The objective of this course is to provide you with an introduction to the Earth’s climate system and patterns of world vegetation. We will emphasize the many linkages and feedbacks between the non-living (abiotic) and living (biotic) components of the earth system.

Topics we will cover include radiation, temperature, winds and pressure, the water cycle, climate change, and biomes. This course will prepare you for subsequent, more specialized courses in climatology, hydrology, ecology, and biogeography (ecosystems and cycles). This is a natural science course, and graphs and basic algebra-level math calculations will be used to help understand the concepts covered.

We will move beyond the classroom setting with multiple ecological field trips to nearby locations in Boulder!
GEOG 1982
World Regional Geography

Choose one of three times:

Maymester, M-F 9:00 - 12:00
MUEN E113, Amy Schubert, PhD Candidate

Summer Term A, M-F, 11:00-12:35
GUGG 3, Aaron Malone, PhD Candidate

Summer Term B, M-F, 11:00-12:35
GUGG 2, Lauren Gifford, PhD Candidate

This course introduces a comparative framework for recognizing and understanding world regions. Units combine historical understanding with discussion of problems and challenges that face them, including discussion of economic growth, inequality, political conflict, colonialism, race and climate change. Examples and assignments will link course topics to current events and students' own experiences. This course meets the MAPS requirement for social science: Geography.
The world's mountains are complex and varied environments in which diverse terrain produces a range of climatic effects, biological adaptations, and human landscapes. Through a focus on these mountain environments, this course traces key topics in physical geography, biogeography, and human geography, and examines the connections between them. We will examine themes from geology, hydrology, ecology, environmental studies, and cultural and historical geography. Examples will highlight both the Colorado Rockies and mountains from around the world. The class will include two field trips, exploring the physical, environmental, and human geography of the mountain landscapes around Boulder.
Boulder’s “open space” is a crucial foundation of our local identity. Whether providing a scenic backdrop, recreational opportunities, a buffer against encroaching urbanization, or wildlife habitat, our open space is a tangible reflection of community values. How did we end up with this unique landscape? What challenges face open space managers in the future? The class will include multiple field trips and guest speakers.
In this course we will tap into the excitement and fun of climate politics and policy in 2016 as we work to understand, explore and critically analyze how climate changing activities are governed. The class sessions will consist of four main components:

1. A general introduction: mitigation & adaptation; frames, perspectives & responsibilities; impacts
2. Climate politics and policy at the national and international levels (especially after COP21 Paris)
3. Climate politics and policy at the sub-national level: regional, state and city-level governance
4. Where climate politics and policy meet the public: non-state actors and everyday spaces

2016 is a big year for climate politics and policy, so we will anchor our discussions and analyses to the unfolding events around us, from the international to the Boulder city scale. And by way of four main themes addressed in the class periods in summer session A, we will work to distinguish patterns, appraise and assess values, and gain insights from a variety of perspectives and viewpoints while we gain an improved understanding of the many dynamic and contested factors, pressures and processes that are involved in contemporary climate politics undergirding explicit policy proposals. Through the class readings, lectures and discussions, course participants will come away with a clear understanding of current international, national, regional, state and local policy activities on climate change. Students will also better understand how these policy formulations and proposals have developed through history.

Overall, students who critically engage with the course themes, concepts and case studies can expect to complete the semester better equipped to understand, analyze and engage in the high-stakes 21st century arena of climate politics and policy. We will be centering our discussions on the following required texts, and then also pulling from additional peer-reviewed journal articles and gray literature.
GEOG 4110/5100
Special Topics in Geography: GIS in the Social and Natural Sciences

Summer 2016 (Maymester)
May 9 - 26
M-F 9:00 - 12:00

Professor Stefan Leyk
stefan.leyk@colorado.edu

Prerequisites:
Familiarity with file management tasks in Windows, confidence in working with software tools. Students are encouraged to set up their own laptops with software provided (ArcGIS with student licenses).

This course is designed as an introductory class to Geographic Information Systems (GIS) suitable for students (graduate and undergraduate) from Geography, Environmental Sciences, Engineering, Geology, Ecology/Biology, Anthropology, Economy, Education or Sociology who are interested in learning about GIS tools and their underlying principles and how to apply GIS to analytical and mapping-related tasks. Students will get basic skills for working in a GIS environment without formal prerequisites in Cartography or Statistics. I will introduce basic theoretical and practical elements of GIS and GIScience that are important to get started on a GIS project, handling and managing geospatial data, creating maps and conducting GIS analysis. Students will work in ArcGIS and QGIS software on tasks typically encountered in the social and natural sciences. We will meet in the KESDA computer lab in the Geography building. The format of class meetings will alternate between lecture/demo/in-class exercise components and computer exercises. This way concepts discussed in lecture will be directly put in practice to better understand underlying mechanics, results, problems and important implications resulting from decisions made based on such results.