

Florida State University

**Department of Statistics** 

STA 2023 – Fundamental Business Statistics

Spring 2020 – Online Course (Sections 0021,0022 & 0025)

**3** Credit Hours

Instructor: Kristine Rosenberger

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

Office: LOV 302-A

Office Hours: Tuesday 12:30pm - 2:00pm, or by appointment

Mentor(TA): Avizit Adhikary

Email: aa19bi@my.fsu.edu

Avizit Adhikary 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 Avizit Adhikary (aa19bi@my.fsu.edu) and cc me on it: Always title your email STA2023-0021 (or 0022,0025) question, clarification,...etc. We are handling three different STA2023 online classes, so you must indicate the class from which you are emailing.

**Class Meeting Days/Times/Location:** This is an online course. A testing center is required for the Common Assessment (CA) and Final Exam.

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

**Required Material:** This class will be conducted entirely on Canvas. This has the notes, assignments 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 exams.

#### 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) Analyze and address problems drawn from real world scenarios by applying appropriate mathematical, statistical, logical, and/or computational models or principles.

(2) Interpret and evaluate data and information as presented in a variety of modes (such as tables, graphs, and charts), using appropriate technology. They will also be able to clearly communicate a summary of their findings to peers.

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 Wednesday January 8, 2020 at 11:59pm. If you have not completed the requirement by this point you will be dropped from the course.

**Common Assessment:** Due from March 9 – March 13: You will be asked to pick any day from October 6 – October 11 to schedule (at least three weeks prior) and take the CA at the FSU Testing Center.

**Final Exam:** Due by from April 27 – May 1. You will be asked to pick any day from April 27 – May 1 to schedule (at least three weeks prior) and take the final at the FSU Testing Center.

## Pacing Schedule:

All assignments are due **Saturdays at 11:59pm**. Grades will submit automatically at this time, even if you are working on them. Note that chapters have both a quiz and homework component to complete.

Week	Due Date	Assignments Due		
Week 1 (Jan 5 – Jan 11)	Jan 11	First Day Attendance (Unit		
		0 on Canvas)		
Week 2 (Jan 12 – Jan 18)	Jan 18	Homework 1		
Unit 1 – Data and		Quiz 1		
Graphing				
Week 3 (Jan 19 – Jan 25)	Jan 25	Homework 2		
Unit 2 - Sampling		Quiz 2		
Week 4 (Jan 26 – Feb 1)	Feb 1	Homework 3		
Unit 3 – Summary		Quiz 3		
Statistics				
Week 5 (Feb 2 – Feb 8)	Feb 8	Homework 4		
Unit 4 - Probability		Quiz 4		

Week 6 (Feb 9 – Feb 15)	Feb 15	Homework 5		
Unit 5 – Random Variables		Quiz 5		
Week 7 (Feb 16 – Feb 22)	Feb 22	Homework 6		
Unit 6 – Binomial Distribution		Quiz 6		
Week 8 (Feb 23 – Feb 29)	Feb 29	Homework 7		
Unit 7 – Scatter Plots and Correlation		Quiz 7		
Week 8 (Mar 1 – Mar 7)	Mar 7	Homework 8		
Unit 8 – Linear Regression		Quiz 8		
Week 9 (Mar 8 – Mar 14) TAKE LSQA	Mar 13	LSQA/Common Assessment		
Week 10 (Mar 15 – Mar 21)	SPRING BREAK			
Week 11 (Mar 22 – Mar 28)	Mar 28	Homework 9		
Unit 9 – Normal Distribution		Quiz 9		
Week 12 (Mar 29 – Apr 4)	Apr 4	Homework 10		
Unit 10 – Central Limit Theorem		Quiz 10		
Week 13 (Apr 5 – Apr 11)	Apr 11	Homework 11		
Unit 11 – Confidence Intervals		Quiz 11		
Week 14 (Apr 12 – Apr 18)	Apr 18	Homework 12		
Unit 12 – Hypothesis Testing		Quiz 12		
Week 15 (Apr 19 – Apr 25)				

#### Studying and Doing the Weekly Assignments

Click on the course module that you want to do on Canvas. Each unit will have notes, homework and a quiz. 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 6 days before they are due.

#### Assignments

#### Types of Assignments:

**Homework:** Homework is assigned on Canvas. Homework is always due on Saturdays at 11:59pm. Homework is graded based on completion and can be taken as many times as you like – if you receive at least a 7/10, you will be given full credit for the assignment. If you get less than a 7/10 you will not receive credit for the homework!

**Quizzes:** Quizzes are assigned together with learning curves on Launchpad. Quizzes are graded for accuracy and may only be completed once. There is no time limit. Quizzes plus Homework are always due Saturdays at 11:59pm.

**Extensions:** You are allowed extensions on up to 2 units in the course (first day attendance and LSQA cannot be extended). An extension covers all material in the unit (i.e., homework and quiz). **All extensions must be completed within 1 week of the original due date - no exceptions.** Additional extensions require proper documentation.

**Special Note:** <u>This course is heavily technology-dependent</u>. 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 need to be taken at a testing center. You will be allowed unlimited notes (typed and/or hand written) and a calculator. More details will be given on Canvas at the start of the term.

#### Grading Structure:

Weights: Homework – 30%, Quizzes – 30%, 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:

А	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.

## 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 <u>http://fda.fsu.edu/Academics/Academic-Honor-Policy</u>.)

## 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) bring a letter to the instructor indicating the need for accommodation and what type. 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 more information about services available to FSU students with disabilities, contact the: Student Disability Resource Center 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) sdrc@admin.fsu.edu http://www.disabilitycenter.fsu.edu/

# Liberal Studies for the 21st Century

The *Liberal Studies for the 21<sup>st</sup> 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.

# 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; 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 (<u>https://uhs.fsu.edu/</u>).

# 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) (ii) fill out the "Request to Reschedule Final Examination" form at https://artsandsciences.fsu.edu/students/undergraduate/forms-requiring-deansapproval/reschedulingfinal-examination and take it to the Dean of Arts and Sciences office at 010 LON to get it approved, and
- (iii) bring the approved form back to me 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.

# Note on Proctored Testing Fee

- 1. You are required to register with either the FSU testing center or an approved off campus proctor (for students taking the course remotely) for both the CA and Final.
- 2. Students are encouraged to estimate the cost of their proctored exams at the start of the course. Students can use the <u>Proctor Selection</u> application on the ODL website to locate an approved, nearby testing center and then follow up with that facility to find out its current testing fees. Keep in mind that some facilities charge by the hour, and students will need to know the length of an exam to estimate their costs.
- 3. Because they are considered an educationally related expense, students may use financial aid toward their proctored testing fees, just as they would toward books and supplies.