

Syllabus

Weather and Climate Laboratory
METR 1014-021
Spring 2010
Tuesday, 5:30-7:20, SEC P203

Laboratory Instructor: Mike Vandenberg

Office: NWC 5110

E-mail: mike_vandenberg@ou.edu

Office hours: Friday 1:50-2:50 or by appointment.

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. So, please stop by my office 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

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 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 yourself must hand it in.

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 (ex. A death in the family) 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.

Lab Structure

We will start each lab promptly at the stated starting time. 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 sometimes colored pencils to each 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. 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.

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.

There will be 5 quizzes over lab material throughout the semester, with the lowest quiz grade being dropped.

Correspondence:

If you are unable to come during my office hours or need additional help, please do not hesitate to contact me at the email address above to set up an appointment. Parking is available at the NWC. Also, CART has a route between main campus and the NWC called the "Research Shuttle" or "N42 Gold" route. **In order to enter the building, you will need to show your OU student ID to the security guards at the front desk.**

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.

METR 1014 Labs
Section 021
Spring 2010

WEEK	LAB	QUIZZES
Week 1 – Jan 19	No Labs	
Week 2 - Jan 26	#1 North American Geography	
Week 3 - Feb 2	Dimensions and units	
Week 4 – Feb 9	#2 Earth-Atmosphere System	
Week 5 - Feb 16	#3 Radiation and Energy Transfer	Quiz 1 over #1 NA Geog & Units
Week 6 – Feb 23	#4 Daily Temperature	
Week 7 – March 2	#5 Atmospheric Moisture	
Week 8 – March 9	Atmospheric Motions	Quiz 2 over #2, #3, & #4
Week 9 – March 16	SPRING BREAK	
Week 10 – March 23	#6 Air Masses and Fronts	
Week 11 – March 30	#7 Surface Map Analysis	Quiz 3 over #5 and Atmos. Motions
Week 12 – April 6	Mid-latitude Cyclones	
Week 13 – April 13	Thunderstorms and Tornadoes	Quiz 4 over #6 & #7
Week 14 – April 20	#13 Hurricane Tracks	
Week 15 – April 27	COMET Climate Module	Quiz 5 over Mid-lat cyclones, Thunderstorms & Tornadoes
Week 16 – May 4	No lab meeting; COMET lab is due	