

METR 1014: Introduction to Weather & Climate

Course Syllabus

Spring 2012

TR 1:30-2:45

SEC A235

Instructor: Kristen Bradford – Graduate Student; School of Meteorology

E-mail: Kristen.Bradford@ou.edu

Office: Chesapeake Lounge – 1st floor of Sarkeys Energy Center

Alternate Office: National Weather Center rm. 5110

Office hours: Tuesday and Thursday 2:45-3:45pm

I will hold my weekly office hours in the Chesapeake Lounge, which is on the first floor of Sarkeys Energy Center. I also have an office in the National Weather Center (rm. 5110) in which we can meet by appointment only.

My job is to help you understand the presented material, but I can't help if you don't ask me questions. If you have a conflict with my scheduled office hours, or a question arises that you would prefer to discuss sooner than then, feel free to e-mail me. I will do my best to respond in a timely manner.

Course Web Page: D2L (<https://learn.ou.edu>)

Co-requisite: Lab section

Required Texts:

1. *Essentials of Meteorology: An Invitation to the Atmosphere*, by C. Donald Ahrens, 6th ed.
2. *Explorations in Meteorology: A Lab Manual*

Course Grade Determination:

| | |
|--------------------------|-----|
| Exam 1 | 20% |
| Exam 2 | 20% |
| Assignments/Pop Quizzes | 10% |
| Comprehensive Final Exam | 25% |
| Lab Section Grade | 25% |

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 current-event topics such as ice storms, heat waves, and global warming.

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

About the labs:

The labs associated with this class are designed to both enhance your understanding of lecture material, as well as to introduce some material that we simply do not have time to cover in lecture. As such, the labs don't always coincide exactly with what is going on in lecture.

The lab section will make up 25% of your final grade for this class. Your lab Teaching Assistant will have more information for you when you attend your first lab.

Attendance:

Attendance to each lecture is MANDATORY. Any quizzes or exams missed due to an absence will be recorded as a zero. I do not accept ANY late work (unless there are legitimate extenuating circumstances), so please plan accordingly.

Regardless, it is your responsibility to make up the material you missed in class. The PowerPoints from each lecture will be posted on D2L; however, it is always a good idea to copy the notes from another student in class. Unfortunately, I do not have the time re-teach the lessons to you, but I am always willing to answer any points of confusion that you may have during my office hours.

Pop Quizzes and Class Assignments

Although I will not be taking attendance during class, I will be distributing pop quizzes and in-class assignments frequently throughout the semester. If you are not in class at the time and miss the quiz and/or assignment, it will be recorded as a zero. You will not have an opportunity to make these up if missed. Pop quizzes and class assignments are 10% of your overall grade (see course grade determination). At the end of the semester, I will drop your two (2) lowest grades under this category.

Important Policies:

Accommodation of Students with Disabilities

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the instructor 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. You may contact the office at 405-325-3852 (voice) or 405-325-4173 (TDD).

Academic Misconduct

Cheating will not be tolerated and will be reported. No exceptions, no excuses. Those found cheating will be penalized under the OU Academic Misconduct Code, which can be found at <http://www.ou.edu/provost/integrity>. In short, if you cheat, expect to be removed from the course and to receive an F for the course.

CLASSROOM ETIQUETTE

This is a large class, and as such it is imperative that everyone make an extra effort to respect others in the class. Students pay to be there - good students are there to learn. You are adults and are expected to behave as such. Below are some basic “rules” that I expect everyone to follow while in my class:

- You are expected to get to class on time. Coming late is a disruption. If you do come in late, please take the first available seat so as to minimize disrupting everyone.
- Come to class with the expectation of staying in class for the entire period. In the rare event that you need to leave class early, please make every effort to let me know prior to the beginning of class that you will have to leave.
- Please take care of all restroom trips either before or after class. In the rare event that you need to make an emergency trip to the restroom, please do so as quietly as possible.
- When in class, please be considerate by turning off cell phones and pagers, and turning down the volume on your laptop computer.
- Please do NOT engage in lengthy discussions with your neighbors. This is very distracting to everyone around you (not to mention rude).
- Clean up after yourself. If you are reading a newspaper before class, please be sure to take it with you and dispose of it properly when you leave class. The same goes for any food or drinks you bring to class – please make sure to clean up the area around you when you leave.
- Come to class with the intention of paying attention. Obvious reading of newspapers or other materials not relevant to the lecture will not be tolerated.
- Please be sure to bring paper and pencil (or pen) to each class
- Class ends when I dismiss the class. Please do not begin to pack your things until I have dismissed the class.

Following these simple, common courtesy rules will make the class a much more pleasant experience for everyone.

Tentative Lecture Schedule:

| Week | Date | Topic | Text Chapter |
|---------|--------|--|---------------------|
| Week 1 | 17-Jan | Intro to class/course expectations | |
| | 19-Jan | Introduction to the Earth's Atmosphere | Chapter 1 |
| Week 2 | 24-Jan | Tornado History! | |
| | 26-Jan | Class Cancelled!! | |
| Week 3 | 31-Jan | Energy and Seasons | Chapter 2 |
| | 2-Feb | Air Temperature | Chapter 3 |
| Week 4 | 7-Feb | Water Cycle/Moisture | Chapter 4 |
| | 9-Feb | Clouds and Fog | Chapter 5 |
| Week 5 | 14-Feb | Global Winds | |
| | 16-Feb | EXAM 1 | Chapters 1-5 |
| Week 6 | 21-Feb | Stability and Cloud Development | Chapter 5 |
| | 23-Feb | Stability and Cloud Development | Chapter 5 |
| Week 7 | 28-Feb | Precipitation | Chapter 5 |
| | 1-Mar | Atmospheric Pressure | Chapter 6 |
| Week 8 | 6-Mar | Atmospheric Forces | Chapter 6 |
| | 8-Mar | Local Wind Systems | Chapter 7 |
| Week 9 | 13-Mar | Global Circulation | Chapter 7 |
| | 15-Mar | Wind Power and Renewable Energy | |
| Week 10 | 20-Mar | SPRING BREAK! | |
| | 22-Mar | | |
| Week 11 | 27-Mar | Pre-Spring Break Review | Chapters 5-7 |
| | 29-Mar | Air Masses and Fronts | Chapter 8 |
| Week 12 | 3-Apr | Moisture and Precipitation | |
| | 5-Apr | EXAM 2 | Chapters 5-8 |
| Week 13 | 10-Apr | Mid-Latitude Cyclones | Chapter 8 |
| | 12-Apr | Weather Forecasting | Chapter 9 |
| Week 14 | 17-Apr | Thunderstorms | Chapter 10 |
| | 19-Apr | Thunderstorms and Tornadoes | Chapter 10 |
| Week 15 | 24-Apr | Tornadoes | Chapter 10 |
| | 26-Apr | Hurricanes | Chapter 11 |
| Week 16 | 1-May | Climate Change | Chapter 12 |
| | 3-May | Climate Change | Chapter 12 |

Cumulative Final Exam: FRIDAY, MAY 11 1:30-3:30 A235