

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

Term: 2nd semester 2006-2007 (062)
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.
3. Scientific calculator with statistical functions

Instructor:

Office:

Phone:

E-mail:

Web Page:

Office Hours:

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 (homework, attendance, quizzes)	10%
Lab	10%
Exam 1 (Chapters 1, 2, 3) 5:30 PM, 28 March, B – 10	20%
Exam 2 (Chapters 4 & 5) 5:30 PM, 2 May, B – 10	20%
Final Exam (Comprehensive) 7:00 PM, 6 June	40%

Note:

- 1) Students are required to carry a calculator with statistical functions to **every class, quizzes, and exams**.
- 2) 9 unexcused absences will lead to a **DN** grade.
- 3) Some lab times are reserved for student practice on MINITAB.
- 4) It is to the student's advantage to keep a binder for storing class notes, homework, and other graded assignments. Students who are organized will find it easier to find important materials when studying for exams.

Syllabus

Week	Dates	Sections	Topics
01	17/2 – 21/2	1-1,1-2	What is Business Statistics, Tools for Data Collection
02	24/2 – 28/2	1-3,1-4	Populations, Samples, Sampling Techniques, Data Types
03	3/3 – 7/3	2-1, 2-2, 2-3	Graphs, Charts and Tables
04	10/3 – 14/3	3-1,3-2	Measures of Location and Measures of Variation
05	17/3 – 21/3	3-3	Coefficient of Variation, Empirical Rule, Tchebysheff's Inequality and Standardized Data Values
06	24/3 – 28/3	4-1	Basic Concepts of Probability
07	31/3 – 4/4	4-2, 4-3	Rules of Probability, Introduction to Probability Distributions
08	7/4 – 11/4	5-1, 5-2	The Binomial and Other Discrete Distributions
12 to 15 April – Mid Term Break			
09	16/4 – 18/4	5-2 Continued & 5-3	The Normal Distribution
10	21/4 – 25/4	5-3 Continued & 5-4	Other Continuous Distributions.
11	28/4 – 2/5	6-1, 6-2.	Sampling Error Sampling Distributions of the Mean
12	5/5 – 9/5	6-3, 7-1	Proportion , Point and Confidence Interval Estimation of the Mean and Proportion
13	12/5 – 16/5	7-1 Continued & 7-2	Sample Size Determination for Estimating the Mean
14	19/5 – 23/5	7-3, 9-1	Estimating a Population Proportion, Estimation for Two Populations Means.
15	26/5 – 30/5	9-3	Estimation of Two Population Proportions and Review
16	2/6 - 3/6		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.

- 1) To effectively learn statistics, students need to **solve problems** in statistics and **analyze data**.
- 2) The selected homework problems above are designed to prepare you for class quizzes, major exams, and final exams. So, you are **strongly encouraged** to complete them.