STA 371G
STATISTICS AND MODELING
Unique Numbers: 04465, 04478
FALL 2013

Time: MW 8:00 – 9:30 am, 9:30 – 11:00 am
Place: UTC 4.110, UTC 1.104

Instructor: Dr. Tatiana Encheva
E-mail: tatiana.encheva@mccombs.utexas.edu
Office: CBA 3.412
Office Hours: By appointment

TA: Youngbum Hur
E-mail: youngbum.hur@gmail.com
Office: ETC 5.112
Office Hours: Friday, 9:00 – 11:00 am and by appointment

Course Description
This course takes an applied approach to the coverage of statistical concepts and methods used in the decision making areas of business – accounting, finance, economics, marketing, and operations management. Emphasis is given on data analysis and interpretation of computer output in the form of spreadsheet applications. The course is focused on the fundamental procedures for data organization, sensitivity analysis, and alternative modeling approaches. Topics include decision analysis techniques and simulation modeling, simple linear and multiple regression, time series analysis and forecasting.

Prerequisites
Management Information Systems 301 or 310; Mathematics 408D, 408L, or 408M; Statistics 309 or 309H; and credit or registration for Business Administration 324 or 324H.
Students are expected to be familiar with Excel and elementary statistics.

Quantitative Reasoning flag
This course carries the Quantitative Reasoning flag. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.

Required Materials

Textbook:
Data Analysis and Decision Making, 4th edition, by Albright, Winston, and Zappe,
ISBN: 978-0-538-47612-6

Website: *Blackboard* http://courses.utexas.edu
Syllabus, lecture notes, homework assignments, and other course materials will be available within this site. You are responsible for bringing a hard copy of the relevant lecture notes to every class.

Software: *EXCEL*
We will use Microsoft Excel 2010 with the Decision Tools Suite add-in. You can download it at http://www.mccombs.utexas.edu/Tech/Computer-Services/COE.aspx

The Decision Tools Suite runs only on Windows machines. If you use a Macintosh computer, you must use a Windows emulator such as Parallels. Alternatively, you can use the computers in the MOD Lab (CBA 5.304 and 5.325) or Millenium Lab (CBA 5.322).

Calculator
Any calculator that does averages, standard deviations, and logarithms is acceptable. A simple calculator that adds, subtracts, multiplies, divides and takes the square root is all that is necessary.

Laptop Policy
Laptops and other electronic devices may be used in class for legitimate class purposes. Please be courteous to your classmates by restraining from multitasking. If I notice you are distracting other students I will ask you to leave the classroom.

Grading Policy
The course grade is comprised of the following elements:

Homework – 20%
Four exams – 80% (20% per exam)

There is no predetermined grade distribution for this class. The standard McCombs grading policy for core courses will be used to determine your final grades.

Homework
There will be nine homework assignments. Students are encouraged to form groups to do homework and only one write-up per group needs to be turned in. The maximum group size is four.

Hard (paper) copies of the homework should be submitted at the beginning of class on due dates. Please order, staple and sign your homework. Late homework is not accepted under any circumstances. The lowest homework score will be dropped.

Exams
Four in-class examinations will be given during the semester. All exams are comprehensive with an emphasis on the material covered after the previous exam. All exams are closed book, closed notes. You may bring one double sided 4” x 6” index card of hand written notes to exam 1, two cards to exam 2, three cards to exam 3, and four cards to exam 4.

For the first three exams, there will be no make-ups under any circumstances. The fourth exam score (if higher) will automatically replace one of the previous three exam scores.
For the last exam, make-ups will not be given without a University approved reason.

Comments:

1. If you find yourself falling behind, please come by and see me. It is very important not to get confused early on, since each new topic builds on the previous topics.
2. If you have a specific question please do not hesitate to contact me by Email.

Statement on 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 BBA Program's Statement on Scholastic Dishonesty at http://www.mccombs.utexas.edu/BBA/Code-of-Ethics.aspx. By teaching this course, I have agreed to observe all faculty responsibilities described in that document. By enrolling in this class, you have agreed to observe all student responsibilities described in that document. If the application of the Statement on Scholastic Dishonesty to this class or its assignments is unclear in any way, it is your responsibility to ask me for clarification. 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, the integrity of the University, and the value of our academic brand, policies on scholastic dishonesty will be strictly enforced. You should refer to the Student Judicial Services website at http://deanofstudents.utexas.edu/sjs/ to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

Statement on Students with Disabilities
The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259, http://www.utexas.edu/diversity/ddce/ssd/.

Religious Holy Days
By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Campus Safety
Please note the following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, http://www.utexas.edu/safety/:

- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
– Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
– Students requiring assistance in evacuation should inform their instructor in writing during the first week of class.
– In the event of an evacuation, follow the instruction of faculty or class instructors.
– Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
– Behavior Concerns Advice Line (BCAL): 512-232-5050
– Further information regarding emergency evacuation routes and emergency procedures can be found at: www.utexas.edu/emergency.

Schedule
STA 371G
Statistics and Modeling
Fall 2013

#	Day	Date	Topic	Notes	Due
1	W	Aug 28	Probability and Probability Distributions		
2	M	Sept 2	Labor Day – no class		
3	W	Sept 4	Describing Distributions	In MOD Lab	
4	M	Sept 9	Decision Analysis		HW #1
5	W	Sept 11	Decision Analysis	In MOD Lab	
6	M	Sept 16	Statistical Inference		HW #2
7	W	Sept 18	Simple Linear Regression		
8	M	Sept 23	Simple Linear Regression	In MOD Lab	
9	W	Sept 25	Review of Part I		HW #3
10	**M**	**Sept 30**	**Exam 1**		
11	W	Oct 2	Inference for Regression		
12	M	Oct 7	Inference for Regression	In MOD Lab	
13	W	Oct 9	Multiple Regression		HW #4
14	M	Oct 14	Multiple Regression	In MOD Lab	
15	W	Oct 16	Building Regression Models		HW #5
16	M	Oct 21	Building Regression Models	In MOD Lab	
17	W	Oct 23	Review of Part II		HW #6
18	**M**	**Oct 28**	**Exam 2**		
19	W	Oct 30	Time Series Analysis		
20	M	Nov 4	Time Series Analysis	In MOD Lab	
21	W	Nov 6	Time Series Analysis		HW #7
22	M	Nov 11	Time Series Analysis	In MOD Lab	
23	W	Nov 13	Review of Part III		HW #8
24	**M**	**Nov 18**	**Exam 3**		
25	W	Nov 20	Simulation Models		
26	M	Nov 25	Simulation Models	In MOD Lab	
27	W	Nov 27	Simulation Models	In MOD Lab	
28	M	Dec 2	Review of Part IV		HW #9
29	**W**	**Dec 4**	**Exam 4**		