

STA 2023: Fundamental Business Statistics

Fall 2022

Course Information

Sections 0016 and 0028

Credit-Hours: 3

Format: Face-to-Face

Class Meeting Days, Times, Locations: Monday, Wednesday, Friday 4:50 - 5:40 PM HCB 0312

Prerequisites: None, but we recommend two years of high school algebra.

Special Note: High school students who earn a “3” or better on the AP Statistics exam can be given credit for STA 2023.

Canvas

Course website: <https://canvas.fsu.edu>

Canvas Support

Email: canvas@fsu.edu

Phone: 850-644-8004

Website: <https://support.canvas.fsu.edu/home/>

Hours: 8am-5pm, Mon-Fri

Please turn on the course notifications in Canvas by going to Account/Notifications and selecting the Notify immediately option for all of the items under Course Activities.

Please check your FSU email and the course announcements every day.

If you communicate with me via email, please use your @fsu.edu account.

We will not use Honorlock.

Instructor Information

Instructor: Palmer Swanson

Email: pjswanson@fsu.edu

Office Location & Hours: OSB 322, Wednesday 1:15-2:15 pm or by appointment

Grader Information

Grader: Tianyuan Cheng

Email: tc19n@fsu.edu

Office Location & Hours: Wednesday s 2:00pm - 3pm via zoom or by appointment

Course Description

The course covers statistical applications in business, involving graphical and numerical descriptions of data, data collection, correlation and simple linear regression, elementary probability, random variables, Binomial and Normal distributions, sampling distributions, and confidence intervals and hypothesis tests for a single sample.

The purpose of this course is to prepare students for further study and job preparation in the field of Business. It will emphasize understanding of data and interpretation of statistical analyses. It will require students to think of data, and report the results of their analyses, in context.

Learning Objectives

This course has been approved to meet FSU's Liberal Studies 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.
 - a. The above two competencies will be assessed in the Liberal Studies Quantitative Assessment for STA 2023, which includes a written summary of results.
3. Use descriptive statistics and graphical methods to summarize data accurately.
4. Use inferential statistics to make valid judgments based on the data available.
5. Describe the goals of various statistical methodologies conceptually.
6. Apply statistical techniques in the context of business processes, everyday life, and further studies in their discipline.
7. Develop a healthy skepticism toward statistical studies and their results based on a sensible consideration of the techniques employed.

Required Materials

- A personal computer, reliable internet connection, and Chrome or Firefox browser.
- A TI-84 Plus or equivalent calculator. We will teach you how to use a TI-84 series calculator, but we cannot promise to be able to help with any other type of calculator.
- A textbook is not required for this class. The instructor will provide all required course notes and exercises. Please note that the materials provided by the instructor were put together for your individual use only. We ask that you do not share them, especially with third parties who are not enrolled in this class. If you seek help outside of class, then you may, of course, allow your helper to see the materials, but please do not allow them to make copies or in any other way take our material. We appreciate your co-operation in protecting our material. Thank you!

Additional Resource

The following free online textbook is an additional resource that you might find useful: Introductory Statistics from OpenStax, Print ISBN 1938168208, Digital ISBN 1947172050,

www.openstax.org/details/introductory-statistics.

Note on Technology-dependent Assessments

This course is technology-dependent. While we will do our best to work with you on technology issues, please be aware that if you take an assessment but we can find absolutely no record of the fact, then

we will not be able to give you credit for it. Please do not use Safari when you take assessments on Canvas, please use Chrome or Firefox.

Grades

Assessments that are not submitted will receive a grade of zero.

There will be no makeups without a valid, documented excuse.

However, the two lowest timed and the two lowest open quizzes percentage wise will be dropped from the final grade calculation. So, your four lowest quizzes will be excluded from both the Canvas and the final grade calculation.

If you believe that the grade you received on an assessment is incorrect, please bring it to my attention within 48 hours after the grade has been made available to you. If no issues are raised during that 48-hour time frame, then it will be assumed that the grade is accepted and subsequent requests for a grade review may not be granted.

Your final course grade will be calculated in the following manner:

Assessments: all are online on Canvas	Weight
Open Quizzes <ul style="list-style-type: none"> • Collaboration is allowed • Unlimited Attempts • Two lowest dropped • All due December 5th at 11:59 pm 	25%
Liberal Studies Quantitative Assessment (LSQA) <ul style="list-style-type: none"> • Collaboration not permitted • Cannot be dropped • To be done online 	10%
Timed quizzes <ul style="list-style-type: none"> • Collaboration not permitted • Two Attempts • Two lowest dropped • Final timed quiz will be due December 5th at 11:59 pm 	65%
Total	100%

There may be opportunities for extra credit at various points throughout the semester.

Your final percentage grade will be rounded up to the nearest whole integer (for example, an 89.3 will be rounded up to a 90).

On all quizzes, you may use your own notes, the notes posted on canvas, or any combination of the two.

Collaboration is allowed on the open quizzes. Collaboration is not allowed on the timed quizzes. On

timed quizzes, you may not utilize any outside help

Grading Scale (Percent)

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
>93%	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	<60

A request for a grade of “Incomplete” will

- ~ NOT be granted if you have completed the coursework, including the assessments that cannot be dropped and excluding the drops and allowable absences.
- ~ be granted only if both of the following conditions are satisfied:
 - (1) the only assessment that you have yet to take is the final assessment, and
 - (2) your overall average excluding the final assessment is a passing grade (70% or above).

How to aim for success in this class

For each topic/module:

- ~ during the lectures, pay attention and follow along using the filled-in notes, ask questions,
- ~ after the lectures, study thoroughly the information and examples in the filled-in notes,
- ~ then attempt the relevant Open Quiz,
- ~ do all of the try-on-your-own exercises in the notes,
- ~ do all of the extra exercises posted with the notes,
- ~ study the solutions even if you get the answers right because the solutions can provide insights to the problems,
- ~ make sure you know how to use your calculator appropriately,
- ~ then go back and finish up the relevant Open Quiz,
- ~ then take the relevant Timed Quiz.

Remember that, in addition to emailing us or coming to office hours, you can discuss the material, ask questions and get help in the Friday recitations.

Sexual Misconduct and Title IX Reporting

As an instructor, I am obliged to report all instances of sexual misconduct and other Title IX issues that I become aware of to the University’s Title IX Director; I cannot hold such information confidential. If you would like to discuss your situation in confidence, you may contact the Victim Advocate Program (<https://dos.fsu.edu/vap/>), Counseling & Psychological Services (<https://counseling.fsu.edu/>), the Employee Assistance Program (<https://eap.fsu.edu/>), University Health Services (<https://uhs.fsu.edu/>), or pastoral counselors. If you would like to submit a report to the University’s Title IX Director, please go to <https://report.fsu.edu/>.

Final Exam Rescheduling Policy

You may not take the final exam before final exams week. Individual students who need to reschedule the final exam for a different time during final exams week should talk to me about it first to get my approval and then fill out and follow the instructions on the “Request to Reschedule a Final Examination” form at https://artsandsciences.fsu.edu/sites/g/files/upcbnu321/files/2022-01/Request_to_Reschedule_01032022.pdf.

The form needs to be submitted to the College of Arts and Sciences before 5pm on the last day of classes.

If you experience a documented emergency that prevents you from observing the above deadline, contact me as soon as you are able to, and we’ll take it from there.

University Attendance Policy

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness. Drop and Withdrawal deadlines are given in the University’s academic calendar at <https://registrar.fsu.edu/calendar/>.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>)

Academic Success

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Department of Student Support and Transitions to learn more.

Americans with Disabilities Act

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Office of Accessibility Services; and
- (2) request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and,
- (3) meet (in person, via phone, email, skype, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided.

This syllabus and other class materials are available in alternative format upon request.

For the latest version of this statement and more information about services available to FSU students with disabilities, contact the:

Office of Accessibility Services
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)

oas@fsu.edu

<https://dsst.fsu.edu/oas>

Academic accommodations will be provided as soon as possible after verification is received. Academic accommodations are not retroactive, so they will not apply to lectures/lessons and assessments that took place before verification was received.

Confidential Campus Resources

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program University Center A, Rm. 4100 (850) 644-7161 Available 24/7/365 Office Hours: M-F 8-5 https://dsst.fsu.edu/vap	Counseling and Psychological Services Askew Student Life Center, 2nd floor 942 Learning Way (850) 644-8255 https://counseling.fsu.edu/	University Health Services Health and Wellness Center (850) 644-6230 https://uhs.fsu.edu/
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Disaster

At times of severe weather or other disasters, please check your FSU email, your text messages, the Seminole Safe App and FSU Alerts (<https://alerts.fsu.edu/>) as often as you can to keep yourself informed. Check them every day before you leave home so that you don't miss any last minute announcements. If the University closes due to a disaster, we will all be informed via the above means, and classes and office hours will be automatically cancelled even if I don't announce it. As long as the University remains open, classes will still be on. However, please practice safety first. If it will be unsafe for you to come to class due to the effects of a disaster, please do not attempt to come in. You will not be penalized, we will work with you.

You can sign up to receive alerts via SMS text messages here: <https://emergency.fsu.edu/services/fsu-alert-emergency-notificationwarning-system/fsu-alert-sms-text-messages>.

See here for other ways in which FSU delivers warnings: <https://emergency.fsu.edu/services/fsu-alert-emergency-notificationwarning-system>.

Syllabus Change Policy

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

Classes Subject to HB233 Recording

In this class, consistent with state law and university policy, students are permitted to make recordings of class lectures for personal use only. As noted, sharing, posting, or publishing classroom recordings may subject you to honor code violations and legal penalties associated with theft of intellectual property and violations of other state law. Moreover, students and educators have expressed concern that recording classroom activities may negatively impact the learning experience for others, especially in classes that involve questions, discussion, or participation. To protect a learning environment in which everyone feels free to experiment with ideas, we ask you refrain from recording in ways that could make others feel reluctant to ask questions, explore new ideas, or otherwise participate in class. Students must monitor their recording so that they do not include participation by other students without permission. Students with disabilities will continue to have appropriate accommodations for recordings as established by the Office of Accessibility Services

Course Schedule

Module	Topic
Module 1	Prerequisite Math Skills
Module 2	Introduction
Module 3	Summary Statistics
Module 4	Normal Distributions
Module 5	Central Limit Theorem
Module 6	Simple Linear Regression
Module 7	Probability
Module 8	Random Variables
Module 9	Binomial Distribution
Module 10	One Sample Confidence Intervals
Module 11	One Sample Hypothesis Tests

Additional Information and Resources

Other Information

Florida State University, Department of Statistics

Main office 214 OSB, phone 850-644-3218.

FSU Police non-emergency: 850-644-1234.

Emergency: 911.