Math 158 - 800  
Introduction to Applied Statistics A  
Fall 2011

M W F 10:20 – 11:15  
Snygg 101

Instructor: Dr Scott R Preston, 308 Snygg, 312 2756.

Online: www.oswego.edu/~srp/158. Quickly familiarize yourself with this site. Bookmark it. It links to: my schedule; the complete syllabus; a calendar of daily class activities. Required supplementary documents for reading and exercises are posted. Links to data are provided. (I do not use angel.)

Office hours: Monday 2:45 – 3:45; Tuesday 10:00 – 12:00; Wednesday 12:30 – 1:30; Thursday 1:30 – 2:30; also by appointment or by chance. My schedule is posted online. Office hours may change: Changes will be detailed online. You do not need an appointment to see me during office hours.

Learning outcomes: We will cover basic concepts in descriptive statistics, probability, and statistical inference, including: frequency distributions, measures of location and variability, sampling, statistical estimation and hypothesis testing. You must demonstrate proficiency in computing and interpreting statistical results, and comprehending statistical methodology, as applied to these topics.

Texts: Mario Triola, Elementary Statistics (11th edition), Pearson. You do not need to bring it to class each day. At some point it will be announced that you should bring Tables (appendix; back flap; pull-out section) to class – but the entire book won’t be required.

A considerable amount of reading and exercises will be assigned from supplementary documents. This material is posted online.

Materials: A decent calculator with scientific and statistics functionality is required. Bring it to class each day. (The course website links to instructions for some commonly used models.) You are well advised to have a three-ring binder and a hole punch: Use the binder to organize materials you obtain online and the handouts you get in class.

Computing: We will use Minitab and Excel for some assignments. You may download Minitab (see the course webpage); Minitab is on most campus PCs. (There is no Minitab for Mac OS.)

There will be situations, when you will be allowed – even encouraged – to run a laptop during class. These will be announced. (Generally speaking, if you never bring a laptop, you will miss nothing, as software demonstrations will be given and instructions will be posted for your use.)

Attendance: There will be assigned seating; attendance will be taken. If you miss class, check the course calendar online each day to keep up with announcements. Keep all media and communications devices out of sight and out of hearing during class.

Reading and practice exercises: Reading and exercises from both the textbook and supplementary documents will be assigned regularly. These assignments will be posted online. These will not have a formal due date, but are considered due at the start of the next class period. Practice exercises are not collected and marked – proficiency with these exercises is your responsibility. Solutions to these exercises are provided (often in the back of the text or at the end of the document). These exercises model, and serve as training, for the majority of examination questions.

Graded assignments and quizzes: Graded assignments will have a specific due date, and will be announced in class as well as online. Graded assignments will generally reinforce the practice exercises. Some of the graded assignments illustrate statistical concepts in depth, and introduce software for doing statistical analyses. Quizzes may be given occasionally to assess your familiarity with both the practice exercises and the graded homework.

Extensions for late work are granted for documented emergencies, and, on a case-by-case basis, for situations when you have made arrangements with the instructor in advance.
Exams: There are three midterm exams and a final exam. Midterms are scheduled for September 28, October 28 and December 2. The final exam is on Monday December 12 at 10:30 am.

Only for a documented emergency are you guaranteed a make-up exam. You will be accommodated for a different (usually earlier) time if you give two-class-period advance notice of an instructor-accepted obligation.

Course average: Grades are based entirely on merit. You receive credit for completing homework successfully, and by demonstrating mastery of the course material on quizzes and exams. There will be no opportunity for extra credit.

An aggregate of your homework and quiz scores contributes 20% to your course average.

The three midterms contribute 55% to your course average (each is worth a bit less than 18%).

The final exam contributes 25% to your course average.

If your final course average is at least 90% you earn an A. At least 80%, a B. At least 70%, a C. At least 60%, a D. Below 60%, an E. The ± marks are used for averages at the top/bottom 2% of the grade ranges.

Other policies and protocols: See pages 3 and 4 (online) for more on the following: Contacting the instructor; Graded work; What to do if you miss an exam; More information about assigned work; Review materials; Tutoring and extra help.

If you have concerns about your performance or ability to meet obligations in this course, and would like to present them to me, you must do so in person, and do so at the first instant at which you have concerns. Do not voice these concerns in an email or phone message. I filter out messages that are not related to statistics. (You may email or phone to arrange an appointment.)

If you have a disabling condition which may interfere with your ability to successfully complete this course, please contact the Disability Services Office.

http://www.oswego.edu/student/services/disabilities/

SUNY Oswego is committed to Intellectual Integrity. Any form of intellectual dishonesty is a serious concern and therefore prohibited. The full policy is found at

http://www.oswego.edu/integrity

This is a course about data. When you are asked to supply data, you must do so honestly and accurately, following instructions explicitly. Failure to do so will be considered a violation of college rules. (Consult with the instructor if you object to the nature or inconvenience of any request for data.)

Violation of college rules regarding academic dishonesty will be penalized with an academic penalty up to a course grade of E. Charges may be brought before the appropriate judicial committee(s).
Other policies and protocols

Contacting the instructor about statistics

I respond as quickly as I can to all questions (in person, email, phone) about course content – and also if you have a stats question unrelated to the course (I am one of the campus “experts,” and my services are available to all community members). You may struggle initially with the homework. Believe it or not, the struggle will be of huge aid in retaining the material when you finally do succeed. If difficulty persists, please get in touch with me.

You are welcome to ask questions about the reading and homework in class, or privately (either in person or in writing) in which case I can help you individually (and perhaps prepare a discussion of the matter for the entire class).

Contacting the instructor about your performance in the course

For personal matters relevant to your course standing, you must see me in person. I will almost always be available right after class. If that is not sufficient, still see me then and we can quickly work out another time.

Because of the large amount of inappropriate email I receive, I have filters on my email. If I do not respond to your message, assume I have not received it, and arrange to see me in person.

Graded work

Keep all graded papers. If you feel a paper has been marked improperly, see me immediately. (If you delay, you may forfeit additional credit, even if I agree with you.) My assessment of your request is a matter between me and you alone.

What to do if you miss an exam

Check the course calendar online for instructions and announcements.

If you have a documented emergency, you are assured of a make up. Your objective is to take the exam at the earliest possible time, and you should make it clear to the instructor that you are working towards this objective.

For missing an exam for less compelling reasons: There is no guarantee of a make-up exam. If you have had additional time to study, and the opportunity to contact other students who have taken the exam as scheduled, you have gained unfair advantage. In order to qualify for a make-up exam: Act in accordance with any directives posted on the course calendar, and make every effort to be available to take the exam at the absolute earliest possible time – without regard for the instructor’s availability.

More information about assigned work

The following is excerpted from *Classroom Instruction that Work: Research Based Strategies for Increasing Student Achievement*, by Robert J. Marzano, Debra J. Pickering and Jane E. Pollock (ASD 2001):

3. **The purpose of homework should be identified and articulated.** Not all homework is the same…Two common purposes for homework are (1) practice and (2) preparation and elaboration.

In this course, the homework falling under point (1) is, generally, the daily practice exercises. Exercises of this nature should be rather quick (perhaps after some initial struggle) and to the point. They will be direct descendents of material that is demonstrated in class. Answers will generally be supplied, and it is up to the student to assess their own work on these. (However, I am more than willing to work with you on them.) These exercises – easily stated and with direct, short answers and standard steps to solutions – are the type that form the majority of credit on exams. Drill yourself on these exercises and you will pass the exams.
Some of the daily practice will fall under the heading of preparation or elaboration. Again, you will have
to self-assess your work (with the instructor’s assistance, if you seek it out).

Homework that is specifically assigned with a due date, and then collected and graded, will occasionally
fall more under point (2) above. It will sometimes involve some computing (Excel or Minitab). The
computing will be tested in the most rudimentary fashion, and if particulars are required, the instructor
will spell them out explicitly. These exercises will typically cover fundamentals, then perhaps elaborate
on advanced ideas, or serve as preparatory work towards a future topic.

Homework – collected or otherwise – that requires elaboration will form a small proportion of the tested
material, and will be used largely to distinguish students who have mastered the content and concepts of
the course.

**Review materials**

Use the daily practice exercises, assigned homework, and any quizzes, as your guide to reviewing for
exams. The majority of exam questions will be similar to these. Again: *The daily practice* …*exercises
model, and serve as training, for the majority of examination questions.*

**Tutoring and extra help**

During my office hours I am happy to help all comers. No appointment is necessary, although at times I
may have other students seeking assistance and you might have to wait. Often during free time in my
schedule (check online) I will be happy to speak to you. You can get somewhat prioritized by arranging
your visit in advance.

Tutors are available through the OLS Center (106 Poucher Hall, ols@oswego.edu, 312-3094). Try to find
a tutor who has taken the course with the same instructor you have. Tutoring will assist – but not at all
replace – your hard work solving problems.
Some student statements (paraphrased):

“I will not be able to be in class on Wednesday... I am aware that there is an assignment due on this day, would I be able to hand it in on Friday or at a different time?”

Think about this from the instructor’s perspective (forget about your perspective and the possibility of late papers being docked – see two statements down about that): There’s a big batch of papers due Wednesday, and my wish is to have them graded as quickly and conveniently as possible. Very little is less time efficient than grading a single paper well after the others have been processed (there is economy in scale). Consequently: Make every effort to accommodate the instructor! Why not?

If it’s not clear what this implies, then how about this: Hand it in as quickly as possible. Not the next class period. Bring it to me or get it up under my door (308) or in my mailbox (217) as soon as possible.

Adopting this approach shows initiative on your part, and saves both of us the time of a correspondence about the issue.

“I am in your class and unexpectedly had to miss class last Friday, and did not get the assignment that you handed out. I was wondering if you would allow me to hand it in to you in class on Wednesday.”

First: Often being away for the best of reasons is not a sufficient excuse for failing to complete an assignment on time. Did you check online? Assignments are often posted there. Since it’s a course requirement that you check the calendar when you miss class, I consider it an unacceptable lapse when you fail to “get” the assignment when it is provided for you this way.

Think about this from the instructor’s perspective (forget about your perspective and the possibility of late papers being docked – see the next statement about that): There’s a big batch of papers due Wednesday, and my wish is to have them graded as quickly and conveniently as possible. Very little is less time efficient than grading a single paper well after the others have been processed (there is economy in scale). Consequently: Make every effort to accommodate the instructor! Why not?

If it’s not clear what this implies, then how about this: Get it in as quickly as possible. Not by the next class period. Bring it to me or get it up under my door (308) or in my mailbox (217) as soon as possible.

Adopting this approach shows initiative on your part, and saves both of us the time of a correspondence about the issue.

“I did do the assignment that was due last class but I am sure you do not want it now.”

I want it! I wanted it ASAP. You may not get (full) credit for late submission, but you may get some, and you’ll still get your paper assessed (even if scored 0) as long as you hand it in before the assignment is returned to the class.

“I didn't want to walk in on the middle of your class and interrupt so I didn't attend.”

This is shocking! If other professors have a “don’t come late” policy, I presume they have some good reason(s) due to the particular nature of their class(es). Offhand I can think of no good reason why anyone would object to a (quiet) late arrival: it seems so obviously preferable to no arrival at all. I have heard stories of these sorts of policies; I suspect they are mostly legend. Having taken many courses at many different levels, it has never
happened to me. I suspect and hope it is the rare professor and class for which such an outlook is appropriate. I get a vastly different message from a student who rushes in, gasping and late, than the one who makes the statement above.