

# STA 4322 - Introduction to Statistics Theory

## Summer B 2020

### **Instructor:**

Bryant Davis

Office Hours: MWR 12:30 PM - 1:45 PM, or by appointment, via Zoom

Email: [davibf11@ufl.edu](mailto:davibf11@ufl.edu)

### **Teaching Assistant:**

Office Hours: MW 8 PM - 9 PM, via Zoom

Email: [yang.lei@ufl.edu](mailto:yang.lei@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:**

Teaching will be asynchrononous except office hours and exams. Links to pre-recorded lectures will be shared each day before the stated class time (12:30 PM).

### **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.

### **Homework:**

There will be approximately five graded homework assignments, typically due on Thursdays before the stated class time (12:30 PM). These homework assignments will count for a total of 10% of the final grade. Students are expected to work independently on graded assignments unless otherwise specified in writing.

Additionally, 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 **July 17**, **July 31**, and **August 14**, each worth 30% of the final grade. Exams will be proctored through Honorlock, and will be **available from 12-2 PM with a 90 minute limit**; 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 60 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).

**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.**