

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

**STAT211: BUSINESS STATISTICS I (091)**

**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.

**Textbook and Package:**

1. Business Statistics: A Decision-Making Approach, 7<sup>th</sup> edition, by Groebner, D., Shannon P., Fry, P. and Smith, K., Prentice Hall (2008).
2. MINITAB.

**Instructor:** Esam Al-Sawi

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**Office Hours:**

**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
Quizzes <sup>1</sup> , attendance, homework and Lab work	(7%+3%+3%+7%)
Exam 1 (Chapters 1, 2, 3) 7:00 pm – 9:00 pm, Monday Nov 16, 2009	20%
Exam 2 (Chapters 4 & 5) 7:00 pm – 9:00 pm, Tues Dec 22, 2009	20%
Final Exam (Comprehensive) 7:00 pm – 10:00 pm, Thursday Feb 4, 2010	40%

**General Notes:**

- Students are required to carry **pens**, **binder** and a **calculator** with statistical functions to **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 in study and review for class, exams, etc
  - 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.
- 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*.
- **Never round** your intermediate results to problems when doing your calculations. This will cause you to lose calculation accuracy. Round only your final answers and you should not round less than 4 decimal places unless required otherwise.
- **A formula sheet** and **statistical tables** will be given for you in every exam, so you only need to bring with you **pens**, **pencils**, **a sharpener**, **an eraser**, and a **calculator**.

<sup>1</sup> There will be a quiz at the end of each chapter.

### Syllabus (Tentative)

<i>Week</i>	<i>Sections</i>	<i>Topics</i>	<i>Notes</i>
<b>1</b> 3/10 – 7/10	1-1,1-2	What is Business Statistics, Tools for Data Collection	Last day for late registration; Last day for adding courses.
<b>2</b> 10/10 – 14/10	1-3,1-4	Populations, Samples, Sampling Techniques, Data Types and measurement levels.	Last day for dropping course(s) without permanent record
<b>3</b> 17/10 – 21/10	2-1, 2-2, 2-3	Graphs, Charts and Tables	Beginning of Mid-Term Grade submission thru web at <a href="http://regweb.kfupm.edu.sa">http://regweb.kfupm.edu.sa</a> (for 2 weeks)
<b>4</b> 24/10 – 28/10	3-1,3-2	Measures of Location and Measures of Variation	
<b>5</b> 31/10 – 4/11	3-3, 4-1	Coefficient of Variation, Empirical Rule, Tchebysheff's Inequality and Standardized Data Values, Basic Concepts of Probability	
<b>6</b> 7/11 – 11/11	4-1,4-2	Basic Concepts of Probability, Rules of Probability	Last day for dropping course(s) with grade of "W" thru web at <a href="http://regweb.kfupm.edu.sa">http://regweb.kfupm.edu.sa</a>
<b>7</b> 14/11 – 18/11	4-2, 4-3, 5-1,5-2	Rules of Probability (cont), Probability Distributions, Introduction to Discrete Probability Distribution The Binomial Distributions	<b>1-st Exam</b> Last day of classes before Id al-Adha Vacation
21/11 – 4/12	<b>Id al-Adha Vacation</b>		
<b>8</b> 5/12 – 9/12	5-3,6-1	Other Discrete Distributions, The Normal Distribution,	
<b>9</b> 12/12 – 16/12	6-1, 6-2	The Normal Distribution(cont) , Other Continuous Distributions,	
<b>10</b> 19/12 – 23/12	7-1	Sampling Error, Sampling Distribution of the Mean	<b>2-nd Exam</b> Last day for withdrawal from <b>all courses</b> with grade of "W" thru the Univ Registrar Office
<b>11</b> 26/12 – 30/12	7-2, 7-3	Sampling Distributions of the Mean and Proportion	
<b>12</b> 2/1 – 6/1	8-1	Point and Confidence Interval Estimation of the Mean and Proportion	Beginning of Early Registration for the Second Semester, 2009-2010 (092); Beginning of registration for Coop
<b>13</b> 9/1 – 13/6	8-2, 8-3	Sample Size Determination for Estimating the Mean and Estimating a Population Proportion	
<b>14</b> 16/1 – 20/1	10-1,10-3	Estimation for Two Population Means and Estimation of Two Population Proportions	20/1, Last day for major exams; Last day for withdrawal from all courses with grade of "WP/WF" thru the University Registrar Office
<b>15</b> 23/1 – 27/1		Review	

Important Notes:

- ✓ We will explain the MINITAB commands in the class and the student free to do his homework any were he likes.
- ✓ In accordance with University rules, ***NINE unexcused absences*** will result in a grade of ***DN***.
- ✓ ***Attendance*** on time is ***very*** important. Therefore, ½ % will be deducted for ***each*** one absence
- ✓ Mostly, attendance will be checked within the ***first five minutes*** of the class. Entering the class after that, is considered as one late, and ***every two times late*** equals to one absence.
- ✓ All contacts or announcements between the instructor and the students are supposed to be held on the WebCT, so the student ***must*** check his WebCT inbox ***at least once*** a day.

*Home Work Problems:*

- Handout problems will be posted on the WebCT at the end of each chapter.
- The ***Homework*** should be submitted in the first Saturday after completing the chapter ***and no need for an announcement in advance.***
- No late homework will be accepted.