

ADVANCED MICROECONOMIC THEORY

This course is the first part of a sequence covering the foundations of modern microeconomic theory at a graduate level. We will cover classic consumer theory, producer theory, choice under uncertainty, general equilibrium theory, and game theory with complete information. In this class, you will see a number of models. The purpose is to use these models *as examples* to show you (1) the most important concepts in modern economics: individual optimization, equilibrium and comparative statics, (2) how to formally analyze a problem as an economist.

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 700 and Econ 701 and that you will take Econ 711 in the Spring.

There will be 2 in-class midterms and a final exam (all are closed 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 24th, November 7th)
- Problem sets (10%)
- Final Exam (50%) (TBA)

If a student misses a midterm, the weight of that midterm in the course grade will be added to the weight on the student's final. An exception will be made for University-approved absences (see <http://catalog.unc.edu/policies-procedures/attendance-grading-examination/>); students with this type of absence may request a make-up examination at a time convenient to both student and instructor.

Honor Code. The standard honor code applies. See <https://studentconduct.unc.edu> for details.

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- J. Levine, *Lecture Notes on Graduate Microeconomics*, Stanford, Unpublished Notes.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, *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.

Class Logistics. The class meets on Tuesday and Thursday 3:30-4:45 pm at Gardner Hall 007. You are expected to attend all classes. There is no lecture on the following dates: Oct. 17th (fall break), and Nov. 28th (Thanksgiving).

Course materials (assignments and handouts) will be posted on Sakai. There will be weekly review sessions (Friday 2:30-3:20pm, Gardner Hall 007). Assignments are due in the beginning of the review sessions on the due date.

Contacting Us. My e-mail is lifei@email.unc.edu. My office is Gardner 300B. My office hours are Wednesday 2:00-3:00pm. Your TA for this course is Yunjuan Liu, her e-mail address is yl3322@live.unc.edu. Her office hours: TBA.

Syllabus Changes. Exam dates and other aspects of the syllabus may be changed if necessary.

Tentative Agenda

1. Decision Theory (2 lectures)
2. Consumer Choice and Utility (2 lectures)
3. Demand Theory (4 lectures)
4. Producer Theory (2 lectures)
5. Midterm I
6. Choice under Uncertainty (3-4 lectures)
7. General Equilibrium: Pure Exchange Economy (4 lectures)
8. General Equilibrium: Production Economy (optional)
9. General Equilibrium: Financial Markets (2 lectures)
10. Midterm II
11. Games in Norm Form
12. Games in Extensive Form
13. Mixed Strategies
14. Final