

# Land Use, B.S., Geographic Information Systems (GIS) Concentration

303-556-3143 Science 2028

Catalog 12-13

This sheet applies to the 2012-13 catalog *only*. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors *must* work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

General Studies	33 min
Major courses	65
Electives	22
Total to graduate (min. 40 hrs upper-division)	120 min

Students who have reached junior standing (60 hrs) should request a CAPP (graduation compliance report) and review it with a faculty advisor.

## \*TO BE COMPLETED WITHIN FIRST 30 COLLEGE-LEVEL CREDIT HOURS

### Written Communication

- \_\_\_ ENG 1010 (3 hrs.) Freshman English: The Essay\*  
**or** ENG 1008/1009 (6 hrs.) Freshman Comp: The Essay Part I & II\*  
\_\_\_ ENG 1020 (3 hrs.) Freshman English: Anal., Rsrch. & Docum.  
(to be completed within 45 college-level credit hours)

### Quantitative Literacy\*

- \_\_\_ MTH 1110 or MTH 1400 or MTH 1410

### Oral Communication\*

- \_\_\_ (3 hrs.)

### Arts and Humanities

- \_\_\_ (3 hrs.)  
\_\_\_ (3 hrs.)

### Historical

- \_\_\_ (3 hrs.)

### Natural and Physical Sciences

- \_\_\_ (3 hrs.)  
\_\_\_ (3 hrs.)

### Social and Behavioral Sciences I

- \_\_\_ (3 hrs.)

### Social and Behavioral Sciences II

- \_\_\_ (3 hrs.)

### Global Diversity

- \_\_\_ (3 hrs.) may be satisfied within General Studies

- \_\_\_ **Multicultural Requirement** may be satisfied in Gen Studies, major, minor, or electives

## **MAJOR CORE COURSES** (Please see a Faculty Advisor)

Students must receive a C or better in all courses.

- \_\_\_ GEG 1220 (2 hrs) Map Use  
\_\_\_ GEG 1610 (1 hr) Introduction to Planning  
\_\_\_ GEL 1010 (4 hrs) Physical Geology  
**OR** GEG 1100 (3 hrs) Introduction to Physical Geography  
\_\_\_ GEG 4950 (2-15 hrs) Internship in Land Use  
**OR** GEL 4950 (2-15 hrs) Internship in Geology  
**OR** ENV 4950 (2-15 hrs) Internship in Environmental Science  
\_\_\_ GIS 2250 (3 hrs) Introduction to GIS  
\_\_\_ MTH 1210 (4 hrs) Introduction to Statistics

## **Geographic Information Systems (GIS) Concentration:**

Students must complete each course with a grade of "C" or better. The course cannot be taken pass/fail.

- \_\_\_ GEG 3610 - Principles of Land Use Planning  
\_\_\_ GIS 2710 - Global Positioning Systems  
\_\_\_ GIS 3250 - Cartography  
\_\_\_ GIS 4840 - Remote Sensing  
\_\_\_ GIS 4850 - Spatial Modeling in Raster  
\_\_\_ GIS 4860 - GIS Applications  
\_\_\_ GIS 4870 - Spatial Databases  
\_\_\_ GIS 4890 - Advanced GIS Project

Select from the following to a total of 46 hrs.

- \_\_\_ GIS 4880 - Current Topics in GIS: Variable Topics  
\_\_\_ MTH 3240 - Environmental Statistics  
\_\_\_ CSS 1247 - Introduction to Programming: Visual Basic

Because GIS is an application tool, students are required to specialize in an **area of interest**. A student can select one of the following interest areas (Environment, Meteorology, Planning, Resources) or design one with the approval of a department advisor or select a minor in Computer Science (School of Letters, Arts and Sciences); Computer Information Systems, General Business, International Business, Marketing (School of Business), or Criminal Justice and Criminology (School of Professional Studies).

### **Areas of Interest**

- \_\_\_ Environment (19 hrs, See Catalog for approved courses)  
**OR** Meteorology (19 hrs, See Catalog for approved courses)  
**OR** Planning (19 hrs, See Catalog for approved courses)  
**OR** Resources (19 hrs, See Catalog for approved courses)  
**OR** Surveying and Mapping (19 hrs, See Catalog for approved courses)