

2011-13 Cal Poly Catalog

Social Sciences Department

GEOG–GEOGRAPHY

GEOG 150 Introduction to Cultural Geography (4) GE D3

The interplay of cultures, places, and environments, with emphasis on the diversity, interrelationships, and spatial features of global cultures. Topics include characteristics and patterns of population, ethnicity, agriculture, geopolitics, language, religion, urbanization, industry, and folk and popular culture. 4 lectures. Fulfills GE D3.

GEOG 200 Special Problems for Undergraduates (1–4)

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 8 units, with a maximum of 4 units per quarter. Prerequisite: Consent of department head.

GEOG 250 Physical Geography (4)

Addresses the origins and patterns of the earth's diverse assemblage of climates, landforms, biota and soils. A major focus on relationship between human cultures and these earthly environments. 4 lectures. *Crosslisted as ERSC/GEOG 250.*

GEOG 270 Selected Topics (1–4)

Directed group study of selected topics. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1 to 4 lectures. Prerequisite: Open to undergraduate students and consent of instructor.

GEOG 300 Geography of the United States (4) GE D5

The population (including origin, ethnicity, migration, and distribution), land utilization, and economic development viewed against the background of the physical environment. Topically and regionally organized. Pervading themes include landscape evolution and alteration, regional cultural distinctiveness, and current problems. 4 lectures. Prerequisite: Completion of GE Areas A, D3. Recommended: Junior standing. Fulfills GE D5 except for Social Sciences majors.

GEOG 301 Geography of Resource Utilization (4) GE D5

A multicultural, world view of the interconnections of the following resource systems: food, energy, water, and non-fuel minerals. A pervading theme is the sustainability of these systems. 4 lectures. Prerequisite: Completion of GE Areas A, D3. Recommended: Junior standing. Fulfills GE D5 except for Social Sciences majors.

GEOG 308 Global Geography (4) GE D5

Examination of the major world regions such as Europe, the Middle East, Africa, Asia and Latin America. Focus on the origins and content of contemporary cultural landscapes and on their utility for understanding international differences, interactions, and current events. Particular attention to the relationship between humans and the environment. 4 lectures. Prerequisite: Completion of GE Areas A and D1. Recommended: Junior standing. Fulfills GE D5 except for Social Sciences majors.

GEOG 317 The World of Spatial Data and Geographic Information Technology (4) GE Area F

Basic foundation for understanding the world through geographic information and the tools available to utilize spatial data. Application of Geographic Information Systems (GIS) and related technologies, including their scientific basis of operation. 3 lectures, 1 activity. Prerequisite: Completion of GE Area B2. *Crosslisted as GEOG/LA/NR 317.* Fulfills GE Area F.

GEOG 318 Applications in GIS (4)

ArcGIS Desktop Geographic Information System (GIS) computer software to explore environmental, natural resource, social and economic issues using spatial data. Principles of cartography and map interpretation. Development of data base and software management competencies. 2 lectures, 2 laboratories. Prerequisite: Junior standing and computer literacy, or consent of instructor.

GEOG 325 Climate and Humanity (4)

Geographic perspective on the interrelationships between climate and human cultures. Effects of people on climate and the influence of climate and weather upon human activities and behavior. Focus on global human conditions which are responsible for the alteration of climate and in turn are

vulnerable to climate change. 4 lectures. Prerequisite: Junior standing or consent of instructor. *Crosslisted as ERSC/GEOG 325.*

GEOG 328 Applications in Remote Sensing (4)

Introduction to the use of satellite imagery to analyze natural and human features on the earth. Applications in geology, water, climate, vegetation, agriculture, and urban land use. Fundamentals of processing digital satellite images. Emphasis on bridging the earth and social sciences. 3 lectures, 1 activity. Prerequisite: GEOG 250 or consent of instructor.

GEOG 333 Human Impact on the Earth (4)

Global assessment of the impact of humans on the earth's vegetation, animals, soil, water and atmosphere. Emphasis on problems stemming from the interactions of human attitudes, technologies, and population with natural resources. 4 lectures. Prerequisite: Junior standing or consent of instructor. *Crosslisted as ERSC/GEOG 333.*

GEOG 340 Geography of California (4)

Geographic analysis of the land and people of California. Patterns of physical environment, natural resources, history, settlement, ethnicity, economy, politics, and urban growth. Current issues in a national and global context. 4 lectures. Prerequisite: Junior standing.

GEOG 360 Geography of Europe (4)

The population, land utilization, and economic development viewed against the background of the physical environment. Topically and regionally organized. Pervading themes include landscape evolution and alteration, regional cultural distinctiveness, and current problems. Emphasis on Western Europe. 4 lectures. Prerequisite: Junior standing.

GEOG 370 Geography of Latin America (4) GE D5

Geographic analysis of Mexico, Central America, and South America. The patterns of physical environment, culture, economy, and development. The issues (local, regional, and global) that shape Latin America. 4 lectures. Prerequisite: Completion of GE Areas A, D3. Recommended: Junior standing. Fulfills GE D5 except for Social Sciences majors.

GEOG 400 Special Problems for Advanced Undergraduates (1–4)

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 8 units, with a maximum of 4 units per quarter. Prerequisite: Consent of department head.

GEOG 408 Geography of Development (4)

Detailed analysis of international development from a geographical perspective. Survey of various theories of development and their cultural and ecological components at multiple geographic scales, including institutions and actors involved. Applicable skills for development research and practice, emphasizing sustainability. 4 lectures. Prerequisite: GEOG 308 or consent of instructor.

GEOG 414 Global and Regional Climatology (4)

The earth's pattern of climates and the physical processes that account for them. Focus on interrelationships between climate and the physical/biological and cultural environments. Special emphasis on modern climate changes and their consequences. 3 lectures, 1 laboratory. Prerequisite: Junior standing. *Crosslisted as ERSC/GEOG 414.*

GEOG 415 Applied Meteorology and Climatology (4)

Physical processes in the atmosphere that determine regional weather, climate and climate variability. Surface and satellite systems for weather observation, and weather/climate modeling. Dynamics of weather systems, including thunderstorms and hurricanes. Emphases on weather/climate affecting agriculture and other human activities. 3 lectures, 1 activity. Prerequisite: GEOG/ERSC 250 or consent of instructor. *Crosslisted as ERSC/GEOG 415.*

GEOG 440 Advanced Applications in GIS (4)

Applications in Geographic Information Systems (GIS) emphasizing research, methodologies, and career fields to geography, earth sciences, and the social sciences. 2 lectures, 2 laboratories. Prerequisite: GEOG 318 or consent of instructor.

GEOG 455 Anthropology-Geography Research Design and Methods (4)

Development of knowledge and skills needed to conduct original scientific anthropology-geography research and prepares students for senior projects.

Various empirical methodologies highlighted, with a focus on quantitative design and measurement of human culture, biology, behavior, environment and ecology. 3 lectures, 1 laboratory. Prerequisite: Completion of one GE B2 and two upper division ANT or GEOG classes. *Crosslisted as ANT/GEOG 455.*

GEOG 461, 462 Senior Project I, II (2) (2)

Selection and completion of a project under faculty supervision. Projects typical of problems which graduates must solve in their fields of employment. Project results are presented in a formal report. Minimum 120 hours total time. Prerequisite: Senior standing or consent of instructor.

GEOG 464 Professional Preparation for Anthropologists/Geographers (1) (CR/NC)

Preparation for professional advancement in the fields of anthropology and geography. Supervised career planning emphasizing resume development, selection of an internship or international experience, exploration of career options and graduate programs. Lectures from outside, practicing professionals. Credit/No Credit grading only. 1 seminar. Prerequisite: Junior standing, ANT 201, GEOG 150.

GEOG 465 Internship (3–8) (CR/NC)

Supervised training, research, and work in public and private organizations. Credit/No Credit grading only. Total credit limited to 18 units. Prerequisite: GEOG 464, senior standing and/or consent of instructor.

GEOG 470 Selected Advanced Topics (1–4)

Directed group study of selected topics for advanced students. Open to undergraduate and graduate students. The Schedule of Classes will list title selected. Total credit limited to 12 units. 1–4 lectures. Prerequisite: Consent of instructor.