

**Economics 605: Mathematics for Economists**  
Summer 2020

**Instructor: William Horrace**

Office: 426 Eggers  
Phone: 443-9061  
Email: [whorrace@maxwell.syr.edu](mailto:whorrace@maxwell.syr.edu)  
Hours: M-Th 2:30 – 3:00

**Teaching Assistant:**

Kyuhan Choi  
Email: [kchoi02@syr.edu](mailto:kchoi02@syr.edu)

**Texts:** Alpha C. Chiang, *Fundamental Methods of Mathematical Economics*

**Classes:** 3:00 PM to 4:30 PM Monday through Friday.

**Discussion Sections:** 11:00 AM to 11:50 AM Monday through Friday.

**Course Objective:** To introduce students to some of the mathematical methods used in modern economics.

**Grades:** Your grade will be determined by your performance on homework, a midterm exam, and a final exam.

Homework: due at various dates	30%
Midterm exam: date TBA	35%
Final Exam: date TBA	35%

**Topic**

Linear algebra  
Calculus review  
Unconstrained optimization theory  
Implicit function theorem and comparative statics  
Optimization theory with equality constraints  
Optimization theory with inequality constraints

**Assignment**

C: chapters 4 & 5  
C: chapters 6 & 7  
C: chapters 9 & 11  
C: chapters 7 & 8  
C: chapter 12  
C: chapter 21