

Decision and Information Sciences 6360
Statistical Methods for Business
Fall 2003 (6:00-9:00pm Tue)

Instructor: Dr. Archer McWhorter, Jr.
Room 270B Melcher Hall
Voice: 713-743-4719 (UH) or 281-497-4306 (Home)
E-Mail: amcwhorter@uh.edu
Office Hours: 4:30-6:00 Tue, or by appointment

TA/Grader: To be announced

Text: *Statistics for Business and Economics* by McClave, Benson, and Sincich (8th Edition).

Prerequisite: Graduate standing, MATH 1314 or equivalent

Homework: This course will average about one homework assignment per week. Several of the assignments will require use of a computer package for statistical analysis, and we will use Microsoft Excel for this purpose.

Most of the assignments requiring computer work will be taken up and graded, but the non-computer assignments will not be. For assignments that must be handed in, late submission is permitted, but there will be a 10-point penalty per class meeting that the assignment is late. Complete solutions to homework assignments will be made available.

Exams: There will be two exams during the semester and a three-hour final exam. The final exam will be comprehensive. Tentative dates for these exams are given in the next section.

Grading: The weights and tentative dates of the homework assignments and exams are given below:

	<u>Weight</u>	<u>Tentative Date</u>
Computer Work	15	Various
Exam 1	25	September 30
Exam 2	25	November 4
Final Exam	35	December 12 (Friday, 5-8pm)

Makeup Exams: Makeup exams will be offered only under the most extenuating circumstances. If you are unable to make it to an exam, you must contact me or my secretary before the scheduled time for the exam or take a zero on that exam. A makeup exam may be harder than the scheduled exam.

Drop Policy: Monday, September 22, is officially the last day to drop a course without receiving a grade. Anyone who wishes to do so may drop this course after September 22 but no later than 6:00pm on Tuesday, October 14, and receive an automatic W; note that the first exam will be given September 30 and returned graded on October 7. Anyone who drops after October 14 will receive a W only if his/her average at that point is at least 40. Tuesday, November 4, is officially the last day to drop a course or withdraw.

Course Calendar - DISC 6360 (Fall 2003, 6:00-9:00pm Tue)

<u>Week</u>	<u>Date</u>	<u>Lecture Material</u>
1	Aug. 26	Introduction to statistics Descriptive statistics
2	Sep. 2	Finish descriptive statistics Basic probability concepts
3	Sep. 9	Continue probability concepts Random variables and probability distributions Expected values
4	Sep. 16	Special probability distributions Binomial Normal Normal approximation to the binomial Functions of random variables
5	Sep. 23	Sampling distributions Means Proportions
6	Sep. 30	Exam 1 (first 90 minutes) Introduction to statistical inference: Estimation Point estimates Interval estimates
7	Oct. 7	Continue basics of inference t distribution Hypothesis testing p-values
8	Oct. 14	Example problems - one-sample inference Two-sample problems Independent samples Paired differences
9	Oct. 21	Begin simple linear regression Purpose Assumptions Estimation Hypothesis testing

<u>Week</u>	<u>Date</u>	<u>Lecture Material</u>
10	Oct. 28	More simple linear regression Computer output Interpretation Confidence intervals, prediction intervals F test
11	Nov. 4	Exam 2 (two hours)
12	Nov. 11	Introduction to multiple regression Assumptions Inference Interpretation Subset selection methods Example Partial correlations Explained sum of squares
13	Nov. 18	Continue subset selection Regression model building Purpose of model building, examples Dummy variables Variable transformations
14	Nov. 25	Finish model building Analysis of count data
15	Dec. 2	Simulation and statistics Review
	Dec 12	Final Exam (Friday, 5-8pm)