# ECON5210 Microeconomic Theory I

2023-24 Fall, Department of Economics, HKUST

#### Basic Information

Time: Tue/Thur 18:00-19:50

Classroom: G003, CYT Bldg (subject to change)

Course Material: slides and problem sets Enrollment Requirement: good mathematics Teaching and Learning Activities: lecture

Course Credit: 4

### Instructor

Rui Tang Office Hour email: ruitang@ust.hk LSK6082, Thursday 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 in depth understanding of microeconomic theory. They are also expected to integrate functional knowledge of microeconomic theory to solve relevant problems within their area of specialization.

#### EVALUATION AND EXAM SCHEDULE

Midterm: 40%, first half of the course

Final: 40%, second half of the course

Homework: 20%

Midterm Exam Schedule: 17 Oct 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

## 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