

**GEOGRAPHIC INFORMATION SCIENCE
(NATURAL SCIENCES DIVISION)**

GIS-271 GEOGRAPHIC INFORMATION SYSTEMS (4 cr.) This course will review fundamentals of the Geographic Information Systems; its basic applications and procedures and survey approaches to the use of GIS through problem solving. Two hours of lecture and a two hour laboratory per week. Pre-requisite: Computer literacy in use of PC systems of database management, spreadsheet analysis and a graphical software package. Lab fee.

GIS-295 PRACTICUM IN GEOGRAPHIC INFORMATION SYSTEMS (1-12 cr.)

GIS-390 DIRECTED STUDY IN GEOGRAPHIC INFORMATION SYSTEMS (1-12 cr.)

GIS-394 INTERNSHIP IN GEOGRAPHIC INFORMATION SYSTEMS (1-12 cr.)

GIS-395 PRACTICUM IN GEOGRAPHIC INFORMATION SYSTEMS (1-12 cr.)

GIS-471 ADVANCED GEOGRAPHIC INFORMATION SCIENCE (4 cr.) An advanced Geographic Information Science course with emphasis on development of a semester long, real-world GIS project using state-of-the-art tools and techniques. Additional emphasis will also be placed on project management including goal setting, time lines and production scheduling. Lecture and laboratory. Pre-requisite: A grade of "C" or better in GIS 271. Lab fee.

GIS-481 DIGITAL REMOTE SENSING (4 cr.) Computer processing, analysis and interpretation of digital remote sensing data with an emphasis on application of remotely sensed imagery to the analysis of environmental quality and management of natural resources. Pre-requisite: A grade of "C" or better in GIS 271. Lab fee.

GIS-490 DIRECTED STUDY IN GEOGRAPHIC INFORMATION SYSTEMS (1-12 cr.)

GIS-494 INTERNSHIP IN GEOGRAPHIC INFORMATION SYSTEMS (1-12 cr.)

GIS-495 PRACTICUM IN GEOGRAPHIC INFORMATION SYSTEMS (1-12 cr.)

GIS-499 SENIOR PROJECT AND SEMINAR IN GEOGRAPHIC INFORMATION SYSTEMS (1-3 cr.) Students will conduct and communicate the results of a research project in the Natural Sciences Division. Topics may include the historical, philosophical, cultural and environmental aspects, and the processes of natural science. Requirements of students include satisfactory oral presentation and defense of their research and submission of a written report approved by their advisor to the Natural Sciences Division. Prerequisite: NS 398.