

**SAM HOUSTON STATE UNIVERSITY**  
**COLLEGE OF BUSINESS ADMINISTRATION**  
**Executive MBA in Banking and Financial Institutions Program**

**COURSE NUMBER:**            **BANA 5368**

**COURSE TITLE:**  
                 **Techniques of Statistical Analysis**

**INSTRUCTOR:**  
                 **Valerie P. Muehsam, Ph.D.**

**OFFICE:**  
                 **Smith-Hutson Business Building, Room 103B**

**PHONE:**  
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**On Campus**

**Meeting Times**        **August 7<sup>th</sup> – 19<sup>th</sup>, 2017:**  
                 **TTS        8:00 a.m. – 10:50 a.m. Room 105**  
**Web Schedule:**        **December 10, 2017 to April 7, 2018**

**REQUIRED TEXT:**  
                 *Statistical Techniques in Business & Economics, 16<sup>th</sup> Edition* by Lind, Marchal and Wathen  
                 (McGraw-Hill Irwin), 2015.

**DESCRIPTION OF COURSE:**

This course is a study of the concepts and application of some of the widely used statistical and quantitative techniques for decision making. Topics include statistical inference, ANOVA, correlation, simple linear regression, multiple regression and time series.

**COURSE OBJECTIVES:**

The major objectives of this course are:

1. To introduce the students to a variety of common quantitative techniques used in the business sector.
2. To familiarize the students with analyzing count data using chi-square goodness-of-fit procedures.
3. To introduce the students to analysis of variance procedures.
4. To familiarize the students with the techniques used to investigate the existence of relationships between two variables – correlation analysis and simple linear regression.
5. To familiarize the students with multiple linear regression. The strengths and weaknesses of the procedure along with common misinterpretations will be emphasized.

## **COURSE STRUCTURE:**

The lectures will emphasize concepts, motivation, interpretation, and present vocabulary. Statistical formulas will be given and discussed on a heuristic basis. Mathematical derivations of the formulas will not be presented.

## **COURSE EVALUATION PROCESS:**

### **Exams**

There will be two major exams, online problem sets and a course project.

### **Evaluations**

Exam I	30%
Exam II	30%
Online Assignments	30%
Course Project	10%

The course grade will be based on the following grading scale:

A .... 90 - 100

B .... 75 - 89

C .... 65 - 74

F .... below 65

## **Blackboard**

I will be utilizing Blackboard to post assignments for this course and to email all students. All assignments and notices, including grades, will be kept online. All online assignments must be submitted by email to [pepper@shsu.edu](mailto:pepper@shsu.edu)

## **DISABLED STUDENT POLICY**

It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic, Student Life program, or activity. Disabled students may request help with academically related problems stemming from individual disabilities from their instructors, department/division chair, or by contacting the Director of the Counseling Center, Lee Drain Annex, or by calling (936) 294-1720.

## **TOPICS/TENTATIVE COURSE OUTLINE**

### **Topic(s)**

Role of Statistics in Business

Statistical Inference of means and proportions

Analysis of Variance

### **Exam I – August 12, 2017**

Goodness-of-Fit Analysis

Correlation Analysis and Simple Linear Regression

Multiple Regression and Model Selection

### **Exam II – August 19, 2017**

**Web Schedule TBA:        December 10, 2017 to April 7, 2018**