

# METR 2011 – Introduction to Meteorology I Laboratory Syllabus: Fall 2014

**Instructor:** Jordan Christian  
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**Office Hours:** TBA  
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**Section 900**                      Thursday                      5:00-7:00pm                      NWC 5720

This lab will work to reinforce the course material of METR 2013, but the concepts and materials covered will not necessarily coincide with what is being presented in the actual METR 2013. 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.

## **Recommended Text:**

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

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

**Practical Guide to Linux Commands, Editors, and Shell Programming (3rd Edition)** – by Sobel, Mark G.

**Linux in a Nutshell,** (5<sup>th</sup> 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:**

Follows a standard grade distribution. (90-100 = A, 80-89.9 = B, and so on). I will account for improvement throughout the semester and take into consideration any extenuating circumstances.

<b>Grading:</b>	13 Lab assignments	50%
	13 Weekly Quizzes	40%
	13 Weekly Weather Logs	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 10% 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. I MUST HAVE A VALID EXCUSE NOTE/PROOF TO ALLOW YOU TO MAKE UP ANY QUIZZES.

**Weather Log:** A weather log will be due at the beginning of lab every week. More information on the weather log will be in the weather log handout. Any weather logs not turned in on time will receive a 0%.

**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."*