

Economics 2202 (Section 05)

Macroeconomic Theory

Syllabus

Professor Sanjay Chugh

Fall 2014

Meetings: Tuesdays and Thursdays, 1:30pm-2:45pm, Campion Hall 200

Email address: sanjay.chugh@bc.edu

Course website: www.skchugh.com (through the “Teaching” link)

Professor Chugh’s Office Hours: Tuesdays, 8:45am-10:00am, Maloney Hall 325

Course Objectives: Our broad objective will be to develop the foundations of modern macroeconomic theory, which builds explicitly on the principles of microeconomic theory, and use it to study a variety of macroeconomic issues. A key focus will be on the channels by which fiscal policy and monetary policy can affect the economy. We will trace through some of the history that led to modern macroeconomic theory being what it is today. Throughout, the emphasis will be on theoretical and logical rigor and policy applications, including to the conduct of policy amidst the slow economic recovery.

Prerequisites: EC 132 (*Principles of Economics II – Macro*) and Calculus I. **Please note that we WILL use basic calculus throughout the course.**

Grading Assistant:

Ana Lariau (Ph.D. student)

lariau@bc.edu

Textbooks: The textbook for the course is a manuscript I will provide (*Modern Macroeconomics*), which is available through the “Teaching Manuscript” link on www.skchugh.com. These notes may be updated a bit as the course progresses; if so, I will notify you. I will also provide you with a set of notes that reviews basic concepts from introductory macroeconomics (which everybody is expected to have completed). This latter set of notes is intended to provide a review of basic principles of macroeconomics and are (along with your own previous introductory macroeconomics text and notes) for your reference. In addition, a few topics will be developed through additional notes and readings.

Throughout the course, we will use the frameworks we study to understand current macroeconomic events in the U.S. and around the world. To supplement this part of the course, I will ask you to read various current economic events items as they arise that relate to frameworks we are developing.

Grading: The final grade will be based on two problem sets (each worth 15% of your final course grade), a midterm exam (worth 30% of your final course grade) and a cumulative final exam (worth 40% of your final course grade).

Problem Set 1: Due **Thursday, October 2, 2014**, no later than 1:30pm

Problem Set 2: Due **Thursday, December 4, 2014**, no later than 1:30pm

Problem set solutions should be clearly, logically, and thoroughly presented. Your method of argument(s) and approach to problems is as important as, if not more important than, your “final answer.” Throughout, your analysis should be based on the ideas and concepts we have developed in class. Although not required, typed (rather than hand-written) problem set solutions are preferred. **LATE PROBLEM SETS WILL NOT BE ACCEPTED.**

Midterm Exam:

Tuesday, October 14 AND Thursday, October 16 (during regular lecture period)

The midterm exam will consist of two “parts,” one that you will complete on Tuesday, October 14 (Part 1) and one that you will complete on Thursday, October 16 (Part 2). On each of these two dates, you will have access to **only** that day’s portion of the exam (i.e., on Tuesday, October 14 you will have no access to Part 2 of the exam, and on Thursday, October 16 you will have no access to Part 1 of the exam). The rationale behind a “two-day” exam is that it allows for a more accurate assessment of your first-half performance than “one” 75-minute exam can provide.

Final Exam:

Wednesday, December 17, 2014, 12:30pm

As per Boston College Final Exam Schedule:

<http://www.bc.edu/content/bc/offices/stserv/academic/current/exams.html>

Make-up Exam Policy: All students are required to take both parts of the midterm exam and the final exam **because these assessments are “major scheduled grading events.”** In addition, the two problem sets that are to be submitted are also designated “major scheduled grading events.” Make-up exams will be granted **only** to those students whose excuse complies with University policy. If you believe you are eligible to take a make-up exam, please inform the professor and provide the appropriate documentation as soon as possible.

Exam Regrade Policy: If, after going over your exam and the exam solutions, you believe some of your solutions were more correct than originally judged to be, you may submit, **in writing**, an exam regrade request. Your regrade request must specify which solutions(s) you believe were not graded appropriately and a **substantive explanation** for why you believe your solutions are more correct than originally judged (thus, regrade requests that consist of essentially nothing more than “I think I should have received more points on this question” will not be considered). Your entire exam is subject to regrade. **EXAM REGRADE REQUESTS ARE DUE NO LATER THAN ONE WEEK (7 CALENDAR DAYS) AFTER EXAMS ARE RETURNED** – this deadline applies even if you are not present in class the day graded exams are returned (it is your responsibility to pick up your graded exams in a timely manner).

Academic Integrity: Cheating on any exam will result in (1) an automatic failure in the course and (2) reporting the incident to the College of Arts and Sciences as required by the University. See www.bc.edu/publications/ucatalog/policy.shtml#integrity for a full discussion of the university’s policies and procedures regarding academic integrity.

Accommodations: If you are a student with a documented disability seeking reasonable accommodations in this course, please contact Kathy Duggan, (617) 552-8093, dugganka@bc.edu, at the Connors Family Learning Center regarding learning disabilities and ADHD, or Paulette Durrett, (617) 552-3470, paulette.durrett@bc.edu, in the Disability Services Office regarding all other types of disabilities, including temporary disabilities. Advance notice and appropriate documentation are required for accommodations.

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Outline of topics: The following is a sketch of topics we will cover this semester – it may be modified as the course progresses.

Week of September 1, 2014 and Week of September 8, 2014

Representative Agent Macroeconomics

Reading: *Modern Macroeconomics* Draft, Chapter 0

Microeconomics of Consumer Theory

- Utility Theory
- Budget Constraints
- Optimal Choice
- Lagrangian Optimization

Reading: *Modern Macroeconomics* Draft, Chapter 1

Week of September 8, 2014 and Week of September 15, 2014

Static Consumption-Leisure Framework

- The Two “Goods”: Consumption and Leisure
- Real Wages
- Aggregate Labor Supply Function
- Consumption Demand Function
- Lagrangian Analysis

Reading: *Modern Macroeconomics* Draft, Chapter 2

Week of September 15, 2014 and Week of September 22, 2014

The Consumption-Savings Framework

- A Simple Intertemporal Utility Function
- Budget Constraints
- Optimal Intertemporal Choice – Consumption and Savings

Reading: *Modern Macroeconomics* Draft, Chapter 3

Inflation and Interest Rates in the Consumption-Savings Framework

- The Fisher Equation
- Real Interest Rate
- Consumption-Savings Framework Revisited
- Aggregate Private Savings Function
- Lagrangian Analysis: Lifetime Lagrangian vs. Sequential Lagrangian

Reading: *Modern Macroeconomics* Draft, Chapter 4

Week of September 29, 2014

Ricardian Equivalence and Crowding Out

- Basic Terminology
- Government Budget Constraints
- Taxation and Consumer Budget Constraints
- Ricardian Equivalence
- Distortionary Taxes and the Failure of Ricardian Equivalence
- Changes in Government Spending
- Lump-Sum vs. Distortionary Taxes

Reading: *Modern Macroeconomics* Draft, Chapter 7

Week of October 6, 2014

Infinite-Horizon Consumer Problem and Asset Pricing

- Basic Formulation
- Subjective Discount Factor
- Flow Budget Constraint
- Asset Structure
- Basic Asset Pricing Model
- Consumption-Savings Optimality in Infinite-Horizon Form
- Steady-State (aka Long-Run) Real Interest Rate

Reading: *Modern Macroeconomics* Draft, Chapter 8

**MIDTERM EXAM: Tuesday, October 14 AND Thursday, October 16
(regular lecture time and location)**

Week of October 20, 2014

Firms: Labor Demand, Investment Demand, and Aggregate Supply

- Aggregate Production Function
- A Multi-Period Framework of Firms
- Dynamic Firm Profit Function
- Labor Demand
- Investment Demand
- Cobb-Douglas Production Function
- Production Function Shocks

Reading: *Modern Macroeconomics* Draft, Chapter 6

Preference Shocks

- Utility Function with Shocks (a Demand Shock)
- Production Function with Shocks (a Supply Shock)

Reading: *Modern Macroeconomics* Draft, Chapter 9

Intertemporal Consumption-Leisure Framework

- Individual's Preferences
- Lifetime Budget Constraint
- Extension of Consumption-Leisure and Consumption-Savings Optimality Conditions Concepts to Infinite-Horizon

Reading: *Modern Macroeconomics* Draft, Chapter 5

Week of October 27, 2014

History of Macroeconomics

- The Rise of Macroeconomics
- Keynesianism
- The Macroeconometric Models
- The Phillips Curve
- The Breakdown of Macroeconomic Theory and Policy in the 1970's
- The Lucas Critique
- The Real Business Cycle Revolution
- Dynamic Stochastic General Equilibrium

Reading: *Modern Macroeconomics* Draft, Chapter 25
Nobel Lectures by Edward Prescott, Finn Kydland, Robert Lucas, and Robert Solow; essays by N. Greg Mankiw and George Akerlof

Real Business Cycle Theory (skim)

- The RBC Technology Shock
- Cobb-Douglas Production Function
- Technology Accounting
- Technology Shocks and Aggregate Fluctuations – An Overview
- Technology, Factor Prices, and Output
- Effects on Consumption-Leisure Margin
- Effects on Consumption-Savings Margin
- Putting it Together – Business Cycle Fluctuations

Reading: *Modern Macroeconomics* Draft, Chapter 13

The Phillips Curve (skim)

- Nominal Rigidities and the Short-Run Phillips Curve
- The Long-Run Phillips Curve

Reading: *Modern Macroeconomics* Draft, Chapter 11

Introduction to New Keynesian Economics (skim)

- Differentiated Goods and the Consumption Aggregator

- Monopolistically Competitive Firms
- The Aggregate Price Level and Aggregate Consumption Demand
- Staggered Price-Setting
- Critique of New Keynesian Theory
- Appendix: Theories of Price Stickiness

Reading: *Modern Macroeconomics* Draft, Chapter 12

Week of November 4, 2014 and Week of November 11, 2014

Money in the Intertemporal Model

- Money-in-the-Utility-Function Model
- Linkage between Money Markets and Bond Markets
- Consumption-Money Optimality Condition
- Money Demand Function
- Neutrality and the RBC vs. New Keynesian Debate
- Monetarism: the Link Between Money Growth and Inflation

Reading: *Modern Macroeconomics* Draft, Chapter 14

Week of November 18, 2014

Interactions Between Fiscal and Monetary Policy

- Consolidated Government Budget Constraint
- Seignorage Revenue and Inflationary Finance
- Active vs. Passive Monetary and Fiscal Policies
- Ricardian vs. Non-Ricardian Fiscal Policies
- Fiscal Theory of the Price Level
- Fiscal Theory of Inflation

Reading: *Modern Macroeconomics* Draft, Chapter 15

NO CLASS ON TUESDAY NOVEMBER 25 OR THURSDAY NOVEMBER 27

Week of December 1, 2014 and Week of December 8, 2014

Financial Markets Imperfections and Interactions with the Macroeconomy

- Informational Asymmetries in Financial Transactions
- “Financial Accelerator” Framework
- Role of Collateral and Net Worth
- Risk Premium
- Shocks to Asset Prices and the “Adverse Feedback Loop”
- Policy Implications and Applications

Reading: *Modern Macroeconomics* Draft, Chapter 24