STA 371G
STATISTICS AND MODELING
Unique Number: 04110
SPRING 2012

Time: TTh 8:00 – 9:30 am
Place: UTC 4.104

Instructor: Dr. Tatiana Encheva
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Office: CBA 3.444
Office Hours: TTh 9:30 – 10:30 am

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Office Hours: MW 12:30 – 1:30 pm

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/services/cbacc/coe/

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 may not be used during the classroom sessions. Although it is not necessary, but if you wish you can bring a laptop to the sessions held in the MOD Lab.

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 eight 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. The duration of each exam is 75 minutes. All exams are comprehensive with an emphasis on the material covered after the previous exam. All exams are closed book. You will, however, be allowed to bring one sheet of hand written notes for your reference.

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. 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. The UT Honor Code and an explanation of what constitutes scholastic dishonesty may be accessed at http://registrar.utexas.edu/catalogs/gi09-10/ch01/index.html.

Statement on Students with Disabilities

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. Services for Students with disabilities (SSD) is housed in the Office of the Dean of Students, located on the fourth floor of the Student Services Building. Information on how to register, downloadable forms, including guidelines for documentation, accommodation request letters, and releases of information are available online at deanofstudents.utexas.edu/ssd/index.php. For more information, contact the Office of the Dean of Students at 471-6259, or 471-4641 TTY.

Tentative Schedule
STA 371G
Statistics and Modeling
Spring 2012

#	Day	Date	Topic	Notes	Due
1	T	Jan 17	Probability and Probability Distributions		
2	Th	Jan 19	Describing Distributions	In MOD Lab	
3	T	Jan 24	Decision Analysis		HW #1
4	Th	Jan 26	Decision Analysis	In MOD Lab	
5	T	Jan 31	Statistical Inference		HW #2
6	Th	Feb 2	Simple Linear Regression		
7	T	Feb 7	Simple Linear Regression	In MOD Lab	
8	Th	Feb 9	Review of Part I		HW #3
9	**T**	**Feb 14**	**Exam 1**		
10	Th	Feb 16	Inference for Regression		
11	T	Feb 21	Inference for Regression	In MOD Lab	
12	Th	Feb 23	Multiple Regression		
13	T	Feb 28	Multiple Regression	In MOD Lab	HW #4
14	Th	March 1	Multiple Regression	In MOD Lab	
15	T	March 6	Building Regression Models		
16	Th	March 8	Building Regression Models	In MOD Lab	
17	T	March 20	Review of Part II		HW #5
18	**Th**	**March 22**	**Exam 2**		
19	T	March 27	Time Series Analysis		
20	Th	March 29	Time Series Analysis	In MOD Lab	
21	T	April 3	Time Series Analysis		HW #6
22	Th	April 5	Time Series Analysis	In MOD Lab	
23	T	April 10	Review of Part III		HW #7
24	**Th**	**April 12**	**Exam 3**		
25	T	April 17	Simulation Models		
26	Th	April 19	Simulation Models	In MOD Lab	
27	T	April 24	Simulation Models	In MOD Lab	
28	Th	April 26	Review of Part IV		HW #8
29	T	May 1	Final Review		
30	**Th**	**May 3**	**Exam 4**		