COURSE OUTLINE

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/Recitation Hours: 0



Course Outcomes

By the completion of the course, students 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



Required Materials:

Computer with online accessibility plus text and supplemental items below.

Textbook:

Statistical Techniques in Business & Economics: 16th (w/Connect code)

Author: Lind Copyright Year: 2015 Publisher: McGraw-Hill Companies

The following supplementary materials are available:

- 1. Financial calculator (TI BAII Plus or equivalent)
- 2. Connect code



Topical Description: (Outline chapters and sections to be covered in the book – may include timeline)

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



Notes to Instructors (List information about optional topics, departmental exams, etc)

- 1. All topics should be covered.
- 2. Optional topics are available if time permits.
- 3.

4.

