

**KING FAHD UNIVERSITY OF PETROLEUM & MINERALS**  
**DEPARTMENT OF MATHEMATICS AND STATISTICS**  
**DHAHRAN, SAUDI ARABIA**

**Term: 1<sup>st</sup> semester 2007-2008 (071)**

**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, 6<sup>th</sup> edition, by Groebner, D., Shannon P., Fry, P. and Smith, K., Prentice Hall (2005).
2. MINITAB.
3. Scientific calculator with statistical functions

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**Office Hours:** 12:15-2:15pm SW and 12:15-1:15pm Mon or by appointment

**Meeting Times & Location:**

Section	Time	Location
1	9:00-9:50 am	Bldg 19 Room 417
2	8:00-8:50 am	Bldg 19 Room 417
3	11:00-11:50 am	Bldg 6 Room 258

**Assessment**

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

Activity	Weight
<b>Quizzes<sup>1</sup></b> , attendance, and homework	<b>15%</b>
<b>Lab Work</b>	10%
<b>Exam 1</b> (Chapters 1, 2, 3) 6:00 pm – 8:00 pm, <b>Tuesday Oct 30 OAB</b>	20%
<b>Exam 2</b> (Chapters 4 & 5) 6:00 pm – 8:00 pm, <b>Wednesday Nov 28 OAB</b>	20%
<b>Final Exam</b> (Comprehensive) 7:00 pm <b>Saturday Jan 19</b>	<b>35%</b>

**Note:** Students are required to carry pens and a calculator with statistical functions **every lecture, quizzes, and exams**. Students are also expected to take class notes and organize their learning material in a binder for easy retrieval to help them study and review for class, exams, etc

**Assigned Textbook Problems**

	Homework	Lab work
<b>Ch.1</b>	7, 11(a, b), 14, 23, 27, 32, 43, 37, 52, 57, 62, 64.	1, 2, 6, 15, 24, 30, 34, 40, 46, 53, 55, 59, 63.
<b>Ch.2</b>	4, 10, 18, 25, 27, 32, 37, 42, 46, 53, 60.	6, 9, 16, 24, 30, 36, 40, 44, 47, 50, 58.
<b>Ch.3</b>	4, 14, 18, 20, 26, 33, 34, 46, 48, 54, 59.	3, 25, 19, 24, 27, 30, 41, 42, 47, 50, 57.
<b>Ch.4</b>	1, 8, 14, 18, 35, 38, 46, 49, 63, 74.	2, 11, 15, 17, 26, 39, 47, 52, 65, 78.
<b>Ch.5</b>	2, 22, 25, 30, 35, 40, 52, 64, 69, 79, 85, 91, 116.	3, 21, 23, 29, 38, 47, 53, 67, 70, 79, 87, 108, 117.
<b>Ch.6</b>	3, 6, 10, 13, 20, 26, 29, 37, 41, 51, 56, 68.	1, 5, 9, 16, 21, 28, 32, 39, 42, 52, 64, 76.
<b>Ch.7</b>	3, 12, 19, 23, 25, 34, 40, 41, 46, 55, 58, 62, 68, 72, 82.	4, 9, 14, 24, 27, 36, 38, 42, 49, 53, 57, 61, 65, 77, 80.
<b>Ch.9</b>	1, 7, 11, 13, 36(b), 40(b).	3, 10, 12, 14, 38, 41.

To effectively learn statistics, students need to **solve problems** and **analyze data**. The selected assigned problems are specifically designed to prepare you for class quizzes, lab, majors and final exam. So, it is expected that you complete these problems **step-by-step** and **with comprehension**.

<sup>1</sup> Once a chapter is completed, you should expect a class quiz.

**Syllabus**  
(Tentative)

Week	Dates	Sections	Topics	Important dates
1	9/8 - 9/12	1-1,1-2	What is Business Statistics, Tools for Data Collection	
2	9/15 - 9/19	1-3,1-4	Populations, Samples, Sampling Techniques, Data Types	<b>Tue Sept 18:</b> Last day for dropping course(s) without permanent record
3	9/24 - 9/26	2-1, 2-2, 2-3	Graphs, Charts and Tables	<b>Sun Sept 23:</b> National Holiday
4	9/29 - 10/3	3-1,3-2	Measures of Location and Measures of Variation	
Oct 4- Oct 19 Id al-Fitr Vacation				
5	10/20 - 10/25	3-3, 4-1	Coefficient of Variation, Empirical Rule, Tchebysheff's Inequality and Standardized Data Values, Basic Concepts of Probability	<b>Thu Oct 25:</b> Normal Saturday Classes
6	10/27 - 10/31	4-1,4-2	Basic Concepts of Probability, Rules of Probability	<b>Tues 30 Oct: First Exam</b>
7	11/3 - 11/7	4-2, 4-3, 5-1	Rules of Probability (cont), Probability Distributions, The Binomial Distributions	<b>Tue Nov 6:</b> Last day for dropping course(s) with grade of "W" thru Internet
8	11/10 - 11/14	5-2, 5-3	Other Discrete Distributions, The Normal Distribution	
9	11/17 - 11/21	5-3, 5-4	The Normal Distribution (cont), Other Continuous Distributions	
10	11/24 - 11/28	6-1, 6-2	Sampling Error, Sampling Distribution of the Mean	<b>Wed Nov 28: Second Exam.</b> <b>Tues Nov 27:</b> Last day for withdrawal from <b>all</b> courses with grade of "W" thru the Registrar Office
11	12/1 - 12/5	6-2, 6-3	Sampling Distributions of the Mean and Proportion	<b>Sat Dec 1:</b> Beginning of Early Registration for the Second Semester, 2007-2008 (072)
12	12/8 - 12/12	7-1	Point and Confidence Interval Estimation of the Mean and Proportion	
Dec 13-28 Id al-Adha Vacation				
13	12/29 - 1/2	7-2, 7-3	Sample Size Determination for Estimating the Mean and Estimating a Population Proportion	
14	1/5 - 1/9	9-1,9-3	Estimation for Two Population Means and Estimation of Two Population Proportions	<b>Tues Jan 8:</b> Last day for major exams; Last day for withdrawal from all courses with grade of "WP/WF" thru the University Registrar Office
15	1/12 - 1/16		Review	
16	Jan 19 7:00pm	Comprehensive	Final Exam	