

# ECON 3133: Microeconomic Theory II

## Department of Economics, HKUST

### Course Information

This course builds on Microeconomic Theory I (Econ 3113). We will focus on firm behavior, competition, and strategic interactions between firms and other market participants. Topics include producer theory, competitive equilibrium and welfare, monopoly, as well as game theory and its applications. The course is analytical and makes use of multivariate calculus, linear algebra, and probability throughout.

Prerequisites: ECON 3113 or equivalent.

Exclusions: ECON 3014, SOSC 1440

Credits: 4

### Instructor:

Martin Szydlowski

[mszydlowski@ust.hk](mailto:mszydlowski@ust.hk)

### Lecture times:

L1: Monday 15:00 – 16:20 and Friday 10:30 – 11:50 at CYTG009B.

L2: Wednesday 15:00 – 16:20 and Friday 15:00 – 16:20 at CYTG009A.

You should aim to attend the lecture you signed up for.

### Office hours:

Monday, 13:30 – 14:30 at LSK6083

Friday, 9:00 – 10:00 at LSK6083

### Teaching assistant:

Jeremy To

[ecjeremy@ust.hk](mailto:ecjeremy@ust.hk)

Tutorial sections:

Tuesday, 12:00 – 12:50, LSK Room 1007

Tuesday, 18:00 – 18:50, LSK Room 1011

Office hours: Tuesday, 16:00 – 17:00 and Wednesday 14:00 – 15:00 at LSK6066

## **Textbooks:**

*Microeconomic Theory: Basic Principles and Extensions*, by Nicholson and Snyder (Required)

I will follow the above textbook quite closely. Any somewhat recent edition should be fine.

*Intermediate Microeconomics with Calculus: A Modern Approach*, by Varian (Supplemental)

*Advanced Microeconomic Theory*, by Jehle and Reny (Optional, if you like math)

*Microeconomic Theory*, by Mas-Collel, Whinston, and Green (Extremely optional, if you love math and have too much time on your hands)

## **Assessment**

### **Participation (5%)**

You are expected to attend all class meetings and contribute positively to the learning environment. If you miss a class, ask your classmates to provide you materials and get up to speed before the next session. In addition,

- Arrive on time and stay the entire duration of the class.
- Turn off all electronic devices, including laptops, cell phones, MP3 players, tablets, and hairdryers, unless you use them to take notes.
- Do not eat in class.
- Ask questions whenever something is not clear.
- Participate actively in class discussions.
- Be prepared to be called to answer questions related to the course contents.

### **Problem Sets (15%)**

Problem sets will be posted on Canvas on Mondays, and are due the following Monday. You should submit your homework online on Canvas. You can work in groups. If you do so, make sure that all group members' names are noted on the problem set when you submit. I will drop the lowest of your homework scores.

### **Midterm (35%)**

The midterm test is tentatively scheduled on October 18, 19:00 – 21:00, and it is similar to the questions in the problem sets. I do not have a makeup midterm. If you miss the test due to a legitimate reason and with appropriate documentation, I will drop the midterm from your grade and the weight will be transferred to the final. If you miss the exam without reason or documentation, you will get a score of zero.

## **Final (45%)**

The final exam is cumulative and similar to the midterm. The exam is centrally administered during December 9 – 20 and the date and time will be announced by the ARR.

## **Academic Misconduct**

This course is subject to HKUST's rules on academic integrity (<https://registry.hkust.edu.hk/resource-library/academic-standards>). Penalties for cheating and plagiarism range from a reduced course grade, to failing the class, to termination of studies, and I will report all cases to the University. Cheating yields high risk and low reward. Your life won't dramatically change if you get a slightly better grade in this class. Your life may dramatically change if you get caught.

## **Tentative Course Schedule**

I may modify the schedule as we go along. I'll let you know in advance if that happens.

1. Intro and Math Review
2. Cost Minimization (Chapters 9 and 10)
3. Profit Maximization (Chapter 11)
4. Partial Equilibrium (Chapter 12)
5. Monopoly (Chapter 13)
6. Midterm Exam
7. Game Theory (Chapter 8)
8. Imperfect Competition (Chapter 15)
9. Repeated Games (Chapter 8)
10. Final Exam

## **School Intended Learning Outcomes (SILO)**

After completing the course, students will

1. Understand the logic, scientific basis, and critical thinking of economic analysis (SILO 1)
2. Have a sophisticated knowledge of economics, apply it to explain economic and social phenomena, and make sound economic decisions (SILO 3)

3. Develop ability to qualitatively analyze basic economic and social problems. Conduct basic economic analysis and research of the economy and society (SILO 4)
4. Collaborate effectively with your team members to answer questions in homework (SILO 2)
5. Have informed ethical thinking based on rigorous economic and social analysis (SILO 4)
6. Be a lifelong user of economic analysis (SILO 3)

## Final Grade Descriptors

<b>Grade</b>	<b>Short Description</b>	<b>Elaboration</b>
A	Excellent Performance	Students demonstrate a strong grasp of course materials, effectively utilize tools discussed, excel in problem sets, and perform exceptionally on exams. They exhibit exceptional analytical skills, critical thinking, and effective participation in class discussions.
B	Good Performance	Students exhibit a solid understanding of course materials, proficient use of tools, and competent completion of problem sets. They show commendable analytical skills, effective critical thinking, and participation in class discussions.
C	Satisfactory Performance	Students demonstrate an adequate understanding of course materials, satisfactory use of tools, and completion of problem sets. They display acceptable analytical skills and participation in class discussions.
D	Marginal Pass	Students show limited understanding of course materials, inconsistent use of tools, and incomplete performance in problem sets. Their participation in class discussions is minimal.
F	Fail	Students display a lack of understanding of course materials, inadequate use of tools, and unsuccessful completion of problem sets. They show little to no participation in class discussions.