

# STA 4322 - Introduction to Statistics Theory

## Fall 2021

### **Instructor:**

Bryant Davis  
Office Hours: WF 12 - 1 PM, or by appointment, via Zoom.  
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### **Teaching Assistant:**

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### **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 and Attendance:**

Lectures will be delivered MWF from 3:00 - 3:50 PM in Griffin-Floyd Hall 100. This course requires steady and intensive effort throughout the semester. Lecture attendance is fully expected, even if only casually enforced via pop quizzes. You are responsible for learning all material presented during lecture, and any topic covered in lecture is a potential exam topic (unless otherwise stated).

The modality of this course may change as the Covid-19 spread in Florida fluctuates. Please check your email and the Announcements page on the course Canvas course page frequently for updates. Attendance requirements will be communicated to students if modality changes. Feel free to email the instructor with any questions at any point.

### **Course Website:**

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

### **Required Text:**

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

### **Homework:**

There will be occasional graded homework assignments, typically due on Fridays before class begins (3:00 PM). These homework assignments will count for a total of 15% 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.

### **Quizzes:**

There will be frequent short pop quizzes administered at the end of class throughout the semester. These quizzes will count for a total of 10% of the final grade. Quizzes will not be difficult, but will be designed to ensure you are keeping up with the material.

### **Exams:**

Three mid-term exams are tentatively scheduled for **September 24**, **October 29**, and **December 14**, each worth 25% of the final grade. The first two exams will be administered **in class from 3:00 - 3:50 PM**, while the final exam will be administered from **12:30 PM to 2:20 PM**. Exam dates are subject to change depending on the pace at which we progress through the course, with the exception of the last exam.

**Course Grade:** Grading will be based on a composite score: 10% quizzes, 15% graded homework assignments, and 75% 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, 77% for a B-, ...). **All grades are final and not negotiable.**

### **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/secr/honorcode.php>

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