Geography

GEO 101L  Atmospheric Processes Lab  1 cr
Laboratory exercises associated with GEO 101. GEO 101 must be taken concurrently. Together, GEO 101 and GEO 101L count as one laboratory science course, partially fulfilling general education requirements. Fee.
Co-requisite: GEO 101

GEO 102L  Landscape Processes Lab  1 cr
Laboratory exercises associated with GEO 102. GEO 102 must be taken concurrently. Together, GEO 102 and GEO 102L count as one laboratory science course, partially fulfilling general education requirements. Fee.
Co-requisite: GEO 102

GEO 101  Atmospheric Processes  3 cr
Introduces students to the natural science branch of geography. Emphasizes Earth-Sun relationships, weather and climate. Core Course.
Co-requisite: GEO 101L

GEO 102  Landscape Processes  3 cr
Introduces students to the natural science branch of geography. Emphasizes spatial patterns and processes related to natural landscape regions and landforms. Core Course.
Co-requisite: GEO 102L

GEO 114  Intro to Human Geography  3 cr
This course introduces students to the social sciences branch of geography. Emphasis is placed on the location, spatial arrangement, and spatial interaction of the human environment which includes: population, culture, geopolitics, economic activity, and settlements. Core Course.

GEO 115  World Regional Geography  3 cr
A survey of the major regions of the world, excluding North America, and the interrelationship of environmental, cultural, economic, and political factors that characterize each. Core Course.

GEO 201  Geography Orientation  1 cr
This 1-credit hour course will cover topics that are important to geography students, such as: which geography courses to choose, the major sub-disciplines of geography, and career choices available for geography majors. You will meet the Geography faculty as they give brief overviews of the courses they teach and their research interests. Field trips, which will generally take place during the class time, are included in the course and will showcase examples of the research interests of faculty members. Core Course.

GEO 301  Writing for the Sciences - W  3 cr
This course is designed to introduce students to basic scientific writing skills. Participants will review the general principles of clear writing and will apply these principles to writing for a scientific audience. Particular emphasis will be placed on conveying the significance of research, outlining the aims, and discussing the results for scientific papers.
Pre-requisite: EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

GEO 310  Environmental Earth Science  3 cr
A spatial perspective on major global environmental problems. Topics include population pressure; loss of biodiversity; ozone depletion; global warming; water, energy, and mineral resources, food supplies, waste disposal, geologic hazards, and political/economic forces (identical to GY 310).
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) or GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D

GEO 312  World Economic Geog  3 cr
Emphasis is placed on the location, spatial distribution, and spatial interaction of economic activities within a global context. Topics covered include population, natural resources, primary, secondary and tertiary activities, development and international trade and aid. Students will write technical reports using word processing and spreadsheet software.
Pre-requisite: GEO 114 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

GEO 313  Geography of U.S. and Canada  3 cr
An analysis of the environmental, historical, cultural, and economic factors that create the spatial patterns, development processes and distinctiveness of Canada and the United States.

GEO 314  Geography of Europe  3 cr
An analysis of the environmental, historical, social and economic factors that create the diversity of countries and their unique spatial characteristics on the subcontinent of Europe.

GEO 315  Geography of Latin America  3 cr
A systematic survey of Latin America landscapes. Attention is directed to natural resources, human activities and regional differentiation.
Pre-requisite: GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D
GEO 317 Mountain Geography 3 cr
This course studies the mountainous regions of the world from a regional geography perspective. Course topics will include both physical and cultural aspects: their origins, historic attitudes towards mountains, the sacred mountains, their physical features, population and human occupation, climates, biota, and current threats to mountain environments. We will study the role of human activity in affecting mountain environments as well as the effect of mountains on people.
Pre-requisite: EH 102 Minimum Grade of C

GEO 320 Alabama Geography 3 cr
Spatial study of physical and human features in Alabama. Includes geomorphology, climate, vegetation, agriculture, development, population, and environmental issues within the state.
Pre-requisite: (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

GEO 321 Nat'l Parks Conservation 3 cr
An analysis of the motives and processes for establishing national parks and nature reserves, the primary conservation and preservation issues they have and the influences of ecology, politics, and culture on their planning and management. U.S. national parks are emphasized.
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

GEO 331 Computer Graphs and Maps 4 cr
Introductory review of the application of computers to the production of maps and thematic maps for geographical analysis. Core course. Meets computer proficiency requirement for Geography majors. Fee.
Pre-requisite: GEO 102 Minimum Grade of C and GEO 102L Minimum Grade of C

GEO 332 Remote Sensing I 4 cr
Interpretation of maps, air photos and satellite images (identical to GY 332). Core course.
Pre-requisite: GEO 102 Minimum Grade of C and GEO 102L Minimum Grade of C

GEO 365 Urban Geography and Planning 3 cr
Concentrates upon the evolution and function of the urban spatial system, and upon the internal spatial structure of an urban area's residential, commercial, and industrial land use. This course also introduces basic concepts and strategies of urban and regional planning with a focus on the domestic realm.
Pre-requisite: GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D

GEO 370 International Tourism 3 cr
The study of the components of the Tourism industry, their spatial distribution, the environmental and cultural effects of Tourism, and the requisites and techniques for planning tourism development.
Pre-requisite: (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

GEO 405 Natural Hazards and Disasters 3 cr
An overview of natural hazards and disasters from a scientific perspective that focuses on the occurrence and impact of environmental hazards, such as volcanoes, earthquakes, tsunamis, floods, mass movements, and coastal hazards. Mitigation techniques used to make the human environment more resilient against natural hazards are also covered. In addition, the viewpoint of hazard and emergency managers toward natural disasters will be studied.
Pre-requisite: GEO 102 Minimum Grade of C or (GY 101 Minimum Grade of C or GY 111 Minimum Grade of C)

GEO 410 Biogeography 3 cr
Analysis of spatial patterns of life on earth. Biogeography emphasizes the influence of the physical environment, paleogeography, and past and possible future climate change on the biomes and biogeographic realms.
Pre-requisite: GEO 101 Minimum Grade of D

GEO 411 Soils 3 cr
A review of soil formation, processes and properties (identical to GY 411).
Pre-requisite: GEO 102 Minimum Grade of D

GEO 412 Physiograph Regions N Amer-W 3 cr
The study of the major and minor natural regions of the North American continent, from Alaska to the Mexican border, including the Caribbean area. The course will focus on the different physically defined regions of North America, studying the homogenous variables that make each region distinct, including the topography, vegetation, soils, surface features, and past climates.
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

GEO 417 Health and Place 3 cr
This course illustrates how geographic concepts help us better understand health and well-being, through the exploration of theories, methodologies, and contributions of medical geography to the social and health sciences. Using spatial tools, such as mapping and Geographic Information Systems, this course will examine the geographical patterns of health and disease. This course encourages students to examine the theoretical and technological tools geography brings to topics related to health and provides them with a foundation for studying geographic differences in health and health services.
Pre-requisite: EH 102 Minimum Grade of C
GEO 435 Research Methods Geography 3 cr
This course serves as an introduction to geography as a research discipline. Emphasis is placed on geographic problem solving, data collection, data analysis, and reporting. Micro computer oriented statistical and mapping packages will be used to analyze geographic data. Prerequisites: Junior standing. Core course. Fee. Pre-requisite: (ST 210 Minimum Grade of D or ST 175 Minimum Grade of D)

GEO 440 Coastal Zone Management 2 cr
A review of ecological features and of management policies for coastal communities with a description of relevant federal and state programs. Taught only at Dauphin Island Sea Lab.

GEO 441 Coastal Climatology 2 cr
Study of the controlling factors and features of the world's climates, with particular attention to coastal areas, and application and interpretation of climate data. Taught only at Dauphin Island Sea Lab.

GEO 443 Climatology - W 3 cr
Analysis of global climate as aggregate weather. Component elements, factors controlling distribution, resulting area patterns, and climatic classification are studied (identical to MET 443). Fee Pre-requisite: MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C

GEO 475 Field Work in Geography 1 TO 6 cr
Students will travel to pre-determined location to perform field work for a project that was pre-determined by the professor and student. Once in the field, students will gather data and learn about the landscape(s). Pre-requisite: EH 102 Minimum Grade of D

GEO 485 Seminar in Geographic Thought 3 cr
This course serves as the capstone course for geography majors in which students integrate their knowledge of human and physical geography, as well as the geographic techniques, to investigate real-world problems with a spatial component. Students gain experience in working in small groups and in written and oral presentation of project results. Students will also lead discussions on key or pertinent research articles in geography. Taught Spring only. Pre-requisite: GEO 435 and GEO 331 and GEO 332

GEO 490 Special Topics - 2 TO 4 cr
Geographic topics not covered in current geography courses. May be repeated when content varies for a maximum of 8 credit hours.

GEO 492 Seminar - 1 TO 3 cr
Departmental seminar investigating a selected field of geography. May be repeated when content varies for a maximum of 3 credit hours.

GEO 494 Directed Studies - 1 TO 4 cr
Independent research under the direction of a member of the geography faculty. No more than 8 hours of Directed Studies is allowed.

GEO 496 Internship in Geography 1 TO 4 cr
On-the-job learning through occupational or professional work with an approved firm or agency. Open to geography majors only. No more than 4 hours of Internship credit is allowed.

GEO 590 Sp Top - 1 TO 6 cr
An in-depth course for advanced students in geography. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. Includes specialized topics not currently listed in the Bulletin course offerings.

GEO 594 Grad Dir Study in Geography- 1 TO 4 cr
Independent research in Geography at the graduate level. May be used to learn new techniques or explore research questions of special interest under the direction of a member of the Geography graduate faculty.