SYLLABUS

Course description and learning goals:

This course satisfies the core requirement in microeconomics theory and is especially designed for Stern doctoral students whose programs do not include advanced courses in economic theory. It emphasizes concepts and techniques of microeconomics analysis that are likely to be useful in the students’ further Ph.D. studies and doctoral dissertation research.

Content:

The topics that are developed in this course include: supply & demand; consumer & producer theory; competitive markets; monopoly & price discrimination; game theory; oligopoly; asymmetric information; externalities; public goods; auctions; networks & platforms.

A more detailed course outline is provided below.

Materials:

The readings are drawn from 2 textbooks.¹ There is some overlap between them; for most of the specific class sessions you should read one of them and skim the other one for additional (non-duplicative) material:


- R. Preston McAfee, Tracy Lewis, & Donald J. Dale, *Introduction to Economic Analysis*. (ML&D) This is an “open access” publication, which is available in pdf form and can be downloaded at: https://www.kellogg.northwestern.edu/faculty/dale/ieav21.pdf

A more advanced treatment of the course material can be found in Mas-Colell, Whinston, & Green, *Microeconomic Theory* (Oxford University Press).


² A very similar version is provided in Varian’s *Intermediate Microeconomics: A Modern Approach*, 9th edn.
Grading:

The course grade will be based on a mid-term exam (40%) and a final exam (60%). Both exams will be take-at-home exams. (Examples of last year’s exams and answers are posted on NYU Classes.)

Students are strongly urged – but not required – to do the problem sets that are provided at the end of the chapters in the texts. If you have difficulties seeing the connection between a question/problem and the answer that is provided at the end of the text, bring it to class and let’s work it through together.

Class slides:

Class slides will be available in hard copy at the beginning of each class and will be posted on NYU Classes shortly afterward.

Help:

If you need help: Please come by my office during office hours or send me an e-mail to arrange for another time. I am usually at Stern for a large fraction of any week.

Detailed course outline (tentative):

Sept 9: Introduction; key concepts; basic supply & demand; elasticities; market equilibrium
   ML&D: Chs. 1-3, 5
   Varian: Chs. 1, 16

Sept 16: Consumer theory; demand
   ML&D: Chs. 12-13
   Varian: Chs. 2-10, 12, 14-15

Sept 23: Production theory; cost curves; input demand & supply
   ML&D: Ch. 9
   Varian: Chs. 19, 20-22, 33

Sept 30: NO CLASS

Oct 7: Competition; supply & demand again
   ML&D: Chs. 2-3, 5, 10, 14
   Varian: Chs. 16, 23-24, 32, 34

Oct 14: Monopoly
   ML&D: Ch. 15
   Varian: Ch. 25, 27

Oct 21: Price discrimination
ML&D: Ch. 15
Varian: Ch. 26

Mid-term exam: Assigned after the class on Oct 21; due at 9:00am Mon Oct 28

Oct 28: Game theory
   ML&D: Ch. 16
   Varian: Chs. 29-30

Nov 4: Game theory
   ML&D: Ch. 16
   Varian: Chs. 29-30

Nov 11: Oligopoly
   ML&D: Ch. 17
   Varian: Ch. 28

Nov 18: Asymmetric information
   ML&D: Chs. 18-19
   Varian: Ch. 38

Nov 25: Externalities & public goods
   ML&D: Chs. 7 & 8
   Varian: Chs. 35, 37

Dec 2: Applications: Auctions; Networks/Platforms
   ML&D: Ch. 20
   Varian: Chs. 18, 36

Final exam: Assigned after the class on Dec 2; due by 5:00pm on Tues Dec 10