

**METR 1014-015**  
**Weather and Climate Lab**  
**Spring 2010**  
**Mondays 5:30-7:20, SEC M204**

**Instructor :** Kara Bolognini

Office: NWC 5110

Email: [kara.anne@ou.edu](mailto:kara.anne@ou.edu)

Office Hours: By appointment (most of the time I'm in my office)

My job as your TA is to help you understand the presented material. But I can't help if you don't ask me questions. So please ask me questions if you need something clarified.

**Course Description:**

This lab will cover a wide range of topics about weather and climate and serves as a complement to the material covered in the METR 1014 lectures.

**Course Goals:** 1) To gain an understanding of how material presented is used in real world applications and 2) to gain hands-on experience using some of the methods and techniques used in weather and climate studies.

**Course Materials:**

**Text:** C. Donald Ahrens, *Essentials of Meteorology: An Invitation to the Atmosphere*, (We will not be directly using the textbook in class, but you will be required to bring it since it is a valuable reference text for your lab assignments)

**Laboratory Manual:** Oklahoma Climatological Survey, *Explorations in Meteorology*

**Other lab Supplies:** colored pencils, calculator

We will also be using labs from a different source. These will be posted on the class website on Desire2Learn at <https://learn.ou.edu>. I will inform you of when you need to check the website for these additional labs. It will be YOUR responsibility to print out these labs and bring them to class as they come up during the semester.

**Lab Structure**

We will start promptly at 6:30 PM. Please make your best efforts to be on time, as coming in late disrupts class. Be sure to come prepared with all of your lab materials to each class. It may also benefit you to read over the lab before coming to class. I will give a brief introduction to each lab before you start on your assignment. This is a good time to ask questions if you have any.

Labs are to be completed in class only. The two hours allotted to class should be sufficient to complete each lab, so use your time effectively. If the majority of the class does not complete the lab by the end of class, it will be dealt with as needed.

### **Laboratory Expectations:**

Each student is required to do their own lab and turn in a lab report. Discussion of the lab concepts amongst your classmates is encouraged, however I expect you to come up with your own answers to the questions asked. Late lab reports will not be accepted unless there are extenuating circumstances that have been brought to my attention and cleared. If extenuating circumstances arise, and have been cleared, the lab must be made up within a week.

### **Attendance**

Attendance in lab session is MANDATORY. I will not take attendance at the beginning of class, but will know who is there by who turns in their lab. I will NOT accept labs turned in by a friend. In order to turn in a lab you must hand it in yourself in the class period in which it is due.

DO NOT DO THE LAB BEFORE CLASS!! This will be considered a form of cheating, and will result in a score of ZERO on that particular lab.

If you need to miss a lab, you must have a VALID reason (athletic, religious holiday, illness). If you know in advance you will be missing a lab, inform me AS SOON AS POSSIBLE, but no less than a week prior to the missed class. It may be possible for you to attend an alternate lab session, but this first must be cleared with the proper teaching assistant.

I understand that sometimes you will need to miss a lab due to illness or unavoidable circumstances (death in the family, etc) and will not be able to provide the required one week notice. Please let me know as soon as possible and other arrangements can be made for you to receive credit for your lab.

If you are sick the day of lab, let me know BEFORE the time class starts. If you have not emailed me before class starts stating you are sick, you will be unable to make up the lab. If you email me before class that you are sick, the next time you come to lab you MUST have a doctor's note in order to arrange a makeup for the lab.

### **Grading**

|               |     |
|---------------|-----|
| Lab exercises | 60% |
| Lab quizzes   | 40% |

Your final lab grade will account for 25% of your total grade in the course. The labs will be graded for the most part on accuracy. You may lose points for sloppy or illegible work, so please be neat when completing your lab assignments.

There will be a total of 13 labs in this course. Your grades for each lab will be posted on the class webpage on <https://learn.ou.edu>.

There will be 5 lab quizzes throughout the semester. You will be informed of this one week beforehand, and we will discuss what is being covered on each quiz in the class prior to the class in which the quiz will be given. Your lowest quiz grade will be dropped.

### **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.

Working together is highly encouraged in this class. However, the work you submit MUST be your own work. Any student caught copying off another student will be penalized.

| <b>Week</b> | <b>Lab (parenthesis indicate lab number in manual)</b> |
|-------------|--|
| 1           | No Lab!!   |
| 2           | North American Geography (1)                           |
| 3           | Dimensions and Units                                   |
| 4           | Earth-Atmosphere System (2)                            |
| 5           | Radiation and Energy Transfer (3)                      |
| 6           | Daily Temperature Cycle (4)                            |
| 7           | Atmospheric Moisture (5)                               |
| 8           | Atmospheric Motion                                     |
| 9           | Spring Break—NO LAB!!! ☺                               |
| 10          | Airmasses and Fronts (6)                               |
| 11          | Surface Map Analysis (7)                               |
| 12          | Mid-Latitude Cyclones                                  |
| 13          | Thunderstorms and Tornadoes                            |
| 14          | Hurricane Tracks and Forecasts (13)                    |
| 15          | COMET Climate Module                                   |
| 16          | No lab, but COMET module due                           |