



Hunan University ECON 35: Mathematical Economics

Professor: To be announced

Total contact hours: 54 hours

Credit: 4

Course Description

This course covers comparative static analysis, single and multiple agent unconstrained and constrained optimization problems and introduction to dynamic analysis.

Required Textbook

Fundamental Methods of Mathematical Economics (4th Edition) by Alpha C. Chiang and Kevin Wainwright.

Grading

- Homework Assignments 25%
- Midterm Exam 1 25%
- Midterm Exam 2 25%
- Final Exam 25%
- Total 100%

A+ 96-100	A 90-95	A- 85-89
B+ 82-84	B 78-81	B- 75-77
C+ 71-74	C 66-70	C- 62-65
D 60-61	F < 60	

Course Schedule

The course has 24 class sessions in total. All sessions are 2 hours and 15 minutes in length.

Note: the course outline and required readings are subject to change.

Class 1:

Introduction to the course

Class 2:

Equilibrium analysis in economics



Class 3:

Linear models and matrix algebra

Class 4:

Linear models and matrix algebra ; Homework 1 due

Class 5:

Comparative Statics

Class 6:

Differentiation

Class 7:

Optimization of functions of one variable

Class 8:

Optimization of functions of more than one variable ; Homework 2 due

Class 9:

Midterm 1

Class 10:

Lagrange-multiplier method

Class 11:

First-derivative test or first order conditions

Class 12:

Second-derivative or second order conditions; Homework 3 due

Class 13:

Introduction to mathematica 6

Class 14:

Introduction to mathematica 6

Class 15:

Midterm 2 review

Class 16:

Midterm 2

Class 17:

Uncertainty and consumption under capital markets imperfections



Class 18:

Multiple agents optimization

Class 19:

Economic Analysis and Integral Calculus; Homework 4 due

Class 20:

First Order Differential Equations

Class 21:

First Order Difference Equations

Class 22:

First Order Difference Equations; Homework 5 due

Class 23:

Final review

Class 24:

Final

Attending Policy

Regular and prompt attendance is required. Under ordinary circumstances, you may miss two times without penalty. Each absence over this number will lower your course grade by a third of a letter and missing more than five classes may lead to a failing grade in the course. Arriving late and/or leaving before the end of the class period are equivalent to absences.

Policy on "Late Withdrawals"

In accordance with university policy, appeals for late withdrawal will be approved ONLY in case of medical emergency and similar crises.

Academic Honesty

Hunan University expects all students to do their own work. Instructors will fail assignments that show evidence of plagiarism or other forms of cheating, and will also report the student's name to the University administration. A student reported to the University for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

General Expectations:

Students are expected to:

- Attend all classes and be responsible for all materials covered in class and otherwise



assigned;

- Complete the day's required reading and assignments before class;
- Review the previous day's notes before class and make notes about questions you have about the previous class or the day's reading;
- Participate in class discussions and complete required written work on time;
- Refrain from texting, phoning or engaging in computer activities unrelated to class during the class period;
- While class participation is welcome, even required, you are expected to refrain from private conversations during the class period.

Special Needs or Assistance

Please contact the Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material. Our goal is to help you learn, not to penalize you for issues which mask your learning.