



Prince Sultan University
Department of Mathematical Science
SYLLABUS
Fall Semester 2009 – 2010 (092)

Course : STAT 101
Title : Introduction to Statistics and Probability Theory
Textbook : Introduction to Probability & Statistics;
W. Mendenhall, R. Beaver, and B. Beaver; 12th/13th Edition.

Week	Date	Sec.	Material
1	February 20 – 24	1.1 1.2	Variables and Data Types of Variables
2	Feb. 27 – Mar. 03	1.3 1.4 1.5	Graphs for Categorical Data Graphs for Quantitative Data Relative Frequency Histograms
3	March 06 – 10	2.1 2.2 2.3	Describing a Set of Data with Numerical Measures Measures of Center Measures of Variability
4	March 13 – 17	2.4 2.5 2.6	On the Practical Significance of the Standard Deviation A Check on the Calculation of s Measures of Relative Standing
5	March 20 – 24 March 24	2.7 3.1	The Box Plot Bivariate Data MAJOR EXAMINATION I (1.1 – 2.7)
6	March 27 – 31	3.2 3.3 3.4	Graphs for Qualitative Variables Scatterplots for Tow Qualitative Variables Numerical Measures for Quantitative Bivariate Data
7	April 03 – 07	4.1 4.2 4.3	The Role of Probability in Statistics Events and the Sample Space Calculating Probabilities Using Simple Events
8	April 10 -- 14	4.4 4.5 4.6	Useful Counting Rules Event Composition and Event Relations Conditional Probability and Independence
9	April 24 – 28 April 28	4.7	Bayes' Rule MAJOR EXAMINATION II (3.1 – 4.7)
10	May 01 – 05	4.8 5.1 5.2	Discrete Random Variables & Their Prob. Distributions Introduction to Discrete Distributions The Binomial Probability Distribution
11	May 08 – 12	5.3 5.4 6.1	The Poisson Probability Distribution The Hypergeometric Probability Distribution Probability Distributions for Continuous Random Variables
12	May 15 – 19	6.2 6.3	The Normal Probability Distribution Tabulated Areas of the Normal Probability Distribution
13	May 22 – 26 May 26	6.4 7.2	Normal Approximation to the Binomial Prob. Distribution Sampling Plans and Experimental Designs MAJOR EXAMINATION III (4.8 – 6.4)
14	May 29 – Jun 02	7.3 7.4 7.5	Statistic and Sampling Distributions The Central Limit Theorem The Sampling Distribution of the Sample Mean
15	Jun 05 – 09	7.6	The Sampling Distribution of the sample Proportion Review

Grading Policy:

Exam 1 + Exam 2 + Exam 3: 40 % Final: 40%
Quizzes and Participation: 20%