

Math 211 – S1: Elements of Statistical Methods
Summer 2010
Mondays – Thursdays, 9:00 – 10:15 in room 2911.

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Hours: Tuesdays & Wednesdays, 11:50-1:00. Or by appointment.

Topics: Analysis of data through graphical and numerical methods, linear regression, the normal distribution, data collection, elementary probability, confidence intervals and hypothesis testing. Emphasis on applications.

Text: *Intro Stats*, 3ed, by De Veaux, Velleman, Bock.

Calculators: Calculators are a vital and essential component of this course, as many of the computations required would be overwhelmingly difficult without them (not to mention tedious). Using a TI-83 or TI-84 is *strongly* recommended. TI-82's do not have the proper statistical capabilities. TI-89's require special care and attention. I will assume all students have a TI-83 or TI-84 and will tailor lessons accordingly.

Grading:

Tests: 40%

Homework: 40%

In-class activities: 10%

Quizzes: 10%

Assignment of numerical grades will use a linear grading scale (there is no 'curve' in this class) and will be approximately as follows:

95%: 4.0

80%: 3.0

65%: 2.0

Examinations and quizzes: We will enjoy two midterm exams, on Thursday, July 15th, and Thursday, August 12th. Each of these tests will occupy the entire class period. You will not be allowed to use the textbook or any pre-printed notes for these tests, but I will permit you to use any *handwritten* notes you have taken in class or written outside of class. No photocopies, no word-processing, no internet printouts!

If you know ahead of time that you will not be able to attend the scheduled date of an exam, let me know as soon as possible and we can discuss alternatives if appropriate. If you have an emergency the day of an exam, it is your responsibility to let me know *as soon as possible*. Do not wait until the next class meeting!

In addition to these exams, on Thursdays that we are not having a full exam, we will have a quiz instead. These quizzes will be administered promptly at the beginning of class and will be *very*

short – under 10 minutes. Your lowest quiz score of the quarter will be dropped from the final grade calculations. You may not use any notes on these quizzes. Quizzes may not be made up under any circumstances.

Homework: Almost all of the homework assignments will consist of a set of problems from the book, coupled with a number of extra problems that are usually *not* from the book. I will sometimes refer to these extra problems as “bonus” problems, but that name is misleading as you are definitely required to do them – they are *not* optional. We will spend a few minutes in class going over the homework on the days that homework is due, but that time will probably not be sufficient to answer all your unresolved questions. Not every problem on the homework will be graded (but usually all the “bonus” problems will be).

Each homework assignment will have the same weight in the final computation of your grade, regardless of how many ‘points’ it was worth. (Getting 3 out of 4 points on a homework is worth exactly the same as getting 15 out of 20 on another.)

Late homework is accepted, as long as a reasonable effort was made to complete it (usually this means that something demonstrating understanding has been written for all the problems.) Homework that is both late and incomplete will not receive a grade. Homework that is late and complete will never receive any more than half credit, no matter what your individual circumstances were. (If you find yourself in a situation where you will be forced to turn in several assignments late due to factors outside of your control, let me know and we can discuss possible solutions.) I urge you to look over your homework after I return it to you, to learn from your mistakes – often students can earn perfect scores on homework they made a few mistakes on, but those mistakes would lower their score on an exam. In order to fully understand a concept or section, it may be necessary for you to do even more problems from the book than the ones I assign – it is up to you to determine if this is necessary.

Writing Requirements: Staple any work that is more than one page. You are responsible for stapling your homework; I will not provide a stapler. Homework must be written on paper that is *not* torn from a spiral-bound notebook; homework with those annoying little ruffled edges will not be graded. (I will demonstrate in class what I am talking about.) If you find yourself erasing or crossing out extensively, stop and start again on a fresh page. Use complete English sentences in your responses, and aim to express yourself as clearly as possible. If I cannot understand what you write, I will have to assume you do not understand it either, and will grade you accordingly.

Be warned that this class will probably require more reading, and better reading comprehension, than any other math class you may have taken.

Attendance: It is almost impossible to do well in this class without attending class on a regular basis. You will not be graded on attendance, but since part of your grade will depend on activities performed in class, lack of attendance will therefore affect your grade indirectly.

Electronic Devices: All electronic communication devices like cell phones must be turned off during class, as well as electronic entertainment like mp3 players.

In Case of Emergency: In the event of inclement weather or earthquake or other unforeseen circumstances, the main shoreline website (<http://www.shoreline.edu>) will be updated with information about school closures, if necessary. If school is closed on any day, any homework due on that day or any midterms scheduled for that day will be postponed until the next day class meets.

Extra Credit: Don't count on doing a whole bunch of extra credit at the end of the quarter to bring your grade up; there probably won't be any. There is plenty of extra credit opportunity available by just doing all of the assigned homework and doing it well.