



College of Letters & Sciences

**GEOGRAPHY (GEOGRPY) AND
GEOLOGY COURSES (GEOLGY)**

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SPECIALIZED COURSES

GEOGRPY-520

Meteorology And Climate 3 cr

Begins with fundamental relationships among earth, sun and air. Common myths concerning weather phenomena are dispelled through in-depth explanation in everyday language of the physical laws that govern atmospheric functioning. The course terminates with a survey of world climate regions.

Prereq: GEOGRPY-210 or consent of instructor.

GEOGRPY-523

Water Resources 3 cr

Following a treatment of the character, process- involvement, and distribution of water, n evaluation of the development-management, use, and conservation of water within the contexts of the hydrologic cycle and watershed. Field trips are normally taken.

Prereq: GEOGRPY-210 or consent of instructor.

GEOGRPY-537

Recreation Regions And Systems 3 cr

Initial segments of the course focus upon an evaluation of spatial elements of the recreation phenomenon and the development of recreation areas for the express purpose of providing a background for subsequent analysis of existing recreation plans and formulation of a conceptual framework for the development of future recreation regions. Field trips are normally taken.

Prereq: GEOGRPY-230 or consent of instructor.

GEOGRPY-577

Remote Sensing of the Environment 3 cr

An introduction to the images, sensors and techniques used to gather and process data on the Earth and the other planets, including aerial photography, electro-optical scanners and radar systems. The course will focus on the fundamentals of utilizing remotely sensed data in studying both natural and human induced processes impacting the Earth's surface.

Computer applications will be extensively utilized. Field trips are normally taken.
Prereq: GEOGRPY-320 or GEOGRPY-310 or consent of instructor.

GEOGRPY-620

Human And Climate Interactions 3 cr

The course objective is to distinguish between natural climate change and change induced by human activities. Topics covered include human modifications to cloud cover, global warming, and ozone problems. Another emphasis is to better understand the impacts of severe weather on human activities and the potential threats of future climate change. At least one field trip is usually taken.

Prereq: GEOGRPY-320/520 or an equivalent course or consent of instructor.

GEOGRPY-630

Geography Of Race & Ethnicity In The United States 3 cr

The course will take a geographical approach to the study of ethnic groups in the United States. Native American, African American, Hispanic American, and Asian American groups will be studied systematically. Major topics will include mobility, cultural regions, and the cultural landscape created by the various ethnic groups.

Prereq: GEOGRPY-230 or GEOGRPY-261 or GEOGRPY-344.

GEOGRPY-640

Applied GIS: Application For Business And Industry 3 cr

This course will provide the background necessary to apply Geographic Information Systems software to solve applied business problems. The specific educational objectives of this course are: 1) To gain a conceptual understanding of Geographic Information Systems. 2) To provide the student with “hands on” problem solving skills emphasizing site location, target marketing, sales territory development and networking routing.

Prereq: GEOGRPY-270, GEOGRPY-370, GEOGRPY-340 or permission of instructor.

GEOGRPY-644

Urban Land Use Planning 3 cr

A study of the historical, social and political framework of the urban land planning process with primary emphasis on the United States. Exposure to professional planning approaches and techniques and a critical analysis of plans and planners are stressed. Field trips are normally taken.

Prereq: GEOGRPY-344 or SOCIOLGY-352 or POLISCI-446/646 or ECON-438/638 or consent of instructor.

GEOGRPY-652

Cultural Ecology And Sustainable Development 3 cr

This course will discuss the history of the subdiscipline of cultural ecology within geography and teach about indigenous and traditional societies' knowledge systems from a variety of world cultures. It will use ancient and modern examples of indigenous methods of natural resource management and show how these are being applied internationally to present day environmental problems and to sustainable development

approaches.

Prereq: GEOGRPY-230 or GEOGRPY-252 or consent of instructor.

GEOGRPY-670

Applied Environmental and Natural Resources GIS 3 cr

This course will provide the knowledge and skills necessary to utilize GIS for solving applied environmental analysis problems. Specifically, the course is designed to 1) identify and resolve environmental and natural resource problems in terms of spatial analysis, 2) explore a conceptual understanding of GIS, 3) provide students with technical instructional in current GIS software.

Prereq: GEOGRPY-270 Introduction to Mapping and GEOGRPY-370 Geographic Information Systems or Permission of Instructor.

GEOGRPY-690

Workshop 1-8 cr

GEOGRPY-691

Travel Study 1-3 cr

GEOGRPY-694

Seminar 1-3 cr

GEOGRPY-696

Special Studies 1-3 cr

Repeatable once for a maximum of 6 credits.

GEOGRPY-790

Workshop 1-6 cr

GEOGRPY-794

Seminar 1-3 cr

GEOGRPY-798

Individual Studies 1-3 cr

GEOGRPY-799

Thesis Research 1-6 cr

Students must complete a Thesis Proposal Form in the Graduate Studies Office before registering for this course.

GEOLGY-501

Environmental Geology 3 cr

A study of the physical and cultural problems associated with earthquakes, volcanism, disposal, contaminant hydrogeology, nonrenewable resources, and environmental health. An analysis of various engineering solutions and land use planning approaches concerning these problems will be examined. At least one field trip will be required.

Possibly one or two optional field trips will be taken in which students will have to make a deposit to cover the cost of chartering a vehicle. Two lectures and one two-hour lab each week. The course will be offered during the Fall semester of even numbered years.
Prereq: GEOLGY-100 or GEOGRPY-210 or consent of instructor.

GEOLGY-690

Workshop 1-3 cr

Repeatable.

Prereq: Consent of instructor.

GEOLGY-694

Seminar 1-3 cr

GEOLGY-696

Special Studies 1-3 cr

Repeatable.

Prereq: Consent of instructor.