

Geography / 32

101 Introduction to Geography (3 hours)

Survey course introducing students to the geographical study of the relationship of humans to the environment and the spatial patterns of human activities. (F, S, SS)

102 People and Cultures of the World (3 hours)

A regional perspective on the distribution of languages, religions, laws and customs around the globe. (F, S, SS)

201 Maps and Map Interpretation (3 hours)

Designed to teach students how to analyze and interpret map information based on a knowledge of map projections, map distortion, coordinate systems and map measurement techniques. The basics of air photo interpretation are also covered. (F, S)

207 GPS Fundamentals (3 hours)

An introductory course to the Global Positioning System and the integration with other spatial data-related technologies, such as GIS and remote sensing, for field or in-office work. (F)

211 Special Topics in Geography (1-4 hours)

A course designed to employ geographic tools and methods in the analysis of pertinent topics relating to the human spatial organization of the earth. Topics include: natural disasters, disease and health care, scribing, etc. (F, S, SS)

221 Economic Geography (3 hours)

Survey course dealing with the interrelationships of geography and the human attempt to make a living. Such topics as agricultural regions of the world, industry, mining and forestry will be considered. (F, S)

302 Cadastral Mapping (2 hours)

A course designed to employ geographic tools and methods in the analysis of pertinent topics relating to the human spatial organization of the earth. Prerequisite: Geog 32-201 or permission of instructor. (F, S)

340 Geography of North America (3 hours)

An advanced course examining regional variations in the United States and Canada with numerous case studies. (F, S)

360 Dynamic and Synoptic Meteorology (3 hours)

A study of the physical characteristics of the atmosphere and the variables that control both day-to-day weather and severe weather. Prerequisite: Geog 32-101 or Geol 27-114/115. (alt. trimesters, alt. years)

361 Climatology (3 hours)

Climate types and their significance to ecosystems and human activities are discussed. Emphasis is placed on applied climatology, paleoclimatology and the significance of climate change. Prerequisite: Geog 32-360 or Geol 27-114/115. (alt. trimesters, alt. years)

362 Cartography (3 hours)

Map compilation, design and construction. Prerequisite: Geog 32-201 or permission of instructor. (F, S)

363 Remote Sensing (3 hours)

Use of aerial photography and satellite imagery in geological and geographic research. Prerequisite: Geog 32-201 or permission of instructor. (F, S)

365 Geographic Information Systems (3 hours)

An introduction to geographic information systems encompassing the theoretical and applied aspects of the collection, storage, analysis and display of spatial (geographical) data.

Prerequisite: Geog 32-201 or junior standing. (F, S)

409 Independent Study in Geography (1-3 hours)

Offered only by special arrangement and with the consent of the instructor involved and the department chairperson. Requires written proposal at time of registration.

410 Geographic Thought and Research Methods (3 hours)

An advanced course in geographic research, emphasizing data collection, analysis and presentation. The course will also examine the history of geographic thought in the U.S.

Prerequisites: Geog 32-201 and junior standing. (F, S)

415 Internship in Geography (1-6 hours)

As internships (paid and unpaid) become available, they will be offered. They require permission of the instructor, department chairperson and a written proposal at the time of registration (F, S, SS)

441 Geography of Europe (3 hours)

An advanced course in geography dealing with the continent of Europe. The major regions and nations of Europe are studied in detail. (S, odd years)

442 Geography of Asia (3 hours)

An advanced course in the geography of Asia with a regional approach. Special emphasis is placed on the Chinese Realm, Southeast Asia, the Indian subcontinent, Japan and Korea. (F)

444 Geography of Africa (3 hours)

A comprehensive course study of the physical and cultural geography of the African continent. (S, even years)

445 Geography of Latin America (3 hours)

Provides the student with sufficient information about the physical and cultural aspects of Latin America to allow the application of general concepts of regional geography of this particular area. (F)

465 Introduction to Customized GIS (3 hours)

An introduction to GIS customization for personalized graphic user interface and specialized functions. The GIS function library provided by the current GIS software will be used to facilitate such customization. (S)

499 Senior Seminar (1 hour)

A capstone course in geography. Course is designed to assess the student's ability to synthesize and evaluate geographic knowledge as it applies toward professional enhancement and/or further professional development in higher education. Prerequisites: Senior standing and completion of the Geography Core. (F, S)

500 Special Offerings (1-4 hours)

One time course offering in a timely area of geography.

501 Conservation of Natural Resources (3 hours)

A study of the earth's environment and resource limits as related to population growth and humankind's need to provide food, water, mineral resources and energy in order to survive and prosper. Emphasis is placed on developing an appreciation for the interconnectedness of the natural world and the potential consequences of disrupting those connections. (alt trimesters, alt. years)

510 Geographic Education: Themes and Materials (2 hours)

Designed for elementary or secondary teachers wishing to incorporate an instructional unit in geography in either the social science or science curriculum. (SS)

511 Special Topics in Geography (1-4 hours)

Will be offered according to student needs and interest. Each offering will be designed to incorporate the latest information pertaining to a timely topic in geography. May be repeated once to earn no more than six credits total. Topics may include: applied geographic information systems, urban and regional planning, location analysis, geography of sport, etc. Prerequisites: 12 hours of geography and permission of instructor. (F, S, SS)

521 Political Geography (3 hours)

An advanced course in geopolitics with emphasis on fundamental principles and their application to the major regions and nations of the world today. Prerequisite: Junior standing or permission of instructor. (S, even years)

522 Urban Geography (3 hours)

An advanced course offering an in-depth study of the physical characteristics of cities and some of the problems man is faced with in a world where urbanism is a rapidly increasing phenomenon. Prerequisite: Junior standing or permission of instructor. (S)

543 Applications of Remotely Sensed Data (3 hours)

Covers the use of remotely-sensed information in a geographic information system environment. Emphasis is placed on understanding different data sources, tools and techniques used in remote sensing. (online, alt. trimesters, alt. years)

545 Principles of GIS (3 hours)

A rigorous study of fundamental GIS principles, including the nature of spatial data, vector and raster data models, and key GIS analysis operations. (online, alt. trimesters, alt. years)

562 Digital Cartography and GeoVisualization (3 hours)

An advanced cartography course utilizing computer assisted cartography and advanced techniques of map construction. Prerequisites: Geog 32- 362. (S)

563 Digital Image Processing (3 hours)

Further explores the techniques and concepts learned in Remote Sensing (Geog 32-363). Explores advanced techniques in image analysis and processing not covered in Remote Sensing. Prerequisite: Geog 32-363. (F)

565 Advanced Geographic Information Systems (3 hours)

Builds on the techniques and concepts learned in Geographic Information Systems (Geog 32-365). Stresses research and project design strategies and advanced analytical techniques using geographic information systems to solve spatial problems. Prerequisite: Geog 32-365. (S)

572 Issues in Cartographic Design (3 hours)

An extension of basic GIS/desktop mapping encompassing the theoretical and applied aspects of cartographic problem solving pertaining to the collection, storage, retrieval, analysis and display of spatial data. An emphasis on map/graphics design issues pertaining to delivering the output in evolving media formats such as web dissemination. Prerequisites: Successful completion of an undergraduate Cartography course or equivalent work experience and Geog 32-545. (online, alt. trimesters, alt. years)

580 Spatial Analysis and Geostatistics (3 hours)

Designed to make the student familiar with the analysis and statistical tools used by geographers. Covers the fundamental aspects of geostatistics that are used in research and business environments. (online, alt. trimesters, alt. years)