

Geography Student Learning Objectives

Department of Geography and Anthropology
California State Polytechnic University, Pomona

SLO 1 Students will be able to use written text, speech, maps, graphics, equations, and other devices to identify and describe spatial characteristics, patterns and processes at a variety of scales in physical, human, and social economic environment, including themes in atmosphere, biosphere, lithosphere, hydrosphere, population, culture, economics, settlements, and policies. (*Knowledge*)

SLO 2 Students will develop capabilities and technical skills to apply scientific research methods (in both natural and social sciences) to observe, collect, and process geographic data; to perform analysis based on the knowledge, theories and principles in geography; and to draw quantitative and qualitative conclusions. (*Critical and analytical thinking, and technical research skills*)

Specifically, they should be able to demonstrate the following:

SLO 2a The capability to identify and define research problems in physical and/or human geography fields.

SLO 2b The capability to observe, collect, and process geographic data with state of the art technology, including GIS, Remote Sensing, GPS, field data collection instruments, as well as obtaining data from document and literature sources.

SLO 2c The capability to perform data analysis based on critical thinking skills and use of technical and quantitative methods, including GIS, Remote Sensing, modeling software, and statistical methods.

SLO 2d The capability to draw conclusions and/or suggest solutions or mitigation strategies based on their analysis results.

SLO 3 Students will be able to communicate their understanding and analysis results by making maps, writing research papers and technical reports, giving oral presentations, and developing multimedia presentations. (*Communication skills*)

Specifically, they should be able to demonstrate the following:

SLO 3a Understand the structure and convention of research papers and technical reports in the field and competency in writing.

SLO 3b Understand the principles of cartography and the convention of map making. Students choosing the GIS option should be able to design, develop, and present maps using different medias, including paper and web based maps.

SLO 4 Students will demonstrate readiness to pursue employment in either environmental or GIS related industries, employment in other related fields, or graduate program in geography or a cognate discipline. (*Job skills and advanced study*)

SLO 4a Students with an option in GIS should demonstrate via internship, course projects, and portfolios their competency in GIS software application, data

collection, data processing data management, and mapping skills. These are marketable skills for entry and intermediate level GIS and related jobs.

SLO 4b Students with an option in Environmental Geography should demonstrate via course projects, field assignments, internships, and portfolios their competency in collecting and analyzing field data for environmental analysis and effectively presenting field data and analysis results with various forms. These are marketable skills for entry and intermediate level jobs in environmental geography.

SLO 4c Those students who plan to pursue advanced degrees should demonstrate via the senior colloquium and the portfolio requirements that they have met all the requirements to enter geography or related programs in graduate studies or in teacher preparation, including courses preparations and taking required tests.