King Saud University (RIYADH) College of business administration Department of Quantitative Analysis.

Business Forecasting (QUA 307)

Batch : Semester 2 (1438/1439)Section: 50794Credit hours : 3Number of Sessions : 42Course Facilitator: Dr. Najwan H. AlsadatOffice : Building 3 2nd Floor, Office No. 185 E-mail: nalsadat@ksu.edu.saLecture: day: 2, Time: 8-11Office Hours: day: 1, 3, 5, Time: 12-1

## **Course Objectives**

- The aim of this course is the understanding of forecasting methods for economic, social and administrative phenomena,
- To provide the student knowledge of the principles and basic concepts of forecasting methods and their uses and problems related
- To understand and use the modern software techniques for Modeling of the administrative problems in the predictable future.
- To prepare the students to perform scientific interpretation of current and future behavior for decision-making and policy based on sound statistical tools.

| Session          | Content  |
|------------------|--|
| Sessions 1-3     | Introduction to forecasting  |
| Sessions 4-6     | A review of basic statistical concepts                                   |
| Sessions 7-12    | Simple linear regression models  |
| Sessions 13-18   | Multiple linear regression models  |
|                  | First Midterm (25 points) Monday (24/6/1439 - 12/3/2018) (8:30-10:00 AM) |
| Sessions 19-21   | Moving averaging methods   |
| Sessions 22-27   | Exponential smoothing methods  |
| Sessions 28-32   | Time series analysis   |
|                  | Second Midterm (25 points) Monday (23/7/1439 -9/4/2018) (8:30-10:00 AM)  |
| Sessions 34 - 38 | Box-Jenkins models   |
| Sessions 39 - 42 | Applied examples for illustration  |
|                  | Duties (10 points)   |
|                  | Final Exam (40 points)   |

## **Content of the Course and Session Plan**

**Text Book Recommended:** Hanke and Wichern, **Business forecasting, Pearson International**, Ninth Edition.