

Florida State University

Department of Statistics

STA 2023 – Fundamental Business Statistics

Fall 2020 – Online Course (Sections 0020, 0021, 0022)

3 Credit Hours

Instructor: Kristine Rosenberger

Email: kjr17c@my.fsu.edu (expect responses within 24 hours).

Office: OSB 410

Office Hours: Due to COVID-19, there will be no office hours for this course.

Mentor(TA): Yang Chen

Email: cy16e@my.fsu.edu

Yang Chen will help answer/ address assignment/quiz questions emails from you, to provide faster response times. He will also assist with various grading tasks relating to this course. If you have assignment/quiz questions please email Yang Chen (cy16e@my.fsu.edu) and cc me on it: Always title your email STA2023 clarification,...etc.

Class Meeting Days/Times/Location: This is an online course. Due to the ongoing COVID-19 pandemic, the LSQA and Final Exam will both be given on Canvas.

Common Assessment (CA) is a special quiz required by the FSU for certain STEM core courses. This quiz is based on units 7 and 8 (linear regression).

Required Material: TI-84 Plus or equivalent calculator. This class will be conducted entirely on Canvas. This has the notes and quizzes for the course. No other materials are required.

TI-83, TI-83+, TI-84, TI-84+ Graphing Calculator- Very Important course companion

If you use any of the above model TI- calculator the cause can be extremely easy, and very short video links for almost all chapters are provided on canvas for you. So please borrow or buy one and use it for this class. It will save you a lot of time, energy, challenges when solving problems and doing the CA and final exam.

General Course Information:

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.

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.

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 L.S. 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.

Important Dates:

First Day Attendance: Represents taking the unit 0 quiz on Canvas (this will not be graded for accuracy). Due by Monday August 24, 2020 at 8:00 pm. If you have not completed the requirement by this point you will be dropped from the course.

Common Assessment: Due from October 18 – October 24: You will be asked to pick any day from October 18 – October 24 to take the CA on Canvas.

Final Exam: Due from December 7– December 11. You will be asked to pick any day from December 7– December 11 to take the final on Canvas.

Pacing Schedule:

All assignments are due **Saturdays at 11:59pm eastern time (ET)**. Grades will submit automatically at this time, even if you are working on them. Note that there is a quiz to complete for every chapter

Week	Due Date	Assignments Due				
Week 1 (Aug 23 – Aug 29)	Aug 24 – 8:00pm	First Day Attendance (Unit 0 on Canvas)				
Week 2 (Aug 30 – Sep 5)	Sep 5	Quiz 1				
Introduction; Unit 1 –						
Data and Graphing						
Week 3 (Sep 6 – Sep 12)	Sep 12	Quiz 2				
Unit 2 - Sampling						
Week 4 (Sep 13 – Sep 19)	Sep 19	Quiz 3				
Unit 3 – Summary Statistics						
Week 5 (Sep 20 – Sep 26)	Sep 26	Quiz 4				
Unit 4 - Probability						
Week 6 (Sep 27 – Oct 3)						
Unit 5 – Random Variables	Oct 3 Quiz 5					

Week 7 (Oct 4– Oct 10)	Oct 10	Quiz 6
Unit 6 – Binomial		
Distribution		
Week 8 (Oct 11 – Oct 17)	Oct 17	Quiz 7
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Unit 7 – Simple Linear Regression		
Regression		
Week 8 (Oct 18– Oct 24)	Oct 24	Quiz 8
Unit 8 – Linear Regression		
Week 9 (Oct 25 – Oct 31)	Oct 31	LSQA/Common
TAKE LSQA		Assessment
Week 10 (Nov1 – Nov 7)	Nov 7	Quiz 9
Unit 9 – Normal		
Distribution		
Week 11 (Nov 8 – Nov 14)	Nov 14	Quiz 10
Unit 10 – Central Limit		
Theorem		
Week 12 (Nov 15 – Nov 21)	Nov 21	Quiz 11
Unit 11 – Confidence		
Intervals		
Week 13 (Nov 23 – Nov 28)	Thanksgiving	
Week 14 (Nov 29 – Dec 5)	Dec 5	Quiz 12
Unit 12 – Hypothesis		
Testing		
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Studying and Doing the Weekly Assignments

Click on the course module that you want to do on Canvas. Each unit will have notes, a lecture video and a quiz (when applicable, there may also be supplemental material including additional notes and practice problems). There are various videos containing examples of how to do

problems on the TI-84 calculator. The PowerPoint will tell you if the unit has a supplementary calculator component. The units will generally become available on Canvas Sunday at 12am ET 6 days before they are due.

Assignments

Types of Assignments:

Quizzes: Quizzes are assigned on Canvas. Quizzes are graded for accuracy and may be completed twice. The highest score will be kept for each quiz. There is a two (2) hour time limit for each quiz. Quizzes are always due Saturdays at 11:59pm ET.

Extensions: You are allowed extensions on up to 2 units in the course (first day attendance, LSQA, and final exam cannot be extended). All extensions must be completed within 1 week of the original due date - no exceptions. Additional extensions will require proper documentation.

Special Note: 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 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.

Tests: See Final Exam and Common Assessment below. There are no other tests.

Common Assessment & Final Exam: The Final Exam and Common Assessment will be taken on Canvas. You will be allowed unlimited notes (typed and/or hand written) and a calculator.

Grading Structure:

Weights: Quizzes – 60%, Common Assessment –10%, Final Exam – 30%

Assessments that are not taken, and assignments that are not submitted, will receive a grade of zero. When a missed assessment/assignment is made up, the zero will be replaced with the earned grade.

Letter Grades:

A	A-	B+	В	B-	C+	С	C-	D+	D	D-	F
93 to 100	90 to 92.99	87 to 89.99	83 to 86.99	80 to 82.99	77 to 79.99	73 to 76.99	70 to 72.99	67 to 69.99	63 to 66.99	60 to 62.99	Less than 60

Late Work:

Absolutely NO reschedule for missed scheduled exams/tests without valid emergency documentation is allowed. Missed assignments and/or tests/quizzes will receive a 0%.

Grade Appeals:

Errors in grades MUST be reported within one week of the due date of the assignment in question. Absolutely no grades will be adjusted after the final week in the course.

No Extra Credit Whatsoever

Absolutely No extra credit is given under any circumstances.

Recorded lectures:

Recorded lectures are FSU properties and only available to students enrolled in this class. Students are not allowed to share the recorded lectures to any other people outside the class. Copyright of the recorded lectures are reserved by the instructors and FSU.

Mandatory Syllabus Statements

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.)

Americans with Disabilities Act

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; 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 accommodation to a student until appropriate verification from the Student Disability Resource Center 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 http://dsst.fsu.edu/oas/

Liberal Studies for the 21st Century

The *Liberal Studies for the 21st Century Program* at Florida State University builds an educational foundation that will enable FSU graduates to thrive both intellectually and materially and to support themselves, their families, and their communities through a broad and critical engagement with the world in which they live and work. Liberal Studies offers a transformative experience; this course has been approved as meeting the Liberal Studies requirements and thus is designed to help you become a critical analyzer 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.

E-mail and Communication

Please turn on the course notifications in Canvas by going to Account /Notifications / and checking the Notify me right away option for all of the items under Course Activities. You may expect a response to your email within two work days.

Notes on 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 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.

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 advanced notice.

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 University Counseling Center (https://counseling.fsu.edu/), the Employee Assistance Program (https://eap.fsu.edu/), or University Health Services (https://uhs.fsu.edu/), or pastoral counselors.

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/students/undergraduate/forms-requiring-deans-approval/reschedulingfinal-examination and take it to the Dean of Arts and Sciences office at 010 LON to get it approved, and
- (iii) let me have the approved 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.