

STA 4322/5328

Fall 2023

Introduction to Statistical Theory / Fundamentals of Statistical Theory

Course Prerequisites: STA 4321/5325

Tuesday: 8.30-9.20am & Thursday: 8.30-10.25am @ Little Hall 0121

Instructor and TA

Instructor: Georgia Papadogeorgou (gpapadogeorgou@ufl.edu)

Office hours: Tuesdays 12:10-1:40pm at 103 Griffin-Floyd Hall

TA: Yichen Bai (ybai@ufl.edu)

Office hours: TBD

The TA is your first point of contact for questions.

Course Description

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. 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. The primary purpose of STA 4322/5328 is preparation for graduate-level study in statistics and closely related subjects.

Class format and materials

- **Class Materials:** Notes will be posted periodically on the course website. They will contain *nearly* all of the material, but they will include unsolved examples and questions that I will solve during lecture.
- **Required Textbook:** Seventh edition of Mathematical Statistics with Applications by Wackerly, Mendenhall, and Scheaffer. (ISBN: 9780495110811)

Student responsibilities

- **Homework**

There will be **4 homework assignments** during the semester.

Homework will be due at the **beginning of class** at the instructor's desk. Homework deadlines are strict. Students that do not return their homework by the due time without having received an **approved** extension will receive a grade of zero for the given assignment. For extensions, you need to email me no later than 48 hours before the due time. I will only consider requests for which there is a reasonable reason why the assignment cannot be completed at the allotted time.

You are allowed to collaborate on homework. However, your final homework submission has to reflect your own work, and identical submissions will not be tolerated.

- **Exams**

There will be **4 exams**.

All exams will be held in person. You are required to bring your UF ID for the exams. Exams will be held during class hours at the assigned classroom. Students **are not allowed** to collaborate during exams, and are not allowed to use any material not provided by the instructor for completing the exam.

In case of conflict or illness, if a student is unable to take an exam at the scheduled time, they must get in touch with the instructor at least 48 hours **prior** to the exam time for any arrangements to be made for a makeup. Each case will be reviewed individually. Valid and detailed documentation is a prerequisite under such extenuating circumstances. Academic dishonesty on any exam will result in a *minimum* penalty of a grade of *zero* on that exam.

Important Dates

These dates are **subject to change** during the semester. Any changes will be announced.

Homework #1. Due on September 12th at 8.30am
Exam #1 September 19th
Homework #2. Due on October 5th at 8.30am
Exam #2 October 17th
Homework #3. Due on October 26th at 8.30am
Exam #3 November 2nd
Homework #4. Due on November 28th at 8.30am
Exam #4 December 5th

Grading

The lowest homework score and the lowest exam score will **be dropped**. The average of the top three homework scores and the top three exams will be calculated. The final score is calculated as:

Top 3 Exams 70%
Top 3 Homework 30%

These are tentative and subject to change, however, they will only change in the direction that is good for you. There is a good chance that the course will be curved and the requirements for getting any particular grade level will be lower than what you see here. If your grade falls above a given threshold below, then you are guaranteed to get at least that grade for the course.

| | | | | | |
|----|------------|---|------------|----|------------|
| B+ | 87 to < 90 | A | 93 to 100 | A- | 90 to < 93 |
| C+ | 74 to < 77 | B | 81 to < 87 | B- | 77 to < 81 |
| D+ | 64 to < 67 | C | 70 to < 74 | C- | 67 to < 70 |
| | | D | 60 to < 64 | D- | 55 to < 60 |
| | | E | < 55 | | |

The numeric scores will be rounded to the nearest tenth.
Grades will be changed only when an error has been made; negotiation is not appropriate.
I will not discuss individual grades during the semester.

UF and CLAS Policies

Dropping, Withdrawing and Incomplete

Make up Policy

Requirements for make-up exams, assignments, and other work in this course as well as policies regarding absences, religious holidays, illness and student athletes are consistent with [UF Attendance Policies. \(Links to an external site.\)](#)

Dropping and Withdraw

For late course drops and course withdrawals please visit <https://catalog.ufl.edu/UGRD/academic-regulations/dropping-courses-withdrawals/>

Incomplete

Incompletes are only assigned when extraordinary circumstances (such as an accident, or extended hospitalization), arising after the date for dropping the course, prevent the student from completing the course requirements. Having a failing grade in the course is not a valid reason for requesting an Incomplete. Information on **Medical Withdrawal** can be found at <https://umatter.ufl.edu/>

Accommodating Students with Disabilities

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which will be sent to the instructor. Students with disabilities should follow this procedure as early as possible in the semester, and need to do this every semester. Accommodations will not be made retroactively, but only forward from the day that the letter was received. Special circumstances should be discussed with the instructor.

Academic Misconduct

University's Honesty Policy: UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.

Evaluations

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

Additional resources

Any additional resources including academic support or information technology can be found at <https://www.ufl.edu/about/offices-services/>