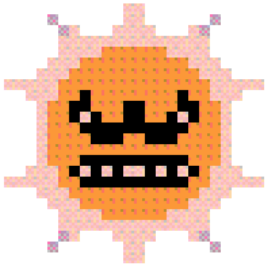
METR 1014: Introduction to Weather & Climate
Course Syllabus
Fall 2010



Class time: MW 6:00 – 7:15 PM SEC N202
Instructor: Bryan Burkholder, Meteorology Ph. D. Graduate Student
Email Address: Bryan.A.Burkholder-1@ou.edu
Office: SEC room 526 Phone: 325-2469
Alternate Office: NWC 5426
Office Hours: R 3:00 – 5:00 PM in **SEC 526**, or by appointment
Course web page: Accessible via https://learn.ou.edu (log in using your 4+4)
Co-requisite: Lab section for METR 1014
Texts:

Essentials o f Meteorology: An Invitation to the Atmosphere (5th ed.), by C. Donald Ahrens
Explorations in Meteorology: A Lab Manual

Course Grade Determination:

In-class Exams (2 exams: 15% each)	30%
Final Exam	25%
Homework Assignments	15%
Desire2Learn Quizzes	5%
Lab Section Grade:	25%

Final Grading Scale

90.0-100.0%	A
80.0- 89.9%	B
70.0- 79.9%	C
60.0- 69.9%	D
00.0- 59.9%	F

About this course:
Meteorology 1014 is a survey course of weather and climate for non-meteorology majors. In this class we will cover a wide variety of topics to help you gain an understanding of the science behind daily weather, climate and climate change, as well as possible current events caused by, or influenced by, atmospheric phenomena.

It is NOT the aim of this course to make scientists out of all of you. I want to help you gain a basic understanding of the atmosphere, and to develop critical thinking skills so that you can intelligently discuss newspaper and magazine articles related to weather and climate.

You are expected to come to class prepared to discuss the day's topic (from reading assignments from the required text). Class attendance is not formally part of your final grade, but is strongly encouraged. It is much easier to understand the material if you regularly attend class. I will make every effort to post the material presented in class on the course website, but I must re-emphasize that attending lectures will most likely improve your understanding of the material.

If you are having problems with the course, I strongly urge you to contact me sooner rather than later; or to visit me during office hours. There is nothing I can do to help if you wait until the end of the semester to talk about troubles you've had all semester long.

Homework Assignments:
Homework assignments will be assigned to supplement your comprehension of the material. Late homework will be accepted with a 15% penalty per day. No late homework will be accepted after 2 days.

Group work is encouraged while working on homework. However, it is the student's responsibility to provide his/her OWN ANSWERS on the homework. If answers on homework questions are too similar to another student's answers, points will be taken off and in severe cases a 0 will be given.

Desire2Learn Quizzes:
Quizzes will be periodically posted on Desire2Learn to test your comprehension of material recently covered in lecture and in the readings. The questions on the quizzes are designed for review of recently covered topics. More challenging questions will be left for homework exercises.

About the labs:
The labs associated with this class are designed to enhance your understanding of lecture material. Material presented in the labs may not coincide with the lectures and there will also be information that we just don't have time to cover in class.

Although there are several lab sections associated with this class, PLEASE don't play "musical lab periods". That is, unless you have permission in advance from the Teaching Assistant(s), please only attend the lab section that you are enrolled in. The lab rooms have very limited seating capacity.

The lab section will comprise 25% of your final grade in the course. Your Teaching Assistant will have more information for you when you attend your first lab.

Important Policies:

Reasonable Accommodation: The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodation in this course are requested to speak with me as early in the semester as possible. Students with disabilities **must** be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone (405) 325-3852, TDD only (405) 325-4173, FAX (405) 325-4491, or ods@ou.edu.

Academic Misconduct: All provisions of the Norman Campus Academic Misconduct Code shall apply in cases of academic dishonesty. Any violation of the Academic Misconduct Code will result in your removal from this course, and a grade of F will be recorded for the course. Academic misconduct is defined as "any act that improperly affects the evaluation of a student's academic performance or achievement." At the University of Oklahoma, academic integrity is expected from each student. Misconduct such as plagiarism, fabrication, and fraud, as well as attempting to commit such acts or assisting others in doing so, will not be tolerated. Students are responsible for knowing the OU Academic Conduct Code, which can be found at http://judicial.ou.edu/content/view/27/32/ and http://www.ou.edu/provost/integrity.

Tentative Schedule (may change based on input/progress)

Date	Topic	Text Chapter
WEEK 1 Week of 23 Aug.	Introduction Structure of Earth's atmosphere	 Chapter 1
WEEK 2 Week of 30 Aug.	Energy and energy balance Temperature	Chapter 2 Chapter 3
WEEK 3 Week of 6 Sept. **NO CLASS ON 6 Sept.**	 Moisture	 Chapter 4
WEEK 4 Week of 13 Sept.	Clouds and fog Stability and cloud development	Chapter 4 Chapter 5
WEEK 5 Week of 20 Sept.	Stability Precipitation	Chapter 5
WEEK 6 Week of 27 Sept.	**EXAM1 – Mon, 27 Sept.** Atmospheric Pressure	**CHAPTERS 1-5** Chapter 6
WEEK 7 Week of 4 Oct.	Atmospheric forces Local Winds/Boundary Layer	Chapter 6 Chapter 7
WEEK 8 Week of 11 Oct.	Air pollution/Air Quality Global Circulation	Chapter 12 Chapter 7
WEEK 9 Week of 18 Oct.	El Nino – Southern Oscillation Air Masses	Chapter 7 Chapter 8
WEEK 10 Week of 25 Oct.	Fronts Mid-Latitude cyclones	Chapter 8
WEEK 11 Week of 1 Nov.	Weather forecasting/predictability **EXAM 2 – Wed, 3 Nov.**	Chapter 9 **CHAPTERS 6-9, 12**
WEEK 12 Week of 8 Nov.	Thunderstorms Tornadoes	Chapter 10
WEEK 13 Week of 15 Nov.	Hurricanes	Chapter 11
WEEK 14 Week of 22 Nov.	Global Climate **THANKSGIVING HOLIDAY**	Chapter 13
WEEK 15 Week of 29 Nov.	Climate Change	Chapter 14
WEEK 16 Week of 6 Dec.	Climate Change **FINAL EXAM – 8 DEC 2010**	Chapter 14 **SEC N202 6:00 PM**