

Course Description:**METEO-010 - Weather and Climate****Units: 3**

This course introduces the student to the science of the atmosphere. It employs physical and chemical principles in exploring the evolution of the atmosphere's structure and composition, the causes of weather, radiation and energy in the atmosphere, adiabatic processes, condensation and precipitation, formation of clouds, the origins and development of storms, urban weather, acid rain and photochemical smog, ozone, depletion, the greenhouse effect, elements of forecasting, global and local climates, and climatic change. The course is designed for non-science majors and to apply to the baccalaureate general education requirements in physical science at the CSU or UC systems.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Recommended: 3 UNITS OF MATH 310 WITH CR OR PLACEMENT BASED ON MATH ASSESSMENT

CAN: None

Advisory Level: Read: 2 Write: 2 Math: 1

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: B1 District GE: B IGETC: 5A

Learning Outcomes:

1. Differentiate the different climatic regions throughout the world
2. Explain how thunderstorms, tornadoes and hurricanes form
3. Analyze the Hydrologic Cycle and how it effects our weather
4. Categorize the various types of instruments used in meteorology
5. Apply computer modeling to weather forecasting
6. Formulate how the Ice Ages and the Greenhouse Effect occur