

**Economics 605: Mathematics for Economists**  
Summer 2011

**Instructor: William Horrace**

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

**Teaching Assistants:**

Yin-Fang Yen  
Email: yyen01@maxwell.syr.edu

Ying Deng  
Email: yideng@maxwell.syr.edu

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

**Classes:** 3:00 PM to 4:30 PM in Room 112 of Eggers Hall, Monday through Friday.

**Discussion Sections:** 11:00 AM to 11:50 AM in Room 112 of Eggers Hall, 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