

STA1013 Statistics Through Example (3 credits)

A. Term: Fall 2025

B. Sections: 7 & 8

C. Delivery Method(s)/Location: Online Asynchronous/Canvas

D. Instructor Information

Name: Apurv Patel

Contact Information: ap23bd@fsu.edu

Office Hours: By appointment (email me to schedule)

E. Prerequisites or Co-requisites

None.

F. Course Description

This course provides students with a background in applied statistical reasoning. Fundamental topics are covered, including graphical and numerical descriptions of data, understanding randomness, central tendency, correlation versus causation, line of best fit, estimation of proportions, and statistical testing. Statistical thinking, relevant ideas, themes, and concepts are emphasized over mathematical calculation. In this class students learn many of the elementary principles that underlie collecting data, organizing it, summarizing it, and drawing conclusions from it.

G. Course Objectives

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.
3. Apply sound concepts of sample selection and experimental design in producing data.
4. Use statistical thinking in the context of work processes, academic endeavors, and everyday life.
5. Describe how inferential statistical methods are used to make valid judgments based on the data.
6. Evaluate the validity of statistical results with skepticism based on sensible considerations.

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. Tentative Course Schedule

Week	Dates	Topics
1	8/25 – 8/31	Preliminary Definitions, Types of Sampling
2	9/1 – 9/7	Frequency Tables & Graphs
3	9/8 – 9/14	Summary Statistics
4	9/15 – 9/21	Summary Statistics
5	9/22 – 9/28	Simple Linear Regression Basics
6	9/29 – 10/5	Probability
7	10/6 – 10/12	Random Variables
8	10/13 – 10/19	Normal Distributions
9	10/20 – 10/26	Central Limit Theorem
10	10/27 – 11/2	Confidence Intervals for μ
11	11/3 – 11/9	Confidence Intervals for μ
12	11/10 – 11/16	Hypothesis Tests for μ
13	11/17 – 11/23	Hypothesis Tests for μ
14	11/24 – 11/30	One-proportion Inference (Sampling Distribution of \hat{p} , Confidence Intervals for p , Hypothesis Tests for p)
15	12/1 – 12/7	One-proportion Inference (Sampling Distribution of \hat{p} , Confidence Intervals for p , Hypothesis Tests for p)
FE	There is no final exam. The final individual-work quiz will be available on Canvas from 12:01am EST Monday Dec 8 to 11:59pm EST Wednesday Dec 10.	

K. Grading/Evaluation

a.

Component / Category	Percentage Weight	Graded for	Help permitted	Number of submissions permitted	Done where
Weekly Check-in	10%	Accuracy	Yes	Unlimited each	Online on Canvas
Collab Quizzes, approx 1 per week	15%	Completion	Yes	Unlimited each	Online on Canvas
QLT Assessment	10%	Accuracy	No	2	Online on Canvas
Individual-work Quizzes, approx 1 per week	65%	Accuracy	No	2 each	Online on Canvas
Extra Credit	5%	Accuracy	No	1	Online on Canvas

Total	105%	---	---	---	---
-------	------	-----	-----	-----	-----

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	B+ 87-89	C+ 77-79	D+ 67-69	F ≤59
A- 90-92	B 83-86	C 73-76	D 63-66	
	B- 80-82	C- 70-72	D- 60-62	

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>