

King Saud University (RIYADH)
College of business administration
Department of Quantitative Analysis.
MSc in Decision Sciences (MSDS)

Course Title: Probabilistic Decision Analysis Models Code: SDE 546
Batch: Semester 2 (1436/1437h) Credit hours : 3 Number of Weeks: 15
Section: 45001 Course Facilitator: Dr .Manahil Kamal Altib
Office: Building 3/2nd Floor/ Office No 118 E-mail: Maltib@ksu.edu.sa
Lecture: Monday 8:00 AM to 10.50 AM (Hall A6)
Office Hours : Sunday (9-10) & (11-12) , Tuesday (9-10) & (12-1) ,
Thursday (9-10) & (12-1)

Course Objectives

This Course aims to make students acquire the analytical and critical thinking skills needed to identify, analyze, and evaluate alternative solutions to Decision Sciences problems, introduce students to use quantitative methods and techniques for effective decisions-making; model formulation and applications that are used in solving business decision problems.

Content of the Course

Week	Content
1	Probability and Statistics (Review)
2-3	decision theory
4-5	queuing theory
6	Computer Solution
7	First Midterm (20 points) : Monday (20/05/1437-29/2/2016) (8-9:30 AM)
7-9	scheduling and inventory theory
10-12	Markov chains
12	Computer Solution
13	Second Midterm (20 points) : Monday (11/07/1437- 18/4/2016) (8-9:30 AM)
13-14	birth and death processes
	Quiz and duties (10 points)
	Project (10 points)
	Final Exam (40 points) Sunday (08/08/1437- 15/5/2016) (8:00-10:00)

References :

- **Operation Research Applications and Algorithms /** Waynet l - Winston .
- **Introduction to Management Science /** Bernard W. Taylor III