

Econ 612: Microeconomics

Professor: Mark Koyama
E-mail: mark_koyama@googlemail.com
Tuesday: 7.10-10.00 pm
Office Hrs (Arlington Campus): Tuesday: 5-6 p.m.

1 Course Outline

Course Requirements

- Midterm Exam worth 40 % of your final grade.
- Comprehensive Final Exam worth 60 % of your final grade.

There will be two exams in this course: one midterm and a final. Exams will consist of a mix of short definitions, multiple choice, and essay questions. They will focus on the readings and class lecture notes. There will be a practice mid-term and a practice final exam.

Important Dates

- 22nd January: First day of Class
- 5th March: Midterm.
- 14th May: Final Exam.

There will be no class on April 23rd.

Readings

There is no single required textbook for this course but it is important to have access to a game theory textbook for the first half of the course. The following are strongly recommended:

- Martin Osborne, *Introduction to Game Theory* Oxford: Oxford University Press, 2004
- Avinash Dixit, D Reiley and S Skeath, *Games of Strategy* New York: W.W. Norton & Company, 2010

The second edition of Dixit et al. (2010) is equally as good as the Third Edition. Osborne (2004) is more mathematical than Dixit et al. (2010) but both are very good introductions to game theory. These books are marketed as for advanced undergraduates or first year graduate students. They are at the right level for MA

students in Economics. Other textbooks in advanced microeconomics or game theory should also be sufficient in combination with my lecture notes.

This reading list is provisional and may be changed during the course. Each week there are assigned readings. The starred readings are essential. The non-starred readings are highly recommended. I will provide pdf copies of the readings where they are hard to obtain online (including selected book chapters).

My lecture notes will be available on Dropbox shortly before or shortly after each lecture. The midterm and final will be heavily based on my lecture notes and you are expected to know and understand all the material covered on them.

2 Topics

By design the first half of this course is textbook heavy. The aim is to teach the standard tools of economic analysis. It will build on both Econ 611 and Econ 630. I focus on game theory which I think is a particularly important tool in understanding microeconomics. The midterm will focus on testing your understanding of these tools. The second half of the course is more applied and focuses on specific topics. It is more heavily based on articles and will involve more class discussion.

2.1 Game Theory

- Osborne (2004, Chapter 2)* or Dixit et al. (2010, Chapter 2)*
- Econlog on Game Theory
- Dixit et al. Chapter 4

2.2 Game Theory II

- Osborne (2004, Chapters 5 and 14)* or Dixit et al. (2010, Chapter 3 and Chapter 11)*

2.3 Monopoly and Competition

- Selections from Jean Tirole, *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988 Chapters 1 and 7*
- W.J. Baumol, Contestable markets: an uprising in the theory of industry structure, *American economic review* 72, Nr. 1 1982

2.4 Oligopoly Theory

- Osborne Chapter 3* or Dixit et al. Chapter 5*
- Selections from Jean Tirole, *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988 Chapter 5*
- Econlib on Cartels

2.5 Public Goods

- Dixit et al. Chapter 12*
- Ernst Fehr and Simon Gächter, Cooperation and Punishment in Public Goods Experiments, *The American Economic Review* 90, Nr. 4 2000*
- Econlib on Public Goods
- Ronald H. Coase, The Lighthouse in Economics, *Journal of Law & Economics* 17, Nr. 2 October 1974

2.6 Externalities

- R. H. Coase, The Problem of Social Cost, *The Journal of Law and Economics* 3, Nr. 1 1960*
- Econlib on Externalities
- Econlib on Coase
- Richard Hornbeck, Barbed Wire: Property Rights and Agricultural Development, *The Quarterly Journal of Economics* 125, Nr. 2 May 2010

2.7 The Theory of the Firm

- Ronald H. Coase, The Nature of the Firm, *Economica* 5, Nr. 16 1937*
- Tirole Selections from Chapter 1*
- Armen A Alchian and Harold Demsetz, Production, Information Costs, and Economic Organization, *American Economic Review* 62, Nr. 5 December 1972
- R. Gibbons, Four formal (izable) theories of the firm?, *Journal of Economic Behavior & Organization* 58, Nr. 2 2005

2.8 The Economics of Uncertainty

- Jack Hirschleifer, *The Analytical of Uncertainty and Information* Cambridge: Cambridge University Press, 1992 Chapters 1,2 and 3*

2.9 Informational Economics

- Paul Milgrom and John Roberts, *Economics, Organization and Management* Prentice Hall, 1992 Chapter 7*
- Liran Einav and Amy Finkelstein, Selection in Insurance Markets: Theory and Empirics in Pictures, *Journal of Economic Perspectives* 25, Nr. 1 Winter 2011*
- 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
- Karl-Gustaf Löfgren, Torsten Persson and Jörgen W. Weibull, Markets with Asymmetric Information: The Contributions of George Akerlof, Michael Spence and Joseph Stiglitz, *The Scandinavian Journal of Economics* 104, Nr. 2 2002
- Dixit et al. Chapter 9

2.10 Regulation

- <http://www.econlib.org/library/Enc/Antitrust.html>
- Sam Peltzman, The Effects of Automobile Safety Regulation, *Journal of Political Economy* 83, Nr. 4 August 1975
- G. J. Stigler, The Theory of Economic Regulation, *The Bell Journal of Economics and Management Science* 2, Nr. 1 1971
- Edward L. Glaeser and Andrei Shleifer, The Rise of the Regulatory State, *Journal of Economic Literature*, Vol 41, Nr. 2 2003

2.11 The Economics of Crime

- Gary S. Becker, Crime and punishment: An economic approach, *The Journal of Political Economy* 76, Nr. 2 1968
- I. Ehrlich, Crime, punishment, and the market for offenses, *The Journal of Economic Perspectives* 10, Nr. 1 1996*
- Ian Ayres and Steven D. Levitt, Measuring Positive Externalities From Unobservable Victim Precaution: An Empirical Analysis Of Lojack, *The Quarterly Journal of Economics* 113, Nr. 1 February 1998
- John J. Donohue and Steven D. Levitt, The Impact Of Legalized Abortion On Crime, *The Quarterly Journal of Economics* 116, Nr. 2 May 2001*
- David Friedman, Why Not Hang Them All: The Virtues of Inefficient Punishment, *Journal of Political Economy* 107, Nr. S6 December 1999*

2.12 The Economics of Religion

- Laurence R Iannaccone, Sacrifice and Stigma: Reducing Free-Riding in Cults, Communes, and Other Collectives, *Journal of Political Economy* 100, Nr. 2 April 1992
- Laurence R. Iannaccone, Introduction to the Economics of Religion, *Journal of Economic Literature* 36, Nr. 3 September 1998
- Jonathan Gruber and Daniel M. Hungerman, The Church versus the Mall: What Happens When Religion Faces Increased Secular Competition?, *The Quarterly Journal of Economics* 123, Nr. 2 05 2008

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
- Alchian, Armen A and Demsetz, Harold: Production , Information Costs, and Economic Organization, *American Economic Review* 62, Nr. 5 December 1972, 777–95

- Ayres, Ian and Levitt, Steven D.: Measuring Positive Externalities From Unobservable Victim Precaution: An Empirical Analysis Of Lojack, *The Quarterly Journal of Economics* 113, Nr. 1 February 1998, 43–77
- Baumol, W.J.: Contestable markets: an uprising in the theory of industry structure, *American economic review* 72, Nr. 1 1982, 1–15
- Becker, Gary S.: Crime and punishment: An economic approach, *The Journal of Political Economy* 76, Nr. 2 1968, 169–217
- Coase, R. H.: The Problem of Social Cost, *The Journal of Law and Economics* 3, Nr. 1 1960, 1
- Coase, Ronald H.: The Nature of the Firm, *Economica* 5, Nr. 16 1937, 386–405
- Coase, Ronald H.: The Lighthouse in Economics, *Journal of Law & Economics* 17, Nr. 2 October 1974, 357–76
- Dixit, Avinash, Reiley, D and Skeath, S: *Games of Strategy* New York: W.W. Norton & Company, 2010
- Donohue, John J. and Levitt, Steven D.: The Impact Of Legalized Abortion On Crime, *The Quarterly Journal of Economics* 116, Nr. 2 May 2001, 379–420
- Ehrlich, I.: Crime, punishment, and the market for offenses, *The Journal of Economic Perspectives* 10, Nr. 1 1996, 43–67
- 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
- Fehr, Ernst and Gächter, Simon: Cooperation and Punishment in Public Goods Experiments, *The American Economic Review* 90, Nr. 4 2000, 980–99
- Friedman, David: Why Not Hang Them All: The Virtues of Inefficient Punishment, *Journal of Political Economy* 107, Nr. S6 December 1999, S259–S269
- Gibbons, R.: Four formal (izable) theories of the firm?, *Journal of Economic Behavior & Organization* 58, Nr. 2 2005, 200–245
- Glaeser, Edward L. and Shleifer, Andrei: The Rise of the Regulatory State, *Journal of Economic Literature*, Vol 41, Nr. 2 2003, 401–425
- Gruber, Jonathan and Hungerman, Daniel M.: The Church versus the Mall: What Happens When Religion Faces Increased Secular Competition?, *The Quarterly Journal of Economics* 123, Nr. 2 05 2008, 831–862
- Hirschleifer, Jack: *The Analytical of Uncertainty and Information* Cambridge: Cambridge University Press, 1992
- Hornbeck, Richard: Barbed Wire: Property Rights and Agricultural Development, *The Quarterly Journal of Economics* 125, Nr. 2 May 2010, 767–810
- Iannaccone, Laurence R: Sacrifice and Stigma: Reducing Free-Riding in Cults, Communes, and Other Collectives, *Journal of Political Economy* 100, Nr. 2 April 1992, 271–91
- Iannaccone, Laurence R.: Introduction to the Economics of Religion, *Journal of Economic Literature* 36, Nr. 3 September 1998, 1465–1495
- Löfgren, Karl-Gustaf, Persson, Torsten and Weibull, Jörgen W.: Markets with Asymmetric Information: The Contributions of George Akerlof, Michael Spence and Joseph Stiglitz, *The Scandinavian Journal of Economics* 104, Nr. 2 2002, 195–211
- Milgrom, Paul and Roberts, John: *Economics, Organization and Management* Prentice Hall, 1992
- Osborne, Martin: *Introduction to Game Theory* Oxford: Oxford University Press, 2004
- Peltzman, Sam: The Effects of Automobile Safety Regulation, *Journal of Political Economy* 83, Nr. 4 August 1975, 677–725
- Riley, John G.: Silver Signals: Twenty-Five Years of Screening and Signaling, *Journal of Economic Literature* 39, Nr. 2 June 2001, 432–478
- Stigler, G. J.: The Theory of Economic Regulation, *The Bell Journal of Economics and Management Science* 2, Nr. 1 1971, 3–21
- Tirole, Jean: *The Theory of Industrial Organization* Cambridge, M.A.: The MIT Press, 1988