

UNIVERSITY OF COLORADO

Department of Economics

**ECON7040: MACROECONOMIC THEORY II**

Spring 2014

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Instructor:	Martin Boileau
Class:	Economics 2; MW 9:30 to 10:45
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**COURSE DESCRIPTION**

This course is the second part of the core macroeconomic theory doctoral sequence. We will focus our attention on dynamic optimization and general equilibrium models.

The course has two objectives. The first is the presentation of the tools required to study dynamic, stochastic, general equilibrium models. The second is the application of these tools to topics in macroeconomics.

**EVALUATION**

The assessment for this class consists of a two (2) term tests and a final exam. Tests and final exam are closed notes and closed books. No make-up tests will be given. The tentative schedule and the grade distribution are displayed in the table below.

<b>Evaluation</b>	<b>Date</b>	<b>%</b>
Term Test 1	Week 6: 19 February	25
Term Test 2	Week 12: 2 April	25
Final Exam	To be determined	50

## REQUIRED TEXT

Ljungqvist, Lars and Thomas J. Sargent, *Recursive Macroeconomic Theory*, Cambridge: MIT Press.

## BACKGROUND TEXTS

Adda, Jerome and Russell W. Cooper, *Dynamic Economics*, Cambridge: MIT Press.

Barro, Robert J. and Xavier Sala-i-Martin, *Economic Growth*, New York: McGraw Hill.

Blanchard, Olivier J. and Stanley Fischer, *Lectures on Macroeconomics*, Cambridge: MIT Press.

Farmer, Roger E., *The Macroeconomics of Self-Fulfilling Prophecies*, Cambridge: MIT Press.

Romer, David, *Advanced Macroeconomics*, New York: McGraw-Hill.

Sargent, Thomas J., *Dynamic Macroeconomic Theory*, Cambridge: Harvard University Press.

Stokey, Nancy L. and Robert E. Lucas, *Recursive Methods in Economic Dynamics* Cambridge: Harvard University Press.

# COURSE OUTLINE

## I. INTRODUCTION: TWO-PERIOD ECONOMIES

1. A Pure Exchange Economy
  - Boileau, Lecture Notes Sections 1 to 4
  - Farmer: Chapter 4
2. A Production Economy
  - Boileau, Lecture Notes Sections 5 and 6

## II. DYNAMIC PROGRAMMING AND APPLICATIONS

1. Dynamic Programming
  - Ljungqvist and Sargent: Chapter 3
  - Boileau: A Child's Guide to Dynamic Programming
2. A Real Business Cycle Model
  - Farmer: Chapters 2 and 3
  - Ljungqvist and Sargent: Chapter 12
  - Romer: Chapter 4
  - King, Robert G., Charles I. Plosser, and Sergio T. Rebelo, 1988. Production, Growth, and Business Cycles: I. The Basic Neoclassical Model, *Journal of Monetary Economics* **7**, 67–82.
3. Numerical Issues
  - Ljungqvist and Sargent: Chapters 4 and 5
  - King, Robert G., Charles I. Plosser, and Sergio T. Rebelo, 2002. Production, Growth, and Business Cycles: Technical Appendix, *Computational Economics* **20**, 87–116.
  - Uhlig, Harald, 1997. A Toolkit for Analyzing Nonlinear Dynamic Stochastic Models Easily.
  - Griffoli, Tommaso M., 2013. Dynare: User Guide.

### **III. DYNAMIC GENERAL EQUILIBRIUM**

1. Equilibrium with Complete Markets
  - Ljungqvist and Sargent: Chapter 8
2. Incomplete Markets and Self Insurance
  - Ljungqvist and Sargent: Chapters 17 and 18
3. Asset Pricing Theory
  - Ljungqvist and Sargent: Chapter 13
4. Search and Matching
  - Ljungqvist and Sargent: Chapters 6 and 28

## University Policies

You should familiarize yourself with the following University of Colorado policies:

1. University policies regarding classroom behavior are available at  
<http://www.colorado.edu/policies/classbehavior.html>
2. University policies regarding disabilities are available at  
<http://www.colorado.edu/disabilityservices>.
3. University policies regarding religious practice are available at  
[http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html).
4. University policies regarding Sexual Harassment and Amorous Relationships are available at  
<http://www.colorado.edu/odh/>.
5. Information regarding the Honor Code Council is available at  
<http://www.colorado.edu/policies/honor.html>  
<http://www.colorado.edu/academics/honorcode/>.