

GEOGRAPHY AND THE ENVIRONMENT

Division: Social Sciences

Division Dean

Dr. Jorge Gamboa

Faculty

Aline Gregorio

Ruben Lopez

- Environmental Sustainability Associate in Arts Degree (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/geography/environmental-sustainability-associate-in-arts-degree/>)
- Geography Associate in Arts Degree (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/geography/geography-associate-arts-degree/>)
- Geography Associate in Arts Degree for Transfer (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/geography/geography-associate-arts-degree-transfer/>)
- Geospatial Technologies Certificate (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/geography/geospatial-technologies-certificate/>)

GEOG 100 F Global Geography **3 Units**
54 hours lecture per term. This course is a survey of the world's geographical regions. It explores basic geographical concepts, human and physical spatial patterns, and contemporary social and environmental issues at the global and regional scales. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: GEOG 125, GLST 102)

GEOG 100HF Honors Global Geography **3 Units**
54 hours lecture per term. This Honors-enhanced course is an overview to the world's geographical regions and an introduction to basic geographical concepts, as well as human and physical spatial patterns. The nature of global geography includes population dynamics and the social, political and economic organization of space. Field trips may be taken outside of regularly-scheduled class time. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 125, GLST 102)

GEOG 102 F Physical Geography **3 Units**
54 hours lecture per term. This course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. Field trips may be taken outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 110)

GEOG 102HF Honors Physical Geography **3 Units**
54 hours lecture per term. This Honors-enhanced course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. Field trips may be taken outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 110)

GEOG 102LF Physical Geography Lab **1 Unit**
Corequisite(s): GEOG 102 F or GEOG 102HF with a grade of C or better.
54 hours lab per term. This lab/field study supplements GEOG 102 F. This course examines the processes of weather and climate, the construction/destruction of the earth's land surface focusing on internal and external forces, and the evolution of associated flora and fauna. This course will emphasize the understanding of the spatial distributions of the earth's physical characteristics and the relative importance of natural and human-induced environmental changes such as global warming, human land use and resources acquisition, and the transformation and creation of human environments. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOG 111)

GEOG 120 F Global Environmental Problems **3 Units**
54 hours lecture per term. This course is a geographical evaluation of the causes and consequences of global environmental problems. The focus is on the spatial dimensions of global environmental crises as they relate to social, political and economic issues. Topics examine the historical evolution of environmental issues including population growth, agriculture, climate change, land-use, urbanization, endangered species, and sustainable development. Field trips outside of regularly-scheduled class time may be required. (CSU) (UC) (Degree Credit), AA GE, CSU GE, IGETC

GEOG 130 F California Geography **3 Units**
54 hours lecture per term. This course investigates and interprets the physical, cultural and economic bases and regions of the state of California. Particular emphasis is placed upon the natural foundations of the landscapes with the exploration of the unique nature and special characteristics of the people utilizing that landscape. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 140)

GEOG 160 F Cultural Geography **3 Units**
54 hours lecture per term. This course provides a study of variations in the world's cultural landscapes, focusing on spatial patterns of population growth and distribution, settlement and livelihoods in the context of social, religious and political belief systems. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 120)

GEOG 199 F Geography Independent Study **1 Unit**
54 hours independent study per term. This course is for students who wish to expand and deepen their knowledge and understanding of geographic concepts, topics, themes and ideas. (Degree Credit) (CSU) (UC)

GEOG 230 F Introduction to Geographic Information Systems (formerly GEOG 281AF) 3 Units

36 hours lecture and 54 hours lab per term. This course provides an introduction to concepts and use of Geographic Information Systems (GIS), and its role in geographic analysis and decision making. This course will include an introduction to basic cartographic principles, maps, scales, coordinate systems and map projections. Varied applications and examples of GIS technology used in the social sciences, governmental agencies, environmental science and business and industry will be presented. Specific topics and skills taught will include an understanding of GIS terminology, raster and vector data structures, data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial databases, including map features and attribute tables, and spatial analysis using map overlays, buffers, and networks. (Degree Credit) (CSU) (C-ID: GEOG 155)

GEOG 231 F Spatial Analysis: Mapping for Solutions and Decision-Making 3 Units

Prerequisite(s): GEOG 230 F with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course teaches students to explore and analyze spatial data from various sources to study issues relevant to the contemporary world ranging from epidemiology, deforestation, environmental hazards, districting, environmental justice, crime analysis, disaster preparedness and response, agriculture and forestry, biodiversity conservation, climate change, housing, business, and more. Students will learn GIS spatial analysis techniques and applications of geographic research methods and analytical tools for decision-making. (Degree Credit) (CSU) (UC)

GEOG 237 F Intermediate and Advanced GIS Applications 3 Units

Prerequisite(s): GEOG 230 F with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course explores intermediate to advanced applications of Geographic Information Systems (GIS) in urban and environmental fields. Students will expand and reinforce GIS principles, tools, and techniques to acquire, explore, visualize, and analyze spatial data. Emphasis is placed on enhancing student knowledge, experience, and critical thinking in utilizing GIS as a spatial tool for understanding trends, patterns and distributions of real-world phenomena as well as influencing decision-making to solve spatial problems in multiple areas of study including urban planning; administrative justice; environmental quality, access and protection; land use; business; communications; politics; and more. (Degree Credit) (CSU) (UC)

GEOG 238 F Principles of Map-Making and Cartographic Design 3 Units

Prerequisite(s): GEOG 230 F with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course provides an introduction to methods, techniques, and considerations in creating ethical, effective, and engaging maps as communication and analytical tools for urban and environmental applications. Emphasis is placed on practical explorations of the full process of map-making and principles of cartographic design including the appropriate usage of map scales, map projections, generalization, color, and symbology through mostly ArcGIS software, the leading commercial software in map-making, and web-based mapping and cartographic presentation. (Degree Credit) (CSU) (UC)

GEOG 262 F Economic Geography 3 Units

54 hours lecture per term. This course is an investigation and interpretation of the world's economic organization, its natural resources, raw materials, crops and crop production, manufacturing and service industries, new trends in producing and the changing centers of production and consumption. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC