

## **STA2023 Fundamental Business Statistics (3 credits)**

**A. Term:** Fall 2025

**B. Section:** 0025

**C. Delivery Method(s)/Location:** Face-to-Face, MWF 9:20-10:10am, OSB 108

### **D. Instructor Information**

**Name:** SHERIF MOHAMMED

**Contact Information:** [sm24bi@fsu.edu](mailto:sm24bi@fsu.edu)

**Office Hours:** WEDNESDAYS, 12 - 1PM

**Office Location:** OSB 331

### **E. Prerequisites or Co-requisites**

Two years of high school algebra is recommended. Special Note: High school students who earn a "3" or better on the AP Statistics Exam may elect to be given credit for STA 2023.

### **F. Course Description**

In this course, students will utilize descriptive and inferential statistical methods in contextual situations, using technology as appropriate. The course is designed to increase problem-solving abilities and data interpretation through practical applications of statistical concepts. This course is appropriate for students in a wide range of disciplines and programs.

### **G. Course Objectives**

1. Students will visualize and summarize data using descriptive statistics.
2. Students will apply basic probability concepts to draw reasonable conclusions.
3. Students will employ concepts of random variables, sampling distributions, and central limit theorem to analyze and interpret representations of data.
4. Students will choose an appropriate method of inferential statistics, including confidence intervals and hypothesis testing, to make broader decisions based on sample data.
5. Students will model linear relationships between quantitative variables using correlation and linear regression.

### **H. CoreFSU Syllabus Language**

This course has been approved to meet FSU's CoreFSU Quantitative and Logical Thinking requirements and helps you become a critical analyst of quantitative and logical claims.

In order to fulfill the State of Florida's College mathematics and computation requirement the student must earn a "C—" or better in the course.

By the end of the course, students will demonstrate the ability to:

1. Select and apply appropriate methods (i.e., mathematical, statistical, logical, and/or computational models or principles) to solve real-world problems.
2. Use a variety of forms to represent problems and their solutions.

#### I. Required Texts, Readings, and/or other Resources

- ~ A personal computer, reliable internet connection, and Chrome or Firefox browser.
- ~ A TI-84 Plus or equivalent calculator or app.
- ~ A textbook is not required. Notes and exercises will be posted on Canvas.

#### J. Course Schedule/Topical Outline

Week	Dates	Topics
1	8/25 – 8/31	Preliminary Definitions, Frequency Tables & Graphs
2	9/1 – 9/7	Summary Statistics
3	9/8 – 9/14	Summary Statistics
4	9/15 – 9/21	Simple Linear Regression
5	9/22 – 9/28	Probability
6	9/29 – 10/5	Probability / Random Variables
7	10/6 – 10/12	Random Variables
8	10/13 – 10/19	Binomial Distributions
9	10/20 – 10/26	Normal Distributions
10	10/27 – 11/2	Normal Distributions / Central Limit Theorem
11	11/3 – 11/9	Central Limit Theorem
12	11/10 – 11/16	Confidence Intervals for Mu
13	11/17 – 11/23	Confidence Intervals for Mu
14	11/24 – 11/30	Hypothesis Tests for Mu
15	12/1 – 12/7	Hypothesis Tests for Mu
FE	<b>There is no final exam. The final quiz will be available on Canvas from 12:01am EST Monday Dec 8 to 11:59pm EST Wednesday Dec 10.</b>	

#### K. Grading/Evaluation

a.

Component / Category	Percentage Weight	Graded for	Help permitted	Number of submissions permitted	Done where
Daily Attendance	10%	Attendance	N/A	N/A	In class
Daily Comprehension	15%	Accuracy	Yes	1 each	In class
QLT Assessment	10%	Accuracy	No	2	Out of class, on Canvas
Quizzes, approx 1 per week	65%	Accuracy	No	2 each	Out of class, on Canvas
Total	100%	---	---	---	---

b. Letter grades will be selected from the table below after rounding the numerical course grade up to the next higher whole number.

A ≥93 A- 90-92	B+ 87-89 B 83-86 B- 80-82	C+ 77-79 C 73-76 C- 70-72	D+ 67-69 D 63-66 D- 60-62	F ≤59
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c. The use of AI (artificial intelligence) and unsanctioned internet sources is not permitted on any of the assessments in this class. All internet sources (apart from the course Canvas) are considered unsanctioned unless the instructor specifically states in writing that a given source is sanctioned.

#### **L. Syllabus Change Policy**

Except for changes that substantially affect implementation of the evaluation statement, this syllabus is a guide for the course and is subject to change with advance notice.

#### **M. University Policies and Syllabus Language**

Visit link below to review

University Attendance Policy

Academic Honor Policy

Americans With Disabilities Act

Academic Success

Free Tutoring from FSU

Statement on Public Health Protocols

<https://facsenate.fsu.edu/Curriculum-Resources/syllabus-language>