KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF MATHEMATICS and STATISTICS
DHAHRAN, SAUDI ARABIA
STAT212: BUSINESS STATISTICS II (171)

Instructor: Esam Al-sawi   **Office:** Building 5 – room 310

Phone: 1887   **E-mail:** Blackboard

Office Hours: UTR 9:00 AM – 9:50 AM and 12:10 AM – 12:50 AM or by appointment.

Text and Package:

1. Basic Business Statistics: Concepts and Applications, 12th edition, by Berenson, M.L., Levine, D.M., and Krehbiel, T.C., Pearson-Prentice Hall (2012).
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:

Activity	Weight
Attendance, Homework, and Lab test	2% + 3% + 5%
Exam 1 (Chapters 9 & 10) Week 5	15%
Exam 2 (Chapters 12 & 13) Week 9	20%
Exam 3 (Chapters 14 & 15) Week 13	20%
Final Exam (Comprehensive) Tue Jan 2 @ 7:00 PM	35%

➡ General Notes:

➡ Students are required to carry **pens, binder** and a **calculator** with statistical functions to **EVERY lecture, quiz, and exam**.

➡ 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_.**

Tentative Schedule

Week	Sections	Topics	Notes
1 Sep. 17 - 21	9.1-9.2	Hypothesis Tests for Means	
2 Sep. 24 - 28	9.3, 9.4, 9.6	Hypothesis Tests for Means (continued), Tests for Proportions	24 September National Day Holiday
3 Oct. 1 - 5	10.1,10.2,	Tests for the Difference Between Two Means	
4 Oct. 7 - 12	10.3, 10.4, 12.5	Tests for Two Populations Proportions, F-Tests for Two Population Variances, Chi-squared Test for One Population Variances	Normal Sunday Class Saturday October 7th
5 Oct. 15 - 19	12.1-12.2, 12.4	Chi-squared Tests for Proportions	Major 1 –
6 Oct. 22 - 26	12.3, 12.10	Introduction to Contingency Tables, Goodness of Fit Tests, Review	Last day for dropping course(s) with grade of "W" thru KFUPM Portal
7 Oct. 29 – Nov. 2	13.1- 13.3	Simple Linear Regression	
8 Nov. 5 - 9	13.4-13.9	Simple Linear Regression (continued), Correlation, Inferences and Uses for Regression Analysis	
9 Nov. 12 - 16	14.1-14.4	Introduction to Multiple Regression Inferences on coefficients, Model testing	Major 2 –
10 Nov. 19 - 23	14.5-14.6	Model testing (cont.) & Multiple Regression with Qualitative Variables	Last day for withdrawal from all courses with grade of "W"
11 Nov. 26 - 30	15.1, 15.3, 15.4, 15.5	Nonlinear Relationships, Model Building	
12 Dec. 3 - 7	15.6, 16.1- 16.3	Aptness of the Model, Introduction to Time-Series Forecasting, Component Factors of Time-Series, and Smoothing Techniques	
13 Dec. 10 - 14	16.4-16.6	LS Trend Fitting, Autoregressive Modeling for Trend Fitting and Forecasting, Choosing an Appropriate Model	Major 3 –
14 Dec. 17 - 21	16.7, 16.8	Time-Series Forecasting of Seasonal Data, Index Numbers	Lab Test –
15 Dec. 24 - 28	16.8	Index Numbers (cont.) & Review	

◉Student Learning Outcomes:

Students are expected to

◉ Know the correspondence between **levels of measurement** and **statistical procedures**.

◉ Know the **assumptions** underlying statistical procedures.

◉ **Select** the appropriate statistical **procedure** for various applied business situations.

◉ Accurately **compute** procedures **manually** and by **MINITAB** and **interpret the results** of these statistical procedures.

◉ Finally, make the **right** decision.

‣Home Work Problems:

‣ 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: 9.4 , 9.13 , 9.21 , 9.28 , 9.45 , 9.50 , 9.54 , 9.56 , 9.76

‣ Chapter 10: 10.6 , 10.10 , 10.12 , 10.18 , 10.21 , 10.27 , 10.35 , 10.44 , 10.46 , 10.50

‣ Chapter 12: 12.4 , 12.9 , 12.13 , 12.21 , 12.26 , 12.27 , 12.32 , 12.39 , 12.45

‣ Chapter 13: 13.3, 13.9, 13.15, 13.21, 13.24, 13.29, 13.33, 13.37, 13.41, 13.47, 13.55, 13.61

‣ Chapter 14: 14.1, 14.4, 14.9, 14.14, 14.18, 14.23, 14.26, 14.31, 14.34, 14.38, 14.41 , 14.44

‣ Chapter 15: 15.1 , 15.6 , 15.8 , 15.13 , 15.14 , 15.16 , 15.21 , 15.25

✳Important Notes:

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

✳ **MINITAB**: We will explain the MINITAB commands in the class and the student free to do his homework any were he likes.

✳ **DN:** In accordance with University rules, **Nine (9) 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:**

✓ 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** equal to one absence.

✳ **Blackboard:** All contacts or announcements between the instructor and the students are supposed to be held on **Blackboard**, so the student **must** check his *Blackboard* inbox **at least once** a day.

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

✳ **Academic Integrity**: All KFUPM policies regarding **ethics** and **academic honesty** apply to this course.