# Econ 325 Intermediate Macroeconomics Analysis

Syllabus

Winter 2010

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# 1 Logistics

1. **Lectures:** M,Tu,W,Th 9:00 am -12:15 pm

2. Location: Tydings Hall 0111

- 3. Office hours: Regular time: Wednesday 12:30pm 2:00 pm Tydings Hall, Room 4118L. Also by appointment
- 4. Course Website Use Blackboard through www.elms.umd.edu
- 5. Course Objectives: This course aims to provide a rigorous understanding of issues related to macroeconomic analysis in intermediate level. A micro-founded representative agent perspective is going to be the main abstraction of the course to help students gain initial access to major practices in modern macroeconomic theory.
- 6. **Prerequisite:** Economics 300 (Methods and Tools for Economic Analysis) with a final grade of "C" or higher. Economics 325 is for economics majors only; the parallel course for non-majors is Economics 305.
- 7. **Textbooks:** This class will have two main references:
  - (a) **(SC)** A Short Course in Representative-Agent Macroeconomics. Sanjay K. Chugh. (This is the **required** book. It is available online at: http://www.skchugh.com/teachingfall2009/econ325maryland.html)
  - (b) **(W)** Macroeconomics. 3rd Edition. Stephen D. Williamson. (This is a **suggested** book)

- 8. Grading: Two problem sets each 15 percent, (first due on January 11th in class, second due on January 19th in class) one midterm exam 30 percent (on January 12th, in class) and a final exam 40 percent (on January 21th in class). Please do not submit late. Late problem sets will not be accepted. You are strongly encouraged to work in groups but the submission is individual. Any regrading request is not valid after one week. Regrading does not mean that your grade is going to increase. It may fall as well.
- 9. Academic Integrity: The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards applicable to all undergraduate students, and you are responsible for upholding these standards as you complete assignments and take exams in this course. Please make yourself aware of the consequences of cheating, fabrication, and plagiarism. For more information see www.studenthonorcouncil.umd.edu.
- 10. **Copyrights:** Course materials are copyrighted. Hence, selling or distributing copies or modified copies of instructors' course materials or assisting another person or entity in selling or distributing those materials may be considered in violation of the University Code of Student Conduct, Part 9(k).

### 2 Course Outline

# 2.1 Representative Agent Macroeconomics

Reading: Short Course, Chapter 0

# 2.2 Microeconomics of Consumer Theory

Reading: Short Course, Chapter 1

- 1. Utility Theory
- 2. Budget Constraints
- 3. Optimal Choice
- 4. Lagrangian Optimization

# 2.3 Static Consumption-Leisure Model

- 1. The Two "Goods": Consumption and Leisure
- 2. Aggregate Labor Supply Function
- 3. Substitution Effect and Income Effect

- 4. Consumption Demand Function
- 5. Lagrangian Analysis

Reading: Short Course, Chapter 2

### 2.4 The Consumption-Savings Model

Reading: Short Course, Chapter 3

- 1. A Simple Intertemporal Utility Function
- 2. Budget Constraints
- 3. Optimal Intertemporal Choice Consumption and Savings
- 4. Steady-State Real Interest Rate

### 2.5 Inflation and Interest Rates in the Consumption-Savings Model

Reading: Short Course, Chapter 4

- 1. The Fisher Equation
- 2. Consumption-Savings Model Revisited
- 3. Aggregate Private Savings Function
- 4. Lagrangian Analysis: Lifetime Lagrangian vs. Sequential Lagrangian

# 2.6 Ricardian Equivalence and Crowding Out

- 1. Basic Terminology
- 2. Government Budget Constraints
- 3. Consumer Reconsidered
- 4. Ricardian Equivalence
- 5. Distortionary Taxes, the Failure of Ricardian Equivalence, and Crowding Out
- 6. Changes in Government Spending
- 7. Lump-Sum vs. Distortionary Taxes

# 2.7 Infinite-Horizon Consumer Problem and Asset Pricing

Reading: Short Course, Chapter 8

- 1. Basic formulation
- 2. Discount factor
- 3. Flow budget constraint
- 4. Asset structure
- 5. Basic Asset Pricing Model
- 6. Steady-State Real Interest Rate

# 2.8 Firms: Labor Demand, Investment Demand, and Aggregate Supply

Reading: Short Course, Chapter 6

- 1. Aggregate Production Function and Aggregate Supply
- 2. Production Function Shocks
- 3. Appendix: Alternative Derivation of Investment Function

#### 2.9 Preference Shocks

Reading: Short Course, Chapter 9

- 1. A Utility Function Augmented with Shocks
- 2. Effects on Consumption Demand Function

# 2.10 Intertemporal Consumption-Leisure Model

- 1. Individual's Preferences
- 2. Lifetime Budget Constraint

### 2.11 Real Business Cycle Theory

Reading: Short Course, Chapter 13 Nobel Lectures by Edward Prescott, Finn Kydland, Robert Lucas, and Robert Solow; essays by N. Greg Mankiw and George Akerlof

- 1. The RBC Technology Shock
- 2. Technology Shocks and Aggregate Fluctuations An Overview
- 3. Technology, Factor Prices, and Output
- 4. Effects on Consumption-Leisure Margin
- 5. Effects on Consumption-Savings Margin
- 6. Putting it Together Business Cycle Fluctuations

### 2.12 Supply-Side Economics (time permitting)

Reading: Short Course, Chapter 10

- 1. Taxes and the Backward-Bending Labor Supply Curve
- 2. The Laffer Curve
- 3. Limitations of Supply-Side Policy

# 2.13 The Phillips Curve

Reading: Short Course, Chapter 11

- 1. Nominal Rigidities and the Short-Run Phillips Curve
- 2. The Long-Run Phillips Curve
- 3. The Great Breakdown of Macroeconomic Theory

# 2.14 New Keynesian Economics

Reading: Short Course, Chapter 12 (including "Menu Cost' topic in Appendix)

- 1. Differentiated Goods and the Consumption Aggregator
- 2. Monopolistically Competitive Firms
- 3. The Aggregate Price Level and Aggregate Consumption Demand
- 4. Staggered Price-Setting
- 5. Critique of New Keynesian Theory
- 6. Appendix: Theories of Price Stickiness

# 2.15 Money in the Intertemporal Model

Reading: Short Course, Chapter 14

- 1. Money-in-the-Utility-Function Model
- 2. Neutrality and the RBC vs. New Keynesian Debate
- 3. Monetarism: the Link Between Money Growth and Inflation

# 2.16 Interactions between Fiscal and Monetary Policy

- 1. Consolidated Government Budget Constraint
- 2. Seignorage Revenue and Inflationary Finance
- 3. Active vs. Passive Monetary and Fiscal Policies
- 4. Ricardian Equivalence Revisited