STA309
Elementary Business Statistics
Unique Number 04375, 04385, 04390

PROFESSOR

Dr. Greenberg
Hours: Tuesday 11:30 am – 1:00 pm, Wednesday 11:00 am – 12:30 pm
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TEACHING ASSISTANT

Kathy Ho
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TEXTBOOK

The Practice of Business Statistics, Using Data for Decisions, Second Edition, by Moore, McCabe, Duckworth, and Alwan, W.H. Freeman and Company, 2009.

Alternatively, online access to *StatsPortal for The Practice of Business Statistics* can be purchased at http://portals.bfwpub.com/pbs2e.php. The StatsPortal include access to the eBook, StatTutor, podcast chapter summaries, and detailed solutions to odd-numbered exercises.

GRADING

Class participation	5%
Homework	10%
Applied Finance Assignments	10%
Test 1	25%
Test 2	25%
Test 3	25%

The grade on one test may be replaced with your Test 3 grade. Grades of 90 or above will earn an A, 80 or above will earn a B or better, etc. Plus/minus grading will be used.

COURSE OBJECTIVE

This course concentrates on the practice of statistics as a tool for learning about and making decisions in the business 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 midnight on their due dates. 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 My 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.

APPLIED FINANCE ASSIGNMENTS

There will be three applied finance assignments to be completed for this class. The assignments are examples of real problems from the field of finance. The assignments 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. Applied Finance Assignments are due by midnight on their due date. The first (1) is worth 4% of your grade, the second (2a) is worth 4%, and the third (2b) is worth 2%, for a total of 10% of your grade.

CLASS PARTICIPATION

We will be using the MOCA (Mobile Ongoing Course Assessment) system for class participation. You are required to obtain a mobile device (any device with a web browser) and to bring it to class every day. Your class participation grade will be determined from the responses that you provide in class. The MOCA system is available at https://diia.webhost.utexas.edu/oca/moca/index.cfm. You will need to enter your UTEID and password to use the system.

TESTS

Tests for this class will be given in the ModLab in the late afternoon/evenings. You will access the test through Blackboard and have Excel and StatTools available. You may bring a calculator to the tests. 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 third test. Necessary distributional tables will be handed out; no formulas will be provided. You must bring a picture ID to each test. The third test will be cumulative.

There will be no make-up tests. Your third test will be cumulative and the 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.

COMPUTING

The practice of statistics requires a fair amount of numerical calculations. We will use Microsoft Excel 2010 and StatTools (included in Pallisade Decision Tools 5.7) for statistical computations and graphics. StatTools is available in McCombs computer labs or you can download it from https://www.mccombs.utexas.edu/services/cbacc/coe/#DecisionTools

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. BRING YOUR CALCULATOR TO CLASS EVERY DAY.

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. The datasets to individual homework assignments are available as you work.

LAPTOPS

You may find it helpful to have a laptop (instead of a calculator) in class to use Excel for data analysis and/or follow along on class notes. If you are multitasking during class and using your laptop for tasks unrelated to class, please sit in the last row of the classroom so that you do not distract other students.

VIDEOS

As a part of this course, you may find it helpful to 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 TA 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 at http://deanofstudents.utexas.edu/sjs/ 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.

Examples of scholastic dishonesty in this course include: copying or collaborating during an exam, discussing or divulging the contents of an exam with another student who will take the test, use of homework solutions from another student or semester, and attempting to gain course participation points while not actually in class to participate.

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.

COURSE SCHEDULE

Topic and Approximate Start Date	Videos	Textbook	Assignment Due Date
Introduction 8/24	1		
Displaying and Describing Distributions 8/26 The Normal Distribution, 8/31	2, 3, 6 4, 5	1.1, 1.2 1.3	HW #1 – Sept 7
Using Excel and StatTools for Statistics 9/5 Scatterplots and Correlation 9/7	 8, 9	 2.1, 2.2	HW #2 – Sept 14
Least Square Regression 9/12 Relationships in Categorical Data 9/16	7 11	2.3, 2.4 2.5	HW #3 – Sept 21
Review 9/21 Test #1			Sept 22, MOD Lab
Applied Finance Assignment #1			Oct 5
Designing Samples 9/26 Designing Experiments 9/28 Randomness and Sampling Variability 10/3	13, 14 12	3.1 3.2 3.3, 4.1	HW #4 – Oct 12
Probability 10/5 Random Variables 10/10 Sampling Distributions 10/14	15 16 18	4.2 4.3 4.4	HW #5 – Oct 19
Control Charts 10/17 Binomial Distributions 10/21	 17	12.1, 12.2 5.2	HW #6 – Oct 26
Review 10/26 Test #2			Oct 27, MOD Lab
Applied Finance Assignment 2a			Nov 2
Confidence Intervals 10/31 Hypothesis Testing 11/4	19 20	6.1 6.2	HW #7 – Nov 9
Using Hypothesis Tests 11/7	21 23	6.3, 6.4 7.1, 8.1	HW #8 – Nov 16
Inference for Comparisons 11/14 Inference for Two-Way Tables 11/18	22 24	7.2, 8.2 9.1	HW #9, – Nov 28
Review 11/30 Test #3			Dec 1, MOD Lab
Applied Finance Assignment 2b			Dec 2