

**Introduction to Mathematical Economics**  
**Econ 4808-001**  
**Fall 2006**

Instructor: Xia Yuan

Class Hours: MWF 10:00-10:50 @ ECON 117

Office Hours: MWF 11:00-12:00 or by appointment @ ECON 414

Email: [xia.yuan@colorado.edu](mailto:xia.yuan@colorado.edu) (Best way to contact me)

Course Website: [ucsub.colorado.edu/~yuanx/](http://ucsub.colorado.edu/~yuanx/)

**Required Text:** Alpha C. Chiang and Kevin Wainwright: *Fundamental Methods of Mathematical Economics* (2005), 4<sup>th</sup> Edition. McGraw-Hill

**Course Description:**

This course is essential for anyone who is considering graduate studies in economics. The purpose of this course is to provide a comprehensive exposition of basic mathematical instruments that are commonly used in economics. Methods of Static Analysis, Comparative Static Analysis, and Optimization will be introduced. Major emphasis is on illustrating how these tools can be used to analyze theoretical and practical economic problems.

**Prerequisites:**

Math tools (ECON 1078 & 1088 or equivalent), Principles of Economics (ECON 2010 & 2020) are prerequisites. It is highly recommended that you fulfill the prerequisites before taking this course.

**Homework:**

Homework and solutions will be posted on the course website. It is a vital part of learning to use math tools and its applications. They will be collected and graded randomly. You are encouraged to work as a group, but your answers must be written individually so that you fully understand how to solve the problems, and get credit for your homework. **No late homework will be accepted.** Some class time will be set aside to go over homework assignments. But the best way to learn math is to practice by yourself. It is also important that you do not allow yourself to get behind.

**Exam:**

There will be three in-class exams assigned based on the following scale.

**Grading:**

Homework: 15%

In-class Exam1: 25%

In-class Exam2: 25%

In-class Exam3: 25%

Final Exam: 35%

Score Letter Grade:

94-100% A

90-93% A-  
87-89% B+  
84-86% B  
80-83% B-  
77-79% C+  
74-76% C  
70-73% C-  
67-69% D+  
64-66% D  
60-63% D-  
Below 60% F

**Additional Notes:**

- 1) It is the students' responsibility to take control of their own education. If you are having problems, I am more than willing to help you. You just need to approach me at some point.
- 2) No make-ups will be given unless there is a proven emergency that prevents you from attending class on the scheduled exam date. You are required to submit proof of the emergency. If you miss an exam or homework, you will be given a zero.
- 3) All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>
- 4) If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services (DS) early in the semester so that your needs may be addressed. DS determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, (<http://www.colorado.edu/disabilityservices>).
- 5) Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class,

