

STA 4322 - Introduction to Statistics Theory

Fall 2020

Instructor:

Bryant Davis
Office Hours: MF 11:45 AM - 12:35 PM, or by appointment, via Zoom.
Email: davibf11@ufl.edu

Teaching Assistant:

Yichen Bai
Office Hours: Tuesday 1-2 PM, Thursday 5-6 PM, via Zoom
Email: ybai@ufl.edu

Course Objectives:

The sequence of courses STA 4321-4322 provides a formal and systematic introduction to mathematical statistics for students who have passed three semesters of standard undergraduate level calculus. Major topics of STA 4322 include normal-theory sampling distributions, estimation methods, properties of point estimators, confidence intervals, hypothesis testing and related theory, and basic linear regression. The primary purpose of STA 4322 is preparation for graduate-level study in statistics and closely related subjects.

Prerequisite: STA 4321 or STA 5325.

Lecture:

Lectures will be delivered asynchronously via Canvas. Links to pre-recorded lectures will be shared each day before the stated class time (11:45 PM).

Every Wednesday, Zoom attendance will be mandatory for in-person problem review sessions from 11:45 AM - 12:35 PM. Exams will also be given during Friday class time.

Course Website:

Please check the Canvas website for this course regularly. Resources such as suggested reading, suggested homework problems, Zoom recordings, and special announcements will be posted there.

Required Text:

Mathematical Statistics with Applications (7th edition) by Wackerly, Mendenhall, and Scheaffer.

Quizzes:

Friday classes will begin with a reduced office hour (11:45 AM - 12:15 PM), and end in a short, 20 minute quiz at the end of class (12:15-12:35 PM). Quizzes will be open note, and are meant to encourage students to keep up with the course material. Quizzes will count for a total of 10% of the final grade.

Suggested HW:

In addition to weekly quizzes, there will be suggested textbook exercises posted as the course progresses. You are not expected to submit your answers to the suggested exercises, but you should solve all of them to thoroughly learn the material and best prepare yourself for exams. Students may work together to solve suggested exercises, but keep in mind that you will be assessed individually.

Exams:

Three mid-term exams are tentatively scheduled on **October 9**, **November 6**, and a final on **December 18**, each worth 30% of the final grade. Exams will be proctored through Honorlock. The first two exams will be **available from 11:30-12:50 PM with a 60 minute limit**; details regarding proctoring will be posted in Canvas. The final will be **available from 12:30-2:30 PM with a 60 minute limit**; again, details regarding proctoring will be posted in Canvas. *Due to the nature of online exams via Canvas, it is important to keep in mind that technical issues may arise. Please try to plan accordingly by saving work, documenting issues, and preparing any relevant materials ahead of time.* Exams will be designed to only take 50 minutes to complete, with buffer time built in to account for potential technical issues.

Course Grade: Grading will be based on a composite score: 10% graded homework assignments, 90% exams. Final letter grades will be assigned using the usual 10-point scale (90% for an A, 87% for an A-, 83% for a B+, 80% for a B, ...). **All grades are final and not negotiable.**

Lecture Attendance:

The course requires steady and intensive effort throughout the semester. Lecture attendance via keeping up with pre-recorded lectures is fully expected, even if not strictly enforced. You are responsible for learning all material presented during lecture, and any topic covered in lecture is a potential exam topic (unless otherwise stated). Attendance on Wednesday review sessions *will be strictly enforced* - not attending the review sessions will result in a loss of points on your weekly quiz.

Reasonable Accommodations:

To request classroom accommodation, please be certain that you have made all necessary arrangements with the Dean of Students Office, and obtain from them documentation to submit to the instructor at the time of your request. A request must be made to the instructor at least one week in advance of the date for which the accommodation is requested. This course information and policies sheet can be made available in alternative formats to accommodate print-related disabilities. Contact the instructor for more information.

Academic Integrity:

Please familiarize yourself with the Student Honor Code and Academic Honesty Guidelines outlined in your University of Florida Student Guide and at <http://www.dso.ufl.edu/sccr/honorcode.php>

This syllabus is subject to change. You will be notified if there is a change.