Virginia Western Community College
BUS 225
Applied Business Statistics

Prerequisites

MTH 120 and BUS 125

Course Description

Introduces statistics as a tool in decision making. Emphasizes ability to collect, present, and analyze data. Employs measures of central tendency and dispersion, statistical inference, index number, and time series analysis.

Semester Credits: 3 Lecture Hours: 3 Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:
Statistical Techniques in Business & Economics: 16th (w/Connect code)Author: Lind Copyright Year: 2015 Publisher: McGraw-Hill Companies

Other Required Materials:
Computer with online accessibility plus text and supplemental items below.

The following supplementary materials are available:

1. Financial calculator (TI BAII Plus or equivalent)

2. Connect code

Course Outcomes

At the completion of this course, the student should be able to:

1. Organize and interpret descriptive statistics in a frequency table format
2. Apply probabilities in problem-solving
3. Test hypotheses of population means and proportions
4. Apply and interpret least squares linear regression

Topical Description

MODULE 1 Statistics: What is it?

Date/Week   Assignment

Chapter 1 - what is statistics

Chapter 2 - describing data: frequency tables

Chapter 3 - describing data: numerical measures

Test

MODULE 2: Understanding and Applying Probabilities

Date Date/Week   Assignment

Chapter 4 - describing data: Displaying and exploring data

Chapter 5 - a survey of probability concepts

Test

MODULE 3: Probability Distribution and the Central Limit Theorem

Date/Week   Assignment

Chapter 6 - discrete probability distributions

Chapter 7 - continuous probability distributions

Chapter 8 - sampling methods and the CLT

Test

MODULE 4: Estimation and Confidence Intervals, Hypothesis Testing

Date Date/Week   Assignment

Chapter 9 - Estimation and confidence intervals

Chapter 10 - One-sample test of hypothesis

Chapter 11 - Two-sample test of hypothesis

Test

MODULE 5: Linear Regression and Correlation

Date/Week   Assignment

Chapter 13- Linear Regression

Chapter 14- Multiple Regression

Chapter 16 - time series and forecasting

Test FINAL

<u>Notes to Instructors</u>

1. All topics should be covered.

2. Optional topics are available if time permits.