

STAT212: BUSINESS STATISTICS II (201)

Instructor: Esam Al-sawi

Office: Building 5 – room 310

Phone: 1887

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Office Hours: UTR 1:00 – 2:00 PM 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.

Course Description

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.

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.

Course Activities:

Activity	Weight
Class Activities (home works, attendance, bonuses, etc.)	7%
Quizzes	15%
Lab work	8%
Online assessment 1 (Chapters 9 and 10) Week 6: Oct. 6 at 5:45 pm	15%
Midterm Exam (Chapters 12 and 13) Week 9: Oct. 20 at 8:00 pm	15%
Online assessment 2 (Chapters 14) Week 12: Nov. 10 at 5:45 pm	15%
Final Exam (Comprehensive)	25%
Total	100%

Important Notes:

❖ Lectures:

Because of the current COVID-19 situation, all lectures will be conducted online using Blackboard Collaborate Ultra or/and Microsoft Teams.

You need

- *a computer (desktop / laptop) with a webcam and audio capabilities.*
- *to install Microsoft Teams on your mobile phone.*
- *good internet connection.*
- *a calculator with statistical functions.*
- *your book every class (soft/hard copy).*

❖ Attendance Policy

- *Attendance on time is very important.*
- *Those who frequently face connection problems will not be considered present.*
- *The student must actively participate in the lecture to be considered present.*
- *Excessive unexcused absences (Eight) will result in a grade of DN in accordance with University rules.*
- *During the class, if you need to get away from your computer, you need to take instructors permission.*

❖ Details and Guidelines for Assessments:

- All exams will be conducted online using the blackboard.
- You will be able to see it in the "Assessments / Tests" section.
- Online assessments 1 and 2 will start exactly at 5:45 PM, and you will have only 5 minutes to login to the assessment. Similarly, midterm will start at 8:00 PM.
- It means after 5:50 PM you cannot login to take the assessment.
- We expect you to abide by all ethical rules and work individually.
- Each assessment may include more than one type of questions (MCQ, fill in the blank, solving, essays ...)
- No makeup assessment will be given for any reason.

Cheating

and Plagiarism:

This course is composed of individual assignments. It is important that your individual assignment be completed with your own efforts instead of copying it from your fellow student. KFUPM instructors follow “zero tolerance” approach with regard to cheating and plagiarism. During examinations (quizzes, major exams, lab tests) cheating or any attempt of cheating by use of illegal activities, techniques and forms of fraud will result in a “**grade of F**” in the course along with reporting the incident to the higher university administration.

Tentative Schedule

Week	Sections	Topics	Notes
1 Aug. 30- Sep. 3	9.1-9.2	Hypothesis Tests for Means	
2 Sep. 6- 10	9.3, 9.4, 9.6	Hypothesis Tests for Means (continued), Tests for Proportions	
3 Sep. 13- 17	10.1,10.2,	Tests for the Difference Between Two Means	Pop quiz (Ch9)
4 Sep. 20- 22	10.3, 10.4, 12.5	Tests for Two Populations Proportions, F-Tests for Two Population Variances, Chi-squared Test for One Population Variances	
5 Sep. 27- Oct. 1	12.1-12.2,1 2.4	Chi-squared Tests for Proportions	Pop quiz (Ch10)
6 Oct. 4- 8	12.3, 12.10	Introduction to Contingency Tables, Goodness of Fit Tests, Review	
7 Oct. 11- 15	13.1- 13.3	Simple Linear Regression	
8 Oct. 18- 22	13.4-13.9	Simple Linear Regression (continued), Correlation, Inferences and Uses for Regression Analysis	
9 Oct. 25- 29	14.1-14.4	Introduction to Multiple Regression Inferences on coefficients, Model testing	Pop quiz (Ch13)
10 Nov. 1- 5	14.5-14.6	Model testing (cont.) & Multiple Regression with Qualitative Variables	
11 Nov. 8- 12	15.1, 15.3, 15.4, 15.5	Nonlinear Relationships, Model Building	
12 Nov. 15- 19	15.6, 16.1- 16.3	Aptness of the Model, Introduction to Time-Series Forecasting, Component Factors of Time-Series, and Smoothing Techniques	
13 Nov. 22- 26	16.4-16.6	LS Trend Fitting, Autoregressive Modeling for Trend Fitting and Forecasting, Choosing an Appropriate Model	Quiz 5:45-7 PM Wed 25
14 Nov. 29- Dec. 3	16.7, 16.8	Time-Series Forecasting of Seasonal Data, Index Numbers	
15 Dec. 6- 10	16.8	Index Numbers (cont.) & Review	
16 Dec. 13 Dec. 14	Review	Normal Wednesday class Normal Thursday class	

▶ *Suggested Problems:*

- ▶ **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**