

COURSE DESCRIPTION

This course is an introduction to modern macroeconomic theory. We will focus our attention on dynamic optimization and general equilibrium models.

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

DELIVERY

The course has two integral components:

1. Courses: Hopefully in person.
2. Recitations: The recitations will use the main material to go deeper on topics in macroeconomics.

EVALUATION

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

| Evaluation | Date | % |
|------------|--------------|----|
| Test 1 | 28 September | 25 |
| Test 2 | | |

REQUIRED TEXTS

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

BACKGROUND TEXTS

Barro, Robert J. and Xavier Sala-

Solow, Robert M., 1956, A Contribution to the Theory of Economic Growth, Quarterly Journal of Economics, 70, 65-94.

III. TWOPERIOD ECONOMIES

1. Consumption
Boileau, Lecture Notes Sections through 3
2. A Pure Exchange Economy
Boileau, Lecture Notes Section 4
Farmer: Chapter 4
3. A Production Economy
Boileau, Lecture Notes Sections 5 and 6

IV. INFINITE HORIZON ECONOMIES: DISCRETE TIME

1. Dynamic Programming
Dixit: Chapters 10 and 11
Ljungqvist and Sargent: Chapters 2 to 5
2. The Neoclassical Growth Model
Boileau, Lecture Notes.
Ljungqvist and Sargent: Chapter 15
3. Overlapping Generations
Boileau, Lecture Notes.
Romer: Chapter 2 part B

V. INFINITE HORIZON ECONOMIES: CONTINUOUS TIME

1. Hamiltonian
Boileau, Lecture Notes.
Dixit: Chapters 10 and 11
Intriligator: Chapters 11 to 15
2. The Neoclassical Growth Model
Barro and Sala-i-Martin: Chapter 2
Blanchard and Fischer: Chapter 2
Intriligator: Chapter 16
Romer: Chapter 2 part A
3. Perpetual Youth
Boileau, Lecture Notes.

Blanchard and Fisher: Chapter 3.3

Banchar, O., 1985. Debt, Deficits, and Finite Horizon. Journal of Political Economy 93

VI. DYNAMIC STOCHASTIC GENERAL EQUILIBRIUM MODELS

1. Dynamic Programming
Ljungqvist and Sargent: 2.1, 2.2, 2.4, 3.2
2. Equilibrium with Complete Markets
Ljungqvist and Sargent: 8.18-5, 8.8
3. Incomplete Markets and Self Insurance
Ljungqvist and Sargent: Chapters 17 and 18
4. Asset Pricing Theory
Ljungqvist and Sargent: 8.7, 13.13.8

V. REAL BUSINESS CYCLE MODELS

1. A Real Business Cycle Model
Farmer: Chapters 2 and 3
Lungqvist and Sargent: Chapter 12
Romer: Chapter 4
King, Robert G., Charles I. Plosser, and Sergio Rebelo, 1988. Production, Growth, and Business Cycles: I. The Basic Neoclassical Model, Journal of Monetary Economics 21
2. Numerical Issues
Ljungqvist and Sargent: Chapters 4 and 5
King, Robert G., Charles I. Plosser, and Sergio Rebelo, 2002. Production, Growth, and Business Cycles: Technical Appendix, Computational Economics 20.
Uhlig, Harald, 1997. A Toolkit for Analyzing

University Policies

CLASSROOM BEHAVIOR

CUBoulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

HONORCODE

All