KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF MATHEMATICS and STATISTICS
DHAHRAN, SAUDI ARABIA
STAT212: BUSINESS STATISTICS II (**133**)

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Office Hours: UMTWR 11:30 AM – 12:30 PM or by appointment.

Text and Package: =
1. Basic Business Statistics: Concepts and Applications, 11th edition, by Berenson, M.L., Levine, D.M., and Krehbiel, T.C., Pearson-Prentice Hall (2009).
2. MINITAB Statistical Package will be used.
3. Scientific calculator with statistical functions in every class and exam.

Course Objectives:

Introducing basic concepts of probability and statistics to business students. Emphasis will be given on the understanding of the nature of randomness of real world problems, the formulation of statistical methods by using intuitive arguments and thereby making meaningful decisions.

Assessment:

Assessment for this course will be based on homework, attendance, two Major exams and a final exam, as following

Activity	Weight
Attendance and Homework	(3%+7%)
Exam 1 (Chapters 9, 10, &12) Wednesday June 25, 16:00 – 17:30 in 4-150	25%
Exam 2 (Chapters 13, 14 & 15.1,15.3) Wednesday July 16, 16:00 – 17:30 in 4-150	25%
Final Exam (Comprehensive) Thursday August 14, 19:00	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
    o 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*__.__

Tentative Schedule

Week	Sections	Topics	Notes
1	9.1-9.2	Hypothesis Tests for Means	
1	9.3, 9.4, 9.6	Hypothesis Tests for Means (continued), Tests for Proportions	
2	10.1,10.2,	Tests for the Difference Between Two Means.	
2	10.3, 10.4, 12.5	Tests for Two Populations Proportions, F-Tests for Two Population Variances, Chi-squared Test for One Population Variances,	
3	12.1-12.2,12.4	Chi-squared Tests for Proportions	
3	12.3, 12.10	Introduction to Contingency Tables, Goodness of Fit Tests, Review	
4	13.1- 13.3	Simple Linear Regression	
4	13.4-13.9	Simple Linear Regression (continued), Correlation, Inferences and Uses for Regression Analysis,	
5	14.1-14.4	Introduction to Multiple Regression Inferences on coefficients, Model testing	
5	14.5-14.6	Model testing (cont.) & Multiple Regression with Qualitative Variables	
6	15.1, 15.3, 15.4, 15.5	Nonlinear Relationships, Model Building	
6	15.6, 16.1- 16.3	Aptness of the Model, Introduction to Forecasting, and Time Series	
7	16.4-16.7 16.9	Trend-fitting, Trend-Based Forecasting Techniques and Forecasting using smoothing methods,	
7	16.9, 16.8	Forecasting (cont.), Index Numbers	
8	16.8	Index Numbers (cont.) & Review	
8	Review		

✓ Students will be required to carry a scientific calculator **with statistical functions** to **every class, quiz, and exam**.

✓ 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, **Eight (8) unexcused absences** will automatically result in a grade of **DN**. It is students' responsibility to provide valid written excuses on time before a **DN** report is issued.

✓ **Attendance** on time is **very** important. Therefore, ½ % will be reduced 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 lateness** 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.

✓ **Quizzes**: In general, there will be a **quiz at the end of every chapter**.

Home Work Problems:

- **Homework** problems will be **handed out** to students
- The **Homework** should be submitted the first Sunday after completing the chapter **and no need for an announcement in advance**.
- No late homework will be accepted.
- Chapter 9: 9.1, 9.3, 9.6, 9.11, 9.13, 9.19, 9. 21, 9.27, 9.33, 9.39, 9.47, 9.51, 9.55
- Chapter 10: 10.2, 10.10, 10.13, 10.19, 10.25, 10.26, 10.31, 10.33, 10.36, 10.39, 10.41, 10.45, 10.49, 10.52
- Chapter 12: 12.1, 12.3, 12.7, 12.13, 12.15, 12.19, 12.21, 12.13, 12.25, 12.27, 12.31, 12.33, 12.35, 12.41, 12.45
- Chapter 13: 13.3, 13.5, 13.9, 13.13, 13.17, 13.19, 13.25, 13.29, 13.33, 13.37, 13.39, 13.41, 13.43, 13.49, 13.53, 13.55, 13.57, 13.61
- Chapter 14; 14.1, 14.3, 14.7, 14.9, 14.11, 14.17, 14.19, 14.21, 14.23, 14.25, 14.29, 14.31, 14.35, 14.38, 14.41, 14.45
- Chapter 15: 15.1, 15.3, 15.7, 15.15, 15.19, 15.21, 15.25
- Chapter 16: 16.3, 16.5, 16.7 16.11, 16.15, 16.19, 16.25, 16.29, 16.33, 16.35, 16.42, 16.47, 16.51, 16.52, 16.55

Student Learning Outcomes:

Students are expected to

1. Know the correspondence between **levels of measurement** and **statistical procedures.**
2. Know the **assumptions** underlying statistical procedures.
3. **Select** the appropriate statistical **procedure** for various applied business situations.
4. Accurately **compute** procedures **manually** and by **MINITAB** and **interpret the results** of these statistical procedures.
5. Finally, make the **right** decision.