STA 2023: FUNDAMENTAL BUSINESS STATISTICS
Section 17   FALL 2019

Course Information
Class Meeting Time: Tuesday & Thursday: 5:15 PM- 6:30 PM
Location: OSB 0110

Instructor Information
Instructor: Heli Gao
Email: hg14e@my.fsu.edu
Office: OSB 201A
Office Hours: Thursday 2:00 - 3:00 p.m. or by appointment
Final Exam: Dec.10th(Tuesday), 7:30am-9:30am

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.
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

- Lecture Notes will be provided online. You may print them out by yourself and bring them to the lecture. Textbook is NOT required for this class, however, you will need to read each set of class notes carefully after each lecture.
- TI-84 calculator or equivalent.
- (Optional, NOT used in class) The Practice of Statistics for Business and Economics, 4th ed. by Moore McCabe Alwan Craig Duckworth; Publisher: W.H.Freeman.

Grading

1. Homework (0%):
- Homework will be assigned each week, but will not be collected or graded. However, you need to do the homework to master the content. Solutions will be given and you need to check them by yourself. They are mainly used for preparing for the quizzes.

2. Attendance (10%):
- There will be 10 **random** attendance checks throughout the semester.

3. Quizzes (50%):
- Approximately every 2-3 weeks there will be a quiz, which lasts for 45 mins. You may prepare a one-page hand written cheat sheet for the quiz. Quiz paper won't be returned. However, you can check your quiz during office hour, or by appointment.
- There will be **3 or 4** quizzes in total, depending on our progress, details and contents will be announced before the quiz.

4. Exam (40%):
- There will be **one** final exam. Final exam will last 2 hours. You can use your calculator and bring two pieces of hand written cheat sheets to the final exam.
- Final exam will be on Dec.10th (Tuesday) at 7:30-9:30 a.m. Location will be announced before the final exam week.

5. Extra credit (5%):
- Extra credit might be given if you solve an extra credit problem in quiz.

Graded Assessment	Percentage
Attendance	10%
Quizzes	50%
Final exam	40%
Extra credit	5%
Total	105%

Overall course grade

FSU does not award A +		B+	87-89	C+	77-79	D+	67-69	F	<60
A	93+	B	83-86	C	73-76	D	63-66		
A-	90-92	B-	80-82	C-	70-72	D-	60-62		

- Any grade with decimals will be rounded up to the closest integer, e.g. 80.2 will be rounded up to 81.
- The final grade might be curved up.

Penalties for missed quizzes and exams
Without any reason, if you miss a quiz or exam, you will receive zero mark for that quiz. You may make up your quiz with reasonable excuse and documents are required. However, make-ups usually need to be done **within one week**. **Also, no make-ups are allowed after the final teaching week.**

Excused Absence Make Up Policy
If provided with eligible documents, students missed any quizzes may be made up in my office during my office hours. If you miss any lecture, you may come to my office to ask specific questions or get help from your classmates.

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.

Grading Appeals
During the term, if you believe that a paper was improperly graded, you can come to my office and discuss with me.

Incompletes
A grade of "Incomplete", "I", will only be given under extreme circumstances where a student has an FSU approved reason for missing a significant portion of course.

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

Students with disabilities needing academic accommodation should:
(1) register with and provide documentation to the Student Disability Resource Center (SDRC); and
2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

We will begin providing special accommodations as soon as possible after I get your letter.   You must take your quizzes and final exam at the SDRC testing center, on the same day as the other students take them in class.   If you need to take a quiz or the final exam on a different day, please talk to me about it first.   Please do not schedule a quiz or the final exam for a different day without first clearing it with me.   If you choose to take a quiz or the final exam in the regular classroom or at some other location, you forfeit your special accommodations and you must comply with the rules that the other students follow.   In particular, we will not be able to allow you extra time in the regular classroom.   You may choose to complete the activities in class or at the SDRC testing center.   Please note that some activities are designed to be group efforts, so you may not fully grasp the learning objectives if you do them on your own.   In my experience, however, students with disabilities have always elected to complete the activities in class and have not had significant problems doing so.   Classmates are generally co-operative and helpful.

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

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
        (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/rescheduling-final-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.

Tentative Pacing Schedule, STA 2023 – 017, FALL 2019

week	Monday	Tuesday	Wednesday	Thursday	Friday
1	Aug. 26	Syllabus, etc 27	28	Summary statistics 29	30
2	No Classes. Sep. 2	Summary statistics 3	4	Summary statistics 5	6
3	Sep. 9	Normal Distributions 10	11	Normal Distributions 12	13
4	Sep.16	Normal Distributions 17	18	Quiz 1 19	20
5	Sep.23	Central Limit Theorem 24	25	Central Limit Theorem 26	27
6	Sep.30	Central Limit Theorem Oct.1	2	Simple Linear Regression 3	4
7	Oct.7	Simple Linear Regression 8	9	Quiz2 10	11
8	Oct.14	Simple Linear Regression 15	16	Probability 17	18
9	Oct.21	Probability 22	23	Random Variables 24	No Classes 25
10	Oct.28	Random Variables 29	30	Quiz3 31	1
11	Nov.4	Binomial Distribution 5	6	Binomial Distribution 7	8
12	Nov.11	One-sample Confidence Interval 12	13	Quiz4 14	15
13	Nov.18	One-sample Confidence Interval 19	20	One-sample Confidence Interval 21	22
14	Nov.25	One-sample Hypothesis Tests 26	No Classes 27	No Classes 28	No Classes 29
15	Dec.2	One-sample Hypothesis Tests 3	4	One-sample Hypothesis Tests 5	6
16	Dec.9	Final exam 10	Final week	Final week	Final week