

# GEOGRAPHY (GY)

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## **GY 403 Independent Study (1)**

Prerequisite(s): Approval of instructor required.

This course gives the advanced student opportunity to pursue directed research. May be duplicated for credit for a total of 3 semester hours.

Grades: Pass/Fail.

## **GY 431 Topics in Physical Geography (WI) (3)**

Advanced geographic study of various facets of the natural environment; topic selection varies; see instructor. May be duplicated for credit for a total of 12 semester hours. (Writing Intensive Course)

## **GY 445 Topics in Environmental Conservation (3)**

(3) (3). Prerequisite: ESC 500 or its equivalent. In-depth examination of various conservation issues. Topic selection varies, see instructor. Examples of the types of topics that could be covered in this course include energy resources, public land management, water or air quality and issues regarding food production. This course may be used to meet degree requirements in the MPA degree with an Environmental Science Management emphasis or in the MA degree with a major in Liberal Studies coursework. May be duplicated for credit for a total of six semester hours.

## **GY 453 Analyzing Spatial Networks (3)**

Prerequisite(s): GY 307.

Undergraduate Introduction to topology theory and its employment in GIS network analysis. Emphasis on methods of determining efficient paths, modeling network flows, and creating efficient service areas for organization entities.

## **GY 454 Site Location Analysis (3)**

Prerequisite(s): GY 307.

Undergraduate Emphasis on evaluating existing site location efficiencies, determining of appropriate point site and area site locations for organizational entities, and analyzing environmental impact analyses using GIS.

## **GY 455 Organization and Management of Spatial Systems (3)**

Fundamentals of GIS implementation and GIS management. Consideration in designing organization-wide GIS and the management of both special projects and organization-wide use of GIS.

## **GY 466 Topics in Cultural Geography (WI) (3)**

Advanced geographic study of various facets of human culture. Topic selection varies. May be duplicated for credit for a total of 12 semester hours. (Writing Intensive Course)

## **GY 475 Natural Hazards (3)**

An introduction to natural hazards, their causes, distribution and impacts. Focus on human perception, vulnerability and risk analysis.

## **GY 501 Concepts in Cultural Geography (3)**

Application of geographical concepts and perspectives to the study of the world's culture regions. May be used in the social science teaching field with a major in secondary education.

## **GY 510 Concepts in Earth Sciences (3)**

Selected topics in earth science such as atmosphere systems and processes, climatology, landform development, soils and biogeography. See instructor for specific topic(s) each term. May be used in the general science and social science teaching fields with a major in secondary education. May be duplicated for credit for a total of 9 semester hours.