

# EARTH SCIENCE/GEOGRAPHY LEARNING OUTCOMES

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## Bachelor of Arts Geography and Bachelor of Science Earth Science Program Learning Outcomes

- **Geographic Literacy:**
  - Students will apply their knowledge of the world's geography by interpreting topographic and thematic maps. They will demonstrate their ability to think geographically by analyzing geographic problems at a variety of scales.
- **Environmental Processes:**
  - Students will demonstrate their understanding of the utilization and distribution of key natural resources. This will include fundamental transport processes such as the hydrologic cycle, the rock cycle, and circulations through the world ocean and global atmosphere and their relationship to contemporary environmental issues.
- **Geotechniques:**
  - Students will demonstrate their understanding of geotechniques such as GIS, remote sensing, spatial statistics, and field maps. Students will apply spatial statistics and other forms of numerical analysis to interrogate existing and original geographical data sets.
- **Field Experience:**
  - Students will apply field research techniques toward the completion of field mapping and other data collection exercises.
- **Written and Oral Communication:**
  - Students will demonstrate their ability to describe research and to summarize research results in essays, written reports and oral presentations.
- **Group Activities:**
  - Students will be able to work together in small groups to collect and analyze classroom/field data and they will demonstrate their ability to collaborate with other students to deliver research presentations.
- **Professional Preparation:**
  - Students will hone research skills and work on research projects which reflect their command of the subject matter and its relevance to contemporary environmental issues, as well their command of geotechniques and their application. The research projects prepare students for graduate school and/or the workforce, and can be used as examples of the kinds of knowledge and expertise that they could bring to prospective employers.