

GEOGRAPHY

Course Search

Not all courses are offered every semester. Refer to the schedule of courses for each term's specific offerings.

[More Info](#)

Courses at the University of Florida, with the exception of specific foreign language courses and courses in the online Master of Arts in Mass Communication program, are taught in English.

Courses

GEA 1000 Geography for a Changing World 3 Credits

The spatial organization of society. Emphasizes the political regions of the world. (S and N)

General Education - International
General Education - Social Science

GEA 2270 Geography of Florida 3 Credits

Geographic conditions and human adjustments in the major regions in Florida. The natural environment, population, routes of communication, industries, resources and strategic location in their geographical and historical aspects. (WR)

WR6

GEA 3405 Geography of Latin America 3 Credits

Examines the interconnecting land, life and welfare throughout Latin America. (WR)

WR6

GEA 3500 Geography of Europe 3 Credits

Comprehensive and systematic survey of the population, natural resources, geographic regions and potentialities of Europe and the significance of this region in the economic and political affairs of the world. (N and S)

General Education - International
General Education - Social Science

GEA 3600 Geography of Africa 3 Credits

Comprehensive and systematic survey of the population, natural resources, geographic regions and potentialities of Africa and the significance of this region in the economic and political affairs of the world. (S and N) (WR)

General Education - International
General Education - Social Science

WR6

GEA 4465 Amazonia 3 Credits

The biophysical basis of natural resource management, cultural diversity and economic development in Amazonia. Appreciating the complexity and variability of soils, vegetation, aquatic ecosystems and climate in the region offers clues for understanding human settlement and development as well as the potential and limitations of the rich natural resource base. (S and N)

General Education - International
General Education - Social Science

GEA 4911 Undergraduate Research in Regional Geography 3 Credits

Provides firsthand, supervised research in Regional Geography. Projects may involve inquiry, design, investigation, scholarship, discovery or application in Regional Geography.

GEO 2200 Physical Geography 3 Credits

Studies the development and distribution of landforms, climates, minerals, soils and water resources. Interrelationships among the physical environment and regional patterns formed by these elements are analyzed against man's utilization of them. (P)

General Education - Physical Science

GEO 2200L Physical Geography Laboratory 1 Credit

Laboratory in physical geography, for lab science credit. (P)

Coreq: GEO 2200 or GEO 2201

General Education - Physical Science

GEO 2242 Extreme Weather 3 Credits

Introduces the science of weather (what we get short term) and climate (what we expect long term) and current scientific developments in such areas as extreme weather prediction, global climate change and improved forecasting of events. (P)

General Education - Physical Science

GEO 2410 Social Geography 3 Credits

Introduces geography as a social science. Various social concepts presented from a spatial perspective. (S and D)

General Education - Diversity
General Education - Social Science

GEO 2420 Introduction to Human Geography 3 Credits

Introduces cultural geography with an emphasis upon the development and spatial arrangement of the major societies of the modern world. (S and N)

General Education - International
General Education - Social Science

GEO 2426 Pop Music and Culture: a Geographic Perspective 3 Credits

Examines the geographic origins, development and diffusion of contemporary pop music and the regional dynamics of pop music culture from the 1950s to present. (S)

General Education - Social Science

GEO 2500 Global and Regional Economies 3 Credits

Contemporary perspectives, themes and research in economic geography, focusing on issues and problems associated with regional and global economic and demographic change. Regional variations and disparities in growth and development are analyzed and policy implications discussed. (S) (WR)

General Education - Social Science
WR6

GEO 3162C Introduction to Quantitative Analysis for Geographers 4 Credits

Introduces elementary geographical data analysis, including spatial measurement, spatial statistics and spatial forecasting. Students apply statistical concepts and the use of spreadsheet computer software. (P)

Prereq: STA 2023 or instructor permission
General Education - Physical Science

GEO 3250 Climatology 3 Credits

Genesis of regional climates and their global distribution. Emphasis on world regional climatology. Secondary topics include applied climatology and climate change. (P)

General Education - Physical Science

- GEO 3280 Principles of Geographic Hydrology** **4 Credits**
Examines the effects of physical geography on the land-based portion of the hydrologic cycle at the regional and basin scales. Includes discussion of precipitation, infiltration and runoff. (P)
Prereq: GEO 2200 or instructor permission
Coreq: GEO 3162C
General Education - Physical Science
- GEO 3315 Geography of Crop Plants** **3 Credits**
Studies the biological structure, means of survival, propagation and distribution of plants, with emphasis on their relationship to the culture and diffusion of man throughout the world and his part in their development and improvement. (B)
General Education - Biological Science
- GEO 3341 Extreme Floods** **3 Credits**
Examines the world's most extreme floods from the Pleistocene through present due to various causes. Discusses physical and human aspects of flood warning, preparedness, response and recovery throughout the world. (N and P)
General Education - International
General Education - Physical Science
- GEO 3352 The Human Footprint on Landscape** **3 Credits**
Studies human-environment relationships from a primarily geographic perspective, focusing on the human forces that shape landscapes.
- GEO 3372 Conservation of Resources** **3 Credits**
Surveys natural resources and a study of wise and wasteful practices of these resources. Satisfies resource certification for social studies teachers.
Prereq: sophomore standing or instructor permission
- GEO 3427 Plants, Health and Spirituality** **3 Credits**
Issues and controversies surrounding organic food, genetically-modified crops, medicinal plants, plants used to achieve altered states of consciousness and the importance of ornamental plants as inspiration for artists and in worship.
- GEO 3430 Population Geography** **3 Credits**
Geographical analysis of populations, including population description, distribution, change and characteristics; demographic processes; and the consequences of development, conflict and population control diseases. (S)
General Education - Social Science
- GEO 3452 Introduction to Medical Geography** **3 Credits**
Medical geography deals with human-environment interactions and the influence of these interactions on public health. Provides a broad and comprehensive survey of geographic approaches in medical studies.
Prereq: sophomore standing
- GEO 3454 Peoples and Plagues** **3 Credits**
Introduces emerging infectious diseases (EIDs) in the context of previous outbreaks, focusing on geography, origin, and management response. Explores basic models of infectious diseases processes, transmission cycled, and life-histories of host-vector systems, and the ecological and landscape conditions that favor emergence.
Prereq: sophomore standing
- GEO 3502 Economic Geography** **3 Credits**
A comprehensive geographical survey of major economic activities such as agriculture, forestry, fishing, mining, manufacturing and commerce. Emphasizes the study of the characteristics of distribution and the regional patterns of these activities. (S) (WR)
General Education - Social Science
WR6
- GEO 3602 Urban and Business Geography** **3 Credits**
An empirical and theoretical spatial analysis of the various economic, population and social facets within and between urban settlements. (S) (WR)
Prereq: junior standing or instructor permission
General Education - Social Science
WR6
- GEO 3611 Housing, People and Places in a Spatially Diverse America** **3 Credits**
Examines the housing, people and places that comprise the diverse contemporary human settlement patterns in the U.S. Topics focus on the quality of life found in the housing and neighborhoods of these urban and rural landscapes. (S and D)
General Education - Diversity
General Education - Social Science
- GEO 3803 Geography of Alcohol** **3 Credits**
Origins and fission of alcoholic beverages and associated crops on a global scale.
- GEO 3930 Special Topics** **3 Credits**
Rotating topics in geography.
- GEO 4167C Intermediate Quantitative Analysis for Geographers** **3 Credits**
Surveys various multivariate techniques commonly used to analyze geographic data. Emphasis on hypothesis testing, inference, multiple regression, analysis of variance and cluster analysis. Introduces time-series regression and grouped estimation procedures, factor analysis, probit/logit modeling and trend-surface interpolation. (WR)
Prereq: GEO 3162C or the equivalent
WR6
- GEO 4281 River Forms and Processes** **3 Credits**
Examines the nature and variety of fluvial processes and the origin and modification of fluvial landforms. Includes discussion of environmental changes in rivers and human activities in drainage basins.
Prereq: GEO 2200 or GLY 2010C, or instructor permission
General Education - Physical Science
- GEO 4285 Models in Geographic Hydrology** **3 Credits**
Investigates the numerical and computational techniques available for the extraction of geographic information from hydrometeorologic data. (WR)
Prereq: GEO 3162C, and GEO 3280 or STA 3032
Coreq: GEO 4167C
WR6
- GEO 4300 Environmental Biogeography** **3 Credits**
Description and explanation of spatial patterns of biodiversity and the underlying biophysical factors of human-environment interactions. Investigates past and present distributions of organisms and how patterns of environmental variation influence organisms. How biogeography is used to design nature reserves and how forecasting climate change may affect organisms and explain human adaptations to environmental variability.
Prereq: GEO 2200 or equivalent
- GEO 4306C Geography of Vector-borne Diseases** **3 Credits**
Introduces the spatial epidemiology of vector-borne diseases (VBDs) and geospatial methods for monitoring, mapping and modeling them. Provides hands-on experiences for mapping and modeling risk of VBDs via GIS-based labs.
Prereq: GEO 3452 or GIS 3043 or permission of the instructor

GEO 4554 Regional Development	3 Credits	GIS 4001C Maps and Graphs	4 Credits
The problems of regional development and regional growth within the context of economic, political and spatial relationships. (S) (WR)		Analyzes cartographic problems with exercises in techniques of presentation, including map projections and symbols and problems in statistical representation by graphic methods.	
Prereq: junior or senior standing			
General Education - Social Science			
WR6			
GEO 4612 Shelter and Care Options for U.S. Elderly	3 Credits	GIS 4021C Aerial Photo Interpretation	3 Credits
Examines the strengths, weaknesses and demand for housing and care alternatives addressing the needs of both active and frail American elderly persons.		Principles of aerial photography, identification and interpretation of physical and cultural features, sketching and simple map-making, and uses of aerial photography.	
Prereq: refer to the department		Prereq: GEO 2200 or instructor permission	
GEO 4905 Individual Work	1-5 Credits	GIS 4037 Digital Image Processing	4 Credits
Qualified students and the instructor concerned may choose a particular topic or problem for study.		Introduces the theory and application of digital imagery data in geographical research with a hands-on, lab-based approach.	
Prereq: undergraduates only with 9 credits of geography and instructor permission		Prereq: instructor permission	
GEO 4911 Undergraduate Research in Geography	3 Credits	GIS 4102C GIS Programming	3 Credits
Provides firsthand, supervised research in Geography. Projects may involve inquiry, design, investigation, scholarship, discovery or application in Geography.		Introduces basic programming concepts; instruction in popular programming languages for geospatial processing, applications, and modeling in ArcGIS environment.	
GEO 4930 Senior Seminar	1 Credit	Prereq: GIS 3043C or equivalent	
Integrates geographic concepts for graduating seniors; provides introduction to professional geography for students entering the job market.		GIS 4113 Introduction to Spatial Networks	3 Credits
Prereq: geography seniors only		Many phenomena of interest in physical, social and cyber environments can be thought of as networks within geographic context. Teaches methods for analyzing these spatial networks, and introduces their applications in geography, transportation, hydrology, epidemiology, social science, etc.	
GEO 4938 Selected Topics in Geography	1-4 Credits	Prereq: Entry level knowledge of statistics or instructor permission	
Rotating geography topics.		GIS 4115 Applied Geostats	3 Credits
GEO 4944 Internship	1-10 Credits	Introduces fundamentals and practices of advanced geostatistical analysis (kriging), which addresses optimal spatial interpolation. Geostatistics are currently applied in diverse disciplines such as geography, geology, engineering, hydrology, urban studies and epidemiology.	
Experimental learning in position with city, county, regional and state government agencies.		Prereq: STA2023, GEO3162C or equivalent and GIS3043 or equivalent or instructor permission	
Prereq: senior standing		GIS 4911 Undergraduate Research in Geospatial Trends	3 Credits
GEO 4970 Honors Thesis	3 Credits	Provides firsthand, supervised research in Geospatial Trends. Projects may involve inquiry, design, investigation, scholarship, discovery or application in Geospatial Trends.	
Completion of an honors thesis that meets department specifications during the semester in which the student is enrolled.		GLY 4734 Coastal Morphology and Processes	3 Credits
Prereq: senior standing and participation in department honors program		Examines the nature and variety of coastal processes, and the origin and modification of environmental changes along coasts, including human activities in the coastal zone.	
GIS 2002 The Digital Earth	3 Credits	Prereq: GEO 2200 or GLY 2010C or GLY 2030C	
Focuses on how the Earth's surface is visualized, explored, and analyzed in digital formats (e.g. maps, satellite images, aerial photos). Provides an introduction to fundamental concepts of digital geographic data to understand the Earth environment and human society based on the vast quantities of geographic information in our ever-changing world.		MET 3503 Weather and Forecasting	3 Credits
GIS 3043 Foundations of Geographic Information Systems	4 Credits	Provides hands-on experience using weather instruments and making forecasts.	
Geographic Information Systems (GIS) as the technology for creation, modification, display and analysis of spatial information. Develops knowledge of GIS, competence in geographic databases and familiarity with computer software and hardware.		Prereq: GEO 2242 or MET 1010 or GEO 2200	
Prereq: GEO 2200, GEO 3162C and 2000-level human geography course		MET 4532 Hurricanes	3 Credits
GIS 3420C GIS Models for Public Health	3 Credits	Meteorological and climatological concepts related to hurricanes. Forecasting current activity, researching past storms and analyzing storm structure, damage and future trends.	
Focuses on the design of GIS-based models to address health and healthcare issues. Topics include a conceptual framework, landscape epidemiology models, disease diffusion models, health accessibility, human health behavior and location-allocation of health services. Laboratory section provides hands-on experience applying these models with GIS tools.		Prereq: GEO 2242 or MET 1010, or instructor permission	
Prereq: GIS 3043, and STA 2023 or GEO 3162C			

MET 4560 Atmospheric Teleconnections **3 Credits**

Atmospheric teleconnections are recurring large-scale patterns of pressure and circulation anomalies. They can influence temperature, rainfall, storm tracks and jet stream location and intensity. Examines how these patterns were discovered, how the index that characterizes the phase of each teleconnection is calculated and the weather associated with different phases.

Prereq: MET 3503 or GEO 3250 with a minimum B- grade

MET 4750 Spatial Analysis of Atmospheric Data using GIS **3 Credits**

How atmospheric data are collected and analyzed for meteorologic and climatologic-scale research. Where various types of data are obtained and how to analyze data to answer specific research questions.

MET 4911 Undergraduate Research in Meteorology and Climatology **3 Credits**

Provides firsthand, supervised research in Meteorology and Climatology. Projects may involve inquiry, design, investigation, scholarship, discovery or application in Meteorology and Climatology.
