

# METR 3613-011

## Meteorological Measurements Systems - Lab

### Fall 2014 Syllabus

**Time:**

Section 011 Group A

Tuesday 9:30 AM – 11:30 AM

**Location:** NWC 5302

**011 Lab Instructor:** Jennifer (Jen) Newman ([jennifer.newman@ou.edu](mailto:jennifer.newman@ou.edu))

NWC 5240

Office hours: Tues./Thurs. 2-3 pm (NWC 5240)

Or by appointment

**Lab Materials:**

All documents and the five lab instruction manuals will be posted on D2L. The tools and materials you will need to complete each lab will be provided during the lab session. You should have a lab notebook for taking notes during lab classes and for documenting your findings. An inexpensive notebook should be fine. The information you put into these lab reports will help you put together your lab reports. Make sure to document your results and procedures!

**Grading:**

A total of 5 grades (each from a different laboratory experiment) will be averaged and worth 25% of the overall METR 3613 grade. Each of these 5 grades will be divided into two sections:

- Quiz 10%
- Lab report 90%

**Lab Schedule:**

	<b>Assigned</b>	<b>Due</b>
<b>Lab 1</b>	T. Sept. 2 <sup>nd</sup>	M. Sept. 15 <sup>th</sup>
<b>Lab 2</b>	T. Sept. 16 <sup>th</sup>	M. Sept. 29 <sup>th</sup>
<b>Lab 3</b>	T. Sept. 30 <sup>th</sup>	M. Oct. 13 <sup>th</sup>
<b>Lab 4</b>	T. Oct. 14 <sup>th</sup>	M. Oct. 27 <sup>th</sup>
<b>Lab 5</b>	T. Oct. 28 <sup>th</sup>	M. Nov. 10 <sup>th</sup>
<b>Tour</b>	T. Nov. 11 <sup>th</sup>	

# Lab Instructions, Quizzes, and Assignments

## Laboratory Manuals

A total of five laboratory manuals will be used during this course. Lab manuals and additional lab handouts can be found online on D2L during the week before your scheduled lab. Each manual contains background about the lab, a description of the laboratory experiment, and the assignment to be completed. You will have a period of almost two weeks (13 days) to complete the lab. Make sure to read the lab prior to coming to class so you are prepared. **You are responsible for bringing a printed copy of the lab description to the lab classes.**

## Quizzes

A short quiz will take place at the beginning of each lab. The quizzes are meant to make sure that you go over the lab manual material beforehand and come to class prepared. Being aware of what the lab is about will help you go through the experiment efficiently. It will be easier for you to understand what is going on and even finish early. The quizzes will include approximately five questions and will be based on the material discussed in the corresponding lab manual. Quizzes will go under the quiz category.

## Laboratory Assignments

Lab assignments are designed to help you understand the material learned in lecture, but also to help you in the learning process of writing a full laboratory report. The first laboratory assignment will be the easiest one to carry out and to document. It will require some data analysis, learning some of the basics on how to display results in scientific documents, and some basic writing (you will demonstrate your ability to summarize). You will develop a simplified/reduced lab report for the second laboratory assignment. The final three assignments will consist of full laboratory reports, and their format will be somewhat similar to that of your Senior Capstone projects. Writing skills that you learn in this class will carry over to other places such as your job, any research you may do, and your Senior Capstone project.

There will be a total of 5 assignments during the semester, which will be related to the material covered during the corresponding laboratory session. Each assignment must be submitted electronically to a D2L dropbox by 8 PM on the evening before the next lab session. Your Dropbox folders are already created and have names like “Lab 1 – Group A, Tuesday – Instructor: Jen.” For every hour the lab is late, 10% will be taken off the lab grade. If you are late and email your assignment, you must use only your OU or Rossby email accounts. I prefer ‘.docx’ documents if you use Word; or ‘.pdf’. Please use the following convention for naming your files: LastnameFirstname\*.doc (i.e. NewmanJenniferLab1.doc). No printed hardcopy of the assignment is required (unless explicitly specified in the assignment).

Although lab experiments are carried out in teams and data must be shared among team members, the assignments must be written up individually. Any form of copying text from reports of other students, laboratory manuals or any other material publicly available without making references will be treated as academic misconduct.

## **MATLAB Help Sessions**

The final two homework assignments for the Measurements lecture will require you to analyze and plot data in MATLAB. Dr. Klein will hold several help sessions during the Friday lectures to help you with these assignments. In addition, you may ask the TA who is grading the assignment (either Jen or Tim) for assistance. It is extremely important that you start these assignments early so that you have ample time to ask for help if you need it. **The TAs will not be available to answer questions on the day that a MATLAB assignment is due.** It is your responsibility to manage your time wisely and start the assignment before the day it is due.

## **Attendance and Make-up Policy**

The lab experiments must be performed in a team and must follow a strict schedule. Therefore, we expect 100% attendance to be the norm, and it is required that you attend the laboratory exercises at the times designated for the group that you signed up for. Lab exercises cannot be made up without a prior permission, which will be granted by the instructors on a case-by-case basis and under extraordinary circumstances.

If you miss a lab, you may not use someone else's data. Any attempt to do so without permission by the instructors will be treated as academic misconduct, and actions will be taken according to the academic misconduct code described further below. So, again ... please don't do it!

## **Other Important Policies**

**Reasonable accommodation:** The University of Oklahoma is committed to provide 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 Disability Resource Center prior to receiving accommodations in this course. The Disability Resource Center is located in Goddard Health Center, Suite 166, phone 405-325-3852 or TDD only 405-325-4173.

**Academic Misconduct:** All provisions of the Norman Campus Academic Misconduct Code shall apply in cases of academic dishonesty. Academic misconduct is defined as "any act that improperly affects the evaluation of a student's academic performance or achievement." All faculty at the University of Oklahoma expect academic integrity from each student. Misconduct such as plagiarism, fabrication and fraud, as well as attempting to commit such acts or assisting others in doing so, will not be tolerated. Students are responsible for knowing the academic misconduct code ([http://integrity.ou.edu/files/Academic\\_Misconduct\\_Code.pdf](http://integrity.ou.edu/files/Academic_Misconduct_Code.pdf)), which is included in the student code. All instances of alleged academic misconduct will be thoroughly investigated and action will be taken according to the rights and responsibilities described under the academic misconduct code: [http://integrity.ou.edu/files/Academic\\_Misconduct\\_Code.pdf](http://integrity.ou.edu/files/Academic_Misconduct_Code.pdf).