

## **Prince Sultan University**

## **Department of Mathematical Sciences SYLLABUS**

Dr. Bahaa Eldin Abdalla First Semester 2013 – 2014 (131)

Course **STAT 271** 

Title Statistical Analysis

Elementary Statistics (A Step by Step Approach); Allan G. Bluman; 8<sup>th</sup> Edition. Textbook

Week	Date	Sec.	Material
1	Sept. 01 – 05	Ch.6 7.1	Review of The Normal Distribution Confidence Intervals for $\mu$ When $\sigma$ Is Known and Sample Size
2	Sept. 08 – 12	7.2 7.3	Confidence Intervals for the Mean When $\sigma$ Is Unknown Confidence Intervals and Sample Size for Proportions
3	Sept. 15 – 19	7.4 8.1	Confidence Intervals for Variances and Standard Deviations Steps in Hypothesis Testing-Traditional Method
4	Sept. 22 – 26	8.2 8.3	z Test for a Mean t Test for a Mean
5	Sept. 29–Octo. 03 October 03	8.4	z Test for a Proportion First Major Examination (7.1 – 8.4)
6	Octo. 06 – 10	8.5 9.1	$\chi^2$ Test for a Variance or Standard Deviation Testing the Difference Between Two Means: Using the <i>z</i> Test
Eid Al-Adha Vacation (October 11 20)			
7	Octo. 21 – 24	9.2 9.3	Testing the Difference Between Means of Independent samples: Using the <i>t</i> Test Testing the Difference Between Two Means: Dependent samples
8	Octo. 27 – 31	9.4	Testing the Difference Between Proportions
9	Nove. 03 – 07 <b>November 07</b>	9.5	Testing the Difference Between Two Variances Second Major Examination (8.5 – 9.5)
10	Nove. 10 – 14	10.1 10.2	Scatter Plots and Correlation Regression
11	Nove. 17 – 21	10.3	Coefficient of Determination and Standard Error of the Estimate
12	Nove. 24 – 28	11.1 11.2	Test for Goodness of Fit Tests Using Contingency Tables
13	Dece. 01 – 05 <b>December 05</b>	12.1	One-Way Analysis of Variance Third Major Examination (10.1 – 12.1)
14	Dece. 08 – 12	12.2 13.3	The Scheffe Test and the Tukey Test The Wilcoxon Rank Sum Test
15	Dece. 15 – 19	13.5	The Kruskal-Wallis Test
16	Dece. 22 – 23		Review

<u>Grading Policy</u>: Exam 1: <u>10%</u>, Exam 2: <u>10 %</u>, Exam 3: <u>10 %</u>, Quizzes: <u>10%</u>, Attendence: <u>10%</u>, Participation: <u>10%</u>, Final: <u>40%</u>