# **ATMS 103**

# Introduction to Meteorology

Spring 2009

**Professor**: Dr. Chris Hennon

**Office** : RBH 236C **Phone** : 232-5159

**Email** : <u>chennon@unca.edu</u>

Office Hours : W 11:30-1:30, TR 11:00-12:00 and other hours by appointment

#### **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 will be the biggest environmental challenge for humans over the next few centuries – global climate change. 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 : 10975

Days and Time : T R 9:25 – 10:40 am Building / Room : RBH 239 (Robinson Hall)

Textbook : Essentials of Meteorology, 5<sup>th</sup> Edition

C. Donald Ahrens, Thomson Brooks/Cole ISBN 0-495-11558-4

Website : Moodle Prerequisites : None

#### **Grading Information**

**In-class Work (10%):** Generally short (~30 minute) exercises that will be given out about once a week. They may be individual exercises or group work.

**Homework Exercises (40%):** A take home set of problems, usually more in depth than class exercises. Generally are due about 1 week after they are given out, and will require more time to complete than in-class work.

**Mid-Term Exams (15% x 2):** 70 minute exams that cover material presented in the previous 5 weeks. Calculators may be required.

Final Exam (20%): A longer exam that covers material from the entire course.

# **Grading Scale**

Your final grade will be based on the following scale:

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

# Make Up Policy

**In-class Work:** You must be in class to receive credit for these assignments. They cannot be made up.

**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.* 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.

### **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

See the class Moodle page for a thorough class schedule.

Final Exam: Tuesday, May 12, 8:00-10:30 am, RBH 239