

King Saud University (RIYADH)
College of business administration
Department of Quantitative Analysis
Business Statistics (QUA 207)

Course Objectives:

- Explain the concepts of Probability Distributions and Sampling Distributions.
- Explain the concepts of Estimation and Hypothesis Testing.
- Illustrate applications of Confidence Intervals and Hypothesis Testing for Business problems.
- Analyze Business and Economic data for decision making.
- Explain the consequences to the Management based on the data analysis.

Content of the Course and Session Plan

Session	Content
Sessions 1-4	Review of the concepts of probability theory and probability distributions. Review of the Normal distribution and its characteristics.
Sessions 5-12	Sampling Distribution of the Sample Mean where the underlying distribution is Normal. Central Limit Theorem.
Sessions 13-21	Estimation – Point Estimation and Interval Estimation. Construction of Confidence Intervals for different population Parameters in case of Normal distribution.
	First Midterm (25 points) Wednesday (21/6/1437 - 30/3/2016) (3:00-4:30 PM)
Sessions 22-29	Hypotheses Testing about important population Parameters in case of Normal distribution - One Sample Tests of Hypothesis (Population Mean, Population Proportion).
Sessions 30-36	Hypotheses Testing about important population Parameters in case of Normal distribution - Two Sample Tests of Hypothesis (The difference between two Population Means , Population Variance, Ratio of two Populations Variances, and the difference between two Population Proportions).
	Second Midterm (25 points) Wednesday (13/7/1437 - 20/4/2016) (3:00-4:30 PM)
Sessions 37-42	F-Distribution. Analysis of Variance.
	Participation and duties (10 points)
	Final Exam (40 points)

Text Book Recommended

1. Lind, Marchal and Wathen, Statistical Techniques in Business and Economics, McGraw Hill International, Fourteenth Edition.