

ATMS 103
Introduction to Meteorology
Spring 2013

Professor : Dr. Chris Hennon
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Office Hours : MW 10 – 11 am, T 1:30 – 2:30 and 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 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 : 10278
Days and Time : TR 10:50 am – 12:05 pm
Building / Room : RRO 238 (Robinson Hall)

Textbook : Essentials of Meteorology, 5th Edition
C. Donald Ahrens, Thomson Brooks/Cole ISBN 0-495-11558-4

Website : Moodle (<http://learnonline.unca.edu>)

Prerequisites : None

Learning Objectives

As a natural science component of CL01 (Global and Environmental Issues), Intro to Meteorology will provide a physics-based treatment of how the atmosphere and climate system works - each have profound impacts on global economics, culture, and politics. In other CL01 courses such as Environmental Politics (POLS 354) and Economic Globalization (ECON 250), it will become apparent that many of the world's social systems are driven in part by the environment. For example, why are there so few powerful countries in the tropical regions of the earth?

As a student in an introductory course in the Department of Atmospheric Sciences, I encourage you to read our departmental student learning outcomes, which can be found here:

<http://www.atms.unca.edu/slos.shtml>

Grading Information

Your final grade will consist of three components. The total points possible for the course is 1000. I reserve the right to change the number of assignments and/or their point value during the semester. You will be notified in class of any changes.

Homework Exercises (8 x 50 points = 400 points): 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 (2 x 150 points = 300 points): 70 minute exams that cover material presented in the previous 5 weeks. Exams may be split over two class periods. *Calculators may be required* – please acquire one and bring it to exams.

Final Exam (300 points): A longer exam that covers material from the entire course.

Although attendance will not be recorded (except during the first week for add/drop purposes), it may be considered along with other factors at the end of the semester for borderline grade cases.

Grading Scale

There are 1000 points available in this class. Your final grade will be based on the following scale (no grading “curve”, or adjustments, will be made in this class):

925 – 1000 points	A
900 – 924 points	A-
875 – 899 points	B+
825 – 874 points	B
800 – 824 points	B-
775 – 799 points	C+
725 – 774 points	C
700 – 724 points	C-
675 – 699 points	D+
600 – 674 points	D
< 600 points	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.* If you put homework in my mailbox, please find another faculty member (there are two in the same room) to date/time stamp it. My mailbox is outside of my office in room 236 RBH (Robinson Hall).

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. If you believe you are going to miss an exam for any reason, *please let me know as soon as possible!*

Accomodations for Students with Disabilities

University of North Carolina at Asheville is committed to making courses, programs and activities accessible to students with documented disabilities. Students requiring reasonable accommodations must register with the Disability Services Office by providing current diagnostic documentation. All information provided will remain confidential. For more information please contact Joshua Kaufman, Disabilities Coordinator, at [\(828\) 232-5050](tel:8282325050) in the OneStop Student Services center or at <http://www2.unca.edu/disabilityservices/index.asp>

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 course Moodle page

Final Exam: Thursday May 2 11:30 am – 2:00 pm (RRO 238)