

ECON3020: INTERMEDIATE MACROECONOMICS

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Office hours: Mondays 10am-12pm

TIME AND LOCATION

Mondays and Wednesdays 9:00-9:50am in Monroe Hall Room 118.

TEACHING ASSISTANT

The teaching assistant for this course is Donghyun Suh who will lead discussion sections on Thursdays 5:00-5:50pm (Monroe Hall 118) and 6:00-6:50pm (Chemistry Bldg 306). He can be reached at ds2qzc@virginia.edu. His office hours are on Tuesdays 3-5pm. Discussion sections will be used to cover new material, go over homeworks and exams, and work sample problems.

COMMUNICATION

Email is the preferred means of communication, please allow up to 24 hours to get a response. Course materials and current grades will be posted on [Canvas](#). Canvas will also be used to make general course announcements. Office hours are on Mondays 10am to 12pm. Questions and discussions of all kinds are encouraged. In case of a time conflict, alternative appointment may be arranged by email.

COURSE DESCRIPTION

This course offers a modern treatment of macroeconomics, wherein we will discuss both current events and traditional macroeconomic topics through the lens of macroeconomic models. Throughout the course, particular attention will be paid to the tight connection between macroeconomic models and real-world data. We kick off the course with a broad

introduction to macroeconomics, unveiling the questions it tackles and the methods it employs. We then proceed with a detailed examination of macroeconomic data, with a focus on national income accounting.

The second part of the course deals with the examination of essential facts and tools utilized by economists to study economic growth. We first develop and explore the Solow growth model, a cornerstone in macroeconomics, investigating its ability to explain wealth disparities among nations and the considerable improvement in living standards over the past century. We then introduce the Romer model, shifting the focus to the role of innovative ideas in economic growth. The detailed analysis of the labor market will help us understand the determinants of the long-run unemployment rate and reveal some surprising insights. We wrap up the long-run segment by studying inflation through the lens of the quantity theory of money.

The third part of the course pivots to the study of short-run phenomena, including booms and recessions. We first provide an overview of the macroeconomy in the short run, summarizing key empirical facts. We then develop the short-run model; specifically, we first motivate and introduce the IS curve, a key building block of the short-run model. The IS curve reveals that a fundamental determinant of output in the short run is the real interest rate; the interest rate is set by the central bank to keep the economy close to full employment. We will also discuss an important link between the real economy and inflation, called the Phillips curve.

By bringing all pieces together, we arrive at the short-run model in an aggregate supply/aggregate demand (AS/AD) framework. This framework allows the complete dynamics of the economy in the short run to be studied in a single graph. Using this framework, we investigate the role played by expectations, credibility, and time consistency in modern macroeconomic policymaking. Time permitting, we will also consider dynamic stochastic general equilibrium (DSGE) models; this class of model is at the frontier of modern business cycle analysis.

TEXTBOOK

The textbook for this course is “Macroeconomics” by Charles I. Jones, 5th edition (earlier editions are acceptable). As necessary, additional readings, such as articles and notes, will be made available on [Canvas](#) as the course progresses.

COURSE REQUIREMENTS

Course grades are based on the following:

- Problem sets (30%);
- Midterm exam (30%). The midterm exam is scheduled for February 28 and will take place during the class. The midterm is closed book but each student will be allowed to bring one double-sided sheet of paper with written notes.
- Final exam (40%). The final exam is cumulative and is scheduled for May 10th at 2pm. Exam is closed book but each student will be allowed to bring two double-sided sheets of paper with written notes.

Makeup exams are not permitted.

Problem Sets There will be (approximately) 7 problem sets. Students are encouraged to discuss problem sets with each other, however, each student must submit their own solution. The problem set with the lowest score will be dropped. The course will obey the University of Virginia Honor Code.

Late Submission Policy Late submissions will not be accepted. If you have an emergency that prevents you from submitting your work on time, please let the instructor know as soon as possible.

COURSE OUTLINE (TENTATIVE)

The outline below is tentative. Discussion sections will be used to work example problems and go over new material, so attendance will be important. We may fall behind or get ahead, depending on the rate at which material is covered. The date of exams will not change.

1. Introduction and preliminaries.
 - What is Macroeconomics?
 - What questions (and how) do macroeconomists study?
 - Measuring GDP
 - Production function, marginal products of capital and labor

- General vs. partial equilibrium

2. Behavior of the economy in the long run.

- Economic growth around the world
- Solow growth model
- Romer model
- Frictionless and frictional labor markets

3. The short run.

- Model of consumption
- Model of investment
- Monetary policy and the Phillips curve
- AS/AD framework. Theory and applications.