ECON 2174
Mathematics for Economists

Department of Economics, HKUST

Instructor	**Teaching Assistant**
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LSK 6081	LSK 5067
OH: TuTh 16:20-17:00	OH: We 14:00-15:00

Overview

This course serves as an introduction to the essential mathematical tools required for advanced economic studies. It covers various topics such as calculus, linear algebra, and optimization methods specifically tailored to suit economic applications.

Prerequisites

This course assumes that you have some basic understanding of calculus.

Reference Books

I will provide comprehensive slides/lecture notes that are self-contained and sufficient for homework problems and exams. If you desire further explanations, examples, or exercises, the following books can prove to be valuable resources.

Fundamental Methods of Mathematical Economics, A.C. Chiang and K. Wainwright (2005), McGraw-Hill

Mathematics for Economists, Carl P, Simon and Lawrence Blume (1994), Norton

Grading

Homework (20%), midterm exam (35%), final exam (45%).

Homework

Problem sets on a bi-weekly basis. Collaboration is allowed, even encouraged.

Exams

Exam dates are to be determined and will be announced two weeks in advance.

Both exams are in-class. Final exam is cumulative.

Tutorials

We will conduct tutorials, although they will not be scheduled regularly. Please make sure to stay attentive to course emails for any tutorial announcements.

Main topics

- Preliminaries
- Calculus and real analysis
- Linear algebra
- Optimization

Objectives

Upon successfully completing this course, you will acquire a solid grasp of the mathematical tools essential for undergraduate economic studies. As per the University learning goals and objectives, you will fulfill:

Point 1: Graduates will be critical and creative thinkers who make effective decisions supported by appropriate analytical techniques.

Point 2: Graduates will demonstrate effective leadership and English communication skills when solving business problems.

Point 3: Graduates will demonstrate a broad understanding of business functions and in-depth knowledge of their major.

Honor Code

There will be no tolerance for plagiarism and cheating. Any related offense will lead to disciplinary action including termination of studies at the University. 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.