STA1013: Statistics Through Examples
Section 0013/0014

Department of Statistics
Florida State University
Fall 2020

Course Information

Instructor: Hanwen Hu

- Email: hh19j@my.fsu.edu. (Expected responses within one workday.)

- By appointment via email since this is an online class. We will do the scheduled appointment on Zoom.

Class Times and Location
In this semester, this class will be taught remotely and asynchronously. Class videos will be posted on Canvas 10 a.m. EST every Monday and Wednesday. The class provided each day is around 50-60 minutes. You will need access to a computer and a stable internet connection.

Copyright Statement
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.

Email 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.
- 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.**
- If you email me, please send from your @my.fsu.edu account. **Your email title should start with [STA1013].**

Course Description

Prerequisites: None.

Credit Hours: 3.

Required materials
- A personal computer with reliable internet connection, and with Chrome or Firefox browser installed.
- TI-84 (or equivalent) calculator. (We will help you to learn how to use a TI-84 series calculator. but we cannot promise to be able to help with any other type of calculator.)
- A textbook is not required for this class. Instead, you will need to watch lecture videos and study the slides used in the videos.

Recommended materials
Lecture slides and relevant course materials will be posted on Canvas. Although we do not have a textbook for this class, you may turn to the following recommendation as a reference book:
Statistical Reasoning for Everyday Life (5th Edition 2018), by Bennett Briggs Triola.

This course provides students with a background in applied statistical reasoning. Fundamental topics are covered including graphical and numerical description of data, understanding randomness, central tendency, correlation versus causation, line of best fit, estimation of proportions, and statistical testing.
Statistical thinking, relevant ideas, themes, and concepts are emphasized over mathematical calculation. In this class students learn many of the elementary principles that underlie collecting data, organizing it, summarizing it, and drawing conclusions from it.

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:

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 Apply sound concepts of sample selection and experimental design in producing data.

4 Use statistical thinking in the context of work processes, academic endeavors, and everyday life.

5 Describe how inferential statistical methods are used to make valid judgments based on the data.

6 Evaluate the validity of statistical results with skepticism based on sensible considerations.

Assessments & grading

- **All assessments should be completed on Canvas. Please use Firefox or Chrome browser to avoid technical errors.**
- All assessments will be "open-book", which means that the following resources may be used: class slides, personal notes (i.e. notes that you take while preparing/studying for quizzes), textbooks.

Type	Count	Weight	Total Weight
Practices	12-2=10	2.5%	25%
Quizzes	6-1=5	13%	65%
LSQA	1	10%	10%
Bonus	1	5%	5%

1 There will be twelve (12) practices, which occur every week and cover the lecture materials introduced in that week. The lowest two (2) grades will be automatically dropped.

– Practices will be open from 10 a.m. EST of Wednesday to the upcoming Sunday midnight.

– Unlimited attempts are provided, and 60 minutes are provided for each attempt. Students are allowed to collaborate.

2 There will be six (6) quizzes, which occur every two weeks and cover the materials occurring since the last assessment. The lowest one (1) grade will be automatically dropped.

– Quizzes will be open from 10 a.m. EST of Wednesday to the upcoming Sunday midnight. The final quiz will be arranged in the final week instead.

– Two (2) attempts are provided, and 60 minutes are provided for each attempt. Students are **NOT** allowed to collaborate.

– Resources that may not be used during quizzes: any and all people (including classmates etc.), the internet.

3 There will be one (1) Liberal Studies Quantitative Assessment (LSQA), which will cover the topics of Normal distribution and Central Limit Theorem. Tentatively, it will be held on the 8th week in this semester. Its settings are same as a normal quiz.

4 There will be one (1) bonus quiz, which will cover most lecture materials in the semester. This will be held in the final week, but as an optional quiz. Its settings are same as a normal quiz.

Grading appeals. If you believe a correct answer was counted as incorrect in your practice/quiz/LSQA, you must discuss it with me via email within one (1) calendar week after your grade has been posted. If I do not hear from you within this period, I will assume the grade is accepted. **Especially, no grading appeals will be allowed after the Last Day of Classes.**

Make-ups. If you are absent for a practice/quiz/LSQA, please email me immediately. The email must be no later than Monday of the following week to make up a missed assessment, unless you have a documented reason for being unable to do so. You will be allowed one (1) make-up without providing documentation, but you must provide documentation for all other absences. The make-up period will usually be 24 hours after I reply you with the make-up permission. Assessments that are not submitted will receive a grade of zero (0). When a makeup is submitted, the zero (0) will be replaced with the earned grade.

No make-ups will be allowed after the Last Day of Classes. So if you are absent for the final quiz, you must email me immediately or there won't be any chance to make up. Note that you cannot make up the bonus quiz.

Gradings. Your overall numerical grade will be calculated according to the Assessment table above. **It will not be curved.** It will be then rounded up (i.e. the smallest integer greater than or equal to the grade) and used to determine your letter grade by:

Letter	Numerical	Letter	Numerical
A	≥ 93	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	< 60

(e.g., an overall course grade of 89.04 will be assigned an A-, since 90 is the smallest integer greater than or equal to 89.04.)

Tentative Schedule

Week	Date	Day 1 (Monday)	Day 2 (Wednesday)	Practice	Quiz
1	Aug 24-30	Introduction	Speaking of Statistics	x	x
2	Aug 31-Sep 6	Speak. of Statistics	Measurement in Statistics	**P1**	**Q1**
3	Sep 7-13	Visual Displays of Data		**P2**	x
4	Sep 14-20	Summary Statistics of Data		**P3**	**Q2**
5	Sep 21-27	Probability & Random Variables		**P4**	x
6	Sep 28-Oct 4	Probability & Random Variables		**P5**	**Q3**
7	Oct 5-11	A Normal World		**P6**	x
8	Oct 12-18	A Normal World		**P7**	**LSQA**
9	Oct 19-25	One-sample Confidence Intervals		**P8**	x
10	Oct 26-Nov 1	O-S Conf. Intervals	O-S Hypo. Testing	**P9**	**Q4**
11	Nov 2-8	One-sample Hypothesis Testing		**P10**	x
12	Nov 9-15	Correlation & Causality		**P11**	**Q5**
13	Nov 16-22	Simple Linear Regression		**P12**	x
14	Nov 23-29	*(Thanksgiving Break)*		x	x
15	Nov 30-Dec 6	Simple Linear Regression		x	x
16	Dec 7-13	**Q6, Bonus Quiz**			

Course Policies

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.

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.**

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`](deans-approval/rescheduling-final-examination) 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.

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`](http://fda.fsu.edu/Academics/Academic-Honor-Policy).)

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

Americans with Disabilities Act

Students with disabilities needing academic accommodation should:

    1 register with and provide documentation to the Office of Accessibility Services; 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.

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:

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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
https://dsst.fsu.edu/oas/

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