

UNIVERSITY OF CALIFORNIA, RIVERSIDE
DEPARTMENT OF ECONOMICS

ECON 201C: MACROECONOMIC THEORY III
SPRING 2019

“Dynamic general equilibrium theory is a suitable organizing framework for macroeconomics provided one realizes that the welfare theorems that guarantee optimality of equilibrium are theorems and not tautologies.”

in “The Econometrics of Indeterminacy: An Applied Study”
by Roger E.A. Farmer and Jang-Ting Guo (1995)

Instructor: Jang-Ting Guo
Lectures: MW 9:40 - 11:00 a.m., Sproul 2206
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Description: This course examines the overlapping generations model, the Lucas Island model, various endogenous growth models, and the New Keynesian model. This course also covers dynamic optimization in continuous time and the analytical tool of a phase diagram.

Texts: Azariadis, Costas, *Intertemporal Macroeconomics*, Blackwell Publisher, Cambridge, Massachusetts, 1993.

Barro, Robert J., and Xavier Sala-i-Martin, *Economic Growth*, 2nd edition, MIT Press, Cambridge, Massachusetts, 2004.

Farmer, Roger E.A., *The Macroeconomics of Self-Fulfilling Prophecies*, 2nd edition, MIT Press, Cambridge, Massachusetts, 1999.

Galí, Jordi, *Monetary Policy, Inflation, and the Business Cycle*, 2nd edition, Princeton University Press, Princeton, New Jersey, 2015.

The following references are placed on the Rivera library reserve:

- Andersen, Torben M., and Karl O. Moene, editors, *Endogenous Growth*, Blackwell Publisher, Cambridge, Massachusetts, 1993.
- Blanchard, Olivier J., and Stanley Fischer, *Lectures on Macroeconomics*, MIT Press, Cambridge, Massachusetts, 1989.
- Cooley, Thomas F., editor, *Frontiers of Business Cycle Research*, Princeton University Press, Princeton, 1995.
- Grossman, Gene M., and Elhanan Helpman, *Innovation and Growth in the Global Economy*, MIT Press, Cambridge, Massachusetts, 1991.
- Intriligator, Michael D., *Mathematical Optimization and Economic Theory*, Englewood Cliffs, NJ: Prentice-Hall, 1971.
- Ljungqvist, Lars, and Thomas J. Sargent, *Recursive Macroeconomic Theory*, 4th edition, MIT Press, Cambridge, Massachusetts, 2018.

Discussion Section: There is a weekly discussion section held by Ekaterina Seregina. She will discuss the problem sets and answer your questions during these discussion sessions. It is imperative that you attend all TA sessions.

Grading:	Problem Sets	10%
	Midterm Exam	35%
	Final Exam	55%

- Part of the weekly problem sets will be graded. They would give you an idea about the types of questions that will appear on the midterm, final and cumulative exams.
- If you miss the midterm exam *for any reason*, then the final exam will count for 90% of your grade.
- The midterm exam is tentatively scheduled on **Sunday May 5, 2019**. The exact time and place will be announced later.
- The final exam is tentatively scheduled on **Saturday June 8, 2019**. The exact time and place will be announced later.
- There will be no alternate or make-up final exam.

Course Outline:

1. Overlapping Generations Models. (3 lectures)

Farmer, Chapter 6.

Azariadis, Chapter 7.4, 7.5 and 13.1.

Blanchard and Fischer, Chapter 3.1 and 4.1.

Diamond, Peter, "National Debt in a Neoclassical Growth Model," *American Economic Review*, 55(1965), 1026-1050.

Farmer, Roger E.A., and Michael Woodford, "Self-Fulfilling Prophecies and the Business Cycle," *Macroeconomic Dynamics*, 1(1997), 740-769.

Gale, David, "Pure Exchange Equilibrium of Dynamic Economic Models," *Journal of Economic Theory*, 6(1973), 12-36.

Samuelson, Paul A., "An Exact Consumption-Loan Model of Interest with or without the Social Contrivance of Money," *Journal of Political Economy*, 66(1958), 467-482.

2. Choice under Uncertainty. The Lucas Island Model. (3 lectures)

Farmer, Chapter 8.

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

Azariadis, Costas, "A Re-examination of Natural Rate Theory," *American Economic Review*, 71(1981), 946-960.

Debreu, Gerard, *Theory of Value*, Cowles Foundation Monograph 17, Yale University Press, New Haven, 1959, Chapter 7.

Lucas, Robert E. Jr., "Expectations and the Neutrality of Money," *Journal of Economic Theory*, 4(1972), 103-124.

_____, "Nobel Lecture: Monetary Neutrality," *Journal of Political Economy*, 104(1996), 661-682.

Sargent, Thomas J., "Expectations and the Nonneutrality of Lucas," *Journal of Monetary Economics*, 37(1996), 535-548.

3. Sunspots in Overlapping Generations Models. (1 lecture)

Farmer, Chapter 9.

Azariadis, Costas, "Self-Fulfilling Prophecies," *Journal of Economic Theory*, 25(1981), 380-396.

Cass, David, and Karl Shell, "Do Sunspots Matter?" *Journal of Political Economy*, 91(1983), 193-227.

Chiappori, Pierre A., and Roger Guesnerie, "Sunspot Equilibria in Sequential Markets Models," In *Handbook of Mathematical Economics*, Vol. IV, edited by Werner Hildenbrand and Hugo Sonnenschein, North Holland, Amsterdam, 1991, 1683-1762.

4. Neoclassical and Endogenous Growth Theories Revisited. (1 lecture)

Andersen and Moene, pp. 1-35.

Barro and Sala-i-Martin, Chapter 1, 2, 4 and 5.

Grossman and Helpman, Chapter 1 and 2.

Barro, Robert J., "Government Spending in a Simple Model of Endogenous Growth," *Journal of Political Economy*, 98(1990), s103-s125.

Lucas, Robert E. Jr., "On the Mechanics of Economic Development," *Journal of Monetary Economics*, 22(1988), 3-42.

Jones, Larry E., and Rodolfo Manuelli, "A Convex Model of Equilibrium Growth: Theory and Policy Implication," *Journal of Political Economy*, 98(1990), 1008-1038.

Rebelo, Sergio, "Long-Run Policy Analysis and Long-Run Growth," *Journal of Political Economy*, 99(1991), 500-521.

Romer, Paul M., "Increasing Returns and Long-Run Growth," *Journal of Political Economy*, 94(1986), 1002-1037.

5. Growth with Expanding Product Variety. (2 lectures)

Barro and Sala-i-Martin, Chapter 6.

Grossman and Helpman, Chapter 3.

Rivera-Batiz, Luis A., and Paul M. Romer, "Economic Integration and Endogenous Growth," *Quarterly Journal of Economics*, 106(1991), 531-555.

Romer, Paul M., "Growth Based on Increasing Returns Due to Specialization," *American Economic Review Papers and Proceedings*, 77(1987), 56-62.

_____, "Endogenous Technological Change," *Journal of Political Economy*, 98(1990), s71-s102.

6. Growth with Quality Ladders. (2 lectures)

Barro and Sala-i-Martin, Chapter 7.

Grossman and Helpman, Chapter 4.

Aghion, Philippe, and Peter Howitt, "A Model of Growth through Creative Destruction," *Econometrica*, 60(1992), 323-351.

Grossman, Gene M., and Elhanan Helpman, "Quality Ladders in the Theory of Growth," *Review of Economic Studies*, 58(1991), 43-61.

Helpman Elhanan, "Endogenous Macroeconomic Growth Theory," in *Political Economy, Growth, and Business Cycles*, edited by Cukierman, Alex, Zvi Hercowitz, and Leonardo Leiderman, MIT Press, Cambridge, Massachusetts, 1992, pp. 83-116.

7. New Keynesian Models. (6 lectures)

Gali, Chapter 1, 2, 3 and 4.

Ball, Laurence M., and David Romer, "Are Prices Too Sticky?" *Quarterly Journal of Economics*, 104(1989), 507-524.

_____, "Real Rigidities and the Nonneutrality of Money," *Review of Economic Studies*, 57(1990), 183-203.

_____, "Sticky Prices as Coordination Failure," *American Economic Review*, 81(1991), 539-552.

Blanchard, Olivier J., and Nobuhiro Kiyotaki, "Monopolistic Competition and the Effects of Aggregate Demand," *American Economic Review*, 77(1987), 647-666.

Clardi, Richard, Jordi Galí, and Mark Gertler, "Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory," *Quarterly Journal of Economics*, 115(2000), 147-180.

Kleven, Henrik J., and Claus T. Kreiner, "The Role of Taxes as Automatic Destabilizers in New Keynesian Economics," *Journal of Public Economics*, 87(2003), 1123-1136.