

# Econ 612: Microeconomics

Professor: Mark Koyama

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Tuesday: 7.10-10.00 pm

Office Hrs Carow Hall, Fairfax Campus: Wednesday 2-3 pm.

Office Hrs Mercatus Center Arlington Campus (4015): By appointment

## 1 Textbook

It is unfortunate that there is no single textbook at the right level of a masters in economics and this is why I am planning on teaching from a range of textbooks. We will be drawing on several textbooks for this course. The most useful ones for you will be:

- Hal Varian, *Microeconomic Analysis* New York: W.W. Norton & Company Norton, 1992 for producer theory, general equilibrium, monopoly, and competition.
- Avinash Dixit, D Reiley and S Skeath, *Games of Strategy* New York: W.W. Norton & Company, 2010 for the game theory material.

Other textbooks will also be useful (they all cover similar material). I will endeavor to scan and upload all other material that you need.

The aim is to teach the standard tools of economic analysis. Varian is a standard advanced undergraduate/graduate level text It is less mathematical than other graduate texts in economics i.e. Mas-Colell, Whinston, and Green's *Microeconomic Theory* which is a standard text for many PhD. level courses. But it is terse and assumes familiarity with algebra and calculus. It is also a little dated (especially on game theory).

My other recommendation is Hal Varian, *Intermediate Microeconomics* New York: W.W. Norton & Company, 1999 (any version of this is fine, I use the fifth edition because that is the copy I own). This book is an undergraduate textbook and hence a little basic for your purposes. However, if there is any material that you do not understand in the above textbooks this should be your first port of call. It will complement the graduate Varian text. Another textbook you may wish to use is:

- David M. Kreps, *A Course in Microeconomic Theory* New York: Prentice Hall, 1990

There are many good books on game theory. Dixit et al. is the most accessible and comprehensive and it has a lot of good problem sets. Additional readings will all be made available on Dropbox at"

<https://www.dropbox.com/sh/96jlhtx32aaoqoo/AABf3BDHF9ERXDRuMS6Bsp1xa?dl=0>

I have uploaded an undergraduate handbook in mathematical economics onto Dropbox. You may wish to use other books on using mathematics in economics if you do not have a strong background in Calculus and algebra. You will find it useful in both understanding the material, answering problem sets and writing exams. I have also uploaded some excellent notes on consumer and producer theory from Norman Miller which are designed to accompany Mas-Colell, Whinston, and Green's Microeconomic Theory and go beyond the requirements of this course.

## 2 Grading

Your grade in class will be based on short paper summaries, a midterm and a final. No extra credit will be available.

- 10% Paper Summaries: February 24th, March 24th and April 21st.
- 40% Midterm: March
- 50% Comprehensive Final: May .

The paper summaries are 1 page summaries of one of the papers listed for the reading assignments for the week in question. The class on February 24th and April 21st will be based around discussing these papers.

There will be a series of take-home problem sets which will allow you to practice for the mid-term and final. The assessment will be based on mathematical problem and short essay answers. My lecture slides will be available on the dropbox link.

## 3 Course Outline

I may make modifications to this reading list during the semester.

### 1. Introduction: Preferences, Utility, and Demand: 20 Jan

- Varian, *Microeconomic Analysis* Chapter 7

### 2 .Consumer Theory 27th January

- Varian, *Microeconomic Analysis* Chapters 8–10

### 3. Producer Theory, Monopoly, & Competition 3rd February

- Arnold C. Harberger, Monopoly and Resource Allocation, *The American Economic Review* 44, Nr. 2 1954
- Varian, *Microeconomic Analysis* Chapters 1–5 and 13–14
- Jean Tirole, *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988 Chapter 1

#### **4. Oligopoly Theory 10th February**

- Varian, *Microeconomic Analysis* Chapter 16 Selections from Tirole Chapter 5

#### **5. General Equilibrium and Externalities 17th February**

- F.A. Hayek, The use of knowledge in society, *The American Economic Review* 35 1945
- Varian, *Microeconomic Analysis* Chapters 17–18 and 25 or Kreps Chapters 8 and 9

#### **6. Discussion Topics: 24th February**

- W.J. Baumol, Contestable markets: an uprising in the theory of industry structure, *American economic review* 72, Nr. 1 1982
- Harold Demsetz, Barriers to Entry, *American Economic Review* 72, Nr. 1 March 1982
- Harold Demsetz, The core disagreement between Pigou, the profession, and Coase in the analyses of the externality question, *European Journal of Political Economy* 12, Nr. 4 1996
- Richard Hornbeck, Barbed Wire: Property Rights and Agricultural Development, *The Quarterly Journal of Economics* 125, Nr. 2 May 2010

#### **7. Expected Utility Theory 3rd March**

- Varian, *Intermediate Microeconomics* Chapter 11 or Kreps Chapter 14
- Amos Tversky and Daniel Kahneman, Prospect Theory: An Analysis of Decision under Risk, Levine's Working Paper Archive 7656 David K. Levine, December 1979
- Jack Hirschleifer, *The Analytical of Uncertainty and Information* Cambridge: Cambridge University Press, 1992 Chapters 1,2 and 3

#### **Midterm March 17th**

##### **3.1 8. Discussion Topics: March 24th**

- Walter Y. Oi, A Disneyland Dilemma: Two-Part Tariffs for a Mickey Mouse Monopoly, *The Quarterly Journal of Economics* 85, Nr. 1 1971
- Ian Ayres and Peter Siegelman, Race and Gender Discrimination in Bargaining for a New Car, *American Economic Review* 85, Nr. 3 June 1995
- Jean Tirole, *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988 Chapter 7

## **9. Game Theory 1, March 31st**

- Dixit et al. Chapters 2-8.

## **10. Game Theory 2, April 7th**

- Dixit et al. Chapters 10–11

## **11. Asymmetric Information 1: April 14th**

- Dixit et al. Chapters 9 and 14
- John G. Riley, Silver Signals: Twenty-Five Years of Screening and Signaling, *Journal of Economic Literature* 39, Nr. 2 June 2001
- George A Akerlof, The Market for 'Lemons': Quality Uncertainty and the Market Mechanism, *The Quarterly Journal of Economics* 84, Nr. 3 August 1970

## **11. Asymmetric Information 2: April 21st**

- Liran Einav and Amy Finkelstein, Selection in Insurance Markets: Theory and Empirics in Pictures, *Journal of Economic Perspectives* 25, Nr. 1 Winter 2011
- Kenneth J. Arrow, Uncertainty and the Welfare Economics of Medical Care, *The American Economic Review* 53, Nr. 5 1963
- A Michael Spence, Job Market Signaling, *The Quarterly Journal of Economics* 87, Nr. 3 August 1973

## **12. Discussion Topics and Review: 27th April**

- Michael L Bognanno, Corporate Tournaments, *Journal of Labor Economics* 19, Nr. 2 April 2001
- Ernst Fehr and Klaus M. Schmidt, A Theory Of Fairness, Competition, And Cooperation, *The Quarterly Journal of Economics* 114, Nr. 3 August 1999
- Vernon L. Smith, The Two Faces of Adam Smith, *Southern Economic Journal* 65, Nr. 1 July 1998

## **References**

- Akerlof, George A: The Market for 'Lemons': Quality Uncertainty and the Market Mechanism, *The Quarterly Journal of Economics* 84, Nr. 3 August 1970, 488–500
- Arrow, Kenneth J.: Uncertainty and the Welfare Economics of Medical Care, *The American Economic Review* 53, Nr. 5 1963, pp. 941–973
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- Demsetz, Harold: The core disagreement between Pigou, the profession, and Coase in the analyses of the externality question, *European Journal of Political Economy* 12, Nr. 4 1996, 565 – 579
- Dixit, Avinash, Reiley, D and Skeath, S: *Games of Strategy* New York: W.W. Norton & Company, 2010
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- Fehr, Ernst and Schmidt, Klaus M.: A Theory Of Fairness, Competition, And Cooperation, *The Quarterly Journal of Economics* 114, Nr. 3 August 1999, 817–868
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- Hayek, F.A.: The use of knowledge in society, *The American Economic Review* 35 1945, 519–530
- Hirschleifer, Jack: *The Analytical of Uncertainty and Information* Cambridge: Cambridge University Press, 1992
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- Riley, John G.: Silver Signals: Twenty-Five Years of Screening and Signaling, *Journal of Economic Literature* 39, Nr. 2 June 2001, 432–478
- Smith, Vernon L.: The Two Faces of Adam Smith, *Southern Economic Journal* 65, Nr. 1 July 1998, 2–19
- Spence, A Michael: Job Market Signaling, *The Quarterly Journal of Economics* 87, Nr. 3 August 1973, 355–74
- Tirole, Jean: *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988
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- Varian, Hal: *Microeconomic Analysis* New York: W.W. Norton & Company Norton, 1992
- Varian, Hal: *Intermediate Microeconomics* New York: W.W. Norton & Company, 1999