

Microeconomic Theory I Syllabus 個體理論一課程大綱

Classroom and Time: Friday 2:20-4:10pm (lecture) and 16:30-17:20pm (TA session) at 經大講堂

Class website: http://homepage.ntu.edu.tw/~josephw/essential_micro_theory_09F.htm

Instructor: Joseph Tao-yi Wang (王道一) (josephw@ntu.edu.tw); TA 陳曄 (r97323056@ntu.edu.tw)

Office Hours: Thursday 3:15-5:15pm (or by email appointment) at my office (研究大樓 425 室)

Goals of this class:

1. **Enjoy economics through real world examples and classroom experiments.** I will try to prepare one example and/or experiment for each topic. Prepare to have fun and enjoy.
2. **Train you to think like an economist.** You are expected to learn the basic tools used by economists to analyze various questions that arise in the real world.
3. **Improve your English, especially in listening, speaking and writing.** You should be able to improve your English ability (and get a unique, credible recommendation letter to prove it), which is useful when you look for a job or apply to study abroad.

NOTE: This is a graduate micro course taught in English. Hence, you are expected to finish all assignments in English, including your exams and oral presentations. If you feel that you would be in a disadvantaged position, please reconsider your decision to take this course (take Microeconomic Theory III instead). I will not accept English proficiency as an excuse for grade petition. **Also, I pre-commit NOT to understand Chinese either in class or when grading. I might accidentally use Chinese if I don't recognize you as a student of this class, but I will try to correct myself as soon as I realize it.**

References and Textbook:

1. **Textbook:** Jehle and Reny, *Advanced Microeconomic Theory*, 2nd ed., Addison Wesley, 2001.
2. **Classnotes:** John G. Riley, *Essential Microeconomic Theory*, Cambridge UP, forthcoming.
3. **Reference:** Mas-Colell, Whinston and Green, *Microeconomic Theory*, Oxford UP, 1995.
4. **Presentation:** Dan Ariely, *Predictably Irrational: The Hidden Forces That Shape Our Decisions*, revised ed., HarperCollins, 2009.

Grades and Requirements:

1. **Classroom Experiment and Quizzes (20%):** Classroom experiments are conducted throughout the semester. Also, there will be 7 quizzes during review sessions.
2. **Midterms (30%):** 11/13, 2:20-3:10pm in class. Any request of absence must be submitted in writing *before* 2:00pm on the exam day, except for medical emergencies.
3. **Final Exam (40%):** Cumulative, but with emphasis on later material. Any request of absence must be filed according to university rules.
4. **Presentation (10%):** You will form groups to present a chapter of Ariely's *Predictably Irrational*, starting from week 4 in English. You will have to show in 10 minutes (a) what assumption (made by standard theory) is violated in this chapter, (b) which theorem would be different (and how) if we drop this assumption, and (c) when and where do you think this assumption holds (or not hold). To illustrate, I will present chapter 1 on week 2.
5. **Re-grade Policy:** Requests must be submitted in writing within 1 week the exam is returned, and will only be done on the entire exam, not specific sections.

Course outline:

1. [9 /18] Shadow Prices (A2.3; Riley-1.2)
2. [9 /25] Envelope Theorem (A2.4; Riley-1.3); Theory of Choice (1.2; Riley-2.1)
3. [10/ 2] Budget Constrained Consumer Choice with 2 Commodities (1.3~1.4; Riley-2.2) [Quiz 1]
4. [10/ 9] Budget Constrained Consumer Choice with n Commodities (1.5; Riley-2.3)
5. [10/16] Social Preference Experiments (New Handbook Chapter; math notes) [Quiz 2]
6. [10/23] The 2x2 Exchange Economy (5.1; Riley-3.1)
7. [10/30] The Fundamental Welfare Theorems (5.2; Sec.3.2) [Quiz 3]
8. [11/ 6] Supporting Prices/Convexity (A1.4; Riley-1.1); Existence of Equilibrium (5.2; Riley-3.3)
 - [11/13] Midterm
9. [11/20] Theory of the Firm and Returns to Scale (3.2~3.3; Riley-4.1~4.3)
10. [11/27] Decision Making by Price-taking Firms (3.4~3.5; Riley-4.2) [Quiz 4]
11. [12/ 4] Robinson Crusoe Economy (Riley-Sec.5.1); Equilibrium and Efficiency (5.3; Riley-5.2)
12. [12/11] Risky Choices and Aversion to Risk (2.4; Riley-7.1~7.2) [Quiz 5]
13. [12/18] Complete Market Equilibrium (Riley-7.3); Prediction Markets (Holt-Ch.34)
14. [12/25] Equilibrium Future Prices (Riley-5.5); Risk Preference Experiment [Quiz 6]
15. [1 / 8] Core and Equilibria in Replica Economies (5.4); Edgeworth Box Experiment [Quiz 7]
 - [1 /15] Final Exam