

**Florida State University**  
**STAT 4322/5325: Mathematical Statistics**  
 Spring, 2025

**Instructor:** Xiulin Xie  
**Class Days/Time:** Tuesday and Thursday 1:20PM – 2:35PM  
**Classroom Number:** OSB 0108  
**Course website:** Canvas  
**Email Address:** [xx23d@fsu.edu](mailto:xx23d@fsu.edu)  
 Use subject line '[STA-4322]'/ '[STA-5325]' in all email correspondence.  
**Office Hours:** Tuesday/Thursday 2:35PM – 3:35PM, OSB 403

**TA Name:** Hengwei Xing  
**Email Address:** [hx15@fsu.edu](mailto:hx15@fsu.edu)  
**Office Hours:** Wednesday 10AM - 12PM, OSB 408

**Prerequisites**

- STA 4321/5323: Introduction to Mathematical Statistics.
- Students are required to be familiar with functions of several variables, vectors, as well as derivatives, including partial derivatives, gradients, and the Jacobian, multiple integration, optimization, and other topics in multivariable calculus (i.e., Calculus III). By necessity, the course also assumes familiarity with topics in single variable calculus (i.e., Calculus I + II).
- Or permission of the instructor.

**Course Overview**

STA-4322/5325 “Mathematical Statistics” focuses on topics such as the properties of estimators, estimation methods including the method of moments and maximum likelihood estimation, constructing and interpreting confidence intervals, and formulating and conducting hypothesis tests. The course will also briefly discuss linear regression model if time permitting.

**Textbook**

The textbook recommended for this course is **John E. Freund's Mathematical Statistics with Applications, by Irwin Miller, Marylees Miller**, 8th Edition (but any earlier edition is likely to be sufficient). Please obtain the textbook from your preferred source.

**Attendance policy**

Attendance to lecture is formally required, however I will not be taking attendance past the first lecture (as required by university policy). It is the student's responsibility to make up for the material covered in the class during his/her absence.

**Grading**

The course is worth 100 total points which are divided into three categories that determine the final letter grade:

- Homework: 30% of total points
- Midterm 1: 20% of total points
- Midterm 2: 20% of total points
- Final Exam: 30% of total points

### Homework

- The homework assignments will be posted on Canvas.
- You are encouraged to discuss with each other but should write down the answers independently.
- All assignments are to be submitted electronically through the course canvas site assignment page.
- No late submissions will be accepted.

### Exam

- There will be two mid-term exams and one final exam. All are in-class exams.
- These tests will be closed books, closed notes but the use of a scientific calculator is permitted.
- You are allowed to bring an 8.5x11 inch sheet (both side usable) of formulas to these exams. This sheet must be prepared by you and must be submitted with your exam.
- The midterms are in theory noncumulative, but the course material necessarily builds upon itself and latter topics may require knowledge, familiarity, or mastery of previous topics outside of the topic scope of a specific midterm examination.
- The final exam will be **cumulative**.
- There will be no make-up exams in this class. Please see the instructor as early as possible regarding excused absence during an exam.

### Exam schedule (tentative)

- Midterm 1 – Feb 6th, 2025 (Thursday), 1:20 pm – 2:35 pm
- Midterm 2 – Mar 20th, 2025 (Thursday), 1:20 am – 2:35 pm
- Final exam – May 1st, 2025 (Thursday), 12:30 pm – 2:30 pm

### Re-grade policy

- You have **one week** to request a re-grade of a homework or exam from the date on which the graded homework or exam is available to the students of the class.
- Submit a written request detailing the nature of the grading error to the instructor along with the relevant homework or exam.

### Final letter grading policy

- Final point totals will be rounded to the nearest integer.
- No grade adjustments will be considered on an individual basis.
- Final grades may be adjusted for the entire class. However, the assignment of letter grades will not be stricter than the following rubric for end of semester point totals.

Points earned	[93,100]	[90,93)	[87,89)	[83,86)	[80,82)	[77,79)	[73,76)	[70,72)	[67,69)	[63,66)	[60,62)	<60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

### Policy for collaborative work

Any work submitted for a grade which permits collaboration is expected to be individually written-up by the student submitting the assignment. While collaboration is encouraged—where allowed—students must write their own solutions and responses in their own words. Direct copying of write-ups, analyses, or

problem solutions from other students or sources will be considered a violation of the honor code and will be reported for review.

### **Syllabus Change Policy**

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

### **Academic integrity and honor policy**

The Florida State University Academic Honor Policy outlines the university's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and living up to their pledge to "... be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University." The policy in full can be found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>.

### **Americans with Disabilities Act**

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.

To receive academic accommodations, a student:

- must register with and provide documentation to the Office of Accessibility Services (OAS);
- must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and,
- should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the

Office of Accessibility Services  
 874 Traditions Way  
 108 Student Services Building  
 Florida State University  
 Tallahassee, FL 32306-4167  
 (850) 644-9566 (voice)  
 (850) 644-8504 (TDD)  
[oas@fsu.edu](mailto:oas@fsu.edu)  
<https://dsst.fsu.edu/oas/>