

#### **Statistics in Business Administration (QUA 502)**

**Batch : Semester I (1441 h) Credit hours: 3 Number of Sessions: 42**

**Section: 57792**

**Course Facilitator: Dr. Nadia Sarhan E-mail: nsarhan@ksu.edu.sa**

**Office : Building 3, 2nd Floor, Office No. 115**

**Office Hours : Sunday, Tuesday, Thursday**

**Course Objectives**

 The objective of the course is to introduce the managerial statistical analysis to enhance the ability of making decisions. The following topics will be discussed: collecting and arranging statistical data, measures of central tendency and dispersion, introduction to probability, random variables and types, correlation and simple linear regression, and variance analysis with applications in business and using a statistical package (such as SPSS).

 **Content of the Course and Week Plan**

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| **Week** | **Content** |
| Week 1 | Basic Concepts of Statistics |
| Weeks 2-3 | Descriptive Statistics |
| Week 4 | Applications 1 using SPSS software |
| Week 5 | Discrete Probability Distributions |
| Week 6 | Continuous Probability Distributions |
| Week 7  | Simple Linear Regression and Correlation |
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| Week 8 | **First Midterm (25 points) Tuesday (1/3/1441 - 29/10/2019) (W9) (2:00-3:30PM)** |
| Week 9 | Multiple Linear Regression and Correlation Analysis |
| Weeks 10-11 | Statistical Inference |
| Week 12 | Testing of Hypotheses |
| Week 13 | **Second Midterm (25 points) Tuesday (29/3/1441 - 26/11/2019) (W13) (2:00-3:30PM)** |
| Week 14 |  Chi-square Tests |
|  |  **Participation or project (10 points)** |
|  |  **Final Exam (40 points)**  |

**Text Book Recommended:** *Business Statistics for Contemporary Decision Making*, 5th Edition. By: Ken Black, Wiley 2008.

**Other Books:**

* Douglas A. Lind and el., *Statistical Technique in Business and Economics*, McGraw-Hill, USA, 2013.
* David M Levine, Kathryn A. Szabat, David F. Stephan: *Business Statistics, A first Course*. Pearson Education Limited 2016, Seventh Edition.
* [Marija J Norusis](http://library.alibris.com/search/books/author/Marija-J-Norusis?aid=3680735), PASW Statistics 18 Guide to data Analysis, Prentice Hall; ISBN-10: 0321690583.
* Amir D. Aczel and Jayavel Sounderpandian, *Complete Business Statistics*, McGraw Hill International, Seventh Edition.
* Richard I Levin., David S Rubin., *Statistics For Management*, Prentice-Hall, Seventh Edition.
* Edward Tufte, *The Visual Display of Quantitative Information*, Graphics Press, Cheshire, Connecticut.
* Levine, Krehbiel, Berenson, and Viswanathan, *Business Statistics* – A First Course, Pearson Education, Fourth Edition.