

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF MATHEMATICAL SCIENCES
DHAHRAN, SAUDI ARABIA

Term: 2nd semester 2005-2006 (052)
STAT211: BUSINESS STATISTICS I

Course Objectives:

Introduce basic concepts of probability and statistics to business students. Emphasize the understanding of the nature of randomness of real world problems, the formulation of statistical methods using intuitive arguments and thereby make meaningful decisions.

Text and Package:

1. Business Statistics: A Decision-Making Approach, 6th edition, by Groebner, D., Shannon P., Fry, P. and Smith, K., Prentice Hall (2004).
2. MINITAB.

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Office Hours: 9:20-10:30 S M W

Assessment

Assessment for this course will be based on homework, attendance, quizzes, lab, two major exams and a comprehensive final exam, as in the following:

Activity	Weight
Class work	10%
Lab	10%
Exam 1 (Chapters 1, 2, 3) 5:00 pm Sunday March 19, OAB (Auditorium)	20%
Exam 2 (Chapters 4 & 5) 7:00 pm Wednesday April 19, OAB (Auditorium)	20%
Final Exam (Comprehensive) 7:00 pm Tuesday May 30,2006	40%

Note: Students are required to carry a calculator with statistical functions.

Note: 9 unexcused absences will lead to a DN grade.

Syllabus

Week	Dates	Sections	Topics
01	13/2 – 16/2	1-1,1-2	What is Business Statistics, Tools for Data Collection
02	18/2 – 22/2	1-3,1-4	Populations, Samples, Sampling Techniques, Data Types
03	25/2 – 1/3	2-1, 2-2, 2-3	Graphs, Charts and Tables
04	4/3 – 8/3	3-1,3-2	Measures of Location and Measures of Variation
05	11/3 – 15/3	3-3	Coefficient of Variation, Empirical Rule, Tchebysheff's Inequality and Standardized Data Values
06	18/3 – 22/3	4-1	Basic Concepts of Probability
07	25/3 – 29/3	4-2, 4-3	Rules of Probability, Introduction to Probability Distributions
1 to 2 April – Mid Term Break			
08	3/4 – 5/4	5-1, 5-2	The Binomial and Other Discrete Distributions
09	8/4 – 12/4	5-2 Continued & 5-3	The Normal Distribution
10	15/4 – 19/4	5-3 Continued & 5-4	Other Continuous Distributions.
11	22/4 – 26/4	6-1, 6-2.	Sampling Error Sampling Distributions of the Mean
12	29/4 – 3/5	6-3, 7-1	Proportion , Point and Confidence Interval Estimation of the Mean and Proportion
13	6/5 – 10/5	7-1 Continued & 7-2	Sample Size Determination for Estimating the Mean
14	13/5 – 17/5	7-3, 9-1	Estimating a Population Proportion, Estimation for Two Populations Means.
15	20/5 – 24/5	9-3	Estimation of Two Population Proportions and Review
16	27/5-28/5		Review

Problems

	Homework	Lab work
Ch.1	8,12,16,24,29,33,36,45,52,56,61,63.	1, 3, 5, 16, 22, 27, 34, 44, 49, 54, 56, 60, 64.
Ch.2	6, 8, 16, 24,28,34,38,48,56,60	4, 10, 18, 25, 26, 32, 38, 42, 47, 53, 61.
Ch.3	2,8,18,22,24,32,36,38,48,54,60.	4, 14, 18, 20, 29, 31, 41, 43, 47, 56, 66, 77.
Ch.4	2, 9, 15, 16,35,39,47,50,63,74.	2, 11, 14, 16, 20, 38, 40, 52, 67, 70.
Ch.5	4, 6, 20, 26, 28, 36, 46, 48, 65, 70, 80, 84, 91, 117	2, 3, 13, 23, 31, 39, 44, 47, 55, 65, 75, 81, 86, 102, 121, 126.
Ch.6	2, 6, 9, 11, 20, 25, 29, 36, 42, 52, 57, 66.	3, 6, 10, 16, 20, 28, 31, 41, 51, 61, 71, 76.
Ch.7	4, 12, 20, 22, 26, 35, 39, 44, 54, 57, 65, 68, 76, 82	5, 10, 15, 24, 27, 34, 39, 44, 51, 54, 57, 67, 78, 80.
Ch.9	2, 8, 12, 13, 38(b), 40(b).	1, 13, 15, 17, 21, 28, 37, 42, 43, 57.