GEOGRAPHY • GEOG

General education courses are marked with stars (★).

CORE CURRICULUM

(Required of majors.)

★ 1001 Human Geography: Americas and Europe (3) 1001 and 1003 need not be taken in numerical order. Credit will not be given for this course and GEOG 2062. Principal themes of human geography, including the spatial distributions and interactions of culture, history, economy, population, and environment, with a regional emphasis on the Americas and Europe.

★ 1003 Human Geography: Africa and Asia (3) 1001 and 1003 need not be taken in numerical order. Credit will not be given for this course and GEOG 2062. Principal themes of human geography, including the spatial distributions and interactions of culture, history, economy, population, and environment, with a regional emphasis on Africa and Asia.


★ 2050 Physical Geography: The Atmosphere (3) Credit will not be given for both this course and GEOG 2061. May be taken for elective geology credit. Physical principles, processes, and operations in the atmosphere; world climatic realms.

★ 2051 Physical Geography: Land and Water Surfaces, Plant and Animal Realms (3) Credit will not be given for both this course and GEOG 2061. Surface elements of the earth’s environment; relationships among these elements.

2055 Map Reading (3) 2 hrs. lecture; 2 hrs. lab. Nature and interpretation of topographic maps.

MAPPING SCIENCES

(All majors select three courses.)

Cartography

2039 Cartographic Drafting and Graphic Presentation (3) 2 hrs. lecture; 2 hrs. lab. Basic drafting instruments and techniques necessary for preparation of maps and scientific graphics.

4040 Advanced Cartography (3) Prereq.: GEOG 2039 or equivalent. Cartographic history; map projection; advanced techniques of data presentation and cartographic production.

4044 Computer Cartography (3) No programming knowledge necessary. Introduction to selected mapping packages.

4049 Advanced Computer Cartography (3) Prereq.: CSC 1250 or 1253 and GEOG 4044. Use of computer mapping programs; theory and methods of display of point, line, and area elements in thematic maps; algorithms involved in encoding, editing, storing, retrieving, and displaying data from a digital cartographic data base.

Remote Sensing

4019 Aerial Photo Interpretation of Cultural Features (3) 2 hrs. lecture; 2 hrs. lab. Credit will not be given for both this course and GEOG 4020. Analysis of land use/land cover, urban, industrial, and military aspects from aerial photographs.

4020 Aerial Photo Interpretation (3) Prereq.: GEOL 1001 and 1003 or GEOG 2051. Credit will not be given for both this course and GEOG 4019. 2 hrs. lecture; 2 hrs. lab. Analysis and mapping of geologic structure, lithology, and landforms from aerial photographs.

4045 Environmental Remote Sensing (3) Prereq.: consent of instructor. May be taken for elective geology credit. 2 hrs. lecture; 2 hrs. lab. Basic energy and matter relationships; principles of primary remote sensors; environment studied via remote sensing techniques.

GIS/Techniques

4041 Field Methods in Geography (3) 1 hr. lecture; 4 hrs. lab. Cannot be repeated for credit. Students must have Saturdays free. Fall semester emphasis on interpretation of the cultural landscape; spring semester emphasis on the physical landscape.

4042 Enterprise Geographic Information Systems (3) The use of vector-based GIS application software for the input, management, analysis, and presentation of geospatial data. Emphasis is placed on how the GIS relates to database management systems as part of building an enterprise-wide GIS.

4046 Webmapping (3) The creation of Web sites for the presentation of geospatial data via the World Wide Web. Emphasis is placed on how the technologies of Internet Web servers, GIS application software, and database management systems form a symbiotic relationship to make such Web sites possible.

4047 Geographic Information Systems (3) Prereq.: CSC 1250 or 1253 or equivalent. Geographic information systems used in land resource management and planning; data structures and algorithms for automated retrieval and analysis of spatial data; structuring cartographic data into spatial data; integration of remotely sensed data into geographic information systems.

4048 Methods of Spatial Analysis (3) Prereq.: EXST 4001 or equivalent. Mathematical, statistical, and spatial analytical methods for handling and interpreting data related to geography.

HUMAN GEOGRAPHY

(IA candidates select two systematic and one regional course.)

Systematic

2010 Human Geography (3) Survey of patterns and processes of world’s cultures and landscapes.

2080 Humans and the Environment (3) Exploration of geographic concepts that underlie nature-society relationships and human-dimensions of environmental change.

2012 Elements of Cultural Geography (3) Culturally oriented proseminar in American geographical thought during the present century.

2060 Political Geography (3) Systematic, cultural-political geography; emphasis on technical and philosophical aspects and on American political landscapes; territorial political entities (cadastral, civil, national, imperial); role of the lands and seas, nature and objects of war; impacts of political entities on the landscape.

2072 Urban Historical Geography (3) Spatial evolution of cities and city-systems in western civilization through the classical, medieval, mercantile, and industrial periods to 1945.

2073 Urban Geography (3) Internal arrangement, external relations, and locational aspects of urban places, with emphasis on U.S.; urban places identified by presence of tertiary economic activities.

2074 Place and Culture (3) See ANTH 4074.

2077 Economic Geography (3) Location, characteristics, and relationships of primary, secondary, and tertiary economic activity; measurements and theories of location of economic endeavor.

2078 Environment and Development (3) Geographic theories and methods for analyzing relationship between environment and development.

2079 Geography of Religion (3) Also offered as REL 4079. Theory and methods of analyzing the culture and movement of religious rituals and traditions over space and time.

4080 Historical Geography (3) Advanced concepts and principles of historical geography.

4086 Human-Environment Interactions (3) Also offered as ANTH 4086. Cultural adaptation to difficult and distinctive environments, including mountains and highlands, the arctic, deserts, the humid tropics, and grasslands; subsistence strategies, local knowledge, household economies, land use practices, and resource management institutions.

4087 Gender, Place, and Culture (3) Also offered as ANTH 4087 and WGS 4087. The geographies of everyday life showing how notions of maleness and femaleness influence how we understand and relate to the world around us, from our built environment, to the places we invest with meaning, and the very ways we live, work, travel, and explore.

Regional
3001 Geography of Louisiana (3) Development and current distribution of physical and human geography of Louisiana.

4000 Modern India: Society and Culture (3) See SW 4000.

4001 South Asian Society, Polity, and Culture (3) See INTL 4002.

4031 Latin America and the Caribbean (3) Physical and cultural geography of Latin America and the Caribbean.

4033 Geography of Central Asia and Afghanistan (3) Also offered as INTL 4033. Survey of the geography of Central Asia and Afghanistan; emphasis on geographic elements of the history, society, politics, and economics of the region.

4035 Geographical Survey of East Asia (3) General survey of the physical and cultural geography of the region; emphasis on economic development and international relations.

4037 Geography of China (3) Survey of natural environment, population, and economy of China and its relationships to the rest of the world.

4050 Historical Geography of the South (3) Physical and cultural geography of the southern U.S.; emphasis on geographical elements identified with the south and their historical development; emphasis on geographical elements identified with the south and their historical development.

4082 Biogeography (3) Prereq.: GEOG 4082 and a basic course in historical geology, or equivalent. 2 hrs. lecture; 4 hrs. lab. Also offered as ANTH 4083.

4221 The Tropical Atmosphere (3) Prereq.: GEOG 4013 or 4014. Comparative analysis of the tropical and mid-latitude atmospheric circulation systems, including monsoon systems, tropical cyclones, and easterly waves; elements of interannual tropical variability such as El Niño-Southern Oscillation.

Geomorphology and Coastal

4021 Alluvial Morphology (3) Prereq.: GEOG 1001, 1003. May be taken for elective geology credit. Processes that originate and change land and hydrographic forms of alluvial surfaces; emphasis on Louisiana.

4022 Geomorphology (3) Prereq.: GEOG 1001, 1003. May be taken for elective geology credit. Basic principles underlying the study of land forms; emphasis on processes shaping the natural landscape.

4024 Coastal Morphodynamics (3) Prereq.: MATH 1021, 1022, or 1023. See OCS 4024.

4029 Coastal Resources and Management (3) Introduction to coastal environments and contemporary global coastal and estuarine management.

Biogeography and Environment


2070 Environmental Conservation (3) Factors governing human use of the earth and its resources.

4082 Biogeography (3) Different approaches to description and interpretation of plant and soil distribution patterns.

4083 Quaternary Paleoeoecology (3) Prereq.: GEOG 4082 and a basic course in historical geology, or equivalent. 2 hrs. lecture; 4 hrs. lab. Also offered as ANTH 4083.

4977 Special Topics in Geography (3) Permission of instructor. May be taken for a max. of 6 sem. hrs. of credit when topics vary. See GEOG 4999, with special honors emphasis for qualified students.

4999 HONORS: Independent Reading and Research in Geography (1-6) Permission of instructor. May be repeated for credit. An honors course, GEOG 4999, is also available.

7074 Poetics of Place (3) Same as ANTH 7074.

7901 Introduction to Graduate Study (1) Same as ANTH 7901. Techniques and methods of their profession for incoming graduate students.

7902 Introduction to Research Methods in Geography (3)

7906 Settlement Geography: Exploration (3) May be taken for a max. of 9 hrs. of credit with consent of department.

7910 Form-Process Relationships in Coastal Environments (3) V

7911 Selected Topics in Geography (3) Permission of instructor. May be taken for a max. of 9 hrs. when topics vary.

7917 Advanced Physical Geography (3) May be taken for a max. of 9 hrs. of credit with consent of department.

7921, 7922, 7923 Research and Field Work in Geography (3-6 each) Permission of instructor. Each course may be repeated for credit.

7926 Advanced Geomorphology (3) May be taken for a max. of 9 hrs. of credit with consent of department.

7935 Quantitative Methods for Geographical Analysis (3) Prereq.: ENST 7003 or equivalent. Spatial analytical methods for handling and interpreting data related to geography.

7937 Geographical Literature (3)

7938 Culture History (3) May be taken for a max. of 9 hrs. of credit with consent of department.

7942 Coastal Climatology (3) Prereq.: GEOG 4028 and a basic course in either meteorology or climatology, or consent of instructor. Meteorological and climatological phenomena occurring in coastal areas.

7946 Coastal and Estuarine Resources (3) Prereq.: GEOG 4028 and 4029; or equivalent. Nature of coastal and estuarine resources and their perception, evaluation, and exploitation.

7950 Problems in the Geography of Latin America (3) Prereq.: reading knowledge of Spanish or Portuguese. Problems in the cultural and economic geography of Latin America.

7960 Hydroclimatology (3) Prereq.: GEOG 4014 or 4015 or equivalent. 1 hr. lecture; 4 hrs. lab. Field measurements and laboratory analyses of radiation and water budgets in rural and urban environments; emphasis on evapotranspiration rates and climatic consequences.

7973 Advanced Geographic Information Systems (3) Prereq.: GEOG 4047 or equivalent. Theory and methods of design, development, implementation, and applications of geographic information systems.
7975 Advanced Remote Sensing Seminar (3) V Prereq.: GEOG 4045 or equivalent. May be taken for a max. of 9 sem. hrs. of credit when topics vary. Selected topics in remote sensing.

8000 Thesis Research (1-12 per sem.) Permission of instructor. "S"/"U" grading.

9090 Dissertation Research (1-12 per sem.) Permission of instructor. "S"/"U" grading.