Applied Climatology

Purpose: To broaden the perspective of students to the use of weather and climate information in agriculture, natural resource management, public safety, public health, urban and local climates, and other areas of the environment and society.

Focus: This class will be focused on real-world examples of how weather and climate affect different segments of society and ecosystems. Contemporary issues, including impacts of global climate change and challenges for environmental sustainability, will be discussed. Appropriate background in physical climatology will be provided.

Expectations: Students will read required materials prior to class and participate in discussions. Group projects will be emphasized and will include peer evaluation. Projects may require travel to meet with “customers” outside of classroom hours. Students are expected to write well and edit their work before submitting it.

Strongly Recommended Background:
GRADE OF C OR BETTER IN GEOG 3924. MATH 1823, AND PHYS 2514

Topics
- Global and regional climatology, including energy and moisture budgets, general and local circulations, and teleconnections
- Climate data and statistics
- Climate variability and change
- Agriculture
- Fish and wildlife habitats
- Water management
- Health
- Energy
- Insurance
- Public safety

Note that this topical list is tentative and may be updated.