

EAS 2750 Physics of the Weather

Prerequisites – Math 1501, 1502

Co-requisite - Physics 2211

Instructor:

L. Gregory Huey

Office hours: Monday and Friday 3:15 to 5 pm, Rm 3130 ES&T

E-mail: greg.huey@eas.gatech.edu

Location:

Room 17, College of Computing

Meeting Time:

MWF at 2:05 pm

Teaching Assistant:

Kelli Hornberger

Office hours: TBA

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Texts:

Meteorology Today: An Introduction to Weather, Climate, and the Environment,
C. Donald Ahrens

Meteorology for scientists and engineers, *Ronald B. Stull*

Grading:

20% - Approximately eight in class quizzes

20% - Approximately 6 homework assignments

30% - Three in class exams

30% - Final Exam

Exam Dates:

Exam 1 – Friday, Sept 21

Exam 2 – Friday, Oct. 26

Exam 3 – Friday, Nov. 30

Final – December 12, 11:30-2:20

Note:

- Any homework turned in late will be marked down 10% per day.
- Lecture notes, homework and in class worksheets will be posted on T-Square.
- Homework is due on the specified day before lecture begins. Your homework may be turned in on t-square or in class.
- In class quizzes are due at the end of each lecture.

Honor Code:

Students in this class are expected to abide by the Georgia Tech Honor Code and avoid any instances of academic misconduct. In particular, improperly obtaining written or oral information in the preparation of an exam is a violation of the honor code. You are not allowed to collaborate on exams with other students. If you are caught cheating on an exam or quiz you will be reported to the Dean of Students. Use of any previous semester course materials is allowed for this course; however, I remind you that while they may serve as examples, they are not guidelines for any tests, quizzes, homework, projects, or any other coursework that may be assigned during the semester.

List of topics:

Topic	Ahren Chapter	Stull Chapter
Radiation – Black Body – Greenhouse Effect	1	2
Structure of the Atmosphere	1	1
Moisture	4	5
Clouds	5	7
Stability	6	5 and 6
Precipitation	7	8
Radar	7	6
Global Circulation	8 and 10	9 and 11
Equations of Motion	8	9
Storms	14	15
Forecasting	13	14
Fronts and Storms	11	12
Hurricanes	15	16
Tornados	14	15