

CHINESE UNIVERSITY OF HONG KONG

DEPARTMENT OF ECONOMICS

**Introductory Mathematical Economics (ECON4110)
First semester, 2023-24**

Teacher:

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Time and Venue:

11:30am – 2:15pm Thursday

ELB 918 (computer lab ELB 916 for the lecture on September 28)

Course Description:

This course discusses basic tools in mathematical analysis and their applications to economics. Students will learn rigorous mathematical reasoning, and apply it to economic issues. We aim to have balance in theoretical analysis and applications.

Course Outline:

1. Optimizing behavior and equilibrium: An introduction
2. Production
3. Consumer behavior
4. Intertemporal choice
5. General equilibrium overlapping-generations model
6. Behavior under uncertainty
7. Dynamic programming (* if time permits)

Learning Outcomes:

After taking this course, students should be familiar with basic concepts and results in mathematical economics. They should also be able to apply the methods in understanding economic articles and books using rigorous mathematical approach.

Textbooks / Recommended Reading:

There is no textbook for this course. More detailed reading lists for individual topics will be given during the course.

Grading Policy:

There will be five homework assignments (20% total, based on the best 4 scores), one mid-term examination (30%) and a final examination (50%).

Academic Honesty:

Attention is drawn to university policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <http://www.cuhk.edu.hk/policy/academichonesty/>.