## **ATMS 103**

# Introduction to Meteorology

Fall 2006

Professor : Dr. Chris Hennon Office : RBH 236C Phone : 232-5159 Email : <u>chennon@unca.edu</u> Office Hours: MW 2:45 – 4:00, T 10-12

## **Course Description**

This course will provide you with the scientific basis for understanding the Earth's atmosphere through exercises, experiments, observations, and lectures. The first half of the course will provide you with the fundamentals necessary to understand the physical workings of the atmosphere. These include the structure of the atmosphere, energy and temperature, humidity, and the forces that give rise to winds.

Other topics will follow. We will learn about clouds, including their importance for both global temperature and precipitation formation. Then we will take a step (or 40,000) back and look at some of the larger weather systems that the earth creates, including El-Niño, monsoons, sea breezes, and trade winds. The last third of the course will be a fascinating look at some of the storms that the atmosphere creates, including thunderstorms, tornadoes, and hurricanes. Finally, we will examine what could be the biggest challenge for humans over the next few centuries – global warming. You will learn about the science of climate change and how to separate fact from fiction.

This class satisfies a natural science requirement for ILS cluster #1 (CL1), "Globalization and Environmental Issues"

## **Class Information**

Call Number	: 10207
Days and Time	: M W F
Building / Room	: RBH 239 (Robinson Hall)
Textbook	: Essentials of Meteorology, 4 <sup>th</sup> Edition C. Donald Ahrens, Thomson Brooks/Cole ISBN 0-534-42264-0
Website	: http://facstaff.unca.edu/chennon/classes/atms103.html
Prerequisites	: None

## **Grading Information**

Your grade in this class is based on three (3) components: exams, homework, and a project. The point value for each is:

Exams	350 points
Homework	320 points
Project	330 points
Total	1000 points

Following is a brief description of each:

#### EXAMS (350 points)

There will be two mid-term exams worth 100 points each and a final exam worth 150 points. Each exam will have a multiple choice and true/false section followed by a short answer section. Each mid-term exam will cover only material learned since the last exam. The final exam will consist of about 2/3 new material and 1/3 old material.

#### HOMEWORK (320 points)

There will be a series of eight (8) homework assignments, each worth 40 points. Most will be due within a week of being passed out. They will be posted on the class website so that you may get the homework if you miss class.

#### PROJECT (330 points)

Each student will be required to complete a class project. There will be three options that you can choose from. These will be discussed in more detail during class.

### **Grading Scale**

Your final grade will be based on the following scale:

920 - 1000 p	points	A
900 - 919 p	points	A-
880 – 899 p	points	B+
820 – 879 p	ooints	В
800 – 819 p	points	B-
780 – 799 p	points	C+
720 – 779 p	points	С
700 – 719 p	points	C-
680 – 699 p	points	D+
600-679 p	points	D
< 600 points	5	F

#### Make Up Policy

**Homework Assignments**: 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.* 

**Exams**: No make ups. If you have a valid excuse, written documentation is required and I must accept it as valid. Make up exams may include an oral section.

#### 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**

Please see the class website for a detailed schedule and reading list. Although the schedule is fluid, the exam dates will not change.

Exam I: Wednesday, September 27 Exam II: Monday, November 13 Final Exam: To be announced