

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

**Batch : Semester 2 (1437/1438h)      Credit hours      : 3      Number of Sessions      : 42**

**Section: 28644 / 26427 / 28625**

**Course Facilitator: Dr .Manahil Kamal Altib**

**Office : Building 3 2nd Floor, Office No. 118      E-mail: Maltib@ksu.edu.sa**

**Lecture: Sunday, Tuesday, Thursday: Sec (28644) 10 – 11    / Sec (26427) 11-12**

**Monday Sec (28625) 8 - 11**

**Office Hours : Sunday, Tuesday, Thursday (9-10), Tuesday & Thursday (12-1),**

**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. (Chapter 7)
Sessions 5-12	Sampling Distribution of the Sample Mean where the underlying distribution is Normal. Central Limit Theorem. (Chapter 8)
Sessions 13-21	Estimation (Point Estimation and Interval Estimation). Construction of Confidence Intervals for different population Parameters in case of Normal distribution. (Chapter 9)
	<b>First Midterm (25 points) Wednesday (22/7/1438 - 19/4/2017) (3:00-4:30 PM)</b>
Sessions 22-29	Hypotheses Testing about important population Parameters in case of Normal distribution - One Sample Tests of Hypothesis (Population Mean, Population Proportion). (Chapter 10)
Sessions 30-35	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 tow Populations Variances, and the difference between two Population Proportions). (Chapter 11)
	<b>Second Midterm (25 points) Monday (19/8/1438 - 15/5/2017) (3:00-4:30 PM)</b>
Sessions 36-40	F-Distribution. Analysis of Variance (Chapter 12)
Sessions 41-42	Chi Square (Chapter 17)
	<b>Applications and Participation (10 points)</b>
	<b>Final Exam (40 points)</b>

**Text Book Recommended**

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