

Economics 602
Macroeconomic Theory and Policy
Syllabus (Online)
Professor Sanjay Chugh
Fall 2016

Email address: schugh1@jhu.edu
Course website: JHU Blackboard

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 current economic downturn.

Grading: The final grade will be based on a midterm exam (worth 35% of your final course grade), a cumulative final exam (worth 40% of your final course grade), and periodic assignments that will be assigned during the course (worth a cumulative 25% of your course grade). The exams are scheduled for:

Midterm Exam: Friday, October 7, 2016 (exam will be available at 8:00am EST)

Final Exam: Friday, December 2, 2016 (exam will be available at 8:00am EST)

All students are expected to complete both exams. The deadline for each exam is a fixed number of 100 hours after the exam is available on Blackboard, to ensure that all students have sufficient time to complete and upload each exam to Blackboard. Further details will follow.

Textbook: The required textbook for the course is:

Chugh, Sanjay K. *Modern Macroeconomics*, MIT Press, 2015.

In addition, a few topics may be developed through additional notes and readings I provide you.

University Policies

General

This course adheres to all University policies described in the academic catalog. Please pay close attention to the following policies.

Students with Disabilities

Johns Hopkins University is committed to providing reasonable and appropriate accommodations to students with disabilities. Students with documented disabilities should contact the coordinator listed on the [Disability Accommodations](#) page. Further information and a link to the Student Request for Accommodation form can also be found on the [Disability Accommodations](#) page.

Ethics & Plagiarism

JHU Ethics Statement: The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. Report any violations you witness to the instructor.

Read and adhere to JHU's [Notice on Plagiarism](#).

Dropping the Course

You are responsible for understanding the university's policies and procedures regarding withdrawing from courses found in the current catalog. You should be aware of the current deadlines according to the [Academic Calendar](#).

Getting Help

You have a variety of methods to get help on Blackboard. Please consult the help listed in the "Blackboard Help" link for important information. **If you encounter technical difficulty in completing or submitting any online assessment, please immediately contact the designated help desk listed on the [AAP online support page](#).** Also, contact your instructor at the email address listed atop this syllabus.

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

Representative Agent Macroeconomics

Reading: *Modern Macroeconomics*, Introduction

Microeconomics of Consumer Theory

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

Reading: *Modern Macroeconomics*, Chapter 1

Static Consumption-Leisure Model

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

Reading: *Modern Macroeconomics*, Chapter 2

The Consumption-Savings Model

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

Reading: *Modern Macroeconomics*, Chapter 3

Inflation and Interest Rates in the Consumption-Savings Model

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

Reading: *Modern Macroeconomics*, Chapter 4

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*, Chapter 7

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 Real Interest Rate

Reading: *Modern Macroeconomics*, Chapter 8

MIDTERM EXAM

Available: 8:00am (EST) on Friday, October 7, 2016

Deadline: 12:00noon (EST) on Tuesday, October 11, 2016

Firms: Labor Demand, Investment Demand, and Aggregate Supply

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

Reading: *Modern Macroeconomics*, Chapter 6

Preference Shocks

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

Reading: *Modern Macroeconomics*, Chapter 9

Intertemporal Consumption-Leisure Model

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

Reading: *Modern Macroeconomics*, Chapter 5

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 (RBC) Revolution
- Dynamic Stochastic General Equilibrium Modeling

Reading: *Modern Macroeconomics*, Chapter 10
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*, Chapter 14

The Phillips Curve (skim)

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

Reading: *Modern Macroeconomics*, Chapter 11
Modern Macroeconomics, Chapter 12

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*, Chapter 13

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*, Chapter 15

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*, Chapter 21

Unemployment

- Labor Search and Matching
- Labor-Force Participation
- Costs of Recruiting Employees
- Probability of Successfully Finding a Job
- Probability of Successfully Hiring an Employee
- Matching-Market Equilibrium
- Wage Determination and Surpluses

Reading: *Modern Macroeconomics*, Chapter 27

Modern Macroeconomics, Chapter 28

Modern Macroeconomics, Chapter 29

FINAL EXAM

Available: 8:00am (EST) on Friday, December 2, 2016

Deadline: 12:00noon (EST) on Tuesday, December 6, 2016
