

## **BSAD 2130**

### **PRINCIPALES OF BUSINESS statistics**

#### 1.0 Course Description

- 1.1 Overview of Content and Purpose of the Course: Emphasizes the function of statistics in business, including descriptive statistical measures, probability, probability distributions, sampling, estimation analysis, hypothesis testing and simple regression and correlation.
- 1.2 For Whom Course is Intended: This course is for students in business administration and in economics or others in the university who have a desire for an introductory course in statistics.
- 1.3 Prerequisites: MATH 1320 and 12 credit hours, and CSCI 1000.

#### 2.0 Objectives

- 2.1 To give the student an understanding of the functions of statistics in modern business.
- 2.2 To give the student an appreciation of how statistics may be used as an aid in making business decisions.
- 2.3 To prepare the student for more advanced courses in the field of statistics.

#### 3.0 Content and Organization

- 3.1 Descriptive Statistics  
Quantitative and qualitative data; tabular and graphic summary of data; frequency distribution, location and dispersion correlated measures, such as mean median, and standard deviation.
- 3.2 Probability and Probability Distributions"  
Introduction to probability and probability distribution; discrete and continuous probability distribution; expected value concept and decision analysis. Binomial, Poison, and Normal probability distribution.

- 3.3 Inferential Statistics
  - 3.3.1 Sampling and sampling distribution; types of samples; sample size determination.
  - 3.3.2 Concept of estimation; point and interval estimation; confidence interval.
  - 3.3.3 Nature of statistical hypothesis. Introduction to hypothesis testing; inference about mean and proportion; comparison of two populations parameters.
  
- 4.0 Teaching Methodology
  - 4.1 Methods to be Used

Lecture and discussion. Experiential techniques through short projects: Small projects will be assigned and intricacies of survey design, data collection, analysis and statistical model building will be discussed in the class. The course will make extensive use of computers.
  
- 5.0 Evaluation
  - 5.1 The evaluation of the course may involve written examinations and specific assignments. The specific role of any of these items in building the final grade will be detailed in the course syllabus distributed at the beginning of the semester by the instructor.
  
- 6.0 Other
  - 6.1 Contact Hours

The course requires 45 hours of contact with the students.
  
- 7.0 Resource Material
  - 7.1 Textbooks

Equivalent to the following books (use latest edition):

Levin, Richard, Statistics for Management. Prentice-Hall, Inc.

Anderson, D.R., Sweeney, D.J., and Williams, T.A., Statistics for Business and Economics. West Publishing Co.

Picconi, Mario, Albert Romano and Charles Olson. Business Statistics: Elements & Applications. Harper/Collins College Publishers.