

Geography & Geology (GEOFRPY, GEOLOGY)

SPECIALIZED COURSES

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-635

Forest Geography 3 cr

This course introduces the field of forest geography, emphasizing the quantitative description of spatial and temporal patterns of forest change at multiple scales. Both natural and human forest processes are considered as well as the interaction between humans and forested environments. Theories and methods will be used to understand forest processes, using examples from around the world.

Prereq: GEOGRPY-210 or GEOGRPY-330 or BIOLOGY-144 or consent of instructor.

Unreq: Biology-257.

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 SOCIOLOGY-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-660

Applied GIS in Physical Geography 3 cr

The course focuses on the use of GIS to better understand the physical processes shaping the earth's surface and characteristics of the atmosphere. Because physical

geography covers such a broad range of topics, it will be necessary to review the physical processes associated with each (e.g. landform formation, biogeography, patterns of severe weather, etc.) before applying GIS. Thus, the course combines traditional lecture style format with weekly meetings in departmental computer labs equipped with the latest GIS software. Grading is heavily based on completion of labs on time and quality of analysis of GIS outputs.

Prereq: GEOGRPY-210 or GEOGRPY-370.

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 instruction in current GIS software.

Prereq: GEOGRPY-270 and GEOGRPY-370 or consent of the 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 crv

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

GEOLOGY COURSES (GEOLGY)

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.