

UNIVERSITY OF COLORADO

Department of Economics

ECON7040: MACROECONOMIC THEORY II

Spring 2015

Instructor:	Martin Boileau
Class:	Economics 119; MW 9:30 to 10:45
Office:	Economics 215; MW 11:00 to 12:00
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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.

Evaluation	Date	%
Term Test 1	Week 6: 18 February	25
Term Test 2	Week 12: 1 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

1. National Income Accounting
2. Two Period Economies
 - *Boileau*: Two Period Economies: A Review

II. Continuous Time

1. Dynamic Programming and Hamiltonian
 - *Boileau*: A Child's Guide to Dynamic Programming
 - *Boileau*: A Child's Guide to Optimal Control Theory
2. The One-Sector Neoclassical Growth Model
 - *Romer*: Chapter 2
 - Blanchard and Fisher: Chapter 2
3. Perpetual Youth
 - Blanchard, O., 1985. Debt, Deficits, and Finite Horizon. *Journal of Political Economy* **93**.

III. Dynamic Stochastic General Equilibrium Models

1. Discrete Time One-Sector Neoclassical Growth: A Review
 - *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**.
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**.

- Uhlig, Harald, 1997. A Toolkit for Analyzing Nonlinear Dynamic Stochastic Models Easily.
- Griffoli, Tommaso M., 2013. Dynare: User Guide.

IV. Advances in DSGE Models

1. Monopolistic Competition and Sticky Prices
2. Monetary Economies: CIA, MIU, and Cashless Economies
3. Preferences: Non-Homotheticity, Habit, GHH, Endogenous Discount, Epstein-Zin
4. Shocks: Investment-specific, News, and Noise

V. Search and Matching

1. Matching and Bargaining
2. Monopsony
3. Directed Search
4. Search and Money

V. Policy

1. Time Inconsistency
2. Monetary Policy: Optimal Inflation Rate and Policy Reaction Function
3. Monetary Policy Issue: Zero Lower Bound
4. Fiscal Policy: Ricardian Equivalence and Taxation in Dynamic Economies
5. Fiscal Policy Issue: The Multiplier

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.
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/>.