

Prince Sultan University

Department of Mathematical Sciences SYLLABUS

Second Semester 2010 – 2011 (Term 102)

Dr. Bahha Eldin Abdalla & Dr. Mohammed Al-Haj Ebrahem

| Course | : | STAT 101 | | |
|----------|---|---|--|--|
| Title | : | Introduction to Statistics and Probability Theory | | |
| Textbook | : | Elementary Statistics (A Step by Step Approach); | | |
| | | Allan G. Bluman; 7 th Edition. | | |

| Week | Date | Sec. | Material |
|------|-------------------|------|---|
| 1 | Echruczy 12 16 | 1.1 | Descriptive and Inferential Statistics |
| | February 12 – 16 | 1.2 | Variables and Types of Data |
| 2 Fe | February 19 – 23 | 1.3 | Data Collection and Sampling Techniques |
| | rebluary 19 – 25 | 1.4 | Observational and Experimental Studies |
| 3 F | Feb. 26 – Mar. 2 | 1.5 | Uses and Misuses of Statistics |
| | 1 eb. 20 – Mar. 2 | 2.1 | Organizing Data |
| 4 | March 5 – 9 | 2.2 | Histograms, Frequency Polygons, and Ogives |
| | | 2.3 | Other Types of Graphs |
| 5 | March 12 – 16 | 3.1 | Measures of Central Tendency |
| | | 3.2 | Measures of Variation |
| 6 | March 19 – 23 | 3.3 | Measures of Position |
| | | 3.4 | Exploratory Data Analysis |
| 7 | March 26 – 30 | 3.4 | Exploratory Data Analysis |
| 1 | MARCH 30 | | MAJOR EXAMINATION I (1.1 – 3.4) |
| 8 | April 2 – 6 | 4.1 | Sample Spaces and Probability |
| 9 | April 16 – 20 | 4.2 | The Addition Rules for Probability |
| | April 10 – 20 | 4.3 | The Multiplication Rules and Conditional Probability |
| 10 | April 23 – 27 | 4.4 | Counting Rules |
| | | 4.5 | Probability and Counting Rules |
| 11 | April 30 – May 4 | 5.1 | Probability Distributions |
| | . , | 5.2 | Mean, Variance, Standard Deviation, and Expectation |
| 12 | May 7 – 11 | 5.3 | The Binomial Distribution |
| | | 5.4 | Other Types of Distributions |
| | May 14 – 18 | 5.4 | Other Types of Distributions |
| 13 | | | |
| | MAY 18 | | MAJOR EXAMINATION II (4.1 – 5.4) |
| 14 | May 21 25 | 6.1 | Normal distributions |
| | May 21 – 25 | 6.2 | Applications of the Normal Distribution |
| 15 | May 28 – June 1 | 6.3 | The Central Limit Theorem |
| | | 6.4 | The Normal Approximation to the Binomial Distribution |

Grading Policy:

Exam 1: 20 % , Exam 2: 20 % , Final: 40% Quizzes and Participation: 20%