

ISyE 3030 Syllabus

Basic Statistical Methods, Section B, 3 Credits

Fall 2026

Instructor Information

Instructor: Jing Li

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General Course Information

Description

Point and interval estimation of systems parameters, statistical decision-making about differences in system parameters, analysis and modeling of relationships between variables.

Course Learning Outcomes

- Estimate parameters of distributions
- Perform statistical analysis and decision-making using statistical inference
- Use statistical software to conduct analyses and interpret the output
- Draw sound statistical conclusions from experiments and observational studies

Required Course Materials

Douglas C. Montgomery, George C. Runger, *Applied Statistics and Probability for Engineers*, 7th Edition, Wiley, 2018.

Grading Policy:

A \geq 90; B \geq 75; C \geq 60; D \geq 45

Assignments

| | |
|----------|------|
| Homework | 5% |
| Exam 1 | 25% |
| Exam 2 | 25 % |

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|---------|-----|
| Exam 3 | 25% |
| Project | 20% |

Description of Graded Components

- The exams are non-cumulative.
- The exams are close notes and close textbook.
- Formula sheet policy
 - Exam 1: you are allowed to bring one double-sided formula sheet.
 - Exam 2: you can bring the formula sheet from exam 1 and another formula sheet created for exam 2.
 - Exam 3: you can bring the formula sheets from exam 1 &2, and another formula sheet created for exam 3.
- You must bring a calculator, <=3 blank scratch papers, and a pen/pencil.

Course Policies

Attendance and/or Participation

You are expected to attend lectures, which facilitate a structured learning experience.

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.

Core IMPACTS

[Core IMPACTS](#) is the University System of Georgia's General Education curriculum. If you are teaching a course that counts towards Core IMPACTS, you should include a syllabus statement about the Core area and associated [career competencies](#). [This resource](#) developed by the Center for Excellence in Teaching and Learning and Online Education at Georgia State University includes template syllabus statements for each of the Core IMPACTS areas that you may adapt for your course.

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.

Pre- &/or Co-Requisites

ISYE 2027 PROBABILITY WITH APPLICATIONS and, CS 1301 INTRO TO COMPUTING with concurrency or CS 1371 COMPUTER FOR ENGINEERS, with concurrency.