

# STA 309 Elementary Business Statistics (04193)

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<b>Office Hours</b>	<b>M W 12:00 – 13:30 or by appointment</b>
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<b>Course Web Page</b>	<b>via Blackboard</b>

## Course Objectives

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.

## Textbook

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

## Teaching Method

Statistics is a course of repeated application. Be prepared for plenty of examples and exercises during the class. Slides are posted on blackboard 12 to 24 hours before each lecture. You are encouraged to read them before the class, which is helpful to improve the efficiency on taking this course. Data analysis is shown by Excel and you can bring your own laptops to take notes or practice the examples in class.

## Grading\*

Quiz / Participation	5%
Assignments	10%
Projects	15%
Test 1	20%
Test 2	20%
Final Exam	30%

\* On the final exam day, by filling out the consent form, you can make your decision on:

First, whether to let the final exam take the place of one midterm with lower score

Second, whether to let the final exam take the place of the quiz / participation

\* Course Grading Scale: A 90 – 100, B 80 – 89, C 70 – 79, D 60 – 69, F Below 60.

## **Quiz / Participation**

There will be five quizzes during the semester. The purpose of the quizzes is to test your understanding of the knowledge. Also, it is the way to take attendance. Therefore, the scores are effort-based.

## **Assignments**

There will be 12 assignments throughout the semester, which are due on almost each Wednesday. Assignments are on the blackboard and should be submitted on the due date before the class begins. Late assignment is not acceptable for any reasons. However, two lowest assignments' grades will be dropped in the end.

## **Projects**

There will be two projects through the semester. Project 1 worth 5 points and project 2 worth 10 points. You are asked to collect 'real-world data' to do some basic financial analysis using statistical concepts you study in class. These projects are designed to let you practice on data analysis and statistical inferences using financial data.

## **Tests**

All tests are in the MOD LAB on the fifth floor in CBA 5.304. The format is similar to your homework and the content is cumulative. Three tests will be given. And there are no make-up exams for any one of them. But your final exam grade can replace one lower test grade. Please do inform me in advance if you can not take a test. Please bring the picture ID for each test!

Things that you can bring to tests: a simple calculator; cheating sheet 8.5' by 11' both-sided (one page for test 1, two pages for test 2, and three pages for test 3)

## **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 ADHD and learning disabilities. For more information, contact the [Office of the Dean of Students](#) at 471-6259, 471-4641 TTY.

## Tentative Schedule\*

Topics	Textbook	Due Dates*
Displaying Distributions with Graph Displaying Distributions with Numbers	1.1 1.2	HW #1 – Jan 26
Using Excel for Statistics The Normal Distribution	1.2 1.3	HW #2 – Feb 2
Scatterplots and Correlation Least Squares Regression	2.1, 2.2 2.3, 2.4	HW #3 – Feb 9
Relations in Categorical Data	2.5	HW #4 – Feb 16
<b>Test #1</b>		<b>Feb 18, MOD Lab (CBA 5.304)</b>
Project #1		Feb 23
Sampling and Experimental Design Randomness Probability	3.1, 3.2 4.1, 4.2 5.1	HW #5 – Mar 2
Binomial Distribution Random Variables Sampling Distribution	5.2 4.3, 4.4	HW #6 – Mar 9
Project #2 Part a <b>Test #2</b>		<b>Mar 23, Mod Lab (CBA 5.304)</b>
Estimating with Confidence	6.1	HW #7 – Mar 30
Test of Significance	6.2	HW #8 – Apr 6
Using Significance Tests Power and Inference as a Decision	6.3 6.4	HW #9 – Apr 13
Inference for the Mean of a Population	7.1	HW #10 – Apr 20
Comparing Two Means Inference for a Single Proportion	7.2 8.1	HW #11 – Apr 27
Comparing Two Proportions Analysis of Two-Way Tables	8.2 9.1	HW #12 – May 4
Project #2 Part b		May 11
<b>Final Exam</b>		<b>May 16, Mod Lab (CBA 5.304)</b>

\* Schedule and due dates might be subject to change