

GR5211: Microeconomic Analysis I Part I – Choice Theory

Fall 2017

Columbia University

Contact Details

Professor: Mark Dean

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Classes: 4.10 to 5.25 on Mondays in 413 Kent Hall and 9.30-10.55 on Fridays in 203 Hamilton

Office Hours: 3.00 to 6.00 Fridays, or by appointment (Room 1031 IAB)

Website: <http://www.columbia.edu/~md3405>

Teaching Assistant: James Jiang

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Recitation: 4.10 to 5.25 Wednesdays, Kent 413

Office Hours: 4.00-5.00 Tuesdays 1006 IAB

Course Description

G5211 is the first semester course in the microeconomics sequence for the MA program. It consists of two halves: Choice Theory (first half) and Equilibrium (second half), I will teach the first half while the second half will be taught by Professor Wouter Vergote.

The choice theory portion of the class will focus on the fundamental models of behavior which underlie most economic analysis. The majority of the course will focus on consumer behavior. We will begin by studying the relationship between utility maximization, preference maximization and choice, before moving on to study the properties of demand functions. We will conclude the study of consumer choice with a look at choice under uncertainty, before briefly touching on the behavior of firms – i.e. producer theory

Prerequisites

This graduate economics class is intended for the first-year students of the Master of Economics. Students from other programs must obtain permission from the Director of Graduate Studies of the Economics Department in order to enroll in the class.

Assessment

Assessment for the first part of the course will consist of three elements: A midterm exam (20%), homeworks (20%) and a final (60%)

Homeworks

There will be 3 problem sets. You are encouraged to work with your classmates in solving them, but I request each of you to write up and turn in your own answers. Solutions to the problems will be posted on the course website. Each homework will be graded from 0 – 10. Late homeworks will not be accepted or graded.

Midterm and Final

In addition to homeworks, there will be one midterm exam (for the first half of the course – i.e. a ‘quarter term’), and one final exam. The midterm will take place in class on 29th September and will cover material up to and including 25th September. The final is currently scheduled to take place in class on the 23rd October and will cover material from the whole course.

Course Materials

By and large, the course will be based on slides/lecture notes, which I will make available online. For this part of the course, there is one required text – “Microeconomic Theory”, by Mas-Colell et al (which is worth getting as it will be useful for all 4 parts of the microeconomic sequence. Other useful texts include

- Rubinstein (2005). *Lecture Notes in Microeconomic Theory: The Economic Agent*. This is available for free download here: <http://arielrubinstein.tau.ac.il/books.html>
- Kreps (1988), *Notes on the Theory of Choice*

Course Policies

Regrading

Corrected assignments and exams will be available in the class mailbox at most seven days after the deadline or the date of the test. Students then have at most seven days to introduce a complaint regarding a grade (that means exactly two weeks after the deadline or the date of the test or assignment submission). I deal personally with all complaints. Requests must be placed in my mailbox on the 11th floor of IAB. 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 your answer(s) and the relevant section of the answer key, 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 the 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 the TAs’ office hours to complain about grades.

Academic Dishonesty

As members of an academic community, each of us has a responsibility to participate in scholarly discourse and research in a manner characterized by intellectual honesty and scholarly integrity, and cheating on exams is a very serious violation. Any suspected case of cheating will be reported to the university, and students who breach their intellectual responsibility in this regard should anticipate being asked to leave Columbia.

Class Conduct

Cell phone use is not allowed. Laptops are fine for taking notes, but please respect your classmates and instructor by limiting yourself to class-related activities. Though you may be a phenomenal multi-tasker, using a laptop for purposes other than taking notes is distracting to those around you

Topics

1. Choice, Preference and Utility
 - a. Choices as Preference Maximization
 - b. Preference Maximization as Utility Maximization
 - c. Extensions: Infinite spaces and incomplete Data
 - d. Choice from budget sets
2. Demand Functions
 - a. Utility Maximization
 - b. Cost Minimization
 - c. Duality
3. Imperfect Information
 - a. Expected utility theory
 - b. The Independence axiom
4. Producer theory
 - a. Single input case
 - b. Multi input case