

# GEOGRAPHY AND ENVIRONMENTAL SUSTAINABILITY (GES)

## Geography and Environmental Sustainability (GES) Courses

### **GES 1013. Fundamentals of Geography. (3-0) 3 Credit Hours.**

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. (Formerly GRG 1013. Credit cannot be earned for both GRG 1013 and GES 1013.) Generally offered: Fall, Spring. Course Fees: DL01 \$75; LRC1 \$12; LRLF \$10.27; STLF \$18.48.

### **GES 1023. World Regions & Global Change. (3-0) 3 Credit Hours. (TCCN = GEOG 1303)**

Study of the world's regions, focusing on salient physical, cultural, economic, and political characteristics, including physiography, 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. (Formerly GRG 1023. Credit cannot be earned for both GRG 1023 and GES 1023.) Generally offered: Fall, Spring, Summer. Course Fees: DL01 \$75; LRC1 \$12; LRLF \$10.27; STLF \$18.48.

### **GES 2613. Intro to 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; weather and climate; and the relationship of these agents to physical and human landscapes. May apply towards the Core Curriculum requirement in Life and Physical Sciences. (Formerly GRG 2613. Credit cannot be earned for both GRG 2613 and GES 2613.) Generally offered: Fall, Spring, Summer. Course Fees: DL01 \$75; LRC1 \$12; LRLF \$10.27; STLF \$18.48.

### **GES 2623. Human Geography: People, Place, Culture. (3-0) 3 Credit Hours. (TCCN = GEOG 1302)**

An introduction to the study of human patterns and behaviors across the globe. Topics include population and migration; language, religion, gender, and ethnicity; political geography; development; economic geography; urban patterns; and resource issues. May apply towards the Core Curriculum requirement in Social and Behavioral Sciences. (Formerly GRG 2623. Credit cannot be earned for both GRG 2623 and GES 2623.) Generally offered: Fall. Course Fees: LRC1 \$12; LRLF \$10.27; STLF \$18.48.

### **GES 2723. Meteorology. (3-0) 3 Credit Hours.**

An introductory study of atmospheric science offering information on the atmosphere and the scientific tenets and accompanying physical processes that operate weather and climate. Includes interactions between the atmosphere and human activities and the social and behavioral changes that have occurred due to weather.

### **GES 3003. Global Sustainability. (3-0) 3 Credit Hours.**

This course introduces the student to the concepts, principles, and practices of sustainability in the context of physical and human geography. It focuses on key knowledge areas including environmental and ecosystem change; water, food, and energy resources; urban and economic development; social equity; and cultural preservation. The course will help the student respond to critical global challenges such as climate change, natural disasters, food shortages, environmental degradation, and social inequalities. Course Fees: LRLF \$10.27; STLF \$18.48.

### **GES 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. (Formerly GRG 3113. Credit cannot be earned for both GRG 3113 and GES 3113.) Course Fees: LRLF \$10.27; STLF \$18.48.

### **GES 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. (Formerly GRG 3123. Credit cannot be earned for both GRG 3123 and GES 3123.) Course Fees: LRLF \$10.27; STLF \$18.48; DL01 \$75.

### **GES 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. (Formerly GRG 3133. Credit cannot be earned for both GRG 3133 and GES 3133.) Generally offered: Spring. Course Fees: LRLF \$10.27; STLF \$18.48; DL01 \$75.

### **GES 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. (Formerly GRG 3143. Credit cannot be earned for both GRG 3143 and GES 3143.) Course Fees: LRLF \$10.27; STLF \$18.48; DL01 \$75.

### **GES 3153. Geography of Texas. (3-0) 3 Credit Hours.**

A topical and regional examination of the physical, historical, cultural, and economic patterns of the state. Includes demographic characteristics, agriculture, mining, manufacturing, and selected urban areas. The role of historical and political forces in creating social inequities in contemporary Texas are examined in detail, including environmental degradation, rural health, higher education, and patterns of wealth and economic growth. May include a field trip to the nonmetropolitan hinterland of San Antonio. (Formerly GRG 3153. Credit cannot be earned for both GRG 3153 and GES 3153.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. (Formerly GRG 3213. Credit cannot be earned for both GRG 3213 and GES 3213.) Generally offered: Fall. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3223. Revealing Geography through Film and Pop Culture. (3-0) 3 Credit Hours.**

This course explores global geographic issues by means of contemporary cinema, elaborated upon in selected readings. By the use of film, the course immerses the student in the socio-cultural, geo-political, economic, and environmental dimensions of the contemporary world. It examines places and people that are often marginalized, such as certain ethnic and racial groups, women, and the economically disadvantaged. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3314. Introduction to Geographic Information Systems. (3-3) 4 Credit Hours.**

An introductory course on the application of the computer to the acquisition, manipulation, analysis, and display of geographic data; and an overview of projection systems, data acquisition issues, and presentation techniques. Three lecture and two laboratory hours per week. (Formerly GRG 3313 and GRG 3314. Credit cannot be earned for GRG 3314 or GRG 3313 and GES 3314.) Generally offered: Fall. Course Fees: GIS1 \$32; LRLF \$10.27; STLF \$24.64; DL01 \$100.

**GES 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. Students will have the opportunity to explore their own interests within the course. (Formerly GRG 3323. Credit cannot be earned for both GRG 3323 and GES 3323.) Generally offered: Spring. Course Fees: GIS1 \$32; LRLF \$10.27; STLF \$18.48.

**GES 3334. Advanced Geographic Information Systems. (3-3) 4 Credit Hours.**

Prerequisite: GES 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. Three lecture and two laboratory hours per week. (Formerly GRG 3333 and GRG 3334. Credit cannot be earned for GRG 3333 or GRG 3334 and GES 3334.) Course Fees: GIS1 \$32; LRLF \$10.27; STLF \$24.64.

**GES 3343. Analytical and Computer Cartography. (2-3) 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. (Formerly GRG 3343. Credit cannot be earned for both GRG 3343 and GES 3343.) Course Fees: GIS1 \$32; LRLF \$10.27; STLF \$18.48.

**GES 3353. Critical Qualitative GIS. (3-0) 3 Credit Hours.**

This course will serve as an introduction to the concepts, techniques, and histories that enable mapping as a creative and artistic practice, with particular attention to critical and qualitative interventions into the GISciences. It covers the centrality of the map in everyday life and considers the changing role of the map-maker as society becomes increasingly saturated by digital information technologies. The course introduces more recent innovative applications of GIS and mapping in representing social groups through participatory and voluntary mapping practices. Course Fees: GIS1 \$32; LRLF \$10.27; STLF \$18.48.

**GES 3363. GIS Cartography. (3-0) 3 Credit Hours.**

This course is focused on creating and designing high-quality digital maps. Introduces the basic concepts and techniques of digital map making and the broader field of geographic visualization. Topics may include map symbolization, scale, generalization and cognition, virtual environments, designing user interfaces for GIS, and map animations using Online GIS and Google Earth.

**GES 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. (Formerly GRG 3413. Credit cannot be earned for both GRG 3413 and GES 3413.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. Formerly GRG 3423. Credit cannot be earned for more than one of the following: GLA 3423, GRG 3423, POL 3423, or GES 3423.) Course Fees: LRLF \$10.27; STLF \$18.48; DL01 \$75.

**GES 3433. Politics and Geographies of East Asia. (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. (Formerly GRG 3433. Same as POL 3443 and GLA 3443. Credit can only be earned for one of the following: GRG 3433, GLA 3443, POL 3443, or GES 3433.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3443. Medical Geography. (3-0) 3 Credit Hours.**

The human ecology of health and disease. Topics may include analysis of the cultural/ environmental interactions that explain world patterns of disease; the diffusion and treatment of infectious disease; maps and GIS in medical geography; the ecology of non-communicable diseases; and health care promotion and delivery. (Formerly GRG 3443. Credit cannot be earned for both GRG 3443 and GES 3443.) Course Fees: LRLF \$10.27; STLF \$18.48; DL01 \$75.

**GES 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, 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 related to population growth and movement such as political conflict and governance, disease, and immigration policy will be covered. (Formerly GRG 3453. Credit cannot be earned for both GRG 3453 and GES 3453.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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, factors that influence the growth and decline of cities, urbanization, the rise of global cities, the imagined city, cities as urban service centers, urban cultural diversity, social area analysis, and urban cultural conflicts. Focus of the course may be local, national, or international. (Formerly GRG 3513. Credit cannot be earned for both GRG 3513 and GES 3513.) Generally offered: Fall. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3533. Geography of Local Economic Activity. (3-0) 3 Credit Hours.**

Investigates the location of agricultural, industrial, retail and service activities, and transportation flows at the scale of town and community, through relevant theories and models. Includes case studies of agricultural land use around cities, the community economic base, global impacts on the local economy, and central place principles of threshold, range, primacy, and hierarchy. Students will apply these concepts and models to local communities. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3543. Behavioral Geography. (3-0) 3 Credit Hours.**

Study of human spatial perception and behavior as a function of the social, built, and natural environments. Topics include the formation of beliefs and attitudes toward places and peoples; how humans lay claim to and defend proximal spaces and territories; perception of the physical environment; the diffusion of technologies, ideas, people, and diseases over space; and the causes and effects of contemporary human migrations. Students will directly observe human personal space defense in the field, and present their observations in written and/or verbal form. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3573. Urban Planning and Development. (3-0) 3 Credit Hours.**

An exploration and analysis of the planning and development processes of cities and urban regions. Themes and issues may include the history of urbanization; planning tools such as the master plan, zoning and subdivision regulations; property rights and the legal basis for planning and real estate development; economic development; planning and politics; historic preservation and urban design; growth management and sustainability; environmental issues; housing and social issues; and transportation and land use. (Same as POL 3413. Formerly GRG 3523 and GES 3523. Credit can only be earned for one course: GES 3573, POL 3413, GRG 3523, or GES 3523.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. (Formerly GRG 3613. Credit cannot be earned for both GRG 3613 and GES 3613.) Generally offered: Fall. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. (Formerly GRG 3623. Credit cannot be earned for both GRG 3623 and GES 3623.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3633. Geography of Globalization and 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 defining development, modernization and neo-liberalism, structuralism and post-development, major theories of development and underdevelopment, poverty and inequality, sustainable and grassroots development, cultural globalization, and hyper-urbanization. (Formerly GRG 3633. Credit cannot be earned for both GRG 3633 and GES 3633.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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, emerging supranationalism, and the spatial and political problematics associated with the globalization of capitalist exchange. (Formerly GRG 3643. Credit cannot be earned for both GRG 3643 and GES 3643.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3653. Gender and Cities: An Introduction to Feminist Geography. (3-0) 3 Credit Hours.**

The course studies the role of women in the spatial organization 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. In addition to the role of gender, this course explores the roles of race, religion, disability, and sexual orientation in shaping the urban environment. (Formerly GRG 3653. Credit cannot be earned for both GRG 3653 and GES 3653.) Generally offered: Spring. Course Fees: DL01 \$75; LRLF \$10.27; STLF \$18.48.

**GES 3663. Urban Sustainability in Global Context. (3-0) 3 Credit Hours.**

This course explores the challenges of achieving environmentally and socially sustainable communities, neighborhoods, and cities. It investigates how and in what contexts we can move towards urban ecological integrity, economic security, empowerment, social responsibility and social well-being as exemplified by sustainable communities globally. Students will be introduced to the concepts, theories, tools, and techniques of this vibrant, emerging field. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3673. Space and Identity Crisis in the Postmodern Era. (3-0) 3 Credit Hours.**

This course examines the growing crisis of personal and collective identity as a consequence of the globalization of capitalist exchange. The human need for 'belonging' to different social communities at different spatial, social, and cultural levels is challenged by rapid changes in economic production, technology and the corresponding integration with formerly external areas. Common manifestations of these processes are expressed through supranationalism (EC, NAFTA, etc.), gentrification, 'anti-immigrationism', the renewal of recently tainted racial, ethnic, and gender conceptions, among others. This course reveals the systemic underpinnings to growing sectarian strife at the local and international level. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 3683. Sustainable Land Use Management. (3-0) 3 Credit Hours.**

This course will provide students with the opportunity to understand and apply sustainability principles and practices to landscape management and land uses that are responsive to both natural and human needs. They will develop an ability to “read” the landscape and become aware of what has or is happening with the land we inhabit. Students will be introduced to the tools and techniques used by planners, managers, and citizens to achieve desired future land conditions. Issues will include landscape ecology, reconciliation ecology, storm water management, habitat conservation, designing with nature, and related topics. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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, air pressure, precipitation, air masses, optical phenomena, and wave cyclones. Regional attention to weather patterns, including tornadoes and hurricanes. (Formerly GRG 3713. Credit cannot be earned for both GRG 3713 and GES 3713.) Generally offered: Fall. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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 and change them over time. Students will be introduced to the impacts of human intervention in landscape-shaping processes. Emphasis will be placed on the landforms of a selected region, such as the Southwestern United States. (Formerly GRG 3723. Credit cannot be earned for both GRG 3723 and GES 3723.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. The course introduces the student to theories and concepts of urban and regional development, stressing practical skills for analyzing social, political, economic, and demographic characteristics of the urban scene, with an emphasis on sustainable development. (Formerly GRG 3733. Credit cannot be earned for both GRG 3733 and GES 3733.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. (Formerly GRG 3743. Credit cannot be earned for both GRG 3743 and GES 3743.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. (Formerly GRG 3753. Credit cannot be earned for both GRG 3753 and GES 3753.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 4843. Study Away. (3-0) 3 Credit Hours.**

Prerequisite: Permission of instructor and department. A lecture course associated with a study away program. Involves domestic travel and field trips. May be repeated for credit when the destination varies.

**GES 4853. Study Abroad. (3-0) 3 Credit Hours.**

Prerequisite: Permission of instructor. Lecture course associated with a study abroad program. Involves international travel and field trips. May be repeated once for credit when the destination varies. Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 4856. Study Abroad. (6-0) 6 Credit Hours.**

Prerequisite: Permission of instructor. Lecture course associated with a study abroad program. Involves international travel and field trips. Course Fees: LRLF \$10.27; STLF \$36.96.

**GES 4911. Independent Study. (0-0) 1 Credit Hour.**

Prerequisites: Permission in writing (form available) from 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. (Formerly GRG 4911. Credit cannot be earned for both GRG 4911 and GES 4911.) Course Fees: LRLF \$10.27; STLF \$6.16.

**GES 4912. Independent Study. (0-0) 2 Credit Hours.**

Prerequisites: Permission in writing (form available) from 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. (Formerly GRG 4912.) Course Fees: LRLF \$10.27; STLF \$12.32.

**GES 4913. Independent Study. (0-0) 3 Credit Hours.**

Prerequisites: Permission in writing (form available) from 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. (Formerly GRG 4913. Credit cannot be earned for both GRG 4913 and GES 4913.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. (Formerly GRG 4933. Credit cannot be earned for both GRG 4933 and GES 4933.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 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. (Formerly GRG 4936. Credit cannot be earned for both GRG 4936 and GES 4936.) Course Fees: LRLF \$10.27; STLF \$36.96.

**GES 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. (Formerly GRG 4953. Credit cannot be earned for both GRG 4953 and GES 4953.) Course Fees: LRLF \$10.27; STLF \$18.48; DL01 \$75.

**GES 4983. Research Practicum. (0-0) 3 Credit Hours.**

Prerequisites: Permission in writing (form available) from the instructor, the student's advisor, and the Department Chair. The practicum provides students with the opportunity to focus on a specific research issue under the guidance of a professor. The student would engage in a professor's research project or another broader research initiative. The student might be involved in data collection, report writing, preparing presentations or publications, or gaining applied research experience working with several students or professors in a collective research environment such as the GIS lab or in the field. (Formerly GRG 4983. Credit cannot be earned for both GRG 4983 and GES 4983.) Course Fees: LRLF \$10.27; STLF \$18.48.

**GES 4993. Honors Thesis. (0-0) 3 Credit Hours.**

Prerequisites: A minimum grade point average of 3.0 at UTSA, a 3.5 grade point average in the major, and recommendation by a member of the Political Science and Geography faculty. Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval. Students who are approved will enroll in the appropriate honors thesis courses during their final two semesters at UTSA. To earn honors, the thesis must be passed by an Honors Committee that will be formed with the recommending faculty and another faculty member. Students interested in enrolling should contact the Department Undergraduate Advisor of Record for additional information. (Formerly GRG 4993. Credit cannot be earned for both GRG 4993 and GES 4993.) Course Fees: LRLF \$10.27; STLF \$18.48.