ECON 5100
Mathematics for Business and Economics

Department of Economics, HKUST

3 Credits

Instructor	**Teaching Assistant**
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LSK 6081	LSK 5067
OH: TuTh 11:50-12:30 (in classroom)	OH: Fr 9:00-11:00

Overview

This course explores mathematical tools that are needed for graduate studies in economics. Topics include real analysis, linear algebra, differential equations, static and dynamic optimization methods.

Prerequisites

Undergraduate level calculus and linear algebra.

Reference Books

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

Grading

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

Homework

Problem sets. 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 have tutorials but not on a regular basis. Tutorials will be announced
on week in advance.

Main topics

- Calculus, real analysis and differential equations
- Linear algebra
- Static optimization
- Dynamic optimization

Objectives

After completing this course you are expected to have a good understanding
of basic mathematical tools for economic studies.

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.