

Hong Kong University of Science and Technology

Microeconomic Analysis ECON 5130

Yuk-fai Fong

Syllabus

Section	Schedule	Venue
L1	Mon, Wed: 9 - 11 a.m.	LSK 1007
L2	Mon, Wed: 11:30 a.m. - 1:30 p.m.	LSK 1007
Duration	September 4 – November 30	

Description & Course Objectives

This course covers theories of modern microeconomics. It intends to introduce the main theories and methodologies of neoclassical microeconomics, game theory, and information economics. Students are required to understand the theories and concepts intuitively, to master the modeling techniques and derivations, and to solve simple versions of the problems.

Intended Learning Outcomes

Present micro theories. Introduce micro methodologies. Present many examples.

Course Content

The first part of the course focuses on standard theories in advanced microeconomics. The second and third parts of the course introduce students to game theory and oligopoly competition. In the fourth part of the course, we cover some applications of microeconomics to competition policies and strategic interactions among firms.

Resources

Course Website

Slides, reading materials, and problem sets are there. All the slides shown in class are downloadable from this website.

Optional Textbook

Hal Varian, Microeconomic Analysis, Third Edition

Other Supplementary Readings

Wang, S. (2016). Microeconomic Theory. 3rd ed., PDF copy, free.

Jehle, G.A.; Reny, P.J. (2011). Advanced Microeconomic Theory, 3rd ed.

Mas-Colell, et al. (1995). Microeconomic Theory. Oxford University Press.

Laffont, J.J. (1995). The Economics of Uncertainty and Information. MIT.

Course Outline

Tentative Topics

Part 1: Neoclassical Economics.

- Preferences and utility function
- Budget
- Utility maximization
- Expenditure minimization
- Revealed preference
- Producer theory
- Profit maximization and cost minimization
- Competitive market: Partial equilibrium
- Competitive market: Welfare analysis
- Choice under uncertainty
- Externality

Part 2: Game Theory.

Part 3: Oligopoly Competition.

Part 4: Applications: Competition Policies and Business Strategy. Around 6 lectures

Course Prerequisites

Basic math knowledge and advanced optimization methods.

Course Arrangement

Problem Sets: There are a number of problem sets. No need to hand in the problem sets.

Exam and grading: There is one midterm exam (30%) and one final exam (70%). The final exam will be arranged by ARRO.