

General Economic Theory: Macroeconomics
ECON 510a, Fall 2010
(Second Half)
Yale University

Syllabus

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Course Web Site: https://classes.v2.yale.edu/portal/site/econ510_f10

Course Description

The purpose of the second half of Econ 510a is to keep building our understanding about modern macroeconomic theory. We pick up where the first half left off, by studying a general equilibrium macroeconomic model with perfect competition, complete markets and heterogeneous agents. This model constitutes a useful baseline for modern macroeconomic research and we will use it as a benchmark to study Real Business Cycles, Asset Pricing, Neoclassical growth models and Ramsey taxation.

Current research departs from this baseline in various ways. We will analyze some of these departures as well, such as limited commitment, moral hazard and private information. You will see more departures in 511 and, if you decide, during the second year macro sequence. But it is essential to first develop a solid understanding of the baseline. The course is built around methods, and different macroeconomic topics play the role of applications of the methods.

Just as a commitment device (to myself), my office hours are Wednesdays from 4pm to 6pm. However, you're also very welcome to drop me a line so we can schedule a meeting or just to stop by my office. My door is always open in case you want to go for a coffee and chat.

Class Meetings

Lectures take place on Mondays and Wednesdays from 10:30am to 11:50am in 28 HH, Room B8. Sometimes, when I cannot teach during regular times or when I need to complete a lecture, we may also need to use Fridays from 10:30am to 11:50am. I'll let you know in advance. Sections are held as usual.

Textbooks and Suggested Reading

The required readings are *Recursive Macroeconomic Theory 2nd ed.* by Ljungqvist and Sargent (LS), and my lecture notes, available on the course web-site. They cover roughly the same material, but in somewhat different ways. You should work through the chapters assigned for each topic.

Below I also suggest some additional readings, which are useful both in acquiring a deeper understanding of the general framework and also in learning the details of the topics we discuss in class. This list will likely grow along the way, once we discover common interests.

Grading

The grade for this part of the course will be based 90% on a written, closed-book final examination and 10% on weekly problem sets. Don't let the asymmetry in grading weights trick you. Working on the problem sets is a key step towards getting the final right. The final exam is scheduled for Friday December 10, from 1pm to 4pm, at Room B8. The score from the second half will be averaged with the score from the first half to obtain the overall grade for the course.

Road Map for the Class

We will cover seven topics in six weeks. The number of lectures assigned to each topic is approximate. Find below the required and additional suggested readings.

1) A Neo-Classical Benchmark Economy (3 lectures)

- **Planning Problem**
- **Decentralization in a Competitive Equilibrium with Complete Markets**

Required Reading

LS, Chapter 8

Lecture Notes

Additional Suggested Readings:

Arrow, Kenneth (1964). "The Role of Securities in the Optimal Allocation of Risk-Bearing", *Review of Economic Studies* 31, pp. 91-96.

- Bewley, Truman (1972). "Existence of Equilibria in Economies with Infinitely Many Commodities", *Journal of Economic Theory* 4, pp. 514-540.
- Debreu, Gerard (1954). "Valuation Equilibrium and Pareto Optimum", *Proceedings of the National Academy of Sciences* 40, pp. 588-592.
- Debreu, Gerard (1959). "*The Theory of Value: An Axiomatic Analysis of Economic Equilibrium*". New Haven and London. Yale University Press.
(Available at <http://cowles.econ.yale.edu/P/cm/m17/index.htm>)
- Prescott, Edward and Rajnish Mehra (1980). "Recursive Competitive Equilibrium: The Case of Homogeneous Households", *Econometrica* 48: 1365-1379.
- Stokey, Nancy and Robert Lucas (1989) "*Recursive Methods in Economic Dynamics*", Cambridge, Mass. Harvard University Press. Chapters 15-16.
- Townsend, Robert (1995). "Consumption Insurance: An Evolution of Risk-Bearing Systems in Low-Income Economies". *Journal of Economic Perspectives*, 9, pp. 83-102.

2) Real Business Cycle (1 lecture)

Required Reading

Lecture Notes

Additional Suggested Readings:

- Hansen, Gary (1985). "Indivisible Labor and the Business Cycle", *Journal of Monetary Economics* 16, pp. 309-327.
- King, Robert and Sergio Rebelo (1999). "Resuscitating Real Business Cycles". *Handbook of Macroeconomics*. J.B. Taylor and M. Woodford (eds.) Elsevier Science. Amsterdam, pp. 928-1002.
- Kydland, Finn and Edward Prescott (1982). "Time to Build and Aggregate Fluctuations". *Econometrica*. 50(6), pp. 1345-1371.
- Rogerson, Richard (1988). "Indivisible Labor, Lotteries and Equilibrium". *Journal of Monetary Economics* 21, pp. 3-16.
- Romer, David (2006). "*Advanced Macroeconomics*" 3ed. Chapter 4.

3) Asset Pricing (1 lecture)

Required Reading

LS Chapter 13

Lecture Notes

Additional Suggested Readings:

- Campbell, John, Andrew Lo and Craig MacKinlay (1997). "*The Econometrics of Financial Markets*". Princeton, NJ: Princeton University Press, Princeton.

Duffie, Darrell (1996). “*Dynamic Asset Pricing Theory*”. Princeton, NJ: Princeton University Press, Princeton.

Hansen, Lars and Ravi Jagannathan (1997). “Implications of Security Market Data for Models of Dynamic Economies”. *Journal of Political Economy*, 99, pp. 225-262.

Mehra, Rajnish and Edward Prescott (1985). “The Equity Premium: A Puzzle”. *Journal of Monetary Economics*, 15(2), pp. 145-162.

4) Neo-Classical Stochastic Growth Model (2 lectures)

Required Reading

LS Chapter 14

Lecture Notes

Additional Suggested Readings:

Acemoglu, Daron (2009). “*Introduction to Modern Economic Growth*”. Princeton University Press.

Hall, Robert and Charles Jones (1999). “Why do Some Countries Produce So Much More Output per Worker than Others?”, *Quarterly Journal of Economics* 114, pp. 83-116.

Hansen, Gary and Edward Prescott (2002). “Malthus to Solow”, *American Economic Review*, 92(4), pp. 1205-1217.

Jones, Larry and Rodolfo Manuelli (1997). “The Sources of Growth” *Journal of Economic Dynamics and Control*, 21, pp: 75-114.

Lucas, Robert (1988). “On the Mechanics of Economic Development” *Journal of Monetary Economics*, 22, pp: 3-42.

Lucas, Robert (1993). “Making a Miracle” *Econometrica*, 61(2), pp: 251-272.

Romer, Paul (1990). “Endogenous Technological Change” *Journal of Political Economy*, 98(5), pp: 71-102.

5) Fiscal Policy. Ramsey Taxation. (2 lectures)

Required Reading

LS, Chapters 10, 11 and 15

Lecture Notes

Additional Suggested Readings:

Chari, V.V. and Patrick Kehoe (1999). “Optimal Fiscal and Monetary Policy”. *NBER Working Paper* 6891.

Chari, V.V., Larry Christiano and Patrick Kehoe (1994). “Optimal Fiscal Policy in a Business Cycle Model”. *Journal of Political Economy*, 102(4), pp. 203-223.

Jones, Larry, Rodolfo Manuelli and Peter Rossi (1992). “Optimal Taxation in Models of Endogenous Growth”. *Journal of Political Economy*, 101, pp. 485-517.

Phelan, Christopher and Ennio Stacchetti (2001). "Sequential Equilibria in a Ramsey Tax Model". *Econometrica*, 69(6), pp. 1491-1518.

6) Limited Commitment. (2 lectures)

Required Reading

LS, Chapters 19 and 20

Lecture Notes

Additional Suggested Readings:

Kocherlakota, Narayana (1996) "Implications of Efficient Risk Sharing without Commitment", *Review of Economic Studies*, 63, pp.595-609.

Krueger, Dirk and Fabrizio Perri (2006) "Does Income Inequality Lead to Consumption Inequality: Evidence and Theory", *Review of Economic Studies*, 73, pp.163-193.

Thomas, Jonathan and Tim Worrall (1988). "Self-Enforcing Wage Contracts", *Review of Economic Studies*, 55, pp.541-554.

Thomas, Jonathan and Tim Worrall (1990). "Income Fluctuations and Asymmetric Information: An Example of a Repeated Principal-Agent Problem", *Journal of Economic Theory*, 51, pp.367-390.

7) Moral hazard and Private Information (1 lecture)

Required Reading

LS, Chapters 15

Lecture Notes

Additional Suggested Readings:

Atkeson, Andrew, Christian Hellwig and Guillermo Ordonez (2010) "Optimal Regulation in the Presence of Reputation Concerns", Working Paper, Yale.

Hopenhayn, Hugo, and Juan Pablo Nicolini (1997), "Optimal Unemployment Insurance", *Journal of Political Economy* 105, 412-38.

Phelan, Christopher and Robert Townsend (1991), "Computing Multi-Period, Information-Constrained Optima", *Review of Economic Studies*, 58, 853-881.

Prescott, Edward and Robert Townsend (1984), "General Competitive Analysis in an Economy with Private Information", *International Economic Review* 25, 1-20.

Prescott, Edward and Robert Townsend (1984), "Pareto Optima and Competitive Equilibria in an Economy with Private Information", *Econometrica*, 52, 21-45.

Spear, S. and S. Strivastava (1987), "On Repeated Moral Hazard with Discounting", *Review of Economic Studies*, 54, 599-618.