MATH 3215 Introduction to Probability and Statistics Syllabus

Introduction to Probability and Statistics, Section N, 3 Credits
Fall 2026

Instructor Information

Instructor	**Email**
Dr. Amanda Hampton	Ahampton34@gatech.edu

General Course Information

Description

This course is a problem oriented introduction to the basic concepts of probability and statistics, providing a foundation for applications and further study.

Course Learning Outcomes

Upon successful completion of this course, students should be able to do the following:

- Organize, summarize, and display data using graphical methods and numerical measures.
- Apply basic probability rules, including conditional probability, independence, and Bayesian theory.
- Understand discrete and continuous random variables, including binomial, normal, and Poisson distributions, and the application of the Central Limit Theorem.

Required Course Materials

- A digital copy of the textbook, Introduction to Probability and Statistics for Engineers and Scientists (5th edition) by Sheldon Ross, and lecture notes will be provided on the Canvas page of the course. It is *not* required to purchase the textbook.

Grading Policy:

Final grades will be calculated with the following weights:

- Homework: 30%
- Midterms: 40%
- Final Exam: 30%

Description of Graded Components

There will be 10 homework assignments, 2 midterms, and a final exam. Final letter grades will follow the standard cutoffs:

A: [90,100]; B: [80,90); C: [70,80); D: [60,70); F: [0,60).

Generally, homework assignments will be a set of problems from the textbook, which will be submitted over the platform Gradescope. All midterms will take place in person during our normal lecture slot. The final exam is cumulative.

USG Required Course Policies

Attendance and/or Participation

Attendance will not be taken during lecture, but it is strongly recommended that you attend lectures.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Additional Georgia Tech Required Policies

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.