



Alabama
Department of
Postsecondary Education

Representing Alabama's Public Two-Year College System

Jefferson State Community College

Introduction to Meteorology

PHS 230 4 semester hours

I. PHS 230 – 4 semester hours.

II. Course Description - This course is an introductory survey of meteorology emphasizing the hydrologic cycle, cloud formation, weather maps, forecasting, and wind systems. Local weather systems will be given detailed study. Laboratory is required.

III. Prerequisite: None

IV. Text Book: Weather Studies: Introduction to Atmospheric Science. 4th edition. Joseph M. Mora. American Meteorological Society.

V. Course Objectives:

This course is designed to give students an introduction to weather systems. Course will focus on atmospheric processes, cloud formation, severe weather, forecasting, and radar/satellite interpretation. By the end of the semester students will be able to produce a weather forecast using numerical models as well as satellite and radar data. Severe weather awareness and safety is also a key part of the course. Hands-on learning is stressed in this course using real-time data.

VI. Evaluation and Assessment

A. Examinations should be given by instructors periodically throughout their courses. Faculty are encouraged to give evaluative work early in the term so students will have a clear understanding of the progress they are making. Final examinations will be given in all classes, and all students enrolled for academic credit will take the final examination. (College Handbook, section 3.7)

B. Grading system as stated in the college catalog:

- *A - Excellent (90-100)
- *B - Good (80-89)
- *C – Average (70-79)
- D – Poor (60-69)
- F – Failure (below 60)
- W – Withdrawal (before last date to Withdraw)
- WP- Withdrawal passing (after last date to Withdraw)
- WF – Withdrawal failure (after last date to Withdraw)

C. Criteria for evaluation:

1. Recitation
2. Daily Assignments
3. Written Assignments
4. To receive a grade of "C" or higher, the student must obtain an average of at least 70% on written test(s) and other evaluation criteria as determined by the instructor.

VI. Class Activities

- A. Lecture
- B. Recitation
- C. Discussion
- D. Individual Instruction
- E. Testing

Laboratory Time: Students will work together to interpret data and solve forecasting problems. In addition, students should expect several field trips during the semester. Students will utilize NOAA's Jetstream Online Weather School as well as COMET modules to gain better understanding of the atmosphere.

<http://www.srh.noaa.gov/jetstream//>

<https://www.meted.ucar.edu/>

VII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

VIII. Statement on Discrimination/Harassment

The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

IX. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations office is located in FSC 300 (205-856-7731).