

ATMS 350
Weather Forecasting
Spring 2009

Professor : Dr. Chris Hennon
Office : RBH 236C
Phone : 232-5159
Email : chennon@unca.edu
Office Hours : W 11:30-1:30, TR 11:00 – 12:00 am and other hours by appointment

Course Description

The atmosphere is thoroughly chaotic, yet increasingly more predictable. Our better understanding of atmospheric physics and the ability to include this understanding into modern numerical weather prediction models has allowed for more accurate forecasts, and for longer forecast lead times.

This course will provide you with a basic understanding of modern atmospheric prediction. Topics include forecasting agencies, forecast tools, numerical weather prediction models, model output statistics, ensemble forecasting, and many hands-on case studies for you to put into practice what is learned. Forecasts will be made that focus on wintertime precipitation, turbulence, fog, tropical cyclones, severe weather, and daily weather.

Class Information

Call Number : 10984
Days and Time : M W F 2:45 pm – 3:35 pm
Building / Room : RBH 238 (Robinson Hall)

Textbook : Weather Forecasting (Brotak, 2007)
Weather Forecasting Handbook (Vazquez) – Optional

Website : Moodle
Prerequisites : ATMS 205

Grading Information

Your grade for the course will be determined by a combination of four categories:

- 1. Forecast Competition (5%):** Your scores in the 'WxChallenge' forecast competition will be tracked and incorporated into your class grade. Trends in forecast performance and participation (missing forecasts) will be considered.
- 2. Lab Exercises (50%):** Ten lab exercises will be completed throughout the semester. They will generally be due a week after they are passed out.
- 3. Weather Briefings (5%):** A class presentation about the current and future weather. The presentations will be about 10 minutes and should demonstrate understanding of weather and weather processes. More information will be given to you. Each student will give 3 briefings.

4. Exams (2 Mid-terms (20%) and Final Exam (20%): The mid-terms are not cumulative. The final exam is cumulative (covering material from the entire course).

Grading Scale

Your final grade will be based on the following scale:

92 – 100%	A
90 – 91.9%	A-
88 – 89.9%	B+
82 – 87.9%	B
80 – 81.9%	B-
78 – 79.9%	C+
72 – 77.9%	C
70 – 71.9%	C-
68 – 69.9%	D+
60 – 67.9%	D
< 60%	F

Make Up Policy

Lab Assignments: Lab assignments are due at the beginning of class on the due date. Assignments may be turned in up to 24 hours late for a 50% penalty. *Homework more than 24 hours late will not be accepted under any circumstances.* If you put homework in my mailbox, please find another faculty member to date/time stamp it. My mailbox is outside of my office in room 236 RBH.

Exams: Make up exams will be given only in cases of extraordinary circumstances. You must provide written documentation. I will evaluate each reason on a case by case basis. Make up exams may include an oral section.

Briefings: You must present your briefing on the dates you are assigned unless prior arrangements have been made. You cannot make up a missed briefing.

Academic Dishonesty

If you use any form of cheating on an exam or assignment, you will be subject to procedures outlined in section 8.3 of the UNCA Faculty Handbook. Possible outcomes include receiving a zero for the exam or assignment, dismissal from the course, and/or suspension/dismissal from the university.

Class Schedule

The class schedule is on the Moodle page.

Final Exam: Wednesday, May 6, 3:00 – 5:30 pm, 238 RBH