### GEOG 4500: Advanced Topics in Geospatial Science

#### 3 Credit Hours

Prerequisite: (GEOG 3305 and GEOG 3315) or admission to GIS Certificate program

This course examines advanced topics in geospatial science that fit the needs and interests of students and faculty. Example topics include ArcGIS server, online mapping, geospatial databases, geodatabase modeling, python programming, global positioning systems, and spatial statistics in GIS. This course is theme-based and does not focus solely on any one geospatial technique or application. The course can be taken more than one so long as it is not identical in content.

# **GEOG 4700: Geomorphology**

### 3 Credit Hours

This course examines Earth surface processes and landforms, including tectonic, volcanic, hillslope, karst, fluvial, glacial, periglacial, eolian, and coastal geomorphic systems, as well as weathering and soils. Relationships between environmental change and the evolution of landscapes are addressed.

# **GEOL 1121K: Introductory Geosciences I**

### **4 Credit Hours**

Prerequisite: A grade of 'C' or better in any two 1000-level or 2000-level science courses

This course covers Earth materials and processes. This course introduces students to the study of Earth, and processes which modify it over time. The course provides an overview of plate tectonics, describes relationships between rocks and structures, examines the role of water in landscape evolution, and places an emphasis on the environmental applications of Earth processes. Lecture and lab familiarize students with the methodology and tools of the geologist, and emphasize the connections between the components of the Earth system.