Fundamentals of Business Statistics — STA 2023 — Section 20

Syllabus — Spring 2019

Florida State University — Statistics Department

Instructor information

Name: Herman Autore

Email: hautore@fsu.edu

Office: OSB 104-E (OSB is AKA Roger's Building) Find in Google

Maps.

Office hours: TBA. Vote here for

your desired office hours.

Class information

Day(s): Tuesday, Thursday

Time: 5:15 PM to 6:30 PM

Room: OSB 108 (OSB is AKA Roger's

Building)

Required materials:

- Pencil or mechanical pencil
- Eraser
- Calculator. TI-84 or similar. I.e., one you can't use to cheat.
- Textbook. The Practice of Statistics for Business and Economics. Moore, McCabe, Alwan, Craig. 4nd Edition. ISBN 978-1464125645. <u>Search for</u> this book online.

Suggested materials:

 Something with which to access Canvas and other electronic classroom resources.

COURSE DESCRIPTION

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

Credit Hours: 3

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

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.
- (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.

Grading

	Percent of	
Assessment	Grade	
Scheduled Quizzes		
Individual	15	
Homework		
Individual	15	
LSQA (mandatory)	5	
Midterm Exams	30	
Cumulative Final		
Exam	30	
Total	105	

Homework

You will be instructed in detail during class on how to do the homework. The homework is to give you practice so that you thoroughly learn methods.

Exams

Exams will be based on homework and quiz questions.

Cumulative Final Exam

Individual in-class quizzes

The final exam will be based on homework and quiz questions.

The quiz will be one question based on something from the homework.

Grading Scale

	Percent of	
Grade	Points	
	94 ≤ x ≤	
Α	105	
A-	90 ≤ x < 94	
B+	87 ≤ x < 90	
B+	$84 \le x < 87$	
B-	80 ≤ x < 84	
C+	$77 \le x < 80$	
C+	$74 \le x < 77$	
C-	70 ≤ x < 74	
D+	67 ≤ x < 70	
D+	$64 \le x < 67$	
D-	$60 \le x < 64$	
F	x < 60	

Rounding when grading

When grading, percentages will be rounded up.

Pacing schedule

Week	Topic	Assessment Plan A	Date
1	Graphical description of data	HW1 assigned.	1/8/19
1	п	Quiz 1. HW1 due.	1/10/19
2	п	HW2 assigned.	1/15/19
2	Numerical descriptions of data	Quiz 2. HW2 due.	1/17/19
3	п	HW3 assigned.	1/22/19
3	п	Quiz 3. HW3 due.	1/24/19
4	Normal distribution	HW4 assigned.	1/29/19
4	п	Quiz 4. HW4 due.	1/31/19
5	Correlation	HW5 assigned.	2/5/19
5	п	Quiz 5. HW5 due.	2/7/19
6	Simple linear regression	HW6 assigned.	2/12/19
6	п	Quiz 6. HW6 due.	2/14/19
7	II	HW7 assigned.	2/19/19

Week	Topic	Assessment Plan A	Date	
7	Data collection	Quiz 7. HW7 due.		2/21/19
8	"	HW8 assigned.		2/26/19
8	Midterm Exam + LSQA	Quiz 8. HW8 due.		2/28/19
9	Elementary probability	Exam. HW due.		3/5/19
9	"	HW9 assigned.		3/7/19
10	Normal distribution	Quiz 9. HW9 due.		3/12/19
10	Random variables	HW10 assigned.		3/14/19
11	п	Quiz 10. HW10 due.		3/19/19
11	Binomial distribution	HW11 assigned.		3/21/19
12	п	Quiz 11. HW11 due.		3/26/19
12	п	HW12 assigned.		3/28/19
13	Sampling distributions	Quiz 12. HW12 due.		4/2/19
13	п	HW13 assigned.		4/4/19
14	Confidence intervals	Quiz 13. HW13 due.		4/9/19
14	п	HW14 assigned.		4/11/19
15	п	Quiz 14. HW14 due.		4/16/19
15	Hypothesis tests for a single sample	HW15 assigned.		4/18/19
16	п	Quiz 15. HW15 due.		4/23/19
16	п			4/25/19
17	Final Exam	Final Exam	?	

Final Exam

Date: Monday, 4/29/19 For more information visit the

Time: 3:00 pm to 5:00 pm registrar.

Room: TBA

Religious Holidays

If you will be absent or late because of a religious holiday, you must inform me during the first two weeks of class. With proper documentation your absence will be excused.

Penalties

- Missed assessments from excused absences can be made up only within one week of the original due date.
- Missed assessments from an unexcused absence cannot be made up.
- Missed assessments from excused tardies can be made up only within one week of the original due date.
- Missed assessments from unexcused tardies cannot be made up.

Appealing grades

If you think your assignment was incorrectly graded you may email me an explanation of why you think so or visit me during office hours.

Classroom conduct

Do not distract me or your classmates. This implies arriving before class starts, not packing your bags (or leaving) before class ends, and being mindful when using electronics. E.g., making all electronics inaudible to those around you, and not displaying distracting images on your screens.

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.

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 (https://uhs.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 will need to talk to me about it first and get my permission to reschedule, fill out the "Request to Reschedule Final Examination" form at:

<u>artsandsciences.fsu.edu/students/undergraduate/forms-requiring-deans-approval/rescheduling-final-examination</u> and take it to the Dean of Arts and Sciences office at 010 LON to get it approved, and 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.

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/academic-resources/academic-integrity-and-grievances/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) 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/