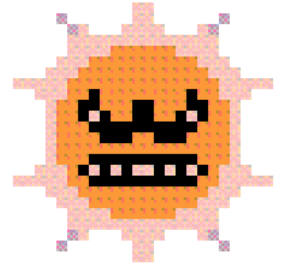




METR 1014: Introduction to Weather & Climate Course Syllabus Spring 2011



Class time: TR 1:30 – 2:45 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

Office Hours: W 9:00 – 10:30 AM 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 of 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: 12.5% each)	25%
Final Exam	25%
Homework Assignments	15%
Desire2Learn Quizzes	10%
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 **NOT** be accepted.

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 (usually weekly) 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. You will be able to drop your lowest quiz grade.

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 17 Jan.	Introduction	
	Structure of Earth's atmosphere	Chapter 1
WEEK 2 Week of 24 Jan.	Energy and energy balance	Chapter 2
	Temperature	Chapter 3
WEEK 3 Week of 31 Jan. NO CLASS ON 6 Sept.	Moisture	Chapter 4
	Clouds and fog	Chapter 4
WEEK 4 Week of 7 Feb.	Stability and cloud development	Chapter 5
	Stability	Chapter 5
WEEK 5 Week of 14 Feb.	Precipitation	
	EXAM1 – Thu, 17 Feb.	CHAPTERS 1-5
WEEK 6 Week of 21 Feb.	Atmospheric Pressure	Chapter 6
	Atmospheric Forces	Chapter 6
WEEK 7 Week of 28 Feb.	Local Winds/Boundary Layer	Chapter 7
	Air Pollution/Air Quality	Chapter 12
WEEK 8 Week of 7 Mar.	Global Circulation	Chapter 7
	El Niño – Southern Oscillation	Chapter 7
WEEK 9 Week of 14 Mar. SPRING BREAK	SPRING BREAK	VACATION
WEEK 10 Week of 21 Mar.	Air Masses/Fronts	Chapter 8
	Mid-Latitude cyclones	
WEEK 11 Week of 28 Mar.	Weather forecasting/predictability	Chapter 9
	EXAM 2 – Thu, 31 Mar.	CHAPTERS 6-9, 12
WEEK 12 Week of 4 Apr.	Thunderstorms	Chapter 10
	Tornadoes	
WEEK 13 Week of 11 Apr.	Hurricanes	Chapter 11
WEEK 14 Week of 18 Apr.	Global Climate	Chapter 13
	Climate Change	
WEEK 15 Week of 25 Apr.	Climate Change	Chapter 14
WEEK 16 Week of 2 May.	Climate Change/Other	Chapter 14
	FINAL EXAM – 11 MAY 2011	SEC A235 1:30 PM