



University of California, Santa Barbara
Program Learning Outcomes

B.S. in Physical Geography

Students graduating with a B.S. in Physical Geography should be able to:

1. Explain the natural Earth as a reciprocally interacting system of physical, biological, and chemical components ("Earth System Science").
2. Describe and analyze Earth's physical environment in a spatial and temporal context using field data and quantitative and digital-processing methods.
3. Describe the basic spatial layout of Earth, its climatic systems, and physical processes in the Atmosphere, Oceans, and on Earth's terrestrial surface.
4. Identify and measure changes in Earth's physical landscape related to human, biological, geological, and climatological forcing factors.
5. Explain the causes and implications of patterns of spatio-temporal interaction and movement, in both the biophysical and human domains.
6. Identify and apply the geographic information techniques of cartography, remote sensing, GIS, and spatial- and geo-statistics.
7. Read, understand, and critically evaluate literature in one or more areas of physical geographic research.
8. Effectively communicate knowledge about physical geographic research and phenomena, in oral, graphical, and written form.
9. Demonstrate an understanding of the role of geography in today's world.