

METR 2011 – Introduction to Meteorology I Laboratory

Syllabus: Fall 2013

Instructor: Christopher Riedel
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Office Hours: By appointment
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Section 003 MON 5:00-7:00pm NWC 5720

This lab will work to reinforce the course material of METR 2013, but the concepts and material covered will not necessarily coincide with what is being presented in the actual class. In fact, this lab may be thought of as a completely separate course.

The Official Description from the OU Catalog:

Reinforces the theoretical concepts provided in the counterpart lecture course Meteorology 2013, which introduces students to important phenomena and physical processes that occur in the earth's atmosphere. Through a series of laboratory exercises, students will learn the basic concepts and tools that are used to study atmospheric problems. Special emphasis will be placed on developing information technology and computational skills. The laboratory exercises target the topics covered in the lecture component.

Required Text:

Meteorology Today: An introduction to weather, climate, and the environment. 8th edition or newer; C. Donald Ahrens. Descriptive text emphasizing concepts and terminology.

Meteorology for Scientists and Engineers. 2nd edition or newer; Ronald B. Stull. Mathematically based text for understanding derivations and applying concepts.

Recommended Text:

Practical Guide to Linux Commands, Editors, and Shell Programming (2nd Edition) – by Sobel, Mark G.

Linux in a Nutshell, (5th edition) – by Seiver, Weber, Figgons, Love, and Robbins. O'Reilly Media Inc.

Course Objectives:

13 Labs will focus on the following areas of meteorology. Of the 13, 9 will focus on “core” areas of meteorology, and 4 will address additional topics as chosen by the instructor. The 9 core topics are:

- 1) Unit conversions
- 2) Creating a website in HTML
- 3) Radiation
- 4) Skew-T/ln P charts
- 5) Measurements
- 6) GEMPAK
- 7) Satellite meteorology
- 8) Atmospheric moisture
- 9) Atmospheric stability

Grading Scale:

I will look for natural breaks in the grade distribution

Grading:	13 Lab assignments	50%
	13 Weekly Quizzes	40%
	Forecast Journal	10%

Lab Assignments: Lab assignments must be turned at the beginning of the next lab class. The only exceptions will be for extenuating circumstances (i.e. death in the family, hospitalization, etc.) when I am notified at least 24 hours in advance. Lab assignments turned in late will be deducted 5% for every day past the due date.

Weekly Quizzes/Attendance: At the start of every lab, there will be a short 5-10 minute quiz covering the previous week's lab topics. If you need to miss a lab for extenuating circumstances, then talk to the lab instructor for making up lab work and quizzes. Unexcused labs will result in a 0% for quizzes.

Web Page: This course has a web page located at: <https://learn.ou.edu>. All grades will be posted on this class website and if you have any questions about what has been posted contact me immediately.

Academic Misconduct:

Academic misconduct is a serious breach of ethics since it potentially can harm those students who are honestly pursuing their studies. All instances of alleged academic misconduct will be thoroughly investigated and action taken under the official university policies. All students are expected to be familiar with and abide by the OU Academic Misconduct Code. Information on this code and other student policies is located at <http://studentconduct.ou.edu>.

You are allowed to work with fellow classmates on any and all lab assignments; however, each and every lab must be your OWN work with your OWN write-up. Any copying is strictly prohibited and will result in a zero on that assignment and the loss of any extra-credit

opportunities for the entire semester. If this behavior continues, immediate action will be taken to report the student for academic misconduct.

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 professor 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, phone 405/325-3852 or TDD only 405/325-4173."

application for the entry certificate. If the letter contains research action will be taken to spot the value for further research.

The University of Oklahoma is committed to providing reasonable accommodations for all students with disabilities.

Our request to speak with the professor as well as the student or research assistant with disabilities must be registered with the Office of Disability Services prior to receiving accommodations to this course. The Office of Disability Services is located in Student Health Center, Room 100, phone (405) 271-1111 or TDD only (405) 271-1112.