

King Saud University

College of Business Administration

Quantitative Analysis Department (QUA)

Course's Professor: Dr. Fuad AlAwwad

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Course Specifications

A- Basic Information	
Course Title: INTRODUCTION TO STATISTICS IN BUSINESS	Code: QUA 107
Programme: Undergraduate	Section:
Credits Hours: Theoretical 3 Practical 1	Pre-requisites: None
Target Students: This course is designed for college of business administration's students as an introduction to statistics.	
Department offering the course: Quantitative Analysis Department (QUA)	
B- Professional Information	
1- Overall aims of course	Provide students with the concepts and special skills for collecting, classifying, analyzing and presenting the data
2- Course brief Contents	<ul style="list-style-type: none">- Collecting, tabulating and presenting of data.- Measures of central tendency.- Measures of dispersion- Index numbers.- Principles of probability.- Probability Distributions
3- Teaching and Learning Methods	<ul style="list-style-type: none">- lectures- exercises- cases studies- Group discussions
4- Students Assessments	
4/1- Tools	<ul style="list-style-type: none">- Medterm Exam- Weekly Homework- Final exam
4/2- Time Schedule	<p>-First Exam: 29/5/1437 (9/3/2016)</p> <p>-Unified Exam: TBA</p> <p>Replacement Exam: TBA</p> <p>You are required to attend the Unified exam. If you miss the unified exam and you have a valid excuse you will be allowed to enter the replacement exam otherwise you will miss the 30 points.</p>
	<ul style="list-style-type: none">- First Exam: 20 Marks- Unified Exam: 30 Marks- Weekly attendance and participation: 10 Marks- Final exam: 40 Marks
5- List of references	
5/1- Text notes	By lectures
5/2- Text books	Text Book: Statistical Techniques in Business and Economics (2010) By Douglas A. Lind, William G.

	Marchal, and Samuel A. Wathen.
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Detail contents

Chapter	Title	Required Topic
1	What is Statistics	Introduction - What is Meant by Statistics? - Types of Statistics - Population versus Sample - Types of Variables - Levels of Measurement.
2	Describing Data: Frequency Distributions and Graphic Presentation.	Introduction - Constructing a Frequency Table - Constructing a Frequency distributions - Relative Frequency Distribution - Histograms -Frequency polygons - Cumulative frequency distributions - Software applications (by Excel).
3	Describing Data: Numerical Measures	Introduction - Population Mean - Sample Mean – Properties of the Arithmetic Mean – The Weighted Mean- The Median - Properties of the Median - The Mode - The Relative Positions of the Mean, Median and Mode – The Geometric Mean –Why Study Dispersion - Measures of Dispersion - Range -Mean Deviation - Variance and Standard Deviation - Chebyshev's Theorem – The empirical Rule - The Arithmetic Mean of Grouped Data - Variance and Standard Deviation for Grouped Data – Software applications (by Excel).
4	Describing Data: Displaying and Exploring Data	Introduction – Dot Plots - Stem and Leaf – Quartiles, Deciles and Percentiles - Box plots - Scatter plot. Software applications (by Excel).
5	A Survey of Probability Concepts	Introduction – What is a Probability – Approaches to Assigning Probabilities - Classical Probability - Mutually Exclusive Events - Collectively Exhaustive Events - Rules for Computing Probabilities –Rules of addition – Rules of Multiplication - Conditional Probability - Contingency Tables - Tree Diagrams - Bayes' Theorem
6	Discrete Probability Distributions	Probability Distribution - Characteristics of a Probability Distribution - Random Variables - The Mean of a Probability Distribution - The Variance, and Standard Deviation of a Probability Distribution - Binomial Probability Distribution - Poisson Probability Distribution – Hypergeometric Probability Distribution.
7	Continuous Probability Distributions	Uniform Probability Distribution- Characteristics of a Normal Probability Distribution - The Normal Probability Distribution – The Normal Approximation to the Binomial - Software applications (by Excel).
15	Index Numbers	Unweighted Indexes - Weighted Indexes (Lespeyres, Paasche and Fisher's Ideal Index) - Value Index