



Florida State University
Statistics Department
STA 1013: Statistics Through Examples
Fall 2019

INSTRUCTOR INFORMATION:

- Idris Demirsoy
 - Email: idris.demirsoy@fsu.edu
- Office: OSB Room 201A

Office Hours:

- 11:00 -11:59 AM Monday and Wednesday
- Or by appointment, please email me at the above address to setup a time to meet

COURSE INFORMATION:

1- STA 1013: Statistics Through Examples, **Section 0008**, 3 Credit Hours
Class meets MoWeFr ---- 8:00AM - 8:50AM ---- HCB 0217

2- STA 1013: Statistics Through Examples, **Section 0014**, 3 Credit Hours
Class meets MoWeFr ---- 9:05AM - 9:55AM ---- HCB 0217

REQUIRED MATERIALS:

- **Textbook:** (Optional): Statistical Reasoning for everyday life, 4th ed. by Bennet Briggs Triola
- **Lecture Notes** will be posted to Canvas at least 24 hours prior to the next class. Print and bring the appropriate notes, and any other materials that are posted with them. I may add or skip portions of the notes, so regular classroom attendance is important to obtain all notes. If you miss a class, you ARE still responsible for what was taught during the lecture
- **Calculator:** Ti-84 Plus or equivalent

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 1013.

This course provides students with a good background of statistical ideas and reasoning with less emphasis on statistical methods. In this class, students will learn many of the fundamental principles that underlie data, including organizing and making

conclusions from it.

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:

- i. Select and apply appropriate methods (i.e., mathematical, statistical, logical, and/or computational models or principles) to solve real-world problems.
- ii. Use a variety of forms to represent problems and their solutions.
- iii. The above two competencies will be assessed in the Liberal Studies Quantitative Assessment for STA 1013, which includes a written summary of results.
- iv. Apply sound concepts of sample selection and experimental design in producing data.
- v. Use statistical thinking in the context of work processes, academic endeavors, and everyday life.
- vi. Describe how inferential statistical methods are used to make valid judgments based on the data.
- vii. Evaluate the validity of statistical results with skepticism based on sensible considerations.

Course Topics:

- Statistical study process
- Types of Data: population, sample, parameter, statistic, categorical, quantitative
- Sampling: simple random sample, systematic, stratified, cluster, convenience
- Visual Displays of data: histograms, stemplots, bar charts, pie charts, boxplots
- Summary Statistics
- Empirical Rule
- Normal Distribution
- Central Limit Theorem
- Probability
- Expected Values
- One Sample Hypothesis Tests
- Correlation
- Simple Linear Regression

GRADING:

Quizzes

- There will be 4 quizzes throughout the semester. All quizzes will be equally weighted
- On quiz days you will need to bring a calculator and a pencil. You may also bring one 3" x 5" note card of **handwritten notes** to use throughout the quiz.
- If you miss a quiz, due to a university excused absence (These can be found at the end of the syllabus), you need to email me or talk to me within 1-week of the missed quiz to schedule a time for you to make-up the quiz. If you do not communicate with me within 1-week you will not be able to make up the quiz and you will receive a 0.

Attendance/Activities

- Attendance will be taken randomly and unannounced throughout the semester. For attendance you must complete the activity in class, you will be able to work in groups on these activities.
- If you have an excused absence, you must show/email me the documentation within 1 week of the missed class. You are still responsible for the material covered during your absence. You may either come to my office hours or setup a time to meet with me to go over any material you missed
- If you are missing class for a **religious holiday**, please either send me an email or give me a written document 1-week in advance of the holiday. The absence will be excused, but students are still responsible for the topics covered in the class.

Final Exam

- Final Exam (30%): There will be a (non-cumulative) final exam given during the FSU final exam week (see course calendar for date/time).

Grading Scheme

| Graded Assessment | Percentage of Total Grade |
|----------------------------|---------------------------|
| Quizzes | 40% |
| Attendance & Participation | 20% |
| Homework | 10% |
| Final | 30% |

Requesting a Re-Grade

- If you disagree with a grade you obtained on a quiz or activity you have one week to come to my office or contact me about a re-grade. If you do not approach me within one week the grade you received is final.

| | | | | | | | |
|-------|--------|-------|--------|-------|--------|-------|--------|
| Grade | Cutoff | Grade | Cutoff | Grade | Cutoff | Grade | Cutoff |
| A | 100-93 | B | 86-83 | C | 76-73 | D | 66-63 |
| A- | 92-90 | B- | 82-80 | C- | 72-70 | D- | 62-60 |
| B+ | 89-87 | C+ | 79-77 | D+ | 69-67 | F | 59-0 |

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

(1) 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.

(2) 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/>.)

(3) Religious Holiday Attendance Policy:

Per Section 1006.53, Florida Statutes, the Florida State University policy on observance of religious work-restricted holy days provides that students shall, upon notifying their instructor, be excused from class to observe a religious work-restricted holy day of their faith. While students will be held responsible for the material covered in their absence, each student shall be permitted a reasonable amount of time to make up the work missed. (<http://registrar.fsu.edu/bulletin/undergraduate/information/integrity/>)

(4) 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/>).

(5) 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.

(6) 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/>