



METR 1014: INTRODUCTION TO WEATHER & CLIMATE
Course Syllabus
Fall 2014



Class time: 11:30-12:20pm MWF, Room 123 George Lynn Cross Hall

Instructor: Professor Susan Postawko, School of Meteorology (spostawk@ou.edu)

Office: SEC room 414

Alternate Office: National Weather Center (NWC) room 5329, phone 325-1142

Office hours: 9:30-10:30 am MW, in room 414 SEC, or by appointment

Course web page: Accessible via <https://learn.ou.edu> (log on using your 4+4)

Grader: Mark Stalcup

Required Text:

Essentials of Meteorology: An Invitation to the Atmosphere, by C. Donald Ahrens, (5th edition or higher is OK)

Co-requisite: Lab section

There is no textbook for the lab. You will be expected to print lab exercises each week to bring to lab. The exercises will be posted on the D2L web site for your lab class.

Course Grade Determination:

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| 3 in-class exams @ 12% each (no drops) | 36% |
| Assignments/quizzes* | 12% |
| Comprehensive Final Exam | 27% |
| Lab Section Grade | 25% |

*assignments will include writing assignments, **in-class** exercises, and **unannounced** pop-quizzes. **Please note – if you have an unexcused absence, there are no make-ups for missed in-class exercises or pop quizzes.** However, I WILL drop the 2 lowest scores in this category, so if you have to miss a class or two you won't be penalized.

Please be sure to bring paper and pen/pencil to class each period!!

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-events 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; but 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.

You are expected to come to class prepared to discuss the day's topic (from reading assignments from the required text). Although class attendance is not formally a part of your grade

for this course, you will get much more out of the course, and have a much easier time with the material if you regularly attend class. In addition, there will be material presented in class that will not be in the textbooks. Although I will make every effort to post material on the course web site, your comprehension of the material will be much greater if you are actually in class when it is presented.

If you are having problems with the course material, I strongly urge you to come and talk to me sooner rather than later. I can't do anything if you wait until the last week of classes to come and talk to me about problems you've been having all semester.

Remember that education is a two-way street – I can only present the material and facilitate discussion, but you must bring to class an intellectual curiosity and a willingness to learn. In order to get the most out of any class, you **MUST** take an active role in your own education!

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 don't have time to cover in lecture. As such, the labs don't always coincide exactly with what is going on in lecture.

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 make up 25% of your final grade for this class. 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 325-3852 or TDD only 325-4173.

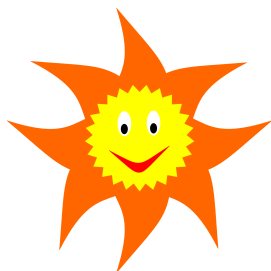
Academic Misconduct: All provisions of the Norman Campus Academic Misconduct Code shall apply in cases of academic dishonesty. Any violation of the Academic Misconduct Code will result in your removal from this course, and a grade of F will be recorded for the course. Academic misconduct is defined as "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://www.ou.edu/studentcode> and <http://www.ou.edu/provost/integrity>

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 here - good students are here 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 in 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 the ringer on cell phones 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 is distracting for everyone and 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 schedule (subject to change)

| Date | Topic | Text Chapter |
|--|---|---|
| WEEK 1 Week of Aug. 18 | Intro to class/course expectations Origin of Earth/origin of the atmosphere | Chapter 1 |
| WEEK 2 Week of Aug. 25 | Structure of Earth's atmosphere Temperature and heat transfer | Chapter 1 Chapter 2 |
| WEEK 3 Week of Sept. 1 No classes on Monday, Sept. 1st | Energy balance The greenhouse effect | Chapter 2 |
| WEEK 4 Week of Sept. 8 | Seasons Air Temperature | Chapter 2 Chapter 3 |
| WEEK 5 Week of Sept. 15 | Air Temperature Wednesday, Sept. 17 - EXAM 1 The water cycle | Chapter 3 Chapters 1-3 Chapter 4 |
| WEEK 6 Week of Sept. 22 | Humidity Fog and clouds Atmospheric stability | Chapter 4 Chapter 5 |
| WEEK 7 Week of Sept. 29 | Precipitation processes Air pressure Atmospheric forces | Chapter 5 Chapter 6 |
| WEEK 8 Week of Oct. 6 No classes on Friday, Oct. 10 | Wind power Wednesday, October 8 – EXAM 2 | Chapter 6 Chapters 4-6 |
| WEEK 9 Week of Oct. 13 | Local winds Global Circulation El Niño-Southern Oscillation | Chapter 7 |
| WEEK 10 Week of Oct. 20 | Air masses, front, mid-latitude cyclones | Chapter 8 |
| WEEK 11 Week of Oct. 27 | Thunderstorms Lightning Other thunderstorm hazards | Chapter 10 |
| WEEK 12 Week of Nov. 3 | Tornadoes Hurricanes | Chapter 10 Chapter 11 |
| WEEK 13 Week of Nov. 10 | Hurricanes Wednesday, November 12th – EXAM 3 Global climate | Chapter 11 Chapters 7, 8, 10 & 11 Chapter 12 |
| WEEK 14 Week of Nov. 17 | Global climate Climate change | Chapter 12 Chapter 13 |
| WEEK 15 Week of Nov. 24 | Climate change THANKSGIVING HOLIDAY NOV. 26 – 30 | Chapter 13 |
| WEEK 16 Week of Dec. 1 | Climate change | Chapter 13 |
| FINAL EXAM | Thursday, December 11 1:30 – 3:30 pm Room 123 GLCH | Comprehensive Exam |