

Course:

Atm 210 Atmospheric Structure, Thermodynamics, and Circulation Spring 2017
Class Number: 6740; Credits: 3

Schedule:

TuTh 10:15 a.m.–11:35 a.m., ES 232

Professor:

Daniel Keyser, ES 224, 442–4559, dkeyser@albany.edu
Office hours: MW Noon–1:00 p.m. and by appointment

Teaching Assistant:

Jonathan Blufer, ES 234, jblufer@albany.edu
Office hours: MW 1:00 p.m.–3:00 p.m. and by appointment

Text:

Ahrens, C. D., and R. Henson, 2016: *Meteorology Today: An Introduction to Weather, Climate, and the Environment*, 11th ed. Cengage Learning, 586 pp.
(Required)

Prerequisites:

Mat 111 or 112 or 118; Phy 140 or 141

Grading:

A–E grading: In-class exams (25% each); Final exam (30%); Homework (20%)

Scope of Course:

This course is a technical survey of the atmosphere, designed for environmental and atmospheric science majors, that introduces and applies elementary principles and concepts from atmospheric dynamics and thermodynamics, radiative energy transfer, and cloud and precipitation physics to describe and understand the processes that govern weather and climate. Topics comprise: the Earth's atmosphere; radiative heating; temperature; moisture and clouds; stability and precipitation; pressure and winds; atmospheric circulations; air masses, fronts, and cyclones; and thunderstorms and tornadoes.

The course will be conducted primarily through classroom lectures, supplemented by handouts and homework assignments. There will be two in-class exams during the semester and a comprehensive exam during the final-exam period.