

## STAT 457 (1 credit) Statistical Methods Lab, Fall, 2010

**Instructor:** Michael O'Lear [m.olear@mso.umt.edu](mailto:m.olear@mso.umt.edu)

**Office/Office Hrs:** office will be MA 212 or computer lab

office hours to be determined on first lab day

phone: cell (406-360-1995) math office (406-243-5311)

**Time/Room:** Tuesday, 11:10-noon (Sec 1) and noon-1PM (Sec 2), lab MA 306

**Web (URL) site:** [www.math.umt.edu/olear/stat457/](http://www.math.umt.edu/olear/stat457/)

**Text/Materials Needed:** There are no special text you need for this lab. The lab sheets will be posted (in .pdf format) on the web site weekly for you to download. It would be a good idea to bring your STAT 451 text and appropriate handouts from that class to the lab day, however. I recommend that you bring a flash drive to lab every time, so that you can save your written documents on the lab.

<b>Grading:</b>	A	90% and up	<b>Weightings:</b>	50%	lab reports
	B	80%-89%		30%	attendance
	C	70%-79%		20%	final project
	D	60%-69%			
	F	less than 60%			

We realize that upper division students sometimes have commitments conflicting with Lab. For this reason, you may miss 2 attendances and 2 lab reports (not necessarily for the same lab) without grade penalty. Any further misses will earn a 0 grade for each miss.

### **Course Objectives/Class Routine:**

Since attendance is worth 3/10 of your grade, it is important that you come on lab day and sign in on the attendance sheet. Lab reports assigned from the previous week are due at the beginning of the next lab day, routinely. No late reports will be accepted. The reports will be written in WORD, and paper copies submitted for grading. You may make paper copies from the lab room at no cost. Please don't abuse the paper copying privilege in this lab, or we will lose that privilege. The following week, typically, your graded labs will be returned to you, with total out of 10 points, usually. You may occasionally submit your written WORD labs by email to me (sent in **.doc** format, NOT **.docx** format), no later than the day due, but use this option as a last choice, rather than a regular routine.

This course is intended as an ancillary resource for the lecture course, STAT 451, taught by Prof. Brian Steele. Therefore, we try to give first priority to those presently taking STAT 451, and consider it as a co-requisite for this lab course. Any extra computer seats may be given to other students not taking STAT 451 concurrently. We will try to stay coordinated with Brian's progress in lecture, so that the lab is a consistent help to students in the lecture. Feel free to visit with me about any ideas you may have regarding activities or approaches you would like to see in lab, which would help you better understand the lecture material. I

am open to new ideas and things which will better assist my students. I also encourage people to collaborate with other lab students on labs, for more thorough and efficient learning. Each student will submit a separate lab report, however. We will not accept the same report with different names on the top, since everyone expresses his/her ideas in different and acceptable ways, and how you express your statistical ideas is almost as important as the ideas you express.

Time spent doing lab assignments are designed to include the lab period plus one additional hour to complete. Some lab assignments will be a bit shorter, some longer. Let me know if they seem to be taking too long for you. Your input is appreciated.

We will begin this course becoming familiar with the MyMathLab statistical package, called STATCRUNCH, then after a few weeks we will begin learning "R". Various tutorial material on R will be displayed on the web page for your downloading, and I strongly recommend you install R (this is a free download) onto your home computer. Instructions to do so (for PCs and Macs) are on the web page. We hope that R will become your statistical package of choice for further academic or thesis work at the University (and elsewhere). It is a package well worthwhile learning.

We will say more about the final project (worth 20% of your grade) in a separate document later, as we get into the course more. In overview, this small project will cement some of the technical concepts you will have learned in statistics lab (and by doing lecture homework) this semester.

Hopefully, I will not lose paper copies of submitted labs, but occasionally that may occur. When this happens, I will ask you to generate another paper copy. Therefore, you must have electronic copies saved on your flash drive, or at the minimum, email yourself any generated documents from the lab, so you have the electronic original.

Finally, my motivating objective for this course is as a resource for you in your STAT 451 coursework. We, hopefully, will empower you with the technology tools to master what is being presented in lecture. Any input you have to help me set this up for you will be encouraged and appreciated.

**Additional Course Information:**

DATES--	August 30	classes begin
	Sept 6	Labor Day holiday
	Sept 20	last day to drop/add by Cyberbear
	Nov 1	last day to drop/add by paper process
	Nov 2	election day holiday
	Nov 11	Veterans' Day holiday
	Nov 24	travel day for students—no classes

Nov 25-26	Thanksgiving Day holiday
Dec 13	last day of classes last day to drop/add via petition
Dec 14-18	Final Exam week

**Misc. Information:**

ACADEMIC MISCONDUCT—All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The code is available for review online at [http://life.umt.edu/vpsa/student\\_conduct.php](http://life.umt.edu/vpsa/student_conduct.php)

WEB PAGE POSTINGS—We will post many documents on the web page, as time progresses. Although, frequently, these postings do not relate directly with what we are presently studying, students say that these are very useful to them, for future reference. Therefore, we recommend that you frequently surf the page for postings which may be useful for you to download, on all types of statistical and lab topics.

OTHER DOCUMENTS—We will post other documents on the web page soon, including “Details on Lab Reports”, “Final Project Specifics”, “Classroom Routine”, etc. Be watchful for these as they appear.

OFFICE HOURS—We will take a survey our first lab day on student time availability for office hours help. On the survey, you will indicate 3 times you would prefer office hours, and 3 times when it is hard/impossible for you to attend office hours. Then, I will come up with office hours for the class based upon the survey results. Office hours will be primarily dedicated to helping students with labs, with software troubles, or other related problems, so the lab will be available to us during office hours in case we need to use computers.

COMPLAINTS/CRITICISMS—If you have a problem with anything in the lab, please visit with me about it. If you do not get satisfaction from me, then feel free to visit Brian with your concern.