



Prince Sultan University
Department of Mathematical Science
SYLLABUS
Second Semester 2009 – 2010 (092)
Dr. Bahaa El-Din Abdalla

Course : STAT 271
Title : Statistical Analysis
Textbook : Introduction to Probability & Statistics;
W. Mendenhall, R. Beaver, and B. Beaver; 12th /13th Edition.

Week	Date	Sec.	Material
1	February 20 – 24	8.4	Review of Sampling Distributions Point estimation
2	Feb. 27 – Mar. 03	8.5	Interval estimation: Large-sample confidence interval for a mean, Large-sample confidence interval for a proportion
3	March 06 – 10	8.6 8.7	Estimating the difference between two means Estimating the difference between two proportions
4	March 13 – 17	8.9 9.2	Choosing the sample size A statistical test of hypothesis
5	March 20 – 24 March 24	9.3	A Large-sample test about a population mean MAJOR EXAMINATION I (Ch. 8 + 9.3)
6	March 27 – 31	9.4 9.5	A Large-sample test for the difference of 2 means A Large-sample test about a population proportion
7	April 03 – 07	9.6 10.2	A Large-sample test for the difference of 2 proportions Student's t distribution
8	April 10 -- 14	10.3 10.4	Small sample Inferences concerning a mean Small sample Inferences for the difference of 2 means
9	April 24 – 28 April 28	11.1	The design of an experiment MAJOR EXAMINATION II (9.4, 9.5, 9.6 + Ch. 10)
10	May 01 – 05	11.4 11.5	The completely randomized designs The ANOVA of a completely randomized designs
11	May 08 – 12	12.2 12.3	A simple linear probabilistic model Method of least squares
12	May 15 – 19	12.4 12.5	ANOVA for linear regression Testing the usefulness of the linear regression mode
13	May 22 – 26 May 26	13.2 13.3	The multiple regression model ANOVA for multiple regression MAJOR EXAMINATION III (Ch. 11 + Ch. 12 + Ch. 13)
14	May 29 – Jun 02	14.2 14.3 14.4	Pearson's Chi-square statistic Testing specified cell probabilities: the goodness-of-fit test Contingency tables: A two-way classification
15	Jun 05 – 09	15.2 15.3	The Wilcoxon Rank Sum Test The Sign Test for a Paired Experiment

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