

CUMBERLAND COUNTY COLLEGE

Course: PI 108 Atmospheric Science

Credits: 3

Prerequisites: EN 060 and MA 091

Description:

This course provides an introduction to the study of the earth's atmosphere. Fundamental concepts of meteorology and atmospheric science are presented. Topics include the structure of the atmosphere, global circulation, weather forecasting, air pollution, the upper atmosphere, and the measurement and interpretation of meteorological data.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and order the atmospheric layers
- List physical parameters of importance in the atmosphere
- Explain the seasonal and daily temperatures
- Distinguish the forms of atmospheric condensation
- Describe the formation of wind, thunderstorms, tornadoes, and hurricanes
- State the conditions of precipitation
- Discuss the optical phenomena in the atmosphere
- Interpret the climate change

Topical Outline:

- The Earth and its Atmosphere
- Warming up the Earth and the Atmosphere
- Seasonal and Daily Temperatures
- Atmospheric Moisture
- Dew, Fog, and Clouds
- Precipitation
- Air Pressure and Wind
- Thunderstorms, Tornadoes, and Hurricanes
- Climate Change
- Atmospheric Optics

Student Assessment:

Assessment is based on Mid-semester exams, Final exam, and a term project as follows

Mid-semester Exams	60%
Project	15%
Final Exam	25%

Text:

Meteorology Today, C. Donald Ahrens. Thomson

Academic Integrity:

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense.

As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Tutoring & Project Assist:

If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

Before Withdrawing From This Course:

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA, which can limit or eliminate future financial aid in addition to causing academic suspension.