GEG Geography

GEG 100 Cultural Geography (3-0) 3 crs.
Surveys the contemporary topics of human geography; population, migration, language, religion, ethnicity, and political, economic and urban geography. Teaches the methods and tools geographers use in their science and practice. IAI S4 900N

GEG 101 World/Regional Geography (3-0) 3 crs.
Surveys the major world regions emphasizing their physical, cultural, economic and historical geographies; provides a geographic interpretation of major current events. IAI S4 900N

GEG 103 The Developing World (3-0) 3 crs.
Surveys the technologically less developed regions of the World, including East Asia, South Asia, Middle and South America, Southwest Asia and North Africa, and Sub-Saharan Africa. Emphasis is placed on the spatial arrangement of resources, population, human institutions, economic activities, political patterns, religion, and cultural and physical landscapes. Each cultural realm is analyzed in respect to the larger international community with special attention to current events and issues. IAI S4 902N

GEG 104 The Developed World (3-0) 3 crs.
Surveys the technologically more developed regions of the world, including Europe, the United States and Canada, the former Soviet Union, Japan, Australia and New Zealand. Emphasis is placed on the spatial arrangement of resources, population, human institutions, economic activities, political patterns, religion, and cultural and physical landscapes. Each cultural realm is analyzed in respect to the larger international community with special attention given to current events and issues. IAI S4 901

GEG 111 Physical Geography (3-0) 3 crs.
Examines the spatial distribution of elements of Earth's four physical spheres: the atmosphere, the hydrosphere, the lithosphere, and the biosphere including landforms, climates, weather, vegetation, and soils. Consideration is given to the causes of these distributions and to their effects on human populations. IAI P1 909

GEG 112 Physical Geography Laboratory (0-2) 1 cr.
Applies the scientific method of observation, hypothesis formation, and experimentation to Earth's four physical spheres: the atmosphere, the hydrosphere, the lithosphere, and the biosphere. IAI P1 909L
Prerequisite: Prior or concurrent enrollment in GEG 111.

GEG 150 GIS and Mapping Principles (2-2) 3 crs.
Provides an introduction to geospatial technologies, such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and Remote Sensing through hands-on computer based exercises. The essential principles of map use and design, and spatial analysis are also included in this course. Fundamental desktop computer skills assumed. IAI S4 905

GEG 151 Geographic Information Systems I (2-2) 3 crs.
Introduces the concepts and problem solving capabilities of Geographic Information Systems (GIS). Spatial data sourcing and management will be learned using information acquired in the field or from other sources. Spatial analysis concepts will be introduced through hands-on exercises using GIS software.
Prerequisite: GEG 150 with a grade of C or better.

GEG 152 Geographic Information Systems II (2-2) 3 crs.
Continues GEG 151. Emphasizes the practical application of Geographic Information Systems (GIS) technology to solve problems and answer questions. Increases level of proficiency using GIS and performing spatial analysis of data. Introduces GIS operational and management issues.
Prerequisite: GEG 151 with a grade of C or better.

GEG 153 Applications for GIS (2-2) 3 crs.
Consolidates the concepts and techniques acquired through prior coursework within the Geographic Information Systems (GIS) certificate. Students will analyze case studies, understand GIS as a professional field, and apply GIS methods and workflows in classroom projects.
Prerequisite: GEG 152 with a grade of C or better.

GEG 154 Introduction to Remote Sensing (2-2) 3 crs.
Provides an introduction to remote sensing of the Earth. Topics include the physical principles upon which remote sensing is based; history and future directions; sensors and their characteristics; image data sources; image classification, interpretation and analysis techniques; and the integration of workflow outputs into GIS (Geographic Information Systems).
Prerequisite: GEG 150 with a grade of C or better.