

ADVANCED MICROECONOMIC THEORY

This class is the first half of a sequence covering the foundations of modern microeconomic theory at a graduate level. The class covers classic consumer theory, producer theory, choice under uncertainty, general equilibrium theory and matching theory.

Class Requirements

There will be problem sets weekly. These will be graded coarsely (P+, P, P-). It is strongly recommended that you attempt the problem sets by yourself. You may discuss difficulties with your classmates, the TA, myself (in that order) if you are stuck. I will assume that you also take Econ 890-5.

Further, there will be 2 in-class midterms and a final exam (all are close-book). The 2nd midterm will only cover material since the first midterm. The final exam is cumulative.

Grades for the class will be based on:

- Midterm (20% each) (In class, on September 22nd, October 20th)
- Problem sets (10%)
- Final Exam (50%) (TBA)

Readings

The required textbook for the class is:

A. Mas-Colell, M. Whinston and J. Green, *Microeconomic Theory*, New York: Oxford, 1995.

Other recommended readings:

- G. Jehle and P. Reny, *Advanced Microeconomic Theory*, Prentice Hall, 2011.
- J. Levine, *Lecture Notes on Graduate Microeconomics*, Stanford, Unpublished Notes.
- D. Kreps, *Notes On The Theory of Choice*, Westview Press, 1988.
- D. Kreps, *Microeconomic Foundations I*, Princeton Press, 2012.
- A. Rubinstein, *Lecture Notes on Microeconomic Theory*, Princeton Press, 2013.
- H. Varian, *Intermediate Microeconomics: A Modern Approach*, 3rd Edition. New York: W. Norton, 1993.
- A. Roth and M. Sotomayor, *Two-Sided Matching: A Study in Game-Theoretic Modeling and Analysis*, Cambridge, 1990.
- R. Sundaram, *A First Course in Optimization Theory*, Cambridge University Press, 1996.
- R. Vohra, *Advanced Mathematical Economics*, Routledge, 2005.

In your spare time, you may want to read the following books and papers for fun. They may answer some (non-technical) questions arising in your first year.

- I. Gilboa et. al., “Economic Models as Analogies,” *Economic Journal*, 2014
- H. Varian, “What Use is Economic Theory?” *unpublished manuscript*, 1989.

Class Logistics

The class meets on Tuesday and Thursday 3:30-4:45 pm at Gardner Hall 307. You are expected to attend all classes. There is no lecture on the following dates: Oct. 15th, and Nov. 26th.

Course materials (assignments and handouts) will be posted on Sakai. There will be weekly review sessions (Friday 1:00pm, Gardner 009). Assignments are due in review sessions at the beginning of the lecture on the due date.

Contacting Us

My e-mail is lifei@email.unc.edu. My office is Gardner 300B. My office hours are Tuesday 4:45-5:30pm. Your TA for this course is Jay Dennis, his e-mail address is jay.dennis@unc.edu. His office hours: TBA.

Tentative Agenda

1. Decision Theory (1 week)
2. Consumer Choice and Utility (1 week)
3. Demand Theory (2 weeks)
4. Producer Theory (1-2 week)
5. Choice under Uncertainty (2 weeks)
6. Principal-Agent Model (1 week)
7. General Equilibrium (3-4 weeks)
8. Non-Market Mechanism (1-2 week)