

Syllabus

Weather and Climate Laboratory
METR-1014-017 - Lab-METR 1014-017
Fall 2014
Tuesday; 5:30 pm-7:20 pm; SEC P0203

Laboratory Instructor: Mason Rowell

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Office hours: 4:30 pm to 5:30pm

I will hold my weekly office hours in the Chesapeake Lounge, which is on the first floor of Sarkeys Energy Center.

My job as your Teaching Assistant 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, feel free to e-mail me. 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 will be required 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: 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 (**this means you should use your own words!**). 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 based off of the names on the labs I receive at the end of class. 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. I understand that sometimes you will need to miss a lab due to illness or unavoidable circumstances (e.g., 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.

Be sure to come prepared. This means bringing a pencil, eraser, calculator, and sometimes colored pencils to each class. You must also print out and bring your lab material to every lab. I will not accept a loose-leaf sheet of paper with the answers written on it. If you fail to bring your lab pages to class, I will give you the opportunity to complete the lab for **half credit** during my office hours.

I will give a brief introduction/lecture to each lab before you start on your assignment. This is a good time to ask questions if you have any. Please don't hesitate to ask me to explain something in a different way if the material sounds confusing. Moreover, 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. You can of course, read through the material first, work out the problems, throw away your work, and re-complete the assignment in class (I'd better not see previously completed work laying around or hidden). The lab may go faster that way, but you should still clear up any confusion before assuming your previous answers were right, as the often aren't when completing labs this way.

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. You must meet me during my office hours to finish any make-up work; however, in extreme circumstances I will allow you to make an appointment to meet with me in my NWC office. When you come to office hours to complete a lab, please arrive when they begin. You will most likely require the entire hour to finish your work, so the earlier you start, the better chance you'll have of making it through the lab.

Grading

Lab exercises	60%
Lab quizzes	40%

Your final lab grade will account for 20% 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 lab which scored the lowest.

There will be a total of 5 quizzes over lab material throughout the semester. They will be announced and discussed in class the week before they are given.

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 and should not be used, except in emergency cases.

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.

Academic Misconduct for this Course: You are allowed to use three resources during lab: ME, YOUR LAB GROUP, and YOUR TEXTBOOK (and maybe handouts or material I leave projected). This means ABSOLUTELY NO LAPTOPS OR SMART PHONES. I will use a three strike policy for either, so there are no excuses on the matter. That means if I SEE a SMART PHONE or LAPTOP out, you will get a strike, and on the third strike, your lab will count as a zero (and I may consider reporting you).

Fall 2014 Lab Tentative Schedule

- Week 1: No lab
- Week 2: North American Geography
- Week 3: Dimensions and Units
- Week 4: Earth-Atmosphere System
- Week 5: Radiation & Energy Transfer
- Week 6: Daily Temperature Cycle
- Week 7: Atmospheric Moisture
- Week 8: Saturation & Atmospheric Stability
- Week 9: Atmospheric Motion
- Week 10: Air Masses & Fronts
- Week 11: Surface Map Analysis
- Week 12: Mid-latitude Cyclones
- Week 13: Thunderstorms & Tornadoes
- Week 14: Hurricane Tracks & Forecasts
- Week 15: COMET module Climate Change: fitting the pieces together