

**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 : 26424 – 44674**

**Course Facilitator: ...Mashaal Ali Alshehri...**

**Office : Building 3 2nd Floor, Office No. 184**

**E-mail: ...mealshehri@ksu.edu.sa.....**

**Lecture: ...26424 (Sunday – Tuesday - Thursday)  
...44674 ( Monday ) .**

**Office Hours : Sunday – Tuesday (10:00 AM – 11:00 AM)**

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