

**SCHOOL OF ECONOMICS  
SINGAPORE MANAGEMENT UNIVERSITY**

**Microeconomics I (ECON 601)**

Academic Year 2018-19, Term 1; Thursdays; 12:00 - 15:15; at SOE/SOSS SR 2-3

**Instructor:** Takashi Kunimoto

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**Office:** SOE 05-051

**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 through 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 hold my office hour every week. I will announce the schedule of my office hour later. If I have to cancel my office hour and/or add extra office hour, I let you know by emails through the eLearn system. **If you want to see me at some other times, I am available only by appointment.**

**TA:** Shenxi Song (shenxi.song.2017@phdecons.smu.edu.sg).

Our TA will grade homework assignments and exams and hold the session where she will provide the suggested answers to the homework assignments and the midterm exam.

**TA SESSION:** Our TA holds 1.5 hour session every week. The schedule of TA’s office hour will be announced later.

**LEARNING OBJECTIVES:**

This course aims at providing a number of basic frameworks and tools of microeconomics, which can be used in any graduate economics course and even 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 building blocks. 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 “solid” knowledge on intermediate microeconomics (such as Varian’s “Intermediate Microeconomics”). I also assume that you are comfortable with the arguments using mathematics. You are supposed to know all the topics covered by the math camp which is offered by our school before this course starts.

## **CLASS TIMINGS**

Class sessions are of 3-hour duration per week. There will be no presentations or case studies in this course. Each session consists 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 lot of intuitions 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 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.
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.

**PROBLEM SET:** There will be about 10 problem sets. Problem sets are essential to help you understand the course materials and develop your skill to analyze economic problems. Besides, it should be expected that these problems sets are very good proxies for what type of questions being asked in the exams.

- You have to hand in your work on each problem set to our TA “before” the TA session starts. Since your homework assignments might not be returned to you in a timely manner, **I strongly encourage you to take a copy of your homework before you submit it.**
- **Do not** hand in your homework to me.
- All problem sets are given to you through our class website.
- The answer to each problem set is uploaded on the class website after the corresponding TA session is finished.

## **ASSESSMENT METHODS:**

There are three components which together determine the grade of this course: (i) Problem sets: 15%; (ii) the in-class midterm exam: 30%; and (iii) the final exam: 55%. Note that there will be no makeup for the midterm exam (if missed, with a valid excuse, the final exam will account for 85% of the 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](mailto: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 | Date                   | Topic   | Readings                  |
|------|------------------------|---|---------------------------|
| 1    | Aug 23                 | Guidance and Consumer Theory  | Ch 2, 3 of MWG            |
| 2    | Aug 30                 | Consumer Theory   | Ch 2 and 3 of MWG         |
| 3    | Sep 6                  | Decision Making under Uncertainty                                   | Ch 6 of MWG               |
| 4    | Sep 13                 | Producer Theory   | Ch 5 of MWG               |
| 5    | Sep 20                 | In-Class Midterm Exam and<br>Static Games with Complete Information | Ch 2, 3 of OR             |
| 6    | Sep 27                 | Static Games with Complete Information                              | Ch 2, 3 of OR             |
| 7, 8 | Oct 4, 11              | Recess Weeks  |                           |
| 9    | Oct 18                 | Dynamic Games with Complete Information                             | Ch 6 of OR                |
| 10   | Oct 25                 | Dynamic Games with Complete Information                             | Ch 7, 8 of OR             |
| 11   | Nov 1                  | Static Games with Incomplete Information                            | Ch 2 of OR<br>Ch 8 of MWG |
| 12   | Nov 8                  | Static Games with Incomplete Information                            | Ch 23 of MWG              |
| 13   | Nov 15                 | Dynamic Games with Incomplete Information                           | Ch 11, 12 of OR           |
| 14   | Nov 22                 | Dynamic Games with Incomplete Information                           | Ch 12 of OR               |
| 15   | Nov 29<br>9:00 - 12:00 | Final Exam  |                           |