STA 4322/5328: Introduction to Statistics Theory

University of Florida
Department of Statistics

Spring 2026
Class 14508/14526

Course Information

Meeting Times

Table 1: Class Meeting Times

Day/Period	Time
Tuesday 5th	11:45 – 12:35
Thursday 5-6th	11:45 – 13:40

Instructor Information

Table 2: Instructor contact details

Name:	Demetris Athienitis
Office:	Griffin Floyd 116B
E-mail:	athienit@ufl.edu
Hours:	See course website

Teaching Assistant Information

Table 3: Teaching assistant contact details

Name:	Swarnali Raha
Office:	See course website
E-mail:	swarnali.raha@ufl.edu
Hours:	See course website

Description: Sampling distributions, central limit theorem, estimation, properties of point estimators, confidence intervals, hypothesis testing, common large sample tests, normal theory

small sample tests, uniformly most powerful and likelihood ratio tests, linear models and least squares, correlation, and introduction to analysis of variance.

Prerequisites: STA 4321 with a minimum grade of C+

Credit Hours: 3

Website: e-Learning

Delivery: In-person, in-class

Communication: Discussion forum (e-Learning); office hours; e-Learning messaging

1 Course Objectives

This course is designed to prepare students for graduate-level work in statistics and related fields, or for research in the sciences, social sciences or medical sciences of the type where advanced statistical methods are used.

This course uses mathematical statistics to provide a rigorous understanding of statistical inference, such as point estimation, confidence intervals, and hypothesis testing for models based on standard parametric families.

2 Materials and Supply Fees

Required Text(s): *Mathematical Statistics with Applications*, 7th Edition

Author(s): D. Wackerly, W. Mendenhall, R.L. Scheaffer

ISBN-13: 780495110811

Computational Requirements: Students may need to use R for some computations. No experience is needed, and sample code will be provided in-class.

The course does not have any supply fees.

3 Course Policies

3.1 Assignments

- Assignments **MUST** be handwritten whereby students are expected to **show**, **explain**, and **cite** their work from the lectures or textbook. Any software output can be inserted into the image file of the handwritten work.
- **Offering, accepting, sharing, and copying solutions, is an act of plagiarism**, which is a serious offense and all involved parties will suspected offenses will be reported to Student Conduct and Conflict Resolution (SCCR) as an honor code violation and handled according to their process. If found responsible, sanctions may be imposed.

- All **deadlines (excluding exams) are at 23:59** of the due/end date and posted on course page. These are ***hard* deadlines** meaning that any open or ongoing assignments will automatically be submitted at the deadline. Assignments are automatically submitted at deadline even if in progress.
- Feedback will be provided within two to five business days from the assignment deadline.
- **Quizzes** that are *timed* and range from conceptual to applied.
  - Quizzes may be administered online or in-class on the predetermined dates. Students registered with the Disability Resource Center (DRC) will be able to schedule it there.
  - Quiz questions vary from multiple choice, text entry or upload handwritten work.

3.1.1 Exams

There will be three (3) in-class exams that may comprise of multiple choice questions and/or open-ended questions. Exams will emphasize more on conceptual questions. Allowed material:

- Provided formula sheet. Sheet will be provided ahead of time with other supplemental material.
- Scientific/Graphing Calculator.

3.1.2 Exam dates

Exam #1 ..... February 17
Exam #2 ..... March 31
Exam #3 ..... Registrar date: April 27

3.2 Grading

3.2.1 Grade distribution

Table 4: Grade Distribution

Item	Value	Notes
Exams 1, 2, 3	65%	17.5% lowest, 22.5% second lowest, 25% best
Homework	20%	
Quizzes	15%	includes Intro quiz, lowest quiz dropped
Total	100%	
Extra Credit	0–1%	class and discussion forum participation

Table 5: Letter grade ranges

		A	93 to 100	A-	90 to less than 93
B+	87 to less than 90	B	83 to less than 87	B-	80 to less than 83
C+	77 to less than 80	C	73 to less than 77	C-	70 to less than 73
D+	67 to less than 69	D	63 to less than 67	D-	60 to less than 63
		E	less than 60		

3.2.2 Letter grade assignment

Final grades will be calculated to 4 significant figures, i.e. 2 decimal places. There will be *no rounding up* of scores.

- Final grades are not shown on e-Learning as they do not account for the conditional weighing of exams.
- To view the result of the letter grades to your GPA please visit the UF Grade and Grading Policies.

4 UF Policies

This course complies with all UF policies. For information on those policies and for a list of campus resources, please see this page: https://syllabus.ufl.edu

5 Tentative Course Outline

Table 6: Course Schedule

Week	**Content**	**Textbook**	HW/Quiz
1–2	Estimators, Sampling Distributions and Central Limit Theorem	8.1-8.4, 7.1-7.3	1.1-1.2
3–5	Estimation	8.5-8.6, 8.8-8.9	2-3
Exam 1			
5–7	Properties of Point Estimators and Methods of Estimation	9.1-9.7	4-5
Exam 2			
8–11	Hypothesis Testing	10.1-10.6, 10.8, 10.10-10.12	6-7
12–14	Linear Models and Estimation by Least Squares	11.3-11.4, 11.6, 11.10-11.14	8-9
Exam 3			