

Econ 612: Microeconomics

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Tuesday: 7.10-10.00 pm

Office Hrs Mercatus Center Arlington Campus (4015): Tuesdays 5pm - 6pm or by appointment.

This syllabus is provisional. Small changes may be made before the semester begins and over the course of the semester.

1 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 consumer theory, 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 (I have not had a chance to review the 2015 edition. We won't use this book till the second half of the semester so you don't need to buy this till then).

It is unfortunate that there is no single textbook at the right level for a masters in economics; this is why I am planning on teaching from a range of textbooks. Do not feel that you need to purchase all of the textbooks I recommend here. 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. In addition to ?, , David M. Kreps, *A Course in Microeconomic Theory* New York: Prentice Hall, 1990 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 assumes familiarity with algebra and calculus. However, it is also rather dense and mathematical and it goes into too much detail on several topics.

My other recommendation is Hal Varian, *Intermediate Microeconomics* New York: W.W. Norton & Company, 1999 (any edition 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. Similarly, please feel free to use any textbook you used as an undergraduate.

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. There will be other less technical material that I will assign you. These additional readings will all be made available on Dropbox.

The other book I recommend is Samuel Bowles, *Microeconomics, behaviour, institutions, and evolution* Oxford: Princeton University Press, 2005. This is a great book for applying game theory to the study of institutions. It also has good discussions of various topics in behavioral economics. However it does not cover many of the main topics of a standard course in microeconomics.

Hopefully you have all taken the Mathematical Economics course taught by Adam Millsap. This should give you a foundation for this course. I will presume you are all comfortable with using calculus to solve economic problems.

I have uploaded an undergraduate handbook in mathematical economics onto Dropbox. You will find it useful in both understanding the material, answering problem sets and writing exams.

2 Exams and Assessment

Your grade in class will be based on a midterm and a final.

- Midterm: March 22nd.
- Final: May TBA (it will be on the official exam date between May 4th and May 11.

The way to do well in this class is to practice problem settings. I will give plenty of practice questions for you to work on before both the midterm and the final. Attendance is compulsory. If you miss a class it is your responsibility to catchup on the material.

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 & Readings

Please note that the date of class has been switched (with Macro) on a Thursday to accommodate academic conferences and presentations.

Starred readings contain information that will be especially useful in the midterm and final. None-starred readings are readings that I will draw on in my lectures. They are all recommended but not essential for you to do well in this class. The main textbooks I refer to are more or less interchangeable as I note above. I endeavor to put as much material as possible on Dropbox for you. All articles can be found online using Google Scholar.

3.1 Introduction:19th Jan

- Hal R. Varian, What Use is Economic Theory August 1989
- Gerard Debreu, Theoretic Models: Mathematical Form and Economic Content, *Econometrica* 54, Nr. 6 1986

- Dani Rodrik, *Economic Rules: The Rights and Wrongs of the Dismal Science* New York: W.W. Norton & Co., 2015 Selected Chapters
- Vernon L. Smith, The Two Faces of Adam Smith, *Southern Economic Journal* 65, Nr. 1 1998

3.2 Consumer Theory, 26th January

- Varian, *Microeconomic Analysis* Chapter 7–9* or
- Kreps Chapter 2*

3.3 Producer Theory and the Firm & Competition, 2nd February

- Varian, *Microeconomic Analysis* Chapter 1–5*

3.4 Oligopoly Theory I. 9th February

- Arnold C. Harberger, Monopoly and Resource Allocation, *The American Economic Review* 44, Nr. 2 1954
- Either Hal Varian, *Microeconomic Analysis* New York: W.W. Norton & Company Norton, 1992 Chapters 13 and 14 or Jean Tirole, *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988 Chapters 1 and 7* or David M. Kreps, *A Course in Microeconomic Theory* New York: Prentice Hall, 1990 Chapters 8 and 9*

3.5 Oligopoly Theory II, 16th February

- Either Hal Varian, *Microeconomic Analysis* New York: W.W. Norton & Company Norton, 1992 Chapter 16 or David M. Kreps, *A Course in Microeconomic Theory* New York: Prentice Hall, 1990 Chapter 10* or Jean Tirole, *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988 Chapter 5*
- W.J. Baumol, Contestable markets: an uprising in the theory of industry structure, *American economic review* 72, Nr. 1 1982

3.6 General Equilibrium and Externalities 18th February (Note Class Time)

- R. H. Coase, The Problem of Social Cost, *The Journal of Law and Economics* 3, Nr. 1 1960*
- Richard Hornbeck, Barbed Wire: Property Rights and Agricultural Development, *The Quarterly Journal of Economics* 125, Nr. 2 May 2010
- Varian, *Microeconomic Analysis* Chapters 17, 21, and 24*

- Joseph M. Ostroy and Louis Makowski, Perfect Competition and the Creativity of the Market, *Journal of Economic Literature* 39, Nr. 2 June 2001

3.7 Expected Utility Theory 1st March

- David M. Kreps, *A Course in Microeconomic Theory* New York: Prentice Hall, 1990 Chapter 3* or Hal Varian, *Microeconomic Analysis* New York: W.W. Norton & Company Norton, 1992 Chapter 11
- Richard H. Thaler Daniel Kahneman, Jack L. Knetsch, Experimental Tests of the Endowment Effect and the Coase Theorem, *Journal of Political Economy* 98, Nr. 6 1990

3.8 Risk, March 15th

- Daniel Kahneman and Amos Tversky, Prospect Theory: An Analysis of Decision under Risk, *Econometrica* 47, Nr. 2 1979*
- Nicholas C. Barberis, Thirty Years of Prospect Theory in Economics: A Review and Assessment, *Journal of Economic Perspectives* 27, Nr. 1 Winter 2013

3.9 Midterm, March 22nd

3.10 Game Theory 1, March 29th

- Avinash Dixit, D Reiley and S Skeath, *Games of Strategy* New York: W.W. Norton & Company, 2010 Chapters*
- Samuel Bowles, *Microeconomics, behaviour, institutions, and evolution* Oxford: Princeton University Press, 2005 Chapters 2 and 4

3.11 Game Theory 2, April 9th (Note Thursday Class Meeting)

- Avinash Dixit, D Reiley and S Skeath, *Games of Strategy* New York: W.W. Norton & Company, 2010 Chapters*
- Samuel Bowles, *Microeconomics, behaviour, institutions, and evolution* Oxford: Princeton University Press, 2005

3.12 Asymmetric Information I, April 12th

- 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
- David M. Kreps, *A Course in Microeconomic Theory* New York: Prentice Hall, 1990 Chapter 17*

3.13 Asymmetric Information II, 19th April

- Liran Einav and Amy Finkelstein, Selection in Insurance Markets: Theory and Empirics in Pictures, *Journal of Economic Perspectives* 25, Nr. 1 Winter 2011

3.14 Review 28 April

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
- Barberis, Nicholas C.: Thirty Years of Prospect Theory in Economics: A Review and Assessment, *Journal of Economic Perspectives* 27, Nr. 1 Winter 2013, 173–96
- Baumol, W.J.: Contestable markets: an uprising in the theory of industry structure, *American economic review* 72, Nr. 1 1982, 1–15
- Bowles, Samuel: *Microeconomics, behaviour, institutions, and evolution* Oxford: Princeton University Press, 2005
- Coase, R. H.: The Problem of Social Cost, *The Journal of Law and Economics* 3, Nr. 1 1960, 1
- Daniel Kahneman, Jack L. Knetsch, Richard H. Thaler: Experimental Tests of the Endowment Effect and the Coase Theorem, *Journal of Political Economy* 98, Nr. 6 1990, 1325–1348
- Debreu, Gerard: Theoretic Models: Mathematical Form and Economic Content, *Econometrica* 54, Nr. 6 1986, 1259–1270
- Dixit, Avinash, Reiley, D and Skeath, S: *Games of Strategy* New York: W.W. Norton & Company, 2010
- Einav, Liran and Finkelstein, Amy: Selection in Insurance Markets: Theory and Empirics in Pictures, *Journal of Economic Perspectives* 25, Nr. 1 Winter 2011, 115–38
- Harberger, Arnold C.: Monopoly and Resource Allocation, *The American Economic Review* 44, Nr. 2 1954, 77–87
- Hornbeck, Richard: Barbed Wire: Property Rights and Agricultural Development, *The Quarterly Journal of Economics* 125, Nr. 2 May 2010, 767–810
- Kahneman, Daniel and Tversky, Amos: Prospect Theory: An Analysis of Decision under Risk, *Econometrica* 47, Nr. 2 1979, 263–291
- Kreps, David M.: *A Course in Microeconomic Theory* New York: Prentice Hall, 1990
- Ostroy, Joseph M. and Makowski, Louis: Perfect Competition and the Creativity of the Market, *Journal of Economic Literature* 39, Nr. 2 June 2001, 479–535
- Riley, John G.: Silver Signals: Twenty-Five Years of Screening and Signaling, *Journal of Economic Literature* 39, Nr. 2 June 2001, 432–478
- Rodrik, Dani: *Economic Rules: The Rights and Wrongs of the Dismal Science* New York: W.W. Norton & Co., 2015
- Smith, Vernon L.: The Two Faces of Adam Smith, *Southern Economic Journal* 65, Nr. 1 1998, 2–19
- Tirole, Jean: *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988
- Varian, Hal: *Microeconomic Analysis* New York: W.W. Norton & Company, 1992
- Varian, Hal: *Intermediate Microeconomics* New York: W.W. Norton & Company, 1999
- Varian, Hal R.: What Use is Economic Theory August 1989