

Macroeconomic Analysis

Stern College for Women – Spring 2024

Macroeconomics is the study of how economies perform over short and long periods of time. The more our economy produces, the more we can consume and the higher is our standard of living. Similarly, if an economy produces less output this year than last year, our consumption this year will likely be lower than last year and the number of unemployed workers will likely be higher than last year.

Macroeconomics also examines the impact that government policy can have on unemployment, aggregate output, interest rates and the prices that we pay for the goods and services that we consume. Among other topics, this course will examine the short-run trade-off between inflation and unemployment.

Also of importance is the time frame in which we are examining the economy's performance. Policies that increase consumption in the short-run may reduce investment, which reduces living standards in the long-run. So this course also emphasizes the difference between short-run and long-run performance, highlighting the trade-offs that policymakers face.

textbook and course materials

- N. Gregory Mankiw. *Macroeconomics*. MacMillan.
- E. Wdowiak. *Macro Analysis* (website). doviac.net/courses/macro-analysis
- Reinhart and Rogoff. *This Time is Different*.
- D.W. Pearce (ed). *The MIT Dictionary of Modern Economics*.

The course revolves the *Lecture Notes* at the course website: doviac.net/courses/macro-analysis, but you need a textbook for depth. I recommend Mankiw's textbook because it covers the material in far greater depth than my *Lecture Notes* and because it's an excellent textbook.

So please acquire a copy of Mankiw's textbook. Any edition is fine. Used copies are cheaper.

Take your savings and buy a used copy of the *MIT Dictionary*. It's optional, but if you acquire a copy, you'll learn a lot about Economics just by reading it. If Economics is a language, then a dictionary will help you learn the language. And the *MIT Dictionary* is an excellent dictionary.

Finally, at the course website: doviac.net/courses/macro-analysis, you will find lecture notes, homeworks, announcements and any additional readings that I may assign. So please check the site regularly.

course requirements

Because this is a directed study, the exams will be "you teach me" format. The purpose will be to demonstrate your understanding of theory.

And because this is a directed study, we can work on writing, so I'll also ask you to write an essay on a macroeconomic topic of your choice (for example: a country analysis or a study of exchange rate crises).

Introduction to Macroeconomics

Lecture 1: Introduction and Math Review

- An introduction to economics and a review of mathematics.
 - Mankiw, chaps. 1 and 2

Lecture 2: the Production Process

- What marginal condition determines a profit-maximizing firm's optimal level of output?
- How does a change in the wage rate affect a cost-minimizing firm's employment of capital and labor?
- How do firms' short-run costs differ from their long-run costs?
- What are increasing, constant and decreasing returns to scale and how do they affect optimal firm size and the number of firms in an industry in the long run?
 - Wikipedia. "[Production function](#)."

Lecture 3: the Distribution and Allocation of National Income

- What is Gross Domestic Product?
- What are the income and expenditure approaches to calculating GDP?
- Why should the income and expenditure approaches to calculating GDP both yield the same sum?
 - Mankiw chap. 3

Economic Growth

Lecture 4: Economic Growth: the Solow Model

- How do saving and growth of the labor force affect the long-run level of output per worker?
- How does technological progress affect the growth rate of the long-run level of output per worker?
 - Mankiw chap. 8

Lecture 5: Economic Growth: Transition Dynamics

- How do government budget deficits affect the national saving rate?
- If higher saving rates lead to higher steady state levels of output per worker, then why is increasing saving rate so unpopular?
 - Mankiw chap. 9

Lecture 6: Economic Growth: Human Capital

- What other factors affect a country's level of economic development?
 - Mankiw chap. 10

skip lectures 7 and 8

Unemployment and Inflation in the Long Run

Lecture 9: Unemployment in the Long Run

- How is the unemployment rate measured?
- Why are there always some people who are unemployed?
- What is the discouraged worker effect? and How does it cause the unemployment rate to present a misleading measure of the true fraction of people who are unemployed?
 - Mankiw chap. 7

Lecture 10: Money and Inflation in the Long Run

- How does the Federal Reserve control the money supply?
- How does the Federal Reserve affect interest rates in the economy?
- What factors affect the optimal quantity of money that people would like to hold?
- What is the difference between the nominal interest rate and the real interest rate?
- What is inflation? and What causes inflation in the long run?
 - Mankiw chaps. 4 and 5

Economic Fluctuations

Lecture 11: Economic Fluctuations: the Goods Market

- Under what conditions would a difference between planned aggregate expenditure and aggregate output occur in the short run?
- How do the levels of taxation and government spending affect the equilibrium quantity of aggregate output produced in the short run?
 - Mankiw chap. 12

Lecture 12: Economic Fluctuations: the Goods and Money Markets

- Under what conditions can the real interest rate deviate from its long-run level in the short run?
- How do changes in the money supply affect equilibrium aggregate output in the short run?
 - Mankiw chap. 12

Lecture 13: Output and Inflation in the Short Run

- How does the aggregate demand curve fundamentally differ from a market supply curve?
- How do cost shocks increase the price level and reduce aggregate output (causing recession)?
 - Mankiw chap. 13

Lecture 14: the Short-Run Tradeoff between Inflation and Unemployment

- Under what conditions will contracting the money supply increase unemployment in the short run?
- Under what conditions will contracting money supply not have a short-run effect on unemployment?
 - Mankiw chap. 15

Lecture 15: Financial Crises and their Aftermath

- How does a banking crisis affect the ability of fiscal and monetary authorities to influence aggregate output, employment and inflation in the short-run?
 - Reinhart and Rogoff, preface, preamble, chaps. 1, 3, 10, 13 and 14