# **GEOGRAPHY (GEOG)**

#### **GEOG 1** Physical Geography

**3 Units** (Degree Applicable, CSU, UC, C-ID #: GEOG 110) Lecture: 54 Prerequisite: Eligibility for ENGL 1A or ENGL 1AH or ENGL 1AM or

AMLA 1A

Study of the natural processes creating the Earth's physical environments with emphasis on the inter-relationships of natural processes and systems; general atmospheric circulation, Earth-sun relationships, oceanic circulation, water and energy budgets, plate tectonics, and the shaping of the physical landscape.

#### **GEOG 1H Physical Geography - Honors**

**3 Units** (Degree Applicable, CSU, UC, C-ID #: GEOG 110) Lecture: 54

Prerequisite: Acceptance into the Honors Program

Study of the natural processes creating the Earth's physical environments with emphasis on the inter-relationships of natural processes and systems; general atmospheric circulation, Earth-sun relationships, oceanic circulation, water and energy budgets, plate tectonics, and the shaping of the physical landscape. An honors course designed to provide an enriched experience. Students may not receive credit for both GEOG 1 and GEOG 1H.

#### **GEOG 1L Physical Geography Laboratory**

1 Unit (Degree Applicable, CSU, UC, C-ID #: GEOG 111) Lab: 54

Corequisite: GEOG 1 or GEOG 1H (May have been taken previously) Advisory: MATH 50

Geographical observations, experiments, and demonstrations in a laboratory setting to explore natural earth processes and systems.

## GEOG 1LH Physical Geography Laboratory - Honors

1 Unit (Degree Applicable, CSU, UC, C-ID #: GEOG 111) Lab: 54

Prerequisite: Acceptance into the Honors Program Corequisite: GEOG 1 or GEOG 1H (May have been taken previously) Advisory: MATH 50

Geographical observations, experiments, and demonstrations in a laboratory setting to explore natural earth processes and systems. An honors course designed to provide an enriched experience. Students may not receive credit for both GEOG 1L and GEOG 1LH.

## GEOG 2 Human Geography

**3 Units** (Degree Applicable, CSU, UC, C-ID #: GEOG 120) Lecture: 54 Prerequisite: Eligibility for ENGL 1A or ENGL 1AH or ENGL 1AM or AMLA 1A

Human geography with emphasis on critical areas of inquiry and research. Focus on the interconnections of place and process in several sites around the globe; comprehension of important terms and concepts; and literacy in the geography of place names and in world regional understanding.

#### GEOG 2H Human Geography - Honors

**3 Units** (Degree Applicable, CSU, UC, C-ID #: GEOG 120) Lecture: 54

Human geography with emphasis on critical areas of inquiry and research. Focus on the interconnections of place and process in several sites around the globe; comprehension of important terms and concepts; and literacy in the geography of place names and in world regional understanding. An honors course designed to provide an enriched experience. Students may not receive credit for both GEOG 2 and GEOG 2H.

# **GEOG 5 World Regional Geography**

**3 Units** (Degree Applicable, CSU, UC, C-ID #: GEOG 125) Lecture: 54 Prerequisite: Eligibility for ENGL 68

Study of the world's regions addressing the major regions of the world in the context of population, resources, environmental challenges, cultural landscapes, economic development, urbanization and geographic problems.

## GEOG 8 Urban Geography

**3 Units** (Degree Applicable, CSU, UC) (May be taken for option of letter grade or Pass/No Pass) Lecture: 54

Prerequisite: Eligibility for ENGL 1A or ENGL 1AH or ENGL 1AM or AMLA1A

Study of urban society and space. Cities are examined as complex social-economic groupings of people, material landscapes of buildings, and public and private spaces. Attention is paid to the evolution of urban experience of the past and present as well as to ever-changing ideas about urban planning and design for the future. While the overall perspective of the course is global, its primary focus is on the cities of North America and, in particular, the Los Angeles metropolitan area. The global-local emphasis is applied both in the classroom and in possible field trips.

## **GEOG 9 Geospatial Concepts**

**3 Units** (Degree Applicable, CSU, UC) Lecture: 54

Introduction to skills needed to use and appreciate maps as a form of communication and as a research tool. Develops spatial reasoning skills through a survey of maps, spatial science concepts, and geospatial technologies. Topics include geospatial information, navigation, map projections, symbolization, misuse of maps, and analysis of spatial data.

GEOG 10 Introduction to Geographic Information Systems

**3 Units** (Degree Applicable, CSU, UC, C-ID #: GEOG 155) Lecture: 36 Lab: 54

Principles, theory, and operations of geographic information systems (GIS), including geospatial data models, analytical functions, data quality, map design and visual communication, and social and environmental applications of GIS.

#### GEOG 12 Cartography 2 Units (Degree Applicable) Lecture: 18 Lab: 54 Prerequisite: GEOG 10

Fundamental digital cartographic concepts and design principles to create and edit effective visual representations of data (maps, graphs, dashboards, and diagrams) in different formats (hardcopy, digital, web, and mobile). Topics include the ethical and appropriate application of map scale, map projections, generalization, and symbolization.

## GEOG 13 Geospatial Data Acquisition and Management

**3 Units** (Degree Applicable) Lecture: 36 Lab: 54 Prerequisite: GEOG 10

Addresses the interpretation and understanding of a variety of data formats used by geospatial professionals. Introduces the fundamental concepts such as primary GIS data creation, database creation, and data management and discusses quantitative techniques for the collection, classification, integration, and management of geographical data.

## **GEOG 14 Spatial Analysis**

**3 Units** (Degree Applicable) Lecture: 36 Lab: 54 Prerequisite: GEOG 10

Examination of the spatial relationships of features in geospatial data, such as patterns, trends, connections, etc. GIS-based spatial analysis techniques for both vector and raster data models with an emphasis on using spatial analysis operations to aid in geospatial problem-solving scenarios.

#### **GEOG 15 Raster Methods**

**3 Units** (Degree Applicable) Lecture: 36 Lab: 54 Prerequisite: GEOG 10

An introduction to working with Raster Data. Topics include the physical principles on which raster data is based, history and future trends, sensors and their characteristics, image data sources, and image classification, interpretation, and analysis techniques.

#### **GEOG 16 GIS Capstone Portfolio**

**3 Units** (Degree Applicable) Lecture: 54 Prerequisite: GEOG 14 and GEOG 15

Geographic Information System instruction on research methodologies and analysis techniques. Emphasis placed on construction of a GIS research project: location of paper and digital sources, using analysis tool, model building, and project presentation.

## GEOG 30 Geography of California

**3 Units** (Degree Applicable, CSU, UC, C-ID #: GEOG 140) Lecture: 54

Thematic approach to issues, processes, and topics relevant to the study of California. Includes an examination of the physical processes that shape the landscapes of California, the interaction of humans with these physical processes (particularly the importance of water), and the cultural and social landscapes that have evolved as a result of this human-environment interface. A field trip may be required.