

Florida State University
Department of Statistics
Spring 2019

Xin Sui

Email: xs14c@my.fsu.edu (will respond within 24 hrs)

Office: OSB 0444

Office hours: Tu 3:00PM-4:00PM; Th 3:00PM-4:00PM or by appointment

STA 1013/0004
Statistics Through Example
MoWe 15:35 - 16:50
OSB 0108

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, 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 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, 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.

Required materials:

Calculator: TI-84 Plus or equivalent.

Textbook: There is no required textbook.

Final exam date, time, location:

May 2, Thursday 8:00 - 10:00 p.m. in OSB 0108

Grade structure:

Exams (70%). There will be 3 exams across the semester, including the final exam. The one that the student did best consists of 30% of the grade, while the other two consists of 20% each. Liberal Studies Quantitative Assessment (5%). The LSQA will be given in week 6-9.

Notes:

1. *All the exams and LSQA are closed books, closed notes. But you will be allowed to use cheat sheets for all of them.*
2. *All the 3 exams are not cumulative, however the topics covered in LSQA will also be covered in Exam 2.*

Homework (15%). Homeworks will be given on a weekly basis. The students are expected to finish them individually. Each homework will be weighted equally.

Attendance (10%). Attendance will be checked at the beginning of every class. Each student is allowed to make up to 3 unexcused absences without affecting the grade.

The conversion from numeric grade to letter grade is as follows:

| Letter | Num.grade | Letter | Num.grade | Letter | Num.grade | Letter | Num.grade | Letter | Num. grade |
|-----------------------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|------------|
| FSU does not award A+ | | B+ | 87 – 89.9 | C+ | 77 – 79.9 | D+ | 67 – 69.9 | F | ≤59.9 |
| A | ≥93 | B | 83 – 86.9 | C | 73 – 76.9 | D | 63 – 66.9 | | |
| A- | 90 – 92.9 | B- | 80 – 82.9 | C- | 70 – 72.9 | D- | 60 – 62.9 | | |

What if I missed a class:

If you misses a class, do send the instructor an email stating the reason (no official document is required) within 1 week. Failure to do so will result in an unexcused absence for that date. Please come to the office hours or schedule an appointment if you need help catching up with the class.

What if I have to turn in my homework late:

You may turn in homework within 1 week past the posted due dates on canvas without receiving any penalty; any homework turned in past that date will receive a 20% penalty unless you have official documents. Hard deadlines for turning in certain homeworks will be posted on canvas throughout the semester.

What if I need to appeal my grading (on exams/homework):

If you have any question on the grading of exams or homeworks, please contact me before posted deadlines on canvas.

What if I need to reschedule an exam (before the actual date of the exam):

Send the instructor an email stating the time you wish to take the exam. No official documents are required unless you want to take the exam more than 1 week early/late than the actual date. The Final Exam Rescheduling Policy applies to the final exam.

What if I need to make-up an exam (after the actual date of the exam):

You may make up an exam within 1 week of the actual date of the exam. A 20% penalty will be applied unless you have official documents. Failure to do so will result in a 0.

What if I have other questions on the course:

Contact me at xs14c@my.fsu.edu as soon as possible. A reply is guaranteed within 24 hours.

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.

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/>).

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/>