ISYE 6673 – Financial Optimization

Course Information

Instructor: Constance Crozier (constance@gatech.edu)

Course Prefix and Number: ISYE 6673

Term: Spring 2027

Course Description

This course exposes students to a wide variety of optimization models used in finance and equipes them with the theoretical foundations and computational tools necessary to solve these models in practical settings.

Course Learning Outcomes

Students will learn:

- To formulate linear optimization problems.
- The concept of duality and its uses in pricing.
- Incorporating
- Solving optimization problems using theory, and the Simplex algorithm.

Grading Policy

Grades will be determined using the following composition:

Homework – 10%

Attendance – 5%

In-Class Group Assessments – 25%

Midterm I – 15%

Midterm II – 15%

Final – 30%

Extra credit – Up to 2%

Homework: Graded as complete/incomplete. Four homework across the semester.

Attendance: Have maintained a class attendance of at least 50%.

In-Class Assessments: completed in class without electronics or notes, but in groups of up to three students. Five assessments will occur (best four count).

Exams: Written exams. Students may bring a cheat sheet but no other materials.