STA 1013: Statistics Through Example

Section 11&12
Department of statistics
Florida State University
Fall 2020

Course Information

The class will be taught remotely, asynchronously.

Instructor: Xiaoyi Wang Email: xw18b@my.fsu.edu

Office hours: 1-2 pm, Wednesday, or by appointment

Office hours Zoom link: Xiaoyi's Office Hours (Meeting link in Canvas Office Hour module)

Course Description

Prerequisite: None. Credit Hours: 3

This course provides students with a background in applied statistical reasoning. Fundamental topics are covered including graphical and numerical description of data, understanding randomness, distribution, and statistical testing.

Statistical thinking is emphasized over mathematical calculation. In this class students learn many of the elementary principles that underlie collecting, organizing, summarizing data, and drawing conclusions from it.

Course Objective

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:

- (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 1013, 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) Select the appropriate statistical tools to analyze a particular problem.
- (6) Describe the goals of various statistical methodologies conceptually.
- (7) Develop a healthy skepticism toward statistical studies and their results based on a sensible consideration of the techniques employed.

Course Materials

- (1) Class videos, notes and exercises will be posted on Canvas Course Material module.
- (2) A recommendation of textbook (not required): Statistical Reasoning for Everyday Life, (4th ed.) by Jeffrey O. Bennett, William L. Briggs, Mario F. Triola.
- (3) Calculator: TI-84 Plus (or equivalent) calculator.

Lecture Videos

Watching the lecture videos is equivalent to attending class and listening to lectures. We acknowledge that the lecture videos are not short, but remember that class time would have been 50 or 75 mins - not short either. On the bright side, however, you may pause the video at any time and return to it later - you would not have been able to do that with live lectures. Therefore, we fully expect you to watch the lecture videos in their entirety. Pause whenever you need to, but always be sure to return and finish watching the video. Recorded lectures are FSU properties and only available to students enrolled in your 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.

Note 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.

Email and Communication

- (1) Please turn on the course notifications on Canvas by going to Account / Notifications / and checking the **Notify me right away** option for all of the items under Course Activities.
- (2) We will communicate with you by sending emails to your my.fsu.edu account and posting announcements on the course website. Please check your FSU email and the Canvas announcements every day.
- (3) If you email us, please send from your my.fsu.edu account.
- (4) Please send assessment-related enquiries least 24 hours before the assessment is due.
- (5) You may expect a response to your email within two work days.

Assessments and Grading Policy

Assessments				
Type	Count	Weight	Total Weight	
Quiz	3(4 in total)	20%	60%	
LSQA	1	10%	10%	
Final	1	30%	30%	
		Total:	100%	

- (1) All the assessments will be online, through Canvas.
- (2) All the assessments will have defined time limit, which will be informed before each assessment.
- (3) There will be 4 quizzes, each will roughly cover the lecture material after the last quiz. Before each assessment, the exact date and topics covered for that quiz will be informed. The lowest grade will be dropped.
- (4) There will be 1 Liberal Studies Quantitative Assessment (LSQA), which will cover one topic. The exact date and topic will be informed.
- (5) There will be 1 Final Exam, which will be cumulative, and the topics will be reviewed during the last two weeks.

Final Exam: The final exam will be given during the final week (7 December-11 December), and only 1 attempt would be allowed. There would be time limit for the final exam. Please find the Tentative Pacing Schedule (TPS) for the approximate dates of all other quizzes.

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

- (1) I-84 (or equivalent) calculator is allowed. You can also use the TI Emulator (software version).
- (2) All the assessments are open book, open material. You can use the lecture notes, textbooks, and your own, self written notes.
- (3) Using internet, discussion or any kind of collaboration with other students is **STRICTLY NOT ALLOWED**.

Overall Course Grade:

Grade Distribution			
Letter Grade	Percentage		
A	93-100		
A-	90-92		
B+	87-89		
В	83-86		
B-	80-82		
C+	77-79		
С	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 taken will receive a zero score. These will be replaced with earned scores if make-ups are taken 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 3 days after your grade for that assessment has been posted on Canvas. If it turns out that your answer was correct, you will be given credit for it. If I do not hear from you within this period, I will assume 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 grade has been 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 will be a record of the fact that you reported the matter. If you report a missing grade

within 3 working days after the assessment took place, I will do my best to locate the missing grade.

Receiving a grade of "Incomplete": A request for a grade of "Incomplete" will

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

Course Policies

Make-up Policy: Make-ups will not be given due to undesired performance on an assessment. Make-ups of any quiz or LSQA are allowed only if you have a religious holiday during assessment days or a strong and genuine reason for not taking that assessment in the timely manner. In that case, let me know ASAP and I would assign you a make-up. Only one make-up is allowed for each assessment. A missed make-up will receive a zero score. E-mail me immediately if you are not be able to take the final exam on the scheduled day.

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 **Approval Form** 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.

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).

Attendance, absence, drop/withdrawal:

- (1) Drop and Withdrawal deadlines are given in the University's academic calendar at https://registrar.fsu.edu/calendar/.
- (2) First-day attendance will be taken electronically on the course website.
- (3) You are expected to adhere to all assessment deadlines.

- (4) Lack of future planning, or mismanagement of time and other resources, are not acceptable reasons for missing assessment deadlines.
- (5) Bear in mind that the opportunities presented in this class are made equally available to all students in the class and it is up to each individual to make the most of these opportunities.
- (6) In the interests of fairness, we will not do for one student what we cannot do for all students who are likely to request the same.
- (7) Documentation for missing assessment deadlines will not be accepted after the Last Day of Class.

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.

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 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/).

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/

Please note that instructors are not allowed to provide academic accommodations to a student until they receive the letter mentioned in item (2) above. Academic accommodations will be provided as soon as possible after the letter is received. Academic accommodations are not retroactive, so they will not apply to lectures/lessons and assessments that took place before the letter was received.