UNIVERSITY OF COLORADO
Department of Economics

ECON7040: MACROECONOMIC THEORY II
Spring 2016

Instructor:	Martin Boileau
Class:	Economics 119; MW 9:30 to 10:45
O ce:	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 rst 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 nal exam. Tests and nal 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: 17 February	25
Term Test 2	Week 13: 4 April	25
Final Exam	5 May: 4:30{7:00pm	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
   - B l ̦: Two Period Economies: A Review

II. Discrete Time

1. Dynamic Programming
   - B l ̦: A Child's Guide to Dynamic Programming
   - $Lj,$ gg t d S g t: 2.A.1, 3.1
2. The One-Sector Neoclassical Growth Model
3. Overlapping Generations Model
   - ̀: Chapter 2

III. Continuous Time

1. Dynamic Programming and Hamiltonian
   - B l ̦: A Child's Guide to Optimal Control Theory

2. The One-Sector Neoclassical Growth Model
   - ̀: Chapter 2
   - Bl d d F : Chapter 2

3. Perpetual Youth
   - Banchard, O., 1985. Debt, De cits, and Finite Horizon$J$, l f P l t l E **93**.
   - Bl d d F : Chapter 3.3

III. Dynamic Stochastic General Equilibrium Models

1. Dynamic Programming
   - $Lj,$ gg t d S g t: 2.1, 2.2, 2.4, 3.2

2. A Real Business Cycle Model
   - Farmer: Chapters 2 and 3

- L_t g_t q_t d S_g t: 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, l f - t E **7**.

3. Numerical Issues
   - Ljungvqist and Sargent: Chapters 4 and 5
   - King, Robert G., Charles I. Plosser, and Sergio T. Rebelo, 2002. Production, Growth, and Business Cycles: Technical Appendix, p, t t l E **20**.
   - Uhlig, Harald, 1997. A Toolkit for Analyzing Nonlinear Dynamic Stochastic Models Easily.
   - Gri oli, 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-speci c, 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 In ation Rate and Policy Reaction Function
3. Monetary Policy Issue: Zero Lower Bound
4. Fiscal Policy: Ricardian Equivalence and Taxation in Dynamic Economies

University Policies

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

1. If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and

Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in