

METR 3613-011/012 : Meteorological Measurements Laboratory

Fall 2010: Syllabus

Time and Location: Section 011 (Group A): T 9:30-11:30 AM, NWC 5302
Section 012 (Groups B, C): W 2:00-4:00 PM, NWC 5302

Lab Instructor: **Jose Galvez** (jmgalvez@ou.edu)
NWC 5335 (next door of Dr. Klein's office)
Office hours: T, R 11:00am-12:00pm and by appointment

Required Textbook: METEOROLOGICAL MEASUREMENT SYSTEMS, by Fred V. Brock and Scott J. Richardson, Oxford University Press, 2001.

Lab materials: All documents including the five lab instruction manuals will be posted on D2L. The tools and materials you need to complete each lab session will be provided during the session. You should, however, use a lab book for taking notes during laboratory classes and for documenting your project studies. Just an inexpensive copybook should work. The information you write down on your lab books will help you to put together your lab reports. Try to document your results and procedures as best as possible!

Grading: A total of 5 grades (each from a different laboratory experiment) will be averaged and worth 25% of the overall METR3613 grade. Each of these 5 grades will be divided in two sections:

- Quiz 10%
- Lab assignment 90%

Schedule:

	A	B	C
Lab 1: Basic Electronics	T September 7	W September 8	W September 15
Lab 2: Wind vane calibration	T September 21	W September 22	W September 29
Lab 3: Thermistor calibration	T October 5	W October 6	W October 13
Lab 4: Thermistor time constant	T October 19	W October 20	W October 27
Lab 5: Raingauge calibration	T November 2	W November 3	W November 10
Term Project discussion	T November 16	W November 16	W November 17
Presentation	T November 30	W December 1	W December 8

Lab instruction manuals, quizzes and assignments

Laboratory manuals

A total of 5 laboratory manuals will be used during this course. Lab manuals and additional lab handouts will be available online on D2L during the week before the lab experiments start. The manuals contain a description of the laboratory experiment to be carried out, plus the corresponding assignment to be completed during a period of almost 2 weeks (13 days). You should download each manual and read it before the lab in order to come prepared to class.

Quizzes

Quizzes count as 10% of the total lab grade. A short quiz will take place at the beginning of each laboratory session. The quizzes will include ~ 5 questions related to the laboratory experience and will be based on the material discussed on the corresponding lab manual. The quizzes are meant to make sure that you go over the lab manual material and come to class prepared. Being aware of what the lab is about will help you to go through the experiment efficiently. It will be easier for you to understand what is going on and even finish early.

Laboratory assignments

Laboratory assignments count as 90% of the total laboratory grade, and they are described in each lab manual. 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 8pm on the evening before the next lab session. To make sure you meet the deadline, the grade will be reduced at a rate of 10% off per hour you are late. If you are late and email your assignment, you must use only your OU or Rossby email accounts. We prefer '.doc' documents if you use WORD; or '.pdf', if you use TeX. Please use the following convention for naming your files: LastnameFirstname*.doc (i.e. GalvezJoseLab1.doc). No printed hardcopy of the assignment is required (unless explicitly specified in the assignment).

Lab assignments are designed to help you understand the material but also to help you in the learning process of writing a full laboratory report. The first laboratory assignment, yet a little big lengthy, 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). On the second and third laboratory assignment you will develop reduced lab reports. The final two assignments will consist on full laboratory reports, and their format will be somewhat similar to that of your senior year capstone projects. If you do a good job writing these reports you might find them very useful when working on your capstone, so keep that in mind.

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 so... please don't do it.

Attendance and Make-up Policy

The lab experiments must be performed in a team and must follow a particular schedule. Therefore, we expect 100% attendance to be the norm, and it is absolutely 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 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.

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://www.ou.edu/studentcode/67259_ou_student_a.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 under the academic misconduct code described at <http://www.ou.edu/provost/integrity-rights/>.

Some tips ...

Please take the learning style quiz in order to find out which type of learner you are. This is not required but it is suggested. Knowing your weaknesses and strengths will help you to make the most of this challenging semester. You can find the learning quiz at the following website: <http://www.engr.ncsu.edu/learningstyles/ilsweb.html>

Also think about what is important to you and what would you expect from a career in meteorology. The following link will give you some interesting insight and you should definitely check it out: http://www.nssl.noaa.gov/users/stensrud/public_html/career/career.html

Good luck!