

# Syllabus

Weather and Climate Laboratory  
METR 1014-913, Fall 2014  
Thursday: 6:30-8:20pm; SEC P0203

**Laboratory Instructor:** Jordan Ferguson

**E-mail:** jfergrva@gmail.com

**Office hours:** Tuesdays and Thursdays 5:00-6:30pm

I will hold my weekly office hours in room 410A of Sarkey's Energy Center.

My job as your Lab Instructor is to help you learn and 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 have a question that needs answering, feel free to e-mail me. My schedule is extremely flexible as I should be able to make an appointment with you outside regular office hours. I will do my best to respond in a timely manner.

## **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 are encouraged to bring it since it is a valuable reference text for your lab assignments)

**Weekly Labs:** Printed off from D2L website prior to the beginning of class.

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

## **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** of the missed class period.

## **Attendance**

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

If you need to miss a lab due to athletic or religious reasons please inform me as soon as possible, but by **no later than one 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. For instance, if you wish to attend my other Monday lab section, which begins at 3:30 in room P0201, you must notify me prior to the start of class. I understand that sometimes you will need to miss a lab due to

illness or unavoidable circumstances (ex. a family emergency) and will not be able to provide the required one week notice. Please let me know as soon as possible before class and other arrangements can be made for you to receive credit for your lab.

Unexcused absences are not tolerated. If you miss a class and fail to notify me before class begins, you will receive a zero for the day and will not be allowed the opportunity to make it up at a later date.

### **Lab Structure**

We will start each lab promptly at the stated starting time. Please make your best effort to arrive on time, not only because walking in late disrupts the class, but also because you could miss important class instructions and announcements (i.e. quizzes \*hint hint\*)

Be sure to come prepared. This means bringing the necessary materials (**pencil, eraser, calculator, and sometimes colored pencils**) to each class. You must also **PRINT OUT AND BRING YOUR LAB TO EVERY CLASS** because I will not have extra copies of the lab with me. If I do, copies will be limited. I will not accept a loose-leaf sheet of paper with the answers written on it. If you fail to bring your lab to class, you may go to the library in Sarkey's Energy Center to print it out but you will likely have to pay a small fee.

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. However, I always welcome and encourage questions as you complete your labs during the class period.

**Labs are to be completed in class only.** The two hours allotted to class should be sufficient to complete each lab, so please use your time effectively. Labs are due at the end of each lab period.

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

Working together on labs is highly encouraged, but please turn in your own work. **DO NOT** turn in exact copies of the work done by your classmates with whom you are working. This will be treated as Academic Misconduct.

### **Make-Up Work**

If you have an excused absence and need to make up a lab, you have exactly one week to complete it without penalty. Otherwise, the grade for the lab will be recorded as a zero. This is because I will return the current week's lab the following week, and if I have already returned the lab to the rest of the class then I will not be able to accept yours. For making up labs, you may either complete the lab during my office hours, make an appointment to meet with me outside office hours, or you can simply bring the completed lab to me. For making up lab quizzes you must meet me during my office hours or make an appointment.

### **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 as neat as possible. At the end of the semester, I will drop your lowest lab percentage grade.

There will be a total of 5 quizzes over lab material throughout the semester. Quiz material and possible questions will be discussed the week before a quiz is issued.

**Correspondence:**

When sending me e-mails, please use your OU e-mail address and put METR 1014: last name in the subject line. I receive many e-mails and this will ensure that yours are read before the others.

**Classroom Courtesy:**

Cell phones, pagers, and watch alarms should be turned off or put to silent before coming to lab.

**Desire2Learn Website:**

I will be using Desire2Learn in this lab for posting grades, lab notes, and other important information. You can find this at <https://learn.ou.edu>. Please check it regularly for announcements.

**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.

## Spring 2014 Lab Schedule

\*\*\*This list is not finite and is subject to change\*\*\*

Week 1: **No lab**

Week 2: North American Geography

Week 3: Dimensions and Units

Week 4: Vertical Structure of the Atmosphere

Week 5: The Surface Energy Budget

Week 6: Annual Temperature Patterns

Week 7: Atmospheric Moisture

Week 8: Saturation & Atmospheric Stability

Week 9: Atmospheric Motion

Week 10: Isopleths, Advection, and Global Circulation

Week 11: Air Masses, Fronts, and Midlatitude Cyclones

Week 12: Weather Map Analysis

Week 13: Thunderstorms and Tornadoes

Week 14: Hurricanes (last time class meets together)

Week 15: **No Lab - Thanksgiving Break**

Week 16: COMET module Climate Change (completed at home during Dead Week)

Week 17: **No Lab - Final Exam Week**