

جامعة
الملك سعود
King Saud University



King Saud University

College of Business Administration

Quantitative Analysis Department

Quantitative Methods in Decision Making

QUA 553

Instructor:

Dr. Mohammed Alahmed

Ph.D. in Applied Statistics

alahmed@ksu.edu.sa

0504433221

Course Description

This course introduces statistical methods and applications in applied research, covering statistical data, population and random sample, sampling methods, data collection, questionnaire, descriptive statistics, probability, and inferential techniques necessary for appropriate analysis and interpretation of data relevant to business. Students will use the statistical software package (SPSS).

Course Objectives

- Familiarity with basic statistics terms.
- Ability to summarize data and do basic statistical analyses using SPSS.
- Ability to understand basis statistical analyses in published journals.
- Understanding of key concepts including statistical hypothesis testing – critical quantitative thinking.
- Foundation for more advance analyses.

Course Evaluation

- | | |
|-------------------------------|-------|
| 1. Assignments and attendance | (20%) |
| 2. Midterm exams (2) | (40%) |
| 3. Final exam | (40%) |

Text book

1. **Business Statistics: A Decision-Making Approach** (8th Edition) by David F. Groebner and others.

Course Contents and Plan

TOPIC	WEEK	READING
The Where, Why, and How of Data Collection	1	Ch 1
Graphs, Charts, and Tables –Describing Your Data	2	Ch 2
Describing Data Using Numerical Measures	3	Ch 3
Using Probability and Probability Distributions	4	Ch 4
Midterm exam 1	5	
Discrete Probability Distributions	6	Ch 5
Introduction to Continuous Probability Distributions	7	Ch 6
Introduction to Sampling Distributions	8	Ch 7
Estimating Single Population Parameters	9	Ch 8
Introduction to Hypothesis Testing	10	Ch 9
Estimation and Hypothesis Testing for Two Population Parameters	11	Ch 10
Midterm exam 2	12	
Analysis of Variance	13	Ch 12
Introduction to Linear Regression and Correlation Analysis	14	Ch 14
Final Exam	15	