Economics 111 – Intermediate Microeconomics

Course Outline

Fall 2009

Syllabus

This is a broad outline of the topics that I hope to cover in the course. Note that this is preliminary, as how fast we can cover these topics depends to some extent on you.

Consumer Theory

- Optimization Problems
- The budget set
- Preferences and indifference curves
- Utility functions
- Optimal choice
- Demand Functions, comparative statics and the Slutsky Equation
- Consumer Surplus

Market equilibrium and efficiency in an exchange economy

- Definition of equilibrium
- The Edgeworth box
- Walras law
- How is equilibrium reached?
- Pareto Equilibrium
- 1$^{\text{st}}$ Fundamental Welfare Theorem
- 2$^{\text{nd}}$ Fundamental Welfare Theorem
- Problems with the welfare theorems
- Property rights and Coase theorem

Producer Theory – Perfect Competition

- Technology
- Profit Maximization and Cost Minimization
- Firm Supply
- Equilibrium in a production economy
- Welfare theorems in a production economy

Monopoly

- The monopolist's problem
- Monopoly behavior
- Cost of monopolies

Game Theory

- The concept of a game
- Nash equilibrium
- Subgame perfect Nash equilibrium
- Applications of Game Theory

Choice Under Uncertainty

- Choices between gambles
- Expected utility theory
- Risk aversion

Asymmetric Information

- The market for lemons
- Adverse selection
- Moral hazard

Behavioral Economics

- Do people choose the 'best option'

- Do people maximize expected utility
- Other-regarding preferences
- The effect on economic analysis

Approximate Schedule

Week Beginning	Topics
7th Sept	Introduction
14th Sept	Consumer Theory 1
21st Sept	Consumer Theory 2
28th Sept	Equilibrium in an Exchange Economy 1
5th Oct	Equilibrium in an Exchange Economy 2
12th Oct	MIDTERM 1 and RECAP
19th Oct	Producer Theory – Perfect Competition 1
26th Oct	Producer Theory – Perfect Competition 2 and Monopoly
2nd Nov	Game Theory I
9th Nov	MIDTERM 2 and RECAP
16th Nov	Game Theory 2
23th Nov	Choice Under Uncertainty and THANKSGIVING
30th Nov	Adverse Selection and Behavioral Economics I
7th Dec	Behavioral Economics II and Revision
14th Dec	FINAL and RECAP

Contact Details

Professor: Mark Dean

Email: mark_dean@brown.edu

Classes: 10:30 to 11:50 Tuesday and Thursday

Office Hours: 2:00 to 4:00 Thursday, or by appointment (Room 303c Robinson Hall)

Teaching Assistant: Mongoljin Batsaikhan

Email: mongoljin.batsaikhan@gmail.com

Classes: Either Thursdays 2:00-2:50pm 303 Wilson Hall or Thursdays 7:00-7:50pm 101 Wilson Hall

Office Hours: 1:00 to 3:00 Friday

Homework Schedule

Homeworks will be available each Thursday, and will be due in class the following Thursday. Mongolijin will then go through the homework solutions in his class, and, return graded transcripts and post solutions.

Homework will be graded on a 10 point scale, and will count towards your final grade. Homework that is not handed in at the correct time will not be graded, and will receive a zero score. However, the worst two homework grades will not count towards the final grade. You may also ask for your homework in advance if you know you are going to be busy in a particular week.

Exams

There will be two 'midterm' exams, and one final exam. The first midterm will take place in class on 15th October and will cover material up to and including 8st October. The second will take place in class on 12th November, and will cover material from 5th October to 5th November. Final exams will take place on Wednesday 16th December at 9.00 am and will cover the whole course.

All exams will be closed book, and there will be rescheduling of midterm exams only in extreme circumstances. The date of the final exam is set by the university and cannot be rescheduled.

Grading

Final grades will take into account assignments, the two midterms and the final according to the following weighting scheme: 20% homeworks, 20% midterm 1, 20% midterm 2, 40% final exam.

Corrected assignments and exams will be available in the class mailbox (in the basement of Robinson hall) at most six days after the deadline or the date of the test. Students then have at most *eight* days to introduce a complaint regarding a grade (that means exactly two weeks after the deadline or the date of the test). I deal personally with all complaints. Requests must be placed in my mailbox situated in Robinson hall (room 103). I expect them to be specific and motivated. This means that you must include a copy of the question(s) that need(s) to be re-graded, a copy of the answer(s), and an explanation as to why the question(s) need(s) to be re-graded. If I find the request motivated, then I will re-grade these question(s) myself (which may possibly result in a lower grade if I find it justified). My decision is final. Please do not use either my or Mongolijin's office hours to complain about grades

Course Materials

This course will be loosely based on '*Intermediate Microeconomics: a Modern Approach*' (7th edition) by Hal Varian, Norton 2005 (previous editions should work too).

I will also post lecture notes on the mycourses.brown.edu website for you to use. Assignments and answer keys will also be posted here.

Prerequisites

Econ 11 or equivalent, Math 9 or 10 or equivalent (major tools needed: multivariate differential calculus and 'simple' optimization methods). Mongolijin will run a maths refresher course in the first class.