the non-Western world and the unique interaction of human and physical phenomena that produces the distinctive character of these areas. Emphasizes the manner in which people of different cultures have made use of opportunities and solved problems existing in the major regions occupied by non-Western cultures: the Middle East and North Africa, Africa south of the Sahara, Oriental Asia and the Pacific Islands.

Attributes: World Cultures(Discovery)

GEOG 402H - Honors/Regional Geography of the Non-Western World

Credits: 4

Major culture areas of the non-Western world and the unique interaction of human and physical phenomena that produces the distinctive character of these areas. Emphasizes the manner in which people of different cultures have made use of opportunities and solved problems existing in the major regions occupied by non-Western cultures: the Middle East and North Africa, Africa south of the Sahara, Oriental Asia and the Pacific Islands.

Attributes: World Cultures(Discovery)

GEOG 405 - Human-Environment Geography

Credits: 4

Introduces human-environment relations as a central focus of geography, spanning social and environmental sciences. Considers mapping, natural resource use, commons and markets, hazards, political ecology, and land use change. Case studies link core concepts with examples from local to international scales.

Attributes: Environment,TechSociety(Disc)

GEOG 473 - Elements of Weather

Credits: 4

Basic principles of weather phenomena and the physical processes underlying these phenomena. Emphasis on weather patterns of New England. Lab.

Attributes: Discovery Lab Course; Physical Science(Discovery)

GEOG #514 - Geography of the United States and Canada

Credits: 4

An introduction to the physical and human geography of the United States and Canada, including landforms, climate and biogeography, environmental issues, population and settlement, culture and identity, political geography, urban patterns, natural resources and economic development. Course content alternates between topics that are large in scope and scale, and others that are more narrowly focused.

GEOG #520 - Geography of Latin America and the Caribbean

Credits: 4

Utilizes regional and topical approaches to explore the physical, cultural, and historical geography of Latin America and the Caribbean. Particular aspects of the economy, politics, language, religion, and ethnicity is examined. The goal of the course is to lay a foundation for critical analysis of historical and contemporary concerns such as environmental issues, uneven development and poverty, social conflict and violence, and international relations.

GEOG 530 - Geography of China

Credits: 4

This course will examine China's diverse physical environments, politics, economies, and cultures across her vast territory. Students will learn to adopt a relational and spatial perspective to study the contemporary issues in China.

Attributes: World Cultures(Discovery)

GEOG 530W - Geography of China

Credits: 4

This course will examine China's diverse physical environments, politics, economies, and cultures across her vast territory. Students will learn to adopt a relational and spatial perspective to study the contemporary issues in China. Writing intensive.

Attributes: World Cultures(Discovery); Writing Intensive Course

GEOG 540 - Geography of the Middle East

Credits: 4

Environmental, cultural, political-geographic, and ecological foundations of the Middle East. Selected regional problems and issues, e.g., geographical dimensions of the Arab-Israeli conflict, oil, urbanization, population growth, and nomadism.

Attributes: World Cultures(Discovery)

GEOG 550 - Geography of Sub-Saharan Africa

Credits: 4

Overview of major physical features and human patterns, with an emphasis on the interaction between people and place and the dynamic issues and challenges facing contemporary African societies. Environmental and resource issues, historical impacts on development, culture and social characteristics, rural and urban organization, industrialization and trade, and prospects for the future.

Attributes: World Cultures(Discovery)

GEOG 560 - Geography of Natural Hazards

Credits: 4

A survey of natural hazards with a focus on what makes them hazardous to humans and how humans respond to those risks. Hazards that are considered include earthquakes, volcanoes, tsunamis, floods, hurricanes and other severe weather events. The geography of community vulnerability to natural hazards is also examined.

Attributes: Environment,TechSociety(Disc)

GEOG 572 - Geography of the Natural Environment

Credits: 4

Provides an introduction to geography of the natural environment, including landforms, weather and climate, water resources, and biogeography. Examines the processes that shape the different elements of the environment and the relationships between them.

Attributes: Physical Science(Discovery)

GEOG #573 - Biogeography

Credits: 4

Explores the introductory concepts of plant geography and biogeography, two interconnected disciplines that document and explain the changing distributions of plants and animals from both a spatial and temporal context. Gives equal emphasis to ecology (biomes, climates, soils), evolution (migration, speciation, dispersal), and applied biogeography and plant geography.

GEOG 574 - Geography of Landforms

Credits: 4

Explores the geography of earth's major landforms and the geographic factors that influence their development, distribution, and morphology. Topics include mountain building, river systems, desert migration and expansion, glacial and periglacial environments, shoreline evolution, and how these processes interact to form surface features that are unique to their geographic environment. Students analyze geographic information in class and in the field using air photos, topographic maps, and spatial data.

Attributes: Physical Science(Discovery)

GEOG 581 - Human Geography

Credits: 4

Differentiation of the world in terms of population, race, language, religion, political territory, and economic life. Collection and critical use of empirical data; emphasis on spatial and ecological analysis.

Attributes: Social Science (Discovery); Inquiry (Discovery)

GEOG 581O - Human Geography

Credits: 4

Differentiation of the world in terms of population, race, language, religion, political territory, and economic life. Collection and critical use of empirical data; emphasis on spatial and ecological analysis.

Attributes: Social Science (Discovery)

GEOG 582 - Global Trade and Local Development

Credits: 4

This course examines the ways in which global trade interacts with local development across the world. It studies the special organization of economic activities through basic approaches in economic geography. It also studies the history and contemporary state of international competition and collaboration.

Attributes: Social Science (Discovery)

GEOG 582W - Global Trade and Local Development

Credits: 4

This course examines the ways in which global trade interacts with local development across the world. It studies the special organization of economic activities through basic approaches in economic geography. It also studies the history and contemporary state of international competition and collaboration. Writing intensive.

Attributes: Social Science (Discovery); Writing Intensive Course

GEOG #583 - Urban Geography

Credits: 4

Spatial structure of cities and the city system. Emphasizes the North American city and its problems: land use, transportation, political fragmentation, physical environment, and residential patterns. Trends in urbanization in the developed and developing worlds. Global cities. (Not offered every year.)

GEOG 584 - Political Geography

Credits: 4

Interactions between geographic and political phenomena at the sub-national, national, and international levels. Emphasis on geographical aspects of current political problems within and between states. (Not offered every year.) Writing intensive.

Attributes: Writing Intensive Course

GEOG 590 - Field Research**Credits: 4**

Explores a range of research methods, emphasizing collection and analysis of field data to understand human-environment dynamics and/or spatial relations. Topics include ethics, sample design, surveys, interviews, participant observation, and qualitative and quantitative analyses. Students complete hands-on research activities.

GEOG 595 - Statistics for Spatial Science**Credits: 4**

Introduces elementary statistics to students of social sciences from a spatial perspective. It is designed to help students approach introductory-level quantitative analysis using basic statistical problem-solving techniques with social and physical science data models. These elementary statistical tools and concepts will be explained during classroom lectures and proficiency obtained during practical exercises.

GEOG 658 - Introduction to Geographic Information Systems**Credits: 4**

An introduction to the use of geographic information systems (GIS) for natural resources and related fields. Data models/structures, map projections, data input/output/storage, data analysis/modeling, interpolation, and data/quality standards. Hands-on using ArcView 3.x GIS software. Students are strongly encouraged to complete an introductory course in statistics before enrolling in course. Majors only. (Also offered as NR 658.)

GEOG 670 - Climate and Society**Credits: 4**

An introduction to climate science and the interaction between humans and climate. Examines the processes that control climate, the mechanisms that drive climate change, and the impact of climate change on society. Writing intensive.

Attributes: Writing Intensive Course

GEOG 671 - Weather Forecasting**Credits: 4**

Examines in depth, the physical processes that govern the development and movement of weather systems. Topics include the relationship between surface and upper-level winds, vertical motion and pressure systems, storm development, and techniques used in weather forecasting.

GEOG 673 - Political Ecology**Credits: 4**

Examines human-environment relations through the geographic subfield of political ecology, integrating social and biophysical sciences. Emphasizes cross-scalar relationships in resource decisions and community development, with substantial coverage of rural, non-US contexts. Seminar-style course with regular readings, writings and discussion. Writing intensive.

Attributes: Writing Intensive Course

GEOG 685 - Geography of Population and Development**Credits: 4**

A regional approach to the study of population geography with concern for the interaction between the focus of economic growth and the components of population change and development. Considers the environmental impact of developing trends in the developed and developing worlds and the relationship of these trends to sustainable growth and population patterns. Writing intensive.

Attributes: Writing Intensive Course

GEOG 686 - World Economy and Globalization**Credits: 4**

Emphasizes the spatial development of the world economy and the evolution into today's "globalized" economy. Topical emphasis includes the processes of global economic production changes, the role of transnational corporations, and the role of the state in globalization. Writing intensive.

Attributes: Writing Intensive Course

GEOG #690 - Geography of Third World Development**Credits: 4**

Explores the geography of development in the Third World (Africa, Asia, Latin America, and Oceania). Addresses factors that affect development spatially and temporally. Emphasis on geographic scale (local, national, regional, and global). Students write and present critical thinking papers that address the interactions of development factors at different scales.

GEOG 695 - Internship**Credits: 1-4**

Internships provide an opportunity for on-the-job skill development and practical experience in a closely supervised work setting. The student must provide a written proposal to a supervising faculty member before an internship program is approved. At the end of the semester, the student must make a presentation, provide work samples, or submit a detailed report, log, or portfolio describing the internship experience. May be repeated for up to 8 hours of credit. Cr/F.

GEOG 757 - Remote Sensing of the Environment**Credits: 4**

Practical and conceptual presentation of the use of remote sensing and other geospatial technologies for mapping the environment. The course begins with the use of aerial photographs (Photogrammetry and photo interpretation) and includes measures of photo scale and area, parallax and stereo viewing, object heights, flight planning, photo geometry, the electromagnetic spectrum, camera image analysis, global positioning systems (GPS), and geographic information systems (GIS). Conceptual lectures are augmented with practical homework assignments and hands-on lab exercises. Prereq: Algebra. Special fee. Lab. (Also offered as NR 757).

GEOG 759 - Digital Image Processing for Natural Resources**Credits: 4**

Introduction to digital remote sensing, including multispectral scanners (Landsat and SPOT), radar, and thermal imagery. Hands-on image processing including filtering, image display, ratios, classification, registration, and accuracy assessment. GIS as it applies to image processing. Discussion of practical applications. Use of ERDAS image-processing software. Knowledge of PCs required. Prereq: GEOG 757 or equivalent and permission. (Also offered as NR 759).

GEOG 760 - Geographic Information Systems in Natural Resources**Credits: 4**

Introduces the use of geographic information systems (GIS) for use with natural resources including data input, manipulation, storage, analysis, and display. Accuracy of spatial data and use of digital elevation models. Discussion of practical applications. Use of PC Arc/Info software. Prereq: permission. Lab. (Also listed as NR 760.)

GEOG 795 - Special Project**Credits: 2 or 4**

Readings, library, archival, and fieldwork. Primarily for geography seniors. Prereq: permission. Writing intensive.

Attributes: Writing Intensive Course

GEOG 796 - Special Topics

Credits: 4

Special Topics in Geography: A) Climatology, B) Environmental Geography, C) Urban Geography, D) Political Geography, E) Population Geography, F) Economic Geography, G) Cultural Geography.

GEOG 797 - Seminar

Credits: 2

Exploration of geography as a research discipline. Definition and investigation of research problems. Primarily for geography seniors. May be repeated up to a maximum of 4 credits.

GEOG 799 - Honors Thesis

Credits: 4

Independent research project conducted under supervision of a faculty sponsor culminating in a written thesis. Students must also make a public presentation of their thesis. Required for all honors students. Open only to geography majors who are part of the honors program. Before registering for the course, students must secure a faculty sponsor, obtain approval for a thesis topic, and complete an honors thesis student/sponsor agreement. Only open to Geography majors.

Faculty

<https://cola.unh.edu/geography/faculty-staff-directory>