



# CLIMATE CHANGE & LANDSCAPE DYNAMICS EMPHASIS

This emphasis focuses on earth systems, its processes and the impacts of these processes on the environment. Recent and future changes in the earth's climate represent one of the greatest challenges for modern society, and courses in this emphasis cover the climate system, climate change and impacts of climate change on the environment and society.

Students can choose electives that allow them to specialize in one or more of the following areas: climate, biogeography, geomorphology, and hydrology/cryogeography.

# REQUIRED CLASSES

*Geography core requirements*

- GEOG 1000** Earth Environments and Global Change (PS)
- GEOG 1005** Earth Environments and Global Change Lab
- ENV 1100** Our Digital World
- GEOG 1300** World Regional Geography (BF)
- GEOG 1400** Human Geography (BF)
- ENV 2100** Environment and Society (BF)
- \***GEOG 3100** Introduction to Geographic Information Science (QI)
- GEOG 3210** Global Climate Change

*BS student requirement*

- \***GEOG 3020** Geographical Analysis (QI)

*BA student requirement*

- ENV 3030** Introduction to Qualitative Methods

*One of the following: (Upper division Human Geography choice list)*

- GEOG 3090** Health Geography in the Age of Global Pandemics
- GEOG 3400** Fertility, Mortality, and Migration in a Dynamic World
- GEOG 3440** Global Economic Geography
- GEOG 3610** World Cities
- ENV 3330** Urban Environmental Geography
- ENV 3350** Resource Conservation and Environmental Management
- ENV 3430** food and the environment

*Emphasis Required Core: (required core courses for emphasis)*

- \***GEOG 3050** Problem Solving in Physical Geography
- \***GEOG 3200** Geomorphology: Mountains, Rivers, Deserts
- GEOG 3205** Climate Change Foundations
- GEOG 3270** Biogeography: Global Patterns of Life
- \***GEOG 3290** Water Resources in a changing climate

## EMPHASIS ELECTIVES

*Select three elective courses from list*

- GEOG 3110** Introduction to Remote Sensing
- \***GEOG 5201** Advanced Topics in Geomorphology: Arid Lands
- GEOG 5215** Climate Change Impacts, Adaptation, & Mitigation
- \***GEOG 5280** Quaternary Environments
- \***GEOG 5410** Paleoclimatology
- GEOG 5420** Pollen Analysis
- \***GEOG 5712** Paleoenvironmental Field Methods for Geographers
- \***ENV 5390** Sustainable Steams and Riparian Zones
- COMM 5365** Communicating Climate Change

\*GEOG 5940 Internship in Geography or GEOG 5950 independent study may be counted only once toward the major elective requirement

## Addition Experience

6 credit hours of BIOL, CHEM, PHYS or:

- \*MATH 1210      \*MATH 1220
- \*MATH 1310      \*MATH 1321
- \*MATH 1321      \*MATH 2210



## CAREER OUTLOOK

Bureau of Land Management  
US Forest Service  
Division of Wildlife Resources  
Fish & Game  
Department of Agriculture & Food & Forestry  
Land focused conservation organizations  
Nature Conservancy  
Environmental Law

## SCHOLARSHIPS

Thanks to the generous donations given by industry & alumni, The School of Environment, Society & Sustainability offers several scholarships to incoming and continuing students.

To apply, please visit:

<https://ess.utah.edu/scholarships.php>

## CONTACT INFORMATION

For more information about the Geography major or to contact an Academic Advisor, please visit: <https://ess.utah.edu/>



THE UNIVERSITY OF UTAH  
**SCHOOL OF ENVIRONMENT,  
SOCIETY & SUSTAINABILITY**



**STEM Education**