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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:

Activity	Weight
Attendance and homework	10%
Exam 1 (Chapters 9, 10, 12) Week 3	20%
Exam 2 (Chapters 13, 14 & 15.1,15.3) Week 5	20%
Lab work	10%
Final Exam (Comprehensive) (**Thursday, August 13, 2015, 8:00 AM**)	40%

Grade Assignment

Score	87 – 100	80 – 86	75 – 79	70 – 74	65 – 69	60 – 64	55 – 59	50 – 54
Grade	A+	A	B+	B	C+	C	D+	D

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

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*.

Syllabus (Tentative)

Week	Sections	Topics	Notes
1 June 07-11	9.1-9.4, 9.6	Fundamentals of Hypothesis Testing Methodology, t test of hypothesis for the Mean, one tail-tests, Z-test for the proportion	
2 June 14 – 18	10.1-10.4	Comparing two means of two independent populations, Comparing the means of two related population, Comparing two population proportions F-test for the difference between two variances	
3 June 21 – 25	12.1-12.5	- Chi-Square test for the difference between two proportions (independent samples) - Chi-Square test for differences among more than two proportions - Chi-Square test for independence - McNemar Test for the difference between two proportions (related samples) - Chi-Square test for the variance or standard deviation	Exam 1
4 June 28 – July 2	13.1-13.9	**Simple Linear Regression (LR):** Types of regression models, Simple Linear Regression Equation, measures of variation, Model Assumptions, Residual Analysis, Autocorrelation, inference about the Slope and Correlation, C.I and P.I. estimates, Pitfalls in regression	
5 July 5– 9	14.1-14.6	**Introduction to Multiple Regression:** - Developing a Multiple Regression model - R^2, Adjusted R^2, and overall F-test - Residual Analysis, - Inferences concerning the population Regression coefficients - Testing portion of the Multiple Regression Models - Using Dummy variables and interaction terms in regression models	Exam 2
	July 12-23	Ramadhan Break	
6 July 26 – 30	15.1, 15.3-15.6	**Model Building:** - The quadratic regression model - Collinearity - Model building - Aptness of the Model, Pitfalls in multiple regression	
7 August 02-06	16.1-16.8	**Time-Series Forecasting and Index Numbers**	
8 August 9-11		Review and catch up.	
Final Exam (Comprehensive): Thursday, August 13, 2015, 8:00 AM			

Important Notes:

- ✓ 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, ***Nine (9) unexcused absences*** will automatically result in a grade of ***DN***.
- ✓ ***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 Saturday after completing the chapter ***and no need for an announcement in advance***.
- • No late homework will be accepted.

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.