



**FLORIDA STATE UNIVERSITY
DEPARTMENT OF STATISTICS
SUMMER 2019**

**STA 2122 INTRODUCTION TO APPLIED STATISTICS
Section 1**

COURSE INFORMATION:

Class Meetings: Jun 24th to Aug 2nd

Mo to Fr 9:30-10:45am OSB 110

Final Exam: Aug 2nd Friday 9:30am-10:45am OSB 110

Instructor: Aditi Basu Bal

e-mail: ab18z@my.fsu.edu

Office location: Room 446 OSB

Office Hours: Tu 11am-12noon and/or by appointment

COURSE DESCRIPTION:

Prerequisite: A grade of "C-" or better in MAC 1105 College Algebra (or equivalent).

Credit Hours: 3

Special Note: No credit given for STA 2122 if a grade of "C-" or better is earned in STA 2171, STA 3032 or QMB 3200.

The course covers Normal distributions, sampling variation, confidence intervals, hypothesis testing, one-way and two-way analysis of variance, correlation, simple and multiple regression, contingency tables and chi-square tests, non-parametric statistics.

The purpose of this course is to prepare students for further study and job preparation in the field of Natural Sciences. 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 2122, 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. Calculator: TI-84 or equivalent. You may not use your phone as a calculator on exams. You need to bring this calculator to each class meeting.
2. Course Website: Canvas is accessible through <https://my.fsu.edu> or at <https://fsu.instructure.com/>. Please check Canvas regularly for class notes, announcements, grades and other course materials.
3. Textbook: Not required. Simply follow the filled-in Class Notes.
4. Study Material: Lecture notes will be provided on-line. Any additional (or changes to) lecture notes/slides will be added on the Canvas website so it is important that you check daily for updates via announcements. You will be filling in the notes during lectures, so you can choose to do this manually by printing the notes or on your laptop.
5. Software: Microsoft Excel or equivalent.

CLASSROOM POLICIES

The classroom environment is an important factor for effective learning. In order to not distract other students' attention please follow these classroom policies. The first one of these is the university policy. Remember that no food or drinks are allowed in the classroom. Turn off all audible alarms (cell phones, pagers, calculators, watches etc.) Do not use cell phones in the class. Come to the class on time. Opening and closing the classroom door in the middle of a class causes distraction to the students and the teacher. Do not talk to other students without permission while the instructor is teaching.

GRADING POLICY

We will allow absolutely no make-ups, no extra credit assignments, and in general, no opportunities for grade improvement, after the Last Day of Class, so please do your best during the term. Assessments that are not taken will receive a zero grade. Your overall course grade will consist of the following:

- 5% each for 2 Online Quizzes
- 25% each for 2 Midterm Examinations
- 10% LSQA (Liberal Studies Quantitative Assessment)
- 30% Final Exam

Online Quizzes

- There will be a total of 2 Online Quizzes each worth 5% of your grade.
- Each quiz will be available on canvas for a week and will have three allowed attempts and the highest score will be kept.
- These quizzes will be open notes and can be taken at home. A calculator may be used where necessary.

Midterms

- There will be a total of 2 mid-terms each worth 25% of your grade.
- Exams will be closed note but you will be allowed to use ONE self-planned self-handwritten back-and-front 8 1/2 " × 11" original sheet of notes.
- You must bring 2 sharpened pencils and one calculator. Under no circumstances you will be allowed to share a calculator with anyone.
- Make sure you arrive 5 minutes earlier as there will be random seating assignments.

LSQA

- There will be one LSQA worth 10% of your grade.
- Exam will be closed note but you will be allowed to use ONE self-planned self-handwritten back-and-front 8 1/2 " × 11" original sheet of notes.
- You must bring 2 sharpened pencils and one calculator. Under no circumstances you will be allowed to share a calculator with anyone.
- Make sure you arrive 5 minutes earlier as there will be random seating assignments.

Final exam

- Final exam is worth 30% of your grade.
- Final exam will be closed note but you will be allowed to use TWO self-planned hand written back-and-front 8 1/2 " × 11" original sheet of notes.
- You must bring 3 sharpened pencils and one calculator. Under no circumstances you will be allowed to share a calculator with anyone.
- Make sure you arrive 5 minutes earlier as there will be random seating assignments.

GRADE DISTRIBUTION

A : 93 or above	A- : 90 - 92	B+ : 87 – 89	B : 83 – 86	B- : 80 – 82	C+ : 77 – 79
C : 73 – 76	C- : 70 – 72	D+ : 67 – 69	D : 63 – 66	D- : 60 – 62	F: 59 or below

Round your overall course grade UP to the next higher whole number before matching it to a letter grade.

GRADING APPEAL POLICY

During the course of the term, if you believe that a paper was improperly graded, make an appointment to come to my office within one week to see your paper and discuss it with me.

MAKE-UP POLICY

- You can make up missed midterm exams/LSQA within one week after submitting proper documentation.
- You are not allowed to make up an online quiz once the week of its online availability is over.
- You are not allowed to retake any exam.
- In case of missed Final Exam, contact me immediately.

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.

FINAL EXAM RESCHEDULING POLICY

Individual students who need to reschedule the final exam for a different time 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 *at least a week before the final exam*.

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.

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/Academics/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)
sdr@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>