**Geography (GRG)**

### Geography (GRG) Courses

**GRG 1013. Fundamentals of Geography. (3-0) 3 Credit Hours. (TCCN = GEOG 1300)**
Introduction to the study of physical and cultural features of the earth and their distributions, causes, and consequences to humans. Topics include landforms, climate, natural resources, population, human behavior in spatial context, economic growth, urbanization, and political systems. May apply toward the Core Curriculum requirement in Social and Behavioral Sciences. Generally offered: Fall, Spring.

**GRG 1023. World Regional Geography. (3-0) 3 Credit Hours. (TCCN = GEOG 1303)**
Study of the world’s regions, focusing on salient physical, cultural, economic, and political characteristics, including physiology, climate, natural resources, population, economic structure and development, globalization, urban growth, cultural institutions, and political structure. Regions include North America, Latin America, Europe, Middle East/ North Africa, Sub-Saharan Africa, South Asia, Japan, China and East Asia, the Russian Federation, and Australasia. May apply toward the Core Curriculum requirement in Language, Philosophy and Culture. Generally offered: Fall, Spring, Summer.

**GRG 2613. Physical Geography. (3-0) 3 Credit Hours. (TCCN = GEOG 1301)**
Study of the earth’s major landforms and climatic patterns, the processes giving rise to these patterns, and their relationship to human activity. Includes the geomorphology of volcanoes, glaciers, coral reefs, mountains, caves, dunes, and plate tectonics. May apply toward the Core Curriculum requirement in Life and Physical Sciences. Generally offered: Fall, Spring, Summer.

**GRG 2623. Human Geography. (3-0) 3 Credit Hours. (TCCN = GEOG 1302)**
Study of the relationship between the social and spatial aspects of human behavior. Topics include stereotyping of people and places, human proxemics and territoriality, perception of places, environmental perception, spatial diffusion, and human migration. May apply toward the Core Curriculum requirement in Social and Behavioral Sciences. Generally offered: Fall.

**GRG 3113. Geography of the United States and Canada. (3-0) 3 Credit Hours.**
Study of selected geographic aspects of the major regions of the United States and Canada, emphasizing current social and economic issues in these regions. From a contextualizing treatment of the continent’s physical geographies, the course proceeds to the social geographies of the major ethnic groups, showing how the historical management and appropriation of space has been integral to determining the character of the contemporary social hierarchy at the national level. The course proceeds through analyses of social and economic patterns of development, including the national and internal geographical patterns of North American cities.

**GRG 3123. Geography of Latin America. (3-0) 3 Credit Hours.**
Beginning with basic aspects of the physical environment, the course examines the social geographies of pre-colonial and colonial Latin America. The structural factors of Latin American economies and cultural institutions are then examined. Emphasis is on their spatial manifestations and their role in producing a Latin America often termed “underdeveloped.” The emerging role of Latin America in the democratic world order of the post-1990s is also examined.

**GRG 3133. Geography of Europe. (3-0) 3 Credit Hours.**
Survey of the European culture area, including Western Europe, Eastern Europe, and the Baltics. Discussion of historical, urban, political, ethnic, and economic forces shaping the 21st-century geography of Europe, including the European Union and the Russian Federation. Generally offered: Spring.

**GRG 3143. Geography of Mexico. (3-0) 3 Credit Hours.**
Investigation of Mexico’s physical and social geography, including climatic and geomorphologic influences, the historical imprint of the Amerindians and the Spanish, population growth and migration, urbanization, political reform, social and cultural change, agriculture and industry, trade liberalization and the impact of NAFTA. May include a field trip to Mexico.

**GRG 3153. Geography of Texas. (3-0) 3 Credit Hours.**
A topical and regional examination of the physical, cultural, and economic patterns of the state. Includes demographic characteristics, agriculture, mining, manufacturing, selected urban areas, and current social issues. May include a field trip to the nonmetropolitan hinterland of San Antonio.

**GRG 3166. Physical and Cultural Geography of the American Southwest. (6-0) 6 Credit Hours.**
A capstone course in geography with both classroom and field components including visiting sites, keeping field logs and making student presentations. Illustrates how the principles of physical and cultural geography play out in the physical and cultural landscapes of the Southwest. The one-week field portion includes travel in vans to areas that may include West Texas and New Mexico in addition to adjacent Colorado, Arizona, and Utah. Students will stay in campgrounds and walk into historic and natural sites.

**GRG 3213. Cultural Geography. (3-0) 3 Credit Hours.**
A thematic exploration of the nature and distribution of human culture hearths, population, folk culture, popular culture, agriculture, industrialization, languages, and religion. Topics are defined and examined in the context of their manifestations and influences as regions, cultural diffusion, ecology, cultural interaction, and landscapes. Generally offered: Fall.

**GRG 3314. Introduction to Geographic Information Systems. (3-2) 4 Credit Hours.**
An introductory course on the application of the computer to the acquisition, manipulation, analysis, and display of geographic data; overview of projection systems, data acquisition issues, and presentation techniques. Three lecture and two laboratory hours per week. (Formerly GRG 3313. Credit cannot be earned for both GRG 3314 and GRG 3313.) Generally offered: Fall.

**GRG 3323. Spatial Analysis. (3-0) 3 Credit Hours.**
Conceptualization, operationalization, and analysis of relationships in geography and the social sciences. Includes the scientific method, research design, sampling, interpretation of spatial patterns, statistics, and univariate and multivariate analysis. Involves use of computer software in the analysis and display of data. Generally offered: Spring.

**GRG 3334. Advanced Geographic Information Systems. (3-2) 4 Credit Hours.**
Prerequisite: GRG 3314. Advanced topics in the use of computer-based analysis of geographic information including data acquisition, modeling complex datasets, and an introduction to scripting to customize an industry-standard software package. (Formerly GRG 3333. Credit cannot be earned for both GRG 3334 and GRG 3333.)
GRG 3343. Analytical and Computer Cartography. (2-2) 3 Credit Hours.
The design, construction, production, and reproduction of maps using computer hardware and software. Topics may include cartographic theory, principles of visual communication, and the techniques of geographic visualization, including 3-D and 4-D modeling and animation.

GRG 3413. Geography of the Middle East and North Africa. (3-0) 3 Credit Hours.
An analysis of the states spanning the Maghreb from Morocco to Libya; Egypt; and the Middle East from Turkey and the Arabian Peninsula to Pakistan. Examination of the region’s physical and social geography and its political and economic dynamics from early history to modern times.

GRG 3423. Geopolitics of Russia and Eurasia. (3-0) 3 Credit Hours.
Multidisciplinary introduction and regional study of the Russian Federation and the Eurasian realm, including the Caucasus, Central Asian nations, Afghanistan, and Mongolia. Both the geography and the politics of this area will be analyzed. Historical and contemporary geopolitical topics include nation-building, regional civilizations, revolution, terrorism, the 19th-century “Great Game,” the rise of the USSR, and the current transition of the Russian Federation to an uncertain future. (Same as GLA 3423 and POL 3423. Credit cannot be earned for more than one of the following: GLA 3423, GRG 3423, or POL 3423.)

GRG 3433. The Geography and Politics of the Asian Rim. (3-0) 3 Credit Hours.
An analysis of the states spanning from the Indian subcontinent through Indo-China to Japan and China. Examination of their physical and social geographies and the regional political dynamics prevalent in the modern era. Selected themes will include population dynamics, cultural hearths, immigration patterns, economic development, and regional integration.

GRG 3443. Medical Geography. (3-0) 3 Credit Hours.

GRG 3453. Population Geography. (3-0) 3 Credit Hours.
Study of the spatial dimensions of population distribution, growth, and mobility. Includes the historical and modern reasons for global patterns of population, the changes in birth and death rates over time, and levels of development as explained by the demographic transition and population policies. Special attention will be given to human migration theories, models, and case studies at the intra-urban, internal, and international levels. Global issues that are related to population growth and movement, such as political conflict and governance, disease, and immigration policy, will be covered.

GRG 3463. The Geography of Tourism. (3-0) 3 Credit Hours.
Introduces the principles and practices of global tourism, including its geographic diversity and the connections between tourist origins and destinations. Discusses the economic importance and dimensions of tourism and the social, economic, and environmental impacts it has on host societies.

GRG 3473. Mountain Geography. (3-0) 3 Credit Hours.
The geography of mountainous regions around the world will be analyzed in the context of Earth systems and human-landscape interactions. Wildlife, plant diversity, landform processes, water resources, climate, hazards, culture, and development will be evaluated as they pertain to mountainous environments.

GRG 3513. Urban Geography. (3-0) 3 Credit Hours.
A geographic examination of the environmental settings and impacts, history, structure, growth, area of influence, economic base, social structure, and culture of cities. Topics may include the physiography and climate of cities, preindustrial and industrial cities in history, urban land-use models and examples, factors that influence the growth and decline of cities, central place theory and the city’s tributary region, the community economic base and the economic multiplier, social area analysis, and the city as a center of cultural diversity. Focus of the course may be local, national, or international. Generally offered: Fall.

GRG 3523. Introduction to Urban Planning. (3-0) 3 Credit Hours.
An introduction to the urban public policy, urban dynamics, selected problems, and the role of the master planning process in their management and solution. Issues and themes include poverty, public education, urban growth, municipal and regional government, energy and waste management, historic preservation and urban design, and relationships between transportation and land use.

GRG 3533. Geography of Economic Activity. (3-0) 3 Credit Hours.
Investigates the location of agricultural, industrial, retail and service activities, and transportation flows, through relevant theories and models. Includes case studies of agricultural land use around cities, the urban economic base, shift-share analysis, global impacts on the local economy, and central place principles such as threshold and range. Major focus is on the San Antonio region.

GRG 3613. Conservation of Resources. (3-0) 3 Credit Hours.
A survey of natural resources, environmental policies, global consumption patterns, and the competing values that affect them. Topics include agriculture, water resources, air pollution, waste disposal, land management, wildlife preservation, habitat conservation, biodiversity, energy production, urban sprawl, economic growth, and other selected components of built and natural systems. Generally offered: Fall.

GRG 3623. Geography of Natural Hazards. (3-0) 3 Credit Hours.
This course introduces students to the geophysical phenomena that are the root causes of natural disasters, as well as the social institutions and human geographies that exacerbate them. Hazards covered in this class may include earthquakes, tsunamis, volcanic eruptions, hurricanes, tornados, floods, drought, wildfire, and global climate.

GRG 3633. Geography of Development. (3-0) 3 Credit Hours.
Survey and analysis of economic growth and social change in different parts of the world, with an emphasis on less-developed countries. Topics may include the definition of development, the major theories of development and underdevelopment, the evolution of global inequalities, the impacts of population growth and migration, the role of agriculture, industry, and transportation in the development, and cultural imperialism and the rise of religious fundamentalism.

GRG 3643. Political Geography. (3-0) 3 Credit Hours.
Investigates the role of the political state in society and the evolution of state organization from classical times to the present. Topics may include centrifugal and centripetal forces, geopolitics, territorial morphology, boundaries, core areas, and emerging supranationalism.

GRG 3653. Gender and Cities: An Introduction to Feminist Geography. (3-0) 3 Credit Hours.
The course studies the role of women in the spatial organizations of society. Topics may include analysis of gendered spaces, the importance of gender relations in shaping physical, social, and built environments, and the spatial-economic consequences of gender-based policies. (Formerly titled “Geographic Perspectives on Women.”) Generally offered: Spring.
GRG 3713. Weather and Climate. (3-0) 3 Credit Hours.
Analysis of the elements and causes of daily weather, climatic classifications, and climate change. Study of world distributions and components of climate, with studies of air pressure, precipitation, air masses, optical phenomena, and wave cyclones. Regional attention to weather patterns, including tornadoes and hurricanes. Generally offered: Fall.

GRG 3723. Physiography. (3-0) 3 Credit Hours.
This course provides a study of landforms, the description and interpretation of relief features of the surface of the earth, and the processes and materials that form them and change them over time. Students will be introduced to the impacts of human intervention in landscape-shaping processes. Special emphasis will be placed on the landforms of the Southwestern United States.

GRG 3733. Urban and Regional Analysis. (3-0) 3 Credit Hours.
Applied models of urban and regional growth, structure, interaction, influence, and inequality over space, with emphasis on the United States. Stresses practical skills.

GRG 3743. Biogeography. (3-0) 3 Credit Hours.
The study of the distribution of species and ecosystems in geographic space and over time. Topics may include the prehistoric and historic diffusion of plant and animal species, the global distribution of flora, fauna and soils, the impacts of plants and animals on settlement and globalization, and the consequences of human activity for the biosphere.

GRG 3753. Climate Change. (3-0) 3 Credit Hours.
Examines changes in climatic systems over both short and long time periods, their physical and human causes, and their impacts on physical and ecological systems. Discusses past, present, and future changes in climatic conditions and the methods used to evaluate changes in temperature, precipitation, and other climatic indicators.

GRG 4911. Independent Study. (0-0) 1 Credit Hour.
Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the Department Chair, and the Dean of the College in which the course is offered. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

GRG 4912. Independent Study. (0-0) 2 Credit Hours.
Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the Department Chair, and the Dean of the College in which the course is offered. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

GRG 4913. Independent Study. (0-0) 3 Credit Hours.
Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the Department Chair, and the Dean of the College in which the course is offered. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

GRG 4923. Advanced Research Tutorial. (0-0) 3 Credit Hours.
Prerequisites: Permission in writing (form available) of the instructor, the student's advisor and the Department Chair. The tutorial provides students with the opportunity to serve as an apprentice to a professor in order to learn the process of academic research. The student will engage in all aspects of the professor's research project, potentially including data collection, report writing, joint paper presentations or publications, providing ideal preparation for graduate school.

GRG 4933. Internship in Geography. (0-0) 3 Credit Hours.
Prerequisites: Consent of internship coordinator and faculty supervisor. Supervised experience relevant to geography within selected community organizations. A maximum of 6 semester credit hours may be earned through the internship.

GRG 4936. Internship in Geography. (0-0) 6 Credit Hours.
Prerequisites: Consent of internship coordinator and faculty supervisor. Supervised experience relevant to geography within selected community organizations. A maximum of 6 semester credit hours may be earned through the internship.

GRG 4953. Special Studies in Geography. (3-0) 3 Credit Hours.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

GRG 4983. Research Practicum. (0-0) 3 Credit Hours.
Prerequisites: Permission in writing (form available) of the instructor, the student's advisor and the Department Chair. The practicum provides students with the opportunity to focus on a specific research issue having practical applications in geography, governance, politics, or policy. Students participate in a hands-on research experience on the issue in a collective research environment. Potential practicum activities could be related to the Social Research Lab, the Media & Elections Studio, and the GIS Lab, for example.

GRG 4993. Honors Thesis. (0-0) 3 Credit Hours.
Prerequisites: Enrollment limited to candidates for Honors in Geography during the last two semesters; completion of honors examination and consent of the Honors College. Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.