

STA309
Elementary Business Statistics
Unique Numbers 03820, 03830

PROFESSOR

Betsy Greenberg
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TEACHING ASSISTANT

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TEXTS

The Practice of Business Statistics, Using Data for Decisions, First Edition, by David Moore, George McCabe, William Duckworth, and Stanley Sclove, W.H. Freeman and Company, 2003.

CPS_{RF} response pad and registration. The response pad can be obtained at the University Coop and the registration is obtained at <http://www.einstruction.com>.

Recommended: *Upgrade Study Pack to accompany The Practice of Business Statistics*

GRADING

Class participation	5%
Homework	5%
Projects	15%
Test 1	20%
Test 2	25%
Final Exam	30%

The grade on one test may be replaced with your final exam grade.

The course grading scale: A 90-100, B 80-89, C 70-79, D 60-69, F below 60.

COURSE OBJECTIVE

This course concentrates on the practice of statistics as a tool for learning about the real world. Upon completion of the course you should be able to think critically about data, use graphical and numerical summaries, apply standard statistical inference procedures, and draw conclusions from such analyses.

WEB PAGE <http://courses.utexas.edu>

This course will use a password-protected class web site. Syllabi, notes, videos, assignments, and other resources will be available within this site. Site activities will include submission of homework assignments and posting of grades. Students who do not want their names included in the electronic class roster must restrict their directory information in the Office of the Registrar, Main Building, Room 1. For information on restricting directory information see: <http://www.utexas.edu/student/registrar/catalogs/gi00-01/app/appc09.html>. Students who have restricted their directory information must see the professor to identify him or herself.

Login to the course website using your UT EID. You should be able to use the website on computers running Windows, Internet Explorer, Excel and the Adobe Acrobat Reader. If you have difficulty, you may be able to get help from the ACITS Help Desk (475-9400). Alternatively, you may need to work in the [CBA labs](#).

HOMEWORK

Statistics is a cumulative subject that requires frequent practice. If one topic is confusing, the next is likely to be more so. To address this, it is necessary for you to practice statistics on a frequent basis. The homework assignments are designed to keep you current in the course. The assignments are available online on the course web page. It is recommended that students work on assignments independently.

You may open an assignment (and even print it out) several times before submitting your answers. Click on the Submit button (at the bottom) when you are done.

Assignments must be completed by 4:00 pm on Fridays. It is recommended that you do not wait until the last minute to complete assignments. This will allow for any unexpected difficulties (with the material, website, etc.).

Once the deadline has past, you will be able see how you did on an assignment. Click on Tools and then Grades and then the automatically generated grade for the assignment to see the correct answers. *Ignore these HW grades.* Your TA will assign grades after each assignment is due.

Working the assigned problems is not sufficient to guarantee an A in the course. Your proficiency with statistics will improve with active practice; i.e., working problems and explaining your results. The textbook has about 100 problems per chapter for additional practice. Answers to all odd numbered problems are given in the back of the textbook. Detailed solutions to these problems are available in the Student Solutions Manual found in the Upgrade Study Pack.

CLASS PARTICIPATION

You are required to obtain a CPS_{RF} response pad and to bring it to class every day. You will need to register the pad at <http://www.einstruction.com>. Your class participation grade will be determined from the responses that you provide in class.

EXAMS

You may bring one 8.5" by 11" page (both sides) of notes to the first test, two pages to the second test, and three pages to the final exam. Necessary distributional tables will be provided with the test; no formulas will be provided. You may bring a

calculator to the exams. You must bring a picture ID to each test and exam. The final exam will be cumulative.

There will be no make-up tests. Your final exam grade can replace one lower test grade. You must inform the professor in advance if you are going to miss a test due to observance of a religious holiday or an official university activity.

PROJECTS

There will be three projects to be completed for this class. The projects are examples of real problems from the field of finance. The projects are designed to give you practical experience analyzing real-world data that you will obtain yourself. You will apply statistical concepts that you learn in this class. Projects are due by midnight on Sundays.

COMPUTING

The practice of statistics requires a fair amount of numerical calculations. We will use Microsoft Excel for statistical computations and graphics. It is also useful to have a calculator that does "two-variable statistics," that is, which calculates not only mean and standard deviation, but also the correlation and the least-squares regression line from keyed-in data. Two-variable calculators are available for \$25 or less. A graphing calculator is not required for this course.

The McCombs School of Business has 2 computer labs with Dell computers: CBA 5.304/5.325(MOD Lab) and CBA 5.322(Millennium Lab). [Lab hours](#) are extensive both in the [CBA labs](#) and the [SMF](#). You must have an [ITS](#) computer account to use the labs. The datasets to individual homework assignments are available as you work.

VIDEOS

As a part of this course, you should watch videos from the series [Against All Odds: Inside Statistics](#), which was prepared with funding from the [Annenberg Corporation for Public Broadcasting](#). Each program contains segments illustrating different applications of statistics. At <http://www.learner.org/resources/resource.html?uid=65>, you can see a description of each of the 26 programs and, if you have a broadband connection, view them over the web. The [UT Learning Center](#) also has a set of the videos available for viewing.

GETTING HELP

Your professor and TAs are eager to help you during office hours or by appointment. If you prefer a private tutor, the [UT Learning Center](#) (phone 471-3614) in Jester A332A can arrange one for you for a reasonable charge. The UT Learning Center also has specific [statistics resources](#) including a copy of the video tape series, *Against All Odds: Inside Statistics*, to help you with material in this class.

SCHOLASTIC DISHONESTY

The [McCombs School of Business](#) has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty with regard to scholastic dishonesty

are described in detail in the [Policy Statement on Scholastic Dishonesty for the McCombs School of Business](#).

By teaching this course, I have agreed to observe all of the faculty responsibilities described in that document. By enrolling in this class, you have agreed to observe all of the student responsibilities described in that document. If the application of that Policy Statement to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification. Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. You should refer to the [Student Judicial Services](#) website or the [General Information Catalog](#) to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

Scholastic dishonesty in this course includes copying or collaborating during an exam, discussing or divulging the contents of an exam with another student who will take the test, and use of homework solutions from another student or semester.

STUDENTS WITH DISABILITIES

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. This includes students with learning disabilities. For more information, contact the [Office of the Dean of Students](#) at 471-6259, 471-4641 TTY.

IMPORTANT DATES

Feb 1	Last day to drop a class with possible refund
Feb 13	Last day to drop a class without academic penalty
Mar 27	Last day for Q/F drop, for withdrawal from the university, or change registration to or from P/F

The entire [UT academic calendar](#) is also available. The [final exam schedule](#) will be available approximately one month before the end of the semester.

COURSE SCHEDULE

Topic	Videos	Textbook	Due Date
Introduction Displaying Distributions	1 2, 6	1.1	HW #1 – January 27
Describing Distributions Using Excel for Statistics The Normal Distribution	3 4, 5	1.2 1.3	HW #2 – February 3
Scatterplots and Correlation Least Squares Regression	8, 9 7	2.1, 2.2 2.3, 2.4	HW #3 – February 10
Relations in Categorical Data Designing Samples Designing Experiments	11 13, 14 12	2.5 3.1 3.2	HW #4 – February 17
Test #1			February 21, MOD Lab
Project #1			February 26
Randomness Sampling Distributions	15 18	3.3, 4.1 4.4	HW #5 – March 3
Statistical Process Control Estimating with Confidence	18 19	12.1, 12.2* 6.1	HW #6 – March 10
Project #2 (part a)			March 19
Tests of Significance	20	6.2	HW #7 – March 24
Using Significance Tests Inference as a Decision and Power		6.3 6.4	HW # 8 – March 31
Test #2			April 4, MOD Lab
Project #2 (part b)			April 16
Inference for One Mean Comparing Two Means	21 22	7.1 7.2	HW #9 – April 21
Inference for Regression Inference for Prediction	25	10.1 10.2	HW #10 – April 28
Assumptions Multiple Regression		11	HW #11 – May 5
Project #3			May 7
Final Exam	26		May 13, 9 am - noon May 16, 9 am - noon

*Chapter 12 can be downloaded from the course web site.