

Meteorology (METO)

METO 1010 **PP**

Introduction to Meteorology

3:3:0 **Fall, Spring, Summer**

Introduces the study of our atmosphere. Studies the Earth's dynamic weather systems. Covers structure and compositions of the atmosphere; weather patterns; air masses; and types of weather fronts, weather forecasting, and climates.

METO 1020

Introduction to Meteorology Laboratory

1:0:2 **Fall**

Provides hands-on experience for students investigating various meteorologic phenomena discussed in METO 1010. Students desiring credit for a science major should take METO 1010 and METO 1020. Course fee of \$10 for lab applies.

METO 1060 **PP**

Fundamentals of Weather Forecasting

3:3:0 **Fall**

* Prerequisite(s) or Corequisite(s): METO 1010

Introduces the fundamental principles of meteorological processes and mid-latitude weather forecasting. Focuses on the analysis of surface and upper-air weather maps, of soundings, of satellite and radar imagery to analyze current meteorological conditions. Explores the application of techniques to perform forecasts for basic weather variables such as temperature and precipitation. Course fee of \$10 for lab applies.

METO 3100

Climate and the Earth System

3:3:0 **Spring**

* Prerequisite(s): (CHEM 1110 or CHEM 1210), (MATH 1050 or MATH 1055), (PHYS 2010 or PHYS 2210), METO 1010, GEO 1010, and University Advanced Standing

Studies the six major components of the Earth system (i.e., the atmosphere, the hydrosphere, the cryosphere, the geosphere, the exosphere, and the biosphere) and investigates the interdependency and connections of these components, with particular emphasis on the effects on the climate system. Discusses the Earth's energy balance, the greenhouse effect, and the biogeochemical cycles of some elements and provides an overview of the most important climatic events that occurred during the history of the Earth. Course fee of \$10 for lab applies.