

ME TR 1014-015
Introduction to Weather and Climate Laboratory
Fall 2010
T 5:30-7:20pm SEC Rm P207

Instructor

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Office Hours: After lab or by appointment.

Text

Explorations In Meteorology: A Lab Manual
Essentials of Meteorology: An Invitation to the Atmosphere (5th Edition)

We will not be directly using the textbook in class so you are not required to bring it, however it is encouraged that you do in case you would need to reference it for your lab assignment. In addition, each student **MUST** have his or her own lab manual for each class. Also be aware that some of the labs we will be doing will not be from the lab manual, and will be posted on D2L prior to class. Each student must print this out and bring his or her own copy to class, as I will not be providing any extras.

Lab Description

Laboratories serve as a complement to the lecture material covered in this course. The material will not be exactly the same as what is presented in lecture but will show up on exams, so make sure you know and pay attention to lab material as well. Lab is designed to engage a hands-on learning environment and to enhance your understanding of meteorology in general. For an overview of topics covered, refer to the calendar on the last page of this syllabus.

Attendance

Attendance in lab session is mandatory. I will not take attendance at the beginning of class but rather at the end when you turn in your lab. If you do not attend lab and therefore do not turn in a lab at the end of class, you will receive a zero for that lab, unless you have made prior arrangements.

If you do need to miss a lab, you are required to have a university-approved excuse. If you know you will need to miss lab one week and do have a legitimate excuse, try to notify me as soon as possible, preferably at least one week before the lab you will miss. Obviously some absences can be unforeseen, such as death in the family, serious illness, transportation issues, etc. You also may have the option to attend a different lab session. Again, you must be approved for this, as this is a last resort option.

It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required classwork that may fall on religious holidays. Any student who has a religious holiday fall on one of the lab days, please see me no later than one week prior to the lab so that we can make arrangements.

Grading

60% Labwork

40% Quizzes

Your final lab grade will account for 25% of your total grade in the course. Of that 25%, the majority will depend on the actual labwork itself. Each lab will have a different point value depending on the depth of each particular lab. The labs will be graded for the most part on accuracy, so just simply putting forth the effort is not quite enough. You may lose points for sloppy or illegible work, so please be as neat as possible.

You may drop the lowest lab grade at the end of the semester, no questions asked. This can account for any unforeseen absences, if necessary.

There will be about 5 total quizzes this semester covering material from previous labs. You will be returned all labs (with grades) at least one week before you are quizzed on them. No quiz grades will be dropped.

Lab Structure

We will start each lab promptly at 5:30. Please make your best effort to not come in late as it disrupts the class. Be sure to come prepared. This means bringing a pencil, eraser, calculator, and colored pencils 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, and 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 please use your time effectively. If the majority of the class cannot finish by the end of lab time, it will be dealt with as needed.

DO NOT COMPLETE THE LAB BEFORE CLASS!! There is no reason to do this. If I suspect that students have completed the lab before class, this will affect their grades and may result in a loss of points on the actual lab.

Desire2Learn

<https://learn.ou.edu> (log in with your 4x4)

Please refer to this website every so often as I will post announcements if necessary. Grades will also be posted here unless you have requested to have them withheld.

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. Using other students as a resource is a great way to learn in a field such as meteorology. However, the work you submit MUST be your own work. Any student caught copying off another student will be penalized.

Lab Schedule

Tentative Lab Schedule METR 1014 Fall 2010		
Week	Lab #	Lab Description
1	<i>No Lab</i>	First Week of Classes
2	Lab 1	North American Geography
3	Appendix A	Dimensions and Units
4	Lab 2	Eath-Atmosphere System
5	Lab 3	Radiation and Energy Transfer
6	Lab 4	Daily Temperature Cycle
7	Handout	Saturation and Atmospheric Stability
8	Handout	Atmospheric Motion
9	Lab 5	Atmospheric Moisture
10	Lab 6	Air Masses and Fronts
11	Lab 7	Surface Map Analysis
12	Handout	Mid-latitude Cyclones
13	Handout	Thunderstorms and Tornadoes
14	<i>No Lab</i>	<i>Thanksgiving</i>
15	Lab 13	Hurricane Tracks and Forecasts
16	Handout	COMET module Climate Change