



Learning Goals for Geography Programs

Effective from Summer 2012

Atmospheric Sciences

- A. Students acquire the theoretical basis for fundamental atmospheric processes and systems
- B. Students are introduced to the computational and other forms of technology used in the atmospheric sciences
- C. Students learn to communicate atmospheric science concepts and methods clearly and concisely
- D. Students develop the ability to solve problems faced by atmospheric scientists

Geography (all specializations)

- A. Students acquire fundamental concepts of geography
- B. Students achieve familiarity with methods used in geography
- C. Students can communicate geographical concepts and methods orally, visually, or in writing
- D. Students can apply geographical concepts and methods in experiential and/or research settings

Geography Information Science

- A. Students acquire fundamental concepts of geographic information sciences
- B. Students achieve proficiency with methods of geographic information sciences
- C. Students can represent complex technical information orally, visually, or in writing
- D. Students can apply geographic information science concepts and methods in experiential and/or research settings

Geography Minor

- A. Students are exposed to foundational concepts in geography
- B. Students are exposed to methods used in geography
- C. Students are exposed to applications of geographical concepts and methods in experiential and/or research settings

1. Students have fundamental knowledge about air transportation systems.
 - Students acquire and apply foundational knowledge from the introductory courses in the core of the major to explain flight performance as well as federal and international aviation laws and policies.
2. Students improve statistical skills.
 - Students acquire and apply statistical skills to critically evaluate data and research findings in the literature (e.g. geospatial data analyses).
 - Students apply quantitative skills to understand the management and operations of aviation-specific organizations, such as aircraft manufacturers, airlines, airports, and the air traffic management system.
3. Students improve and apply social scientific analytical skills.
 - Students comprehend and critically assess the social, political, economic, and physical structures of air transportation systems to explain individual and organizational behaviors.
4. Students will have aviation industry-specific knowledge.
 - Students know aviation regulations and policies and are able to anticipate their ramifications under different scenarios.
 - Students comprehend the structure of the industry and communications flows and are able to pinpoint sources of and remedies for administrative disagreements.