

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

Classroom and Time: Friday 1:20-3:10pm at 社法 2

Class website: [http://homepage.ntu.edu.tw/~josephw/essential\\_micro\\_theory\\_08F.htm](http://homepage.ntu.edu.tw/~josephw/essential_micro_theory_08F.htm)

Instructor: Joseph Tao-yi Wang (王道一) ([josephw@ntu.edu.edu](mailto:josephw@ntu.edu.edu))

Office Hours: Thursday 3:00-5:00pm (or by email appointment) at my office (研究大樓 425 室)

TA: Jason Lai (賴建宇) ([r96323011@ntu.edu.tw](mailto:r96323011@ntu.edu.tw)) TA Session: Friday 15:30-16:20pm at 社法 2

### 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 of your 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 such a mistake as soon as I realize it.**

### References and Textbook:

1. **Textbook:** John G. Riley, *Essential Microeconomic Theory*, Cambridge UP, forthcoming.
2. **Reference:** Mas-Colell, Whinston and Green, *Microeconomic Theory*, Oxford UP, 1995.
3. **Presentation:** Dan Ariely, *Predictably Irrational: The Hidden Forces That Shape Our Decisions*, HarperCollins, 2008.

### 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%):** 11/14, 1:20-3:10pm in class. Any request of absence must be submitted in writing *before* 1:00pm 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 3 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 /19] Peak-load Pricing (Sec.1.5); Supporting and Shadow Prices (Sec.1.1-1.2)
2. [ 9 /26] Envelope Theorem (Sec.1.3); Constraint Maximization (Sec.1.4)
3. [10 / 3] Social Preferences Experiment; Theory of Choice (Sec.2.1) [Quiz 1]
  - [10/10] No class (Holiday)
4. [10/17] Budget Constrained Consumer Choice with 2 and n Commodities (Sec.2.2-2.3)
5. [10/24] Consumer Surplus & Willingness-to-pay (Sec.2.4); [Choice over Time (Sec.2.5)] [Quiz 2]
6. [10/31] Bilateral Bargaining Experiment; Equilibrium in an Exchange Economy (Sec.3.1)
7. [11 / 7] Efficiency in an Exchange Economy (Sec.3.2) [Quiz 3]
  - [11/14] Midterm
8. [11/21] Monopoly Pricing (Sec.4.5); Decision Making by Price-taking Firms (Sec.4.2)
9. [11/28] Returns to Scale (Sec.4.3); [Firm and Industry Analysis (Sec.4.4)] [Quiz 4]
10. [12/ 5 ] Future Prices (Sec.5.5); Robinson Crusoe Economy (Sec.5.1)
11. [12/12] Equilibrium and Efficiency (Sec.5.2);Existence of Equilibrium (Sec.5.3) [Quiz 5]
12. [12/19] Equilibrium with Constant Returns to Scale (Sec.5.6); [Public Goods (Sec.5.4)]
13. [12/26] Risk Preferences Experiment; Risky Choices (Sec.7.1) [Quiz 6]
14. [ 1 / 2 ] Aversion to Risk (Sec.7.2); Principle Agent Problem (Sec.7.5)
15. [ 1 / 9 ] Complete Market Equilibrium (Sec.7.3); Asset Pricing (Sec.7.4) [Quiz 7]