

Syllabus

STA4322 and STA5328 Spring 2024

Introduction to Statistics Theory

Department of Statistics, University of Florida

Course information.

<i>Lectures.</i>	Monday, Wednesday, and Friday from 11:45 AM – 12:35 PM in AND 0134		
<i>Instructor.</i>	Ekvall, Karl Oskar	<i>Teaching assist.</i>	Huang, Zhuochao
<i>office.</i>	103A Griffin–Floyd	<i>office.</i>	–
<i>email.</i>	k.ekvall@ufl.edu	<i>email.</i>	zhuochao.huang@ufl.edu
<i>office hours.</i>	Monday 10:30 - 11:30 AM	<i>office hours.</i>	–
	Friday 12:40 - 1:40 PM		–

Course objective. The sequence of courses STA 4321/4322 (rep. 5325/5328) provides a formal and systematic introduction to mathematical statistics for students who have passed three semesters of standard undergraduate level calculus. The primary purpose of STA 4322/5328 is preparation for graduate-level study in statistics and closely related subjects.

Course topics. Major topics of STA 4322/5328 include normal-theory sampling distributions; estimation methods; properties of point estimators; confidence intervals; hypothesis testing and related theory; and basic linear regression.

Prerequisites. STA 4321/5325. A well prepared student should have taken an introductory statistics course, such as STA 2023 or STA 3032.

Course webpage. Course materials (e.g., homework assignments and due dates) will be posted the course's eLearning site (Canvas), where grades will also be posted. Please check this site regularly for updates and announcements. Course documents and important information, including homework exercises, homework solutions, sample exams, and special announcements, will be posted there.

Textbook. Wackerly, Mendenhall, and Scheaffer, *Mathematical Statistics with Applications* (7th ed), Duxbury Press (Thomson Brooks/Cole Publishing), 2008.

- Exams will be based on material presented in lectures, which will approximately cover Chapters 7–11 of the textbook.

Assessment. Course grades will be based on 6 homework assignments and 3 in-class examinations. The final score (0–100) will be 0.7 times the average exam score plus 0.3 times the

average of the 5 best homework assignment scores. Letter grades will be assigned based on the following cutoffs:

Grade	Percentile
A	100% - 93%
A-	93% - 90%
B+	90% - 87%
B	87% - 83%
B-	83% - 80%
⋮	⋮
D-	63% - 60%
F	60% -

The instructor may adjust cutoffs downward when assigning final course grades. Homework assignments will be submitted and graded electronically through the course eLearning site.

- *Tentative exam dates:*

1. Wednesday, Feb 7
2. Wednesday, Mar 13
3. Wednesday, Apr 24

- *Tentative homework due dates:*

1. Wednesday, Jan 17
2. Wednesday, Jan 31
3. Wednesday, Feb 21
4. Wednesday, Feb 28
5. Wednesday, Mar 27
6. Wednesday, Apr 10

- Any changes to the tentative dates will be announced in class or on the eLearning site.

Missed exam or homework. Missed exams and late homework assignments will receive a grade of zero, except in cases of emergency. If an exam or homework will be missed for a non-emergency reason, the student must notify the instructor *at least two weeks prior* to the exam date and provide proper documentation. When an exam is missed or a homework assignment is late for a medical reason, a doctor's note or equivalent documentation should be provided.