SCHOOL OF ECONOMICS
SINGAPORE MANAGEMENT UNIVERSITY

Microeconomics I (ECON 601)

Academic Year 2023-2024, Term 1; Thursdays; 12:00 - 15:15;

Instructor: Takashi KUNIMOTO
Email: tkunimoto@smu.edu.sg
Tel: 6828 9558
Office: SOE 5051 (5th floor of SOE/SCIS2 Building)
Class Web: We use "eLearn-SMU" as this course's class web.

All the announcements are made on the class web as well as in the class and I often send you emails though the eLearn system. So, please check this website frequently and if necessary, make sure that you forward emails in the eLearn system to your regular account.

OFFICE HOUR: I will hold my office hour every week. I will let you know the exact schedule of my office hour later. If you come to my scheduled office hour, you do not need to make a prior appointment with me. Just stop by my office. If I have to cancel my office hour and/or add an extra office hour, I will let you know by email through the eLearn system. **If you would like to see me at some other times, I am available only by appointment.**

TA: We plan to have one TA for this course.

TA SESSION: Our TA holds the TA session weekly. In the TA session, our TA will discuss some (not necessarily all) of the questions from the weekly homework assignment and the midterm exam.

LEARNING OBJECTIVES:

This course aims to provide a set of basic models and tools of microeconomics that can be used in any graduate economics course, and even be useful for your future research.

COURSE DESCRIPTION:

Microeconomics I is designed as part of the standard graduate microeconomics course. It consists of the two main parts. In the first part, we study *price theory* in perfectly competitive markets and *decision making under uncertainty* and in the second part, we study *(non-cooperative) game theory*.

PREREQUISITE

I assume that all students have a "solid" knowledge on intermediate microeconomics (such as Varian's "Intermediate Microeconomics"). This includes your undergraduate knowledge of game theory. I also assume that you are famliar with the mathematical arguments. I will upload the lecture notes of "Mathematics for Economics" on the class website. You can use the notes if you have any (mathematical) difficulties in understanding the course materials. If you are not sure about your mathematical knowledge, you are encouraged to take "Econ 696: Mathematical Methods for Economic Dynamics," which is taught by me in the same semester.

CLASS TIMINGS

Classes meet every Thursday for 3 hours (1.5 hours lecture, 15 minute break, and 1.5 hours lecture). There will be no presentations or case studies in this course. Each session will consist of a lecture by the instructor and/or a discussion of assignments and readings.

RECOMMENDED TEXTS AND READINGS:

Price Theory and Decision Making under Uncertainty

1. *"Microeconomic Theory,"* by Andreu Mas-Colell, Michael D. Whinston, and Jerry R. Green, Oxford University Press, 1995. (This is one of the two main textbooks. I abbreviate it to "MWG.")

2. *"Advanced Microeconomic Theory,"* Third Edition, by Geoffrey A. Jehle and Philip J. Reny, Prentice Hall, 2011 (This is a supplementary textbook).

3. *"Microeconomic Analysis* Third Edition," by Hal R. Varian, W.W. Norton and Company, 1992 (This is a supplementary textbook).

4. *"Microeconomic Foundations I: Choice and Competitive Markets,"* by David M. Kreps, Princeton University Press, 2013 (This book has a more advanced treatment of the theory of price-taking behavior and decision making under uncertainty than MWG. Kreps is very good at providing the reader with a good intuition behind the theory).

Game Theory

1. *"A Course in Game Theory"* by Martin J. Osborne and Ariel Rubinstein, the MIT press, (1994); **If you go to either Ariel Rubinstein's or Martin Osborne's website, you can obtain this book for free.** This is one of the two main textbooks and used mainly for the game theory part. I abbreviate it to "OR".

2. *"Microeconomic Theory,"* by Andreu Mas-Colell, Michael D. Whinston, and Jerry R. Green, Oxford University Press, 1995. This book will be used sometimes for the game theory part.

3. *"Game Theory: Analysis of Conflict"* by Roger B. Myerson, Harvard University Press, (1991); This is another advanced textbook for game theory. Exercises are very tough.

4. *"Game Theory for Applied Economists"* by Robert Gibbons, Princeton University Press, (1992); If you want to skip lots of definitions and theorems and immediately go to applications of game theory, this book might be for you. However, some of the applications discussed in this book are very advanced.

5. *"Game Theory: An Introduction"* by Steven Tadelis, Princeton University Press, 2012. The structure of this book is quite similar to that of Gibbons. However, this book offers a little bit more rigorous treatment of the subject.

6. *"An Introduction to Game Theory,"* by Martin Osborne, Oxford University Press, 2004. This is a "not-so-mathematical" version of *A Course in Game Theory*. You find many more examples from this book.

HOMEWORK: There will be approximately 10 homework assignments. The homework is essential to help you understand the course material and develop your ability to analyze economic problems. In addition, you should expect these homework assignments to be very good proxies for the type of questions that will be asked on the exams.

- You must submit your work on each problem set to our TA "before" the TA session starts.

- If you are unable to attend the TA session, you should either ask your friend to submit your work at the TA session or upload your submission to the Dropbox on eLearn.

- All homework assignments are given to you through our class website.

- The answer to each homework assignment is uploaded on the class website.

- No more than four students may form a group and hand in their work together, with each member's name and ID number on the front page of the submission.

ASSESSMENT METHODS:

There are three components that together determine your final grade for this course: (i) Homework Assignments: 15%; (ii) the midterm exam: 30%; and (iii) the final exam: 55%. Note that there will be no make-up exam for the midterm exam (if missed, with a valid excuse, the final exam will be worth 85% of your final grade)

ACADEMIC INTEGRITY

All acts of academic dishonesty (including, but not limited to, plagiarism, cheating, fabrication, facilitation of acts of academic dishonesty by others, unauthorized possession of exam questions, or tampering with the academic work of other students) are serious offences.

All work (whether oral or written) submitted for purposes of assessment must be the student's own work. Penalties for violation of the policy range from zero marks for the component assessment to expulsion, depending on the nature of the offense.

When in doubt, students should consult the instructors of the course. Details on the SMU Code of Academic Integrity may be accessed at `http://www.smuscd.org/resources.html`.

ACCESSIBILITY

SMU strives to make learning experiences accessible for all. If students anticipate or experience physical or academic barriers due to disability, please let the instructor know immediately. Students are also welcome to contact the university's disability services team if they have questions or concerns about academic provisions: `included@smu.edu.sg`.

Please be aware that the accessible tables in the seminar room should remain available for students who require them.

OUTLINE OF TOPICS

Here I specify the outline of topics this course covers. Keep in mind that this outline is meant to be a plan and is subject to change as we go along.

Week	Dates	Topic	Readings
1	Aug 17 (Th)	Guidance and Consumer Theory	Ch 2, 3 of MWG
2	Aug 24 (Th)	Consumer Theory	Ch 2 and 3 of MWG
3	Aug 31 (Th)	Decision Making under Uncertainty	Ch 6 of MWG
4	Sep 7 (Th)	Producer Theory	Ch 5 of MWG
5	Sep 14 (Th)	Static Games with Complete Information	Ch 2, 3 of OR
6	Sep 21 (Th)	Static Games with Complete Information Midterm Exam	Ch 2, 3 of OR
7	Sep 28 (Th)	Dynamic Games with Complete Information	Ch 6 of OR
8	Oct 2 - 8	Midterm Recess	
9	Oct 12 (Th)	Dynamic Games with Complete Information	Ch 7, 8 of OR
10	Oct 19 (Th)	Static Games with Incomplete Information	Ch 2 of OR Ch 8 of MWG
11	Oct 26 (Th)	Static Games with Incomplete Information	Ch 23 of MWG
12	Nov 2 (Th)	Dynamic Games with Incomplete Information	Ch 11, 12 of OR
13	Nov 9 (Th)	Dynamic Games with Incomplete Information	Ch 12 of OR
14	Nov 13 -19	Reading Week	
15	Nov 23 (Th) (expected)	Final Exam	