



STA 2023: Fundamental Business Statistics

Section 0019

Department of Statistics

Florida State University

Fall 2021

COURSE INFORMATION

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

Class Time and Location: Tuesday and Thursday, 11:35 am – 12:50 pm, OSB 0110 (**Face-to-Face**)

All the students will need to follow the University's health and safety guidelines. Please follow the below link for updated guidelines: <https://news.fsu.edu/announcements/>

In addition, *everyone is expected to get vaccinated, even if you have had COVID-19 in the past, and to wear a face covering or mask at all times when inside any FSU facility, even if you are vaccinated.* Please refer <https://news.fsu.edu/announcements/covid-19/2021/08/09/our-fall-semester-expectations-for-campus/>

Please refrain from coming to the classroom if you feel sick and reach me out as soon as possible. I would suggest you to self-quarantine and get tested for COVID-19 no sooner than 24 hours after your symptoms begin.

Instructor: Sudipto Saha

- E-mail: ssaha2@fsu.edu
- Office Hours: Wednesday and Friday, 11 am – 12 pm (EST) on Zoom, or by appointment
- Office hours joining link: Sudipto's Office Hours (Zoom meeting on Canvas webpage)

Teaching Assistant: Miranda Mathewson

- E-mail: mm21cn@fsu.edu
- Office Hours: Monday, 1 pm – 2 pm (EST) on Zoom, or by appointment
- Office hours joining link: Miranda's Office Hours (Zoom meeting on Canvas webpage)

COURSE DESCRIPTION

Credit Hours: 3

Prerequisite: 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 will be given credit for STA 2023.

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.

Recommended Textbook: The following free online textbook is an additional resource that you might find useful: *Introductory Statistics* from OpenStax, Print ISBN 1938168208, Digital ISBN 1947172050. <https://urldefense.com/v3/http://www.openstax.org/details/introductory-statistics> ;!!Epnw ITfSMW4!4HxHXnDlobxN6yi7IMqbnXf8WVYiKkpnCL4o-MVd4zyythy1jw2utZ2KtCprZADbGw\$

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.

Lecture Videos and Other Recordings: Please note that the recorded lectures and other recordings are the property of Florida State University and are being made available only to the students enrolled in this class. Students are not permitted to share the recorded lectures or other recordings with any other persons outside of this class. Copyrights of the recorded lectures and other recordings are reserved by the instructor and Florida State University.

COURSE OBJECTIVES

This course has been approved to meet FSU’s **Liberal Studies Quantitative and Logical Thinking** requirements and is designed to help 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.

The above two competencies will be assessed in the Liberal Studies Quantitative Assessment (LSQA) 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.

E-MAIL AND COMMUNICATION

- Please **turn on the course notifications on Canvas** by going to “Account / Notifications /” and checking the “Notify me right away” option for all the items under Course Activities.
- Please **do not reply to "notifications@instructure.com"**. Use the **mentioned e-mail id** or **Canvas inbox** while replying to us for any Canvas notifications.
- Always use your @my.fsu.edu e-mail id to communicate. Sending mail from personal e-mail id may not reach us due to filters. You may expect a response to your e-mail **within 2 working days**.
- Apart from conversation during office hours, we will communicate with you by sending e-mails to your @my.fsu.edu id and posting announcements on the course website. **Please check your e-mail and the announcements daily**.
- Please ask assessment-related enquiries at least 24 hours before the assessment is due to begin.
- Always include your name when you e-mail us. If we need to know this information in order to answer your query and you have not provided it, you may not get a response.

FIRST DAY ATTENDANCE AND DROP/WITHDRAWAL DEADLINE

- University policy states that first-day attendance is mandatory for all the students. I expect each of you to be present in the classroom on the very first day of your class – **August 24th**, to be enrolled in the course. Students who register for this course after August 24th, need not to worry about first-day attendance.
Reach me out as soon as possible if you are self-quarantining and could not attend the first day of class.
- Drop and Withdrawal deadlines are given in the University’s academic calendar at https://registrar.fsu.edu/registration_guide/fall/academic_calendar/

ASSESSMENTS AND GRADING STRUCTURE

Assessments			
Type	Count	Weight	Total Weight
Quiz	7 (drop 1)	12.5%	75%
LSQA	1	10%	10%
Homework	4	3.75%	15%
		Total:	100%

1. All the assessments will be online, through Canvas.
2. All the assessments will have different time limits, which will be communicated before each assessment.
3. There will be **7 quizzes** in total. The lowest scored quiz among the **first 6 quizzes** will be dropped at the end of the semester. The score of the last quiz (Quiz 7) will not be dropped even if someone scores lowest in that. The topics covered in each quiz will be communicated beforehand.
4. There will be **1 Liberal Studies Quantitative Assessment (LSQA)**, which will cover only one topic. The topic will be communicated accordingly.
5. There will be **4 homework assignments** in total. The topics covered will be communicated accordingly.

Instructions: Final instructions will be given prior to each assessment, but in general you must follow below instructions.

- TI-84 Plus (or equivalent) calculator is allowed. You can also use the TI Emulator (software version).
- All the assessments are open book, open material.
- Discussion or any kind of collaboration with other students for quizzes is **STRICTLY NOT ALLOWED**.
- You can use scratch papers to solve problems, but you don't need to upload/send those scratch papers.

Discussion is allowed only for homework assignments. **All homework assignments are required to be submitted individually and not in groups**, but you can discuss the homework with other students of your class. However, you should come up with your own solution. **Please avoid plagiarism**, it means, you can discuss a problem with your classmates, but your answer should not be exactly same. You should have your own words to write an answer.

Technology-dependent Assessments: This course is heavily technology dependent. While we will do our best to work with you on technology issues, please be aware that if you submit an assessment but we don't 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 submit assessments on Canvas, please **USE Chrome or Firefox**.

Overall Course Grade:

Grade Distribution	
Letter Grade	Overall Percentage
A	93 – 100
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	0 – 59

Your overall percentage will be calculated according to your assessment scores (reported as percentages) and the weights given to those assessments. Your letter grade will be assigned using the table above by rounding up the overall percentage to the smallest whole number greater than or equal to that (e.g., an overall percentage of 89.01% will be assigned an A- since 90% is the smallest whole number greater than or equal to 89.01%).

No make-ups, no extra credit assignments, no curving grade, and in general, no opportunities for grade improvement will be allowed after the Last Day of Class. So, please take every assessment on time and do your best throughout the term. **Assessments that are not submitted will receive a score of zero.** These will be replaced with earned scores if make-ups of the same are submitted later.

Assessment Grade Appeal: During the term, if you believe that an assessment has been improperly graded, then you must e-mail me and discuss it with me **within 2 calendar days** after your grade for that assessment is posted on Canvas. If you get an answer wrong in an assessment and believe that you may be right, you are allowed to discuss the question, the correct answer, and your justification with me. The problem will be reviewed and if you are correct, you will receive points back for that question. If I do not hear from you within 2 calendar days, I will assume that the grade is accepted. **Assessment grade appeals will not be allowed after the Last Day of Class.**

Missing Grade: Please check your grades on the course website every day to make sure your latest grades are posted; please do this even if you already know your grade. If a grade is not posted, **alert me immediately via e-mail.** It is important that you alert me via e-mail so that there is a record of the fact that you reported the matter. If you report a missing grade **within 2 calendar days** after the grade is posted, I will do my best to locate the missing grade.

Receiving a grade of “Incomplete”: A request for a grade of “Incomplete” will

- **NOT be granted** if you have completed the coursework, including Quiz 7.
- **be granted** only if both of the following conditions are satisfied:
 - a) the only assessment that you have yet to submit is Quiz 7, and
 - b) your overall percentage excluding Quiz 7 is a passing grade (70% or above).

COURSE POLICIES

Make-up Policy:

Make-ups will not be allowed due to undesired performance in an assessment. Make-ups are allowed only if you have a **religious holiday** fallen on the assessment days or a **genuine reason** for not submitting an assessment in the timely manner. If you could not submit an assessment by the due date for some reason, **let me know within the next 2 calendar days post the due date** and I would assign you a make-up only if your reason is genuine and if you can show proper documentation **before the make-up date**. If there is any medical reason for not submitting an assessment, then a medical certificate or similar document needs to be sent to me **before the make-up date**. A missed make-up will receive a score of zero.

Grade Appeal Policy:

If you are not satisfied with your final course grade, then please e-mail me within **3 calendar weeks** after your final grade has been posted on Canvas and we will discuss.

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.

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 will need to

- i) talk to me about it first and get my permission to reschedule,
- ii) fill out the “Request to Reschedule Final Examination” form at https://artsandsciences.fsu.edu/sites/g/files/upcbnu321/files/2020-09/Request_to_Reschedule_revised.pdf and get it approved by the Dean of Arts and Sciences office, and
- iii) let me have the approved form by 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.

Sexual Misconduct and Title IX Reporting:

As an instructor, I am obliged to report all instances of sexual misconduct 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/>), the 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.

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.

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/Academics/Academic-Honor-Policy>)

Academic Success Statement:

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 Dean of Students office 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.

To receive academic accommodations, a student:

- 1) must register with and provide documentation to the Office of Accessibility Services (OAS);
- 2) must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and,
- 3) should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

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 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>

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 & 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/>

TENTATIVE PACING SCHEDULE

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Aug 23 – Aug 27		Syllabus Discussion and Introducing Statistics		Introduction	
Aug 30 – Sept 03		Introduction		Summary Statistics	
Sept 06 – Sept 10	Labor Day	Summary Statistics	Quiz 1 due at 11:59 pm	Summary Statistics	
Sept 13 – Sept 17		Summary Statistics		Probability	
Sept 20 – Sept 24		Probability	Quiz 2 due at 11:59 pm	Probability	
Sept 27 – Oct 01		Random Variables		Random Variables	
Oct 04 – Oct 08		Normal Distribution	Quiz 3 due at 11:59 pm	Normal Distribution	
Oct 11 – Oct 15		Central Limit Theorem	Homework 1 due at 11:59 pm	Central Limit Theorem	
Oct 18 – Oct 22		Simple Linear Regression	Quiz 4 due at 11:59 pm	Simple Linear Regression	Homecoming
Oct 25 – Oct 29		Simple Linear Regression		Simple Linear Regression	LSQA due at 11:59 pm
Nov 01 – Nov 05		Binomial Distribution	Homework 2 due at 11:59 pm	Binomial Distribution	
Nov 08 – Nov 12		One Sample Confidence Interval	Quiz 5 due at 11:59 pm	No Class. Veteran's Day.	
Nov 15 – Nov 19		One Sample Confidence Interval	Homework 3 due at 11:59 pm	One Sample Hypothesis Test	
Nov 22 – Nov 26	Quiz 6 due at 11:59 pm	One Sample Hypothesis Test	No Class. Thanksgiving.		
Nov 29 – Dec 03		One Sample Hypothesis Test	Homework 4 due at 11:59 pm	No Class.	
Dec 06 – Dec 10		No Class. Last Week.	Quiz 7 due at 11:59 pm	No Class. Last Week.	