DEPARTMENT OF GEOGRAPHY

https://www.uvm.edu/cas/geography (https://www.uvm.edu/cas/geography/)

Students who are curious about why things happen where they do -- from climate change, water resource scarcity and forest migration to urban development, globalization, green buildings, wilderness therapy and the working agricultural landscape -- will find that Geography is the study that brings them all together. UVM’s Geography major equips students with analytical and conceptual skills, as well as an understanding of the spatial dimensions of physical, environmental, and human phenomena. Students develop a broad, international, interdisciplinary and comparative perspective, along with valuable technical skills.

Introductory offerings include courses on the geography of race and ethnicity, skills-based geospatial technologies, weather and climate, space and society, and world regional geography. Intermediate classes include global environmental change, political geography, water resources, cultural ecology, biogeography, geography and gender, climatology, international development and political ecology, urban geography, GIS and remote sensing, regional and field courses. At the advanced level, classes include spatial analysis, research methods, social geography, climate and hazards, global economic restructuring and snow hydrology. These offerings take students conceptually around the world, physically around Vermont and in some cases, include international field experiences.

MAJORS

GEOGRAPHY MAJOR

Geography B.A. (http://catalogue.uvm.edu/undergraduate/artsandsciences/geography/geographyba/)

MINORS

GEOGRAPHY MINORS

Geography (http://catalogue.uvm.edu/undergraduate/artsandsciences/geography/geographyminor/)

Geospatial Technologies (http://catalogue.uvm.edu/undergraduate/artsandsciences/geography/geospatialtechnologiesminor/)

Courses

GEOG 040. Weather, Climate & Landscapes. 0 or 3 Credits.
Introduction to the fundamentals of weather, climate, landform evolution, and plant distribution using a systems approach. Focus on variation in processes over space and time.

GEOG 050. D2:SU:Global Envmnts& Cultures. 3 Credits.
Introduction to Geography from global, place-based, cultural, and socio-environmental perspectives.

GEOG 060. D1:Geography/Race&Ethnic in US. 3 Credits.
Examination of the ways in which spatial and locational processes shape and are shaped by ethnic and racial identities, struggles, and relationships.

GEOG 061. Place, Lndscpe, Environment VT. 3 Credits.
Introduction to Vermont’s physical geographies, environmental histories, and socio-environmental problems. The course also considers Vermont’s global and regional connections.

GEOG 070. SU: Society, Place, and Power. 3 Credits.
An introduction to human geography: a spatial perspective on the study of population and migration, globalization, uneven economic development, geopolitics, cities and rural spaces, cultural meanings of place, and struggles for spatial justice.

GEOG 081. Geospatial Cncpt&Visualization. 0 or 3 Credits.
Introduction to the quantitative and qualitative geospatial concepts and tools used in Cartography, Geographic Information Science (GISci), Remote Sensing, and geographic research. Data creation, analysis, and map design using existing digital map resources, topographic/satellite data, and alternative mapping methodologies.

GEOG 085. Imaging the Earth. 3 Credits.
Geographic analysis and evaluation of aerial imagery produced by remote sensors (satellites, airplanes, drones) and its relationship to environmental problems in the social and physical sciences.

GEOG 091. Internship. 1-3 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

GEOG 095. Special Topics in Geography. 1-18 Credits.
See Schedule of Courses for specific titles.

GEOG 096. Special Topics in Geography. 1-18 Credits.
See Schedule of Courses for specific titles.

GEOG 097. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

GEOG 099. First-Year Seminar. 3 Credits.

GEOG 140. Biogeography. 3 Credits.
Examines geographic distribution of organisms, emphasizing the biotic and abiotic factors that explain temporal and spatial patterns of species, population, and community distributions. Prerequisite: GEOG 040.

GEOG 143. Climatology: Concepts & Tools. 3 Credits.
Quantitative analysis of the atmospheric-land-water processes that determine climate variability and change at the local to global scales. Historical and near real-time data manipulation via statistics, weather map interpretation, climate indices, modeling and remote sensing. Prerequisite: GEOG 040.
GEOG 144. Geomorphology. 0 or 4 Credits.
Examines, using lectures, labs, and field-based independent study research projects, processes which change Earth’s surface and the history of landscape development. Considers fundamental geologic constraints on environmental problems. Prerequisite: GEOL 001, GEOL 005, GEOL 007, or GEOL 055. Cross-listed with: GEOL 151.

GEOG 145. SU: Geography of Water. 3 Credits.
Examination of the spatial dimensions of water distribution from local to global scales, and the social, political, and economic dimensions of its use. Same as NR 102.

GEOG 148. Global Environmental Change. 3 Credits.
Explores changes in natural processes and anthropogenic activities that influence the atmosphere, hydrosphere, and biosphere individually and through interactions and feedbacks from a distinctly spatial perspective employed by physical geographers. Prerequisite: GEOG 040.

GEOG 150. D2: Geography of Africa. 3 Credits.
The character and development of the contemporary cultural, economic, and political patterns of the area against the background of its physical and resource base. Prerequisite: GEOG 050 or GEOG 070.

GEOG 151. D2: Geography of India. 3 Credits.
Survey of India’s physical diversity, historical evolution, colonial and postcolonial legacies, and geopolitical situations, especially as they relate to globalization, migration, environment, and security. Prerequisite: GEOG 050 or GEOG 070.

GEOG 153. The Circumpolar Arctic. 3 Credits.
Examines the physical and human geography of the circumpolar Arctic. Prerequisite: GEOG 040 or GEOG 050.

GEOG 160. The US: Place, Power, Politics. 3 Credits.
Study of the United States through diverse perspectives in Human Geography. Examines how race, class, and gender relations shape social and political landscapes in historical and contemporary contexts. Emphasizes social/environmental justice and geographic approaches to thinking about political power. Prerequisite: GEOG 050 or GEOG 070.

GEOG 170. Historical Geography. 3 Credits.
Examination of the tools, techniques, and perspectives used in studying the historic development of places and landscapes. Vermont and other North American cases. Prerequisite: GEOG 050 or GEOG 070 or HST 012. Cross-listed with: HST 170.

GEOG 173. Political Ecology. 3 Credits.
Human-environment interactions under globalization. The politics of using particular ideas of ‘nature’ for the benefit of some and to the detriment of others in spaces from local backyards to global contexts. Environmental movements and livelihoods. Prerequisites: GEOG 050 or GEOG 070 or ENVS 002; and ENSC 001 or ENVS 001 or GEOG 040 or GEOL 001 or GEOL 007 or GEOL 055 or NR 103. Cross-listed with: ENVS 143.

GEOG 174. Rural Geography. 3 Credits.
Global, national and local scale study of rural landscapes, cultures, social issues, and environmental concerns. Prerequisite: GEOG 050 or GEOG 070.

GEOG 175. Urban Geography. 3 Credits.
Analysis of the morphology, function and social structure of cities. Consideration of the nature, history and theories of urban growth and development. Prerequisite: GEOG 050 or GEOG 070.

GEOG 178. Gender, Space & Environment. 3 Credits.
Examination of the ways in which human relationships to both the built and the natural environment are mediated by gender. Prerequisite: Six hours in Geography or Gender, Sexuality, & Women’s Studies.

GEOG 179. Cultural Ecology. 3 Credits.
Interrelationships of social groups and their natural environments and resource bases, with primary emphasis on nonindustrial cultures, examined from the perspectives of anthropology and geography. Prerequisite: GEOG 050 or GEOG 070.

GEOG 184. Geog Info:Cncpts & Applic. 0 or 3 Credits.
Systematic approach to important geographical concepts (including distance, shape, scale dispersion) structured around the use of Geographical Information Systems (GIS) as an analytical tool. Prerequisite: Sophomore standing.

GEOG 185. Remote Sensing. 0 or 3 Credits.
Examinations of the earth’s surface from aerial photographs and satellite imagery. Emphasis is on image interpretation, classification, change detection, multivariate analysis (e.g. principal components analysis). Prerequisite: Sophomore standing. Cross-listed with: FOR 146, NR 146.

GEOG 186. Qualitative Research Methods. 3 Credits.
Covers data collection, analysis, and representation techniques for qualitative data with emphasis on critical perspectives and cutting-edge practices, such as participatory mapping and mixed-methods approaches. Prerequisite: Sophomore standing.

GEOG 191. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion. Prerequisite: Minimum Junior standing.

GEOG 195. Intermediate Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

GEOG 196. Intermediate Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

GEOG 197. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.
GEOG 198. Undergraduate Research. 1-18 Credits.
Undergraduate student work on individual or small research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

GEOG 199. Teaching Assistantship. 1-3 Credits.
Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, for which credit is awarded. Offered at department discretion.

GEOG 244. Adv Top: Global Change. 3 Credits.
Advanced offerings on topics related to past, present and future changes in the environment, including natural and human-induced changes in the atmosphere, hydrosphere and biosphere. Prerequisite: Vary with course content; Minimum Junior standing.

GEOG 245. Adv Top: Human Env Interactions. 3 Credits.
Advanced offerings on various manifestations of social-environmental relationships. Possible topics include sustainable development, environmental justice, and urban ecology. Prerequisites: Vary with course content; minimum Junior standing.

GEOG 246. Adv Top: Climate & Water Resource. 3 Credits.
Analysis of regional climatology, paleoclimatology, hydroclimatological hazards, or fluvial geomorphology. Topics include droughts, severe weather, climate change, floods and floodplain management, mountain and lowland rivers. Prerequisites: Vary with course content; minimum Junior standing.

GEOG 272. Adv Top: Space, Power, Identity. 3 Credits.
Advanced offerings on topics related to the spatial regulation and geographic construction of social identity, paying particular attention to race, gender, and sexuality. Prerequisites: Vary with course content; minimum Junior standing.

GEOG 273. Adv Top: Political Econ & Ecology. 3 Credits.
Advanced offerings in political ecology and political economy, particularly at global and regional scales. Possible topics include Third World economic restructuring, globalization, international environmental movements. Prerequisites: Vary with course content; minimum Junior standing.

GEOG 274. Adv Top: Critical Urban & Soc Geo. 3 Credits.
Advanced offerings in urban and critical social geography. Possible topics include social justice and the city, human rights, geographies of social control. Prerequisites: Vary with course content; minimum Junior standing.

GEOG 281. Adv Topic: GIS & Remote Sensing. 3 Credits.
Advanced offerings in GIS or remote sensing focusing on landscape interpretation for decision-making practices. Incorporation of applications from Vermont public and private sectors. Prerequisites: Vary with course content; minimum Junior standing.

GEOG 287. Spatial Analysis. 3 Credits.
Analysis of spatial pattern and interaction through quantitative statistical models; application of GIS to statistical modeling. Prerequisite: GEOG 081 or GEOG 184 or NR 143 or ENSC 130 or GEOL 185.