ECON5210 Microeconomic Theory I

2025-26 Fall, Department of Economics, HKUST

Basic Information

Time: Mon/Wed 18:00-19:50pm
Classroom: Room 1007, LSK Building
Course Material: slides and problem sets
Enrollment Requirement: calculus, mathematical analysis
Teaching and Learning Activities: lectures and tutorials
Course Credit: 4
Generative AI: Allowed

Instructor

Rui Tang   email: ruitang@ust.hk
Office Hour   LSK6082, Monday 13:30-14:30

Course Description

This course provides first-year PhD students with fundamental knowledge in advanced microeconomic theory. The course covers concepts and analytical tools for the study of basic microeconomic topics including general equilibrium, decision making with uncertainty, and static and dynamic games.

Course Objective and Intended Learning Outcome

Students are expected to have an broad based knowledge of advanced microeconomic theory. They are also expected to integrate knowledge of microeconomic theory to solve relevant problems within their area of specialization.

Evaluation and Exam Schedule

Midterm: 38%, first half of the course

Final: 38%, second half of the course

Homework: 24%

Midterm Exam Schedule: Oct 20 (Monday, in-class)

Final Exam Schedule: TBA

Recommended Readings

1. Microeconomic Theory, Mas-Collel, A., M.D. Whinston, and J.R. Green, Oxford, 1995

2. A Course in Game Theory, Martin J. Osborne and Ariel Rubinstein, MIT press, 1994

Rubrics for Final Grade

Excellent Performance (A range): Demonstrates a deep understanding of the decision theory materials covered in the course. Knows very well how to apply the knowledge learned in the course to solve problems.

Good Performance (B+, B): Show a solid grasp of the materials covered in the course. Demonstrates good skills in applying the knowledge learned in the course to solve problems.

Marginal Performance (B-, C+, C): Has basic knowledge of the materials covered. Demonstrates reasonable skills in applying the knowledge learned in the course to solve problems.

Fail: Demonstrates **no** understanding of the course materials. Not able to apply **any** knowledge learned in the course to solve problems.

Weekly Course Schedule

First Half: 1. Choice and Preference; 2. Consumer Demand; 3. General Equilibrium and Welfare Theorems; 4. Production; 5. Expected Utility Theory; 6. Revealed Preference

Second Half: 1. Strategic Form Game, Nash Equilibrium and Rationalizability; 2. Extensive Form Game; 3. Bargaining Game; 4. Repeated Game and Folk Theorem; 5. Incomplete Information Game