



## METR 1014: Introduction to Weather & Climate Course Syllabus Spring 2014

**Class times:** T/R @ 1:30-2:45pm

**Class location:** Nielson Hall 0270

**Instructor:** Austin Harris

**Grader:** Branden Katona

**Office:** SEC 410A

**Office:** By appointment

**Email:** [a.harris@ou.edu](mailto:a.harris@ou.edu)

**Email:** [btkatona@ou.edu](mailto:btkatona@ou.edu)

**Office hours:** 10:00-12:00 Tuesdays

**Office Hours:** By appointment

3:00-5:00 Thursdays

or by appointment

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

**Co-requisite:** Lab section

**Required Texts:** Essentials of Meteorology: An Invitation to the Atmosphere, by C. Donald Ahrens

### Course Weighting:

3 in-class exams @ 10% each	30%
4 Homeworks @ 5% each	20%
5 in-class quizzes (random) @2% each	10%
Lab Grade (controlled by lab instructor)	25%
Comprehensive Final Exam	15%

**About this course:** Meteorology 1014 is a qualitative survey course of weather and climate for non-meteorology majors. 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.

The course is not intended to make scientists out of you, but it should help you *gain a basic understanding of the atmosphere* and to *develop critical thinking skills* so that you can understand and have principled discussions about newspaper and magazine articles related to weather and climate etc.

**Recipe for Success:** Here are a few tips to help you get an A in this course

- 1. Don't blow of the labs.** The lab itself is worth 25% of your grade. If you decide to not attend your lab section, the highest grade possible is a C. Even then, getting a C is highly unlikely. While in lab, be sure to prepare for the bi-weekly quizzes. These are worth a good percent of your lab grade.
- 2. Attend Class.** Although attending class is not required, 10% of your grade will be dependent on our performance on the random in-class quizzes. Attending class will improve your grade on your homework and exams. Guaranteed.
- 3. Read the textbook.** Materials from the textbook will be used in my lectures, your homework, and exams. Buy the textbook and read the chapters before lecture.

4. **Take notes.** When in class, pay attention and *take notes*. I will give out “hints” on material you “might see on an exam.” Don’t miss out on these opportunities!
5. **Put forth some effort.** I have structured the course so that *anyone who wants to make an A* can. If you are willing to put in a little bit of work each week, you will be rewarded.

### Struggling?

If you are having problems with the course material, I urge you to come and talk to me sooner rather than later. [Interacting with me is highly encouraged](#). I want you to succeed! However, education is a two-way street – I can only present the material and facilitate discussion, but you must bring to class 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! If you are struggling, reach out to me and I will do my best to help you.

### 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 usually (but not always) coincide 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.

Your Lab Instructor will upload your weekly lab assignment onto D2L. **These are for you to print and bring to class each week.** Your lab T.A. will not print these for you.

Lab grades will be weighted between your weekly lab assignments (60%) and a set of 5 in-class quizzes (40%).

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>

***Tentative schedule (subject to change)***

<b>Date</b>	<b>Topic</b>	<b>Text Chapter</b>
<b>WEEK 1</b> Jan 14 – 16	Intro to class/course expectations Lecture 1: The Earth's atmosphere	Chapter 1
<b>WEEK 2</b> Jan 21 – 23	Lecture 2: Warming the atmosphere Lecture 3: Air Temperature	Chapter 2 Chapter 2-3
<b>WEEK 3</b> Jan 28-30	Lecture 3: Air Temperature Lecture 4: Humidity, Condensation, and Clouds <b>Homework 1 Due Thu Jan 30<sup>th</sup></b>	Chapter 3 Chapter 3-4
<b>WEEK 4</b> Feb 4-6	Lecture 4: Humidity, Condensation, and Clouds Lecture 5: Cloud Development and Precipitation Review for Exam 1	Chapter 4 Chapter 5
<b>WEEK 5</b> Feb 11- 13	<b>EXAM 1 – Tuesday Feb 11</b> Lecture 6: Air Pressure, Winds, and Wind Types	<b>Chapters 1-5</b> Chapter 6
<b>WEEK 6</b> Feb 18-20	Lecture 6: Air Pressure, Winds, and Wind Types Lecture 7: Atmospheric Circulations	Chapter 6 Chapter 7
<b>WEEK 7</b> Feb 25-27	Lecture 8: Air Masses, Fronts, and Mid-Latitude Cyclones Lecture 9: Weather Forecasting <b>Homework 2 Due Tue Feb 25<sup>th</sup></b>	Chapter 8 Chapter 9
<b>WEEK 8</b> Mar 4-6	Lecture 9: Weather Forecasting Lecture 10: Thunderstorm Types	Chapter 9 Chapter 10
<b>WEEK 9</b> Mar 11-13	Lecture 10: Thunderstorm Types/Review for Exam 2 <b>EXAM 2 – Thursday Mar 13</b>	Chapter 10 <b>Chapter 6-10</b>
<b>WEEK 10</b> Mar 18-20	<b>SPRING BREAK (No school)</b>	Chapter 8
<b>WEEK 11</b> Mar 25-27	Lecture 11: Thunderstorm Hazards Lecture 12: Tornadoes <b>Homework 3 Due Thu Mar 27<sup>th</sup></b>	Chapter 10
<b>WEEK 12</b> April 1-3	Lecture 12: Tornadoes Lecture 13: Hurricanes	Chapter 10 Chapter 11
<b>WEEK 13</b> April 8-10	Lecture 13: Hurricanes Lecture 14: Climate Change	Chapter 11 Chapter 12-13
<b>WEEK 14</b> April 15-17	Lecture 14: Climate Change Lecture 15: Global Warming and Optics <b>Homework 4 Due Tue April 15<sup>th</sup></b>	Chapter 13 Chapter 14-15
<b>WEEK 15</b> April 22-24	Lecture 15: Global Warming and Optics/Review <b>EXAM 3 – Thursday April 24</b>	Chapter 15 <b>Chapter 11-15</b>
<b>WEEK 16</b> April 29-May 1	Lecture 1-8 Review Lecture 9-15 Review	Chapter 1-15
<b>FINALS WEEK</b>	<b>Thu May 8<sup>th</sup> – COMPREHENSIVE FINAL EXAM</b>	Chapter 1-15