# About the Syllabus

## Student Learning Outcomes (SLO)

Upon successful completion of this course, students will be able to:

* Module 1 – Exam 1
* Ch. 1 Define statistics, its concepts *and the two branches of statistics: descriptive and inferential*
* *Ch 2 Describe, display and explore descriptive data, with basic Excel graphic presentation*
* *Ch 3 Describe data of numerical measures based on calculation formulas*
* *Ch 4 Explain and its basic concepts, fundamental laws of probability, and combinatorics technique*
* *Module 2 – Exam 2*
  1. *Ch 6 Explain the concept of random variable, probability distribution, expected value and variance*
  2. *Ch 7-8 Demonstrate use of discrete and continuous probability distributions to calculate probabilities*
  3. *Explain the concept and theorem of sampling distribution and basic techniques of statistical inference*
  4. *Demonstrate use of estimation and confidence intervals*
* *Module 3 – Exam 3*
* *Explain the concept and application of hypothesis testing techniques for one sample, two sample, variance and nominal level tests*
* *Demonstrate use of correlation and simple linear regressions*

## Required Texts/Readings

### Textbook

* *Name of Book/Material: Statistical Techniques in Business & Economics*
* *ISBN-13: 9781259666360*
* *ISBN-10: 1259666360*
* *Author: Douglas A. Lind, William G. Marchal, and Samuel A. Wathen,*
* *Link to Book/Material:* [*https://www.mheducation.com/highered/product/statistical-techniques-business-economics-lind-marchal/M9781259666360.html*](https://www.mheducation.com/highered/product/statistical-techniques-business-economics-lind-marchal/M9781259666360.html)

## Homework

* Homework is due the day before the next class session
* Week 1 dues date is waived because the text isn’t available yet.

# Chapter 1