

**Driehaus College of Business
DePaul University**

ECO 306 – Intermediate Macroeconomics

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Office Hours: Tuesdays 4:40-5:10pm (via live Zoom)

Special note: This syllabus is for the “online hybrid” format of the class as the University decides to deliver the entire classes via online due to pandemic.

Goal of this course: This course is intended to help you acquire a firm knowledge of modern macroeconomic theory and empirics at the intermediate level. Macroeconomic environment and policies heavily influence business conditions and decisions. So making right decisions requires a sound knowledge of workings of the macroeconomy. We explore key macroeconomic relationships and policy issues such as long-term economic growth, money and inflation, unemployment, business cycles (booms & recessions), monetary and fiscal policies, budget deficits and government debt, international capital flows and balance of payments. We emphasize the use of theoretical frameworks to study how the economy works and their application to actual economic events or policy debates such as the 2007-09 global financial crisis or the global pandemic.

Prerequisites: It is assumed that you took ECO 106 (principles of macroeconomics). This course is analytical, but the level of mathematics will be kept at the minimum (elementary algebra).

Course Materials:

Main Textbook: N. Gregory Mankiw, MACROECONOMICS, 10th edition, Worth Publishers: New York, 2019

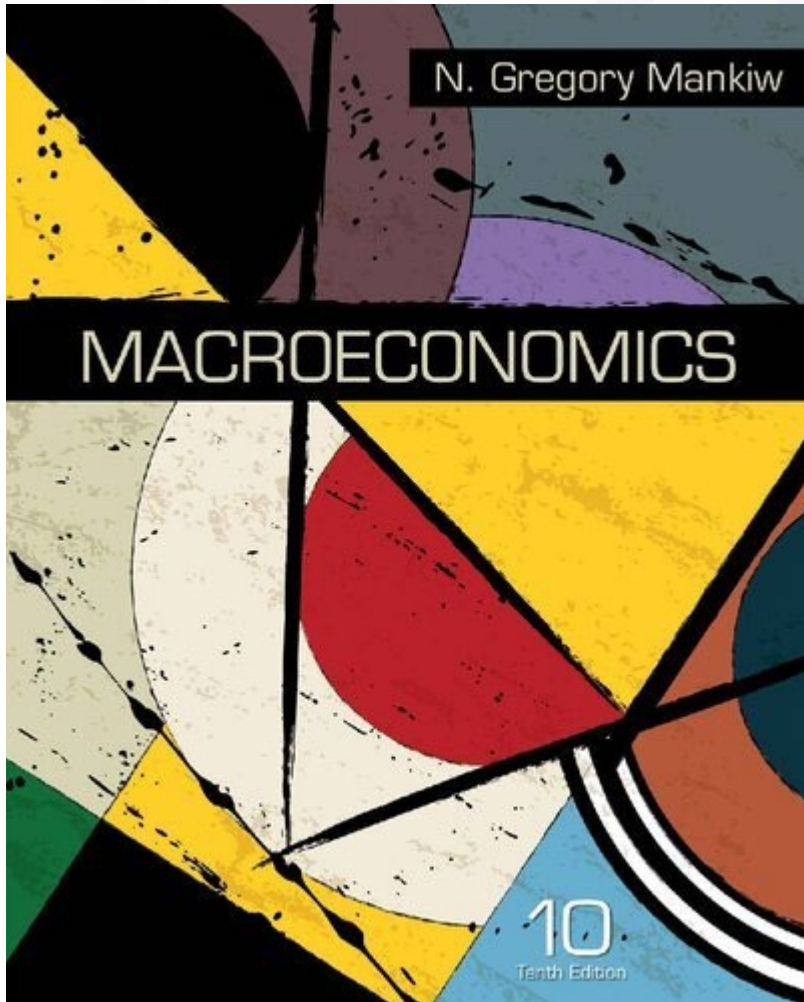
You may use any version (e-book, looseleaf, etc.) or any previous editions (8th or 9th).

Mankiw textbook will serve as primary readings, which will be supplemented with class handouts and articles.

Lecture slides/class handouts will be posted in D2L (<https://d2l.depaul.edu/>) on a regular basis.

Reading materials: the URLs (weblinks) for reading materials are provided in this syllabus (simply click on the title of the article). These reading materials would reinforce your understanding of the topics we cover in class, and some of them will be discussed in class. For the exams, however, only the materials covered in class is exam-relevant.

FYI, Textbook cover



Course Requirements: It is very important to attend and closely follow lectures, since the materials covered in lectures form the core of the course.

There are 3 requirements: 2 Midterm Exams, Final Exam, and Problem Sets

(1) **Exams:** There will be two midterms and one final. **The first mid-term exam will be given on April 22, the second mid-term on May 18, and the final on June 10 (to be confirmed later).** All exams will be take-home exams (i.e., open-book test). Please note that these dates are tentative and will be confirmed later.

(2) **Problem sets (homework):** 6 Problem sets (mostly from textbook) will be assigned. Each problem set will be graded on a simple scale 0 (no submission) and 1 (submission).

A graduate assistant is available for tutoring if you need some help with course materials or with problem sets (their tutoring schedule to be announced later).

Grade: Course grade will be determined by final (35%), two mid-terms (2*21%), problem sets (18%), and class participation (5%).

Grading Scale: A=94% and above; 88%≤A<94%; 82%≤B+<88%; 77%≤B<82%; 72%≤B-<77%; 67%≤C+<72%; 63%≤C<67%; 59%≤C-<63%; 55%≤D+<59%; 50%≤D<55%; and F<50%.

General policy

You should be aware of and abide by the University's policy on academic integrity (<http://academicintegrity.depaul.edu>). Also, the instructor reserves the right to change the topics or schedules if necessary.

Makeup Exams

In cases of severe illness or other extreme circumstances, a student may request a makeup exam. You must inform me of and obtain permission for the absence prior to the exam time, and provide appropriate documentation. I reserve the right to investigate the legitimacy of the request and to assess a grade penalty, or to award a grade of zero if proper procedure is not followed.

Desire2Learn (D2L)

All class material will be posted on D2L (<https://d2l.depaul.edu/>). All communication will be through D2L, although I will make announcements in class and occasionally send emails as needed. "I DIDN'T CHECK D2L" will not be a valid excuse for missing announcements or assignments

Special Notice on Online Class, Discussions, and Emails

(1) The course will be delivered as "hybrid" online, which is combination of asynchronous and synchronous lectures.

(a) Asynchronous part: I will deliver the lecture via pre-recorded format (which would be posted in D2L).

(b) Synchronous part: We will meet up virtually for 90 minutes at a set time and days, as you would do with live ZOOM: **Mar 30; Apr 6; Apr 13; Apr 20; Apr 27; May 4; May 11; May 18 (no virtual meeting due to 2nd midterm exam); May 25; June 1 (starts at 3:10pm)**

(2) To facilitate individual students' questions and concerns, I will hold a virtual office hour so that we can connect in real time via live ZOOM.

(3) Both midterm and final exams will be take-home exams (open-book test). Further details will be provided in advance before the exam is assigned and posted in D2L.

(4) In addition to my recorded lecture (which will be the main medium of delivering the lecture), I will post the regular lecture slides (that I usually use for face-to-face lecture in classroom) in D2L.

(5) Check the D2L frequently, especially "news items" and "contents", where I post new announcement and class materials for the class, respectively.

D2L will be key source of information about the class and course materials.

Also, I will write emails to the class as well.

(6) Please read the Zoom instruction to make yourself familiar with it so that it comes handy whenever you need it.

(7) Importantly, for general questions about the lecture materials and others, you are encouraged to use "Discussions" in D2L, while reserving the email correspondences only for discussions of personal matters/concerns.

CLASS SCHEDULE

*Note that this is **tentative** and may have to be modified if necessary.

Mar 30 (virtual meet) and Apr 1: Overview of the World Economy and US
Data of Macroeconomics: Measuring a Nation's Income and Cost of Living

April 6 (virtual meet) and Apr 8:
National Income, and Saving, Investment and the Financial System
PS#1 will be assigned.

April 13 (virtual meet) and Apr 15:
Saving, Investment and the Financial System; Unemployment;
Productivity and Economic Growth
PS#1 is due. PS#2 will be given.

April 20 (virtual meet):
Productivity and Economic Growth
PS#2 is due.

April 22: First take-home exam (open-book test)/No lecture video

April 27 (virtual meet) and Apr 29:
Productivity and Economic Growth; Money and Inflation
PS#3 will be given.

May 4 (virtual meet) and May 6:
Money and Inflation; PS#3 is due, and PS#4 will be given.

May 11 (virtual meet) and May 13:
Business Cycle: Aggregate Demand and Supply.
PS#4 is due

May 18: Second take-home exam (open-book test)/No virtual meet

May 20: Business Cycle: Aggregate Demand and Supply;
PS#5 will be given.

May 25 (virtual meet) and May 27:
Business Cycle: Aggregate Demand and Supply (cont'd);
Aggregate Demand I: IS-LM model; PS#5 is due, and PS#6 will be given.

June 1 (virtual meet) and June 3:
Aggregate Demand II: IS-LM model; PS#6 is due.

June 10 (to be confirmed): Final take-home exam (open-book test)
(Final exam will be assigned at least a week in advance, say, June 3)

Suggested Reading List (* indicates a more important reading)

1. Overview of the World Economy and Data of Macroeconomics

- (1) Introduction to Macroeconomics
- (2) Measuring a Nation's Income: GDP
- (3) Measuring the Cost of Living (inflation) and Unemployment

Readings: *Mankiw, chapter 2

- The Global Pandemic and U.S. and World Economic Outlook

*[“Federal Reserve issues FOMC statement,”](#) Federal Reserve Board, March 17, 2021.

[“2021 Global Economic Outlook: The Next Phase of the V,”](#) Morgan Stanley, December 1, 2020.

[“Recent economic and financial developments,”](#) Monetary Policy Report to The Congress by the Federal Reserve Board, February, 2021.

- Latest debates on the U.S. economy

*[“The Biden Stimulus Is Admirably Ambitious. But It Brings Some Big Risks, Too,”](#) Lawrence Summers, Washington Post Feb 4, 2021.

[“Inflation Fear Lurks, Even as Officials Say Not to Worry,”](#) New York Times, March 10, 2021.

[“Making Sense of Elevated Stock Market Prices,”](#) Robert Shiller, New York Times, March 5, 2021.

- Policy Response to the Pandemic

[“Federal Reserve Announces Extensive New Measures to Support the Economy,”](#) Federal Reserve Board, March 23, 2020.

[“What's in the nearly \\$2 trillion U.S. Senate Coronavirus Stimulus?”](#) Reuters, March 24, 2020.

- 2007-09 Financial Crisis and Great Recession

[“Financial Panic and Credit Disruptions in the 2007-09 Crisis,”](#) Ben Bernanke, Sept 13, 2018.

[“The housing bubble, the credit crunch, and the Great Recession: A reply to Paul Krugman,”](#) Ben Bernanke, Sept 21, 2018.

- Major Sources of Macroeconomic Data

The U.S. economy

[FRED \(federal reserve economic data\) by St. Louis Fed*](#) (this is an excellent comprehensive database including US GDP, labor, trade, interest rates, exchange rates as well as international data)

[Bureau of economic analysis](#) (US GDP, international trade and balance of payment, etc)

[Bureau of labor statistics](#) (US unemployment, CPI, etc)

[Congress budget office](#) (US budget and economic data)

International data

[OECD \(Organization for Economic Cooperation and Development\) Statistics*](#)

[IMF \(International Monetary Fund\) World Economic Outlook database](#)
[World Bank's World Development Indicators*](#)
[Penn World Table 10.0 \(2021\)](#)
[World Trade Monitor by Netherland CPB](#) (monthly world trade volume data)

2. National Income

Readings: *Mankiw, chapter 3

[“Pent-Up Savings during the Pandemic,”](#) Goldman Sachs, March 12, 2021.

[“Spendthrift Nation,”](#) FRBSF Economic Letter, Nov. 10, 2005.

- Wage Inequality, Skill-Biased Technological Progress, Automation, and Trade

[“Work of the Past, Work of the Future,”](#) David Autor, American Economic Review, May 2019.

[“Are Workers Losing to Robots?”](#) Sylvain Leduc and Zheng Liu, FRBSF Economic Letter, Sept 30, 2019.

[“Middle-Class Economics: The Role of Productivity, Inequality and Participation,”](#) Economic Report of the President, February 2015.

* [“Economic Inequality in the United States,”](#) Janet Yellen, FRBSF Economic Letter, Dec 1, 2006.

3. (Only if time permits) Budget Deficits, Current Account Deficits, and The US Dollar

Readings: *Mankiw, chapter 6

*[“The Great Thrift Shift,”](#) The Economist, Sept 24, 2005

[“The US Capital Account Surplus,”](#) in Chapter 6 of Economic Report of the President, Feb 2006, pp. 125-147.

*[“Chapter 2: Whatever Happened to the Twin Deficits?”](#) in Catherine Mann, [Is the U.S. Trade Deficit Sustainable?](#), Institute for International Economics, September 1999.

- Exchange Rates

[“Currency Market and Exchange Rates,”](#) in Chapter 7 of Economic Report of the President, Feb 2007, pp.149-166.

[“China's Exchange Rate Policies and U.S. Financial Markets,”](#) Thomas Mertens and Patrick Shultz, FRBSF Economic Letter, Oct 2, 2017.

4. Unemployment

- (1) Job Loss, Job Finding, and the Natural Rate of Unemployment
- (2) Frictional Unemployment and Unemployment Insurance
- (3) Real-wage Rigidity and Structural Unemployment, and Minimum Wage Debate
- (4) Efficiency Wage Theory

Readings: *Mankiw, chapter 7.

[“Why Is Unemployment Currently So Low?”](#) Marianna Kudlyak and Mitchell G. Ochse
FRBSF Economic Letter, March 2, 2020.

[“Contrasting U.S. and European Job Markets during COVID-19,”](#) Jean-Benoît Eyméoud, Nicolas Petrosky-Nadeau, Raül Santaeulàlia-Llopis, and Etienne Wasmer, FRBSF Economic Letter, February 22, 2021.

5. Economic Growth

- (1) Solow Model
- (2) Sources of Economic Growth
- (3) Productivity Determinants: Capital Accumulation and Total Factor Productivity
- (4) Productivity Slowdown during 1970s and 80s, and IT Boom and Productivity Surge in the mid-1990s and early 2000s
- (5) Convergence: international differences in growth rate

Readings: *Mankiw, chapters 8 and 9

[“Is Slow Still the New Normal for GDP Growth?”](#) John Fernald and Huiyu Li, FRBSF Economic Letter, June 24, 2019.

[“The Global Growth Slump: Causes and Consequences,”](#) John Williams, FRBSF Economic Letter, July 3, 2017.

*[“Chapter 2. Productivity Growth,”](#) in Economic Report of the President, 2007, pp.45-62.

6. Money, Inflation and the Fed

- (1) Money
- (2) The Federal Reserve System
- (3) The Money Supply and Money Multiplier
- (4) Long-run Effects of Money Supply: The Quantity Theory of Money
- (5) Money Market Equilibrium

Readings: *Mankiw, chapters 4 and 5

[“A Short History of Inflation,”](#) The Economist, February 22, 1992.

[“Global Inflation: That 60s Show,”](#) Economic Research Note, JPMorgan Chase Bank, March 14, 2008.

[“The Biden Stimulus Is Admirably Ambitious. But It Brings Some Big Risks, Too,”](#) Lawrence Summers, Washington Post Feb 4, 2021.

- Current Monetary Policy Issues

[“The Puzzle of Low Interest Rates,”](#) Gregory Mankiw, New York Times, Dec 4, 2020.

*[“Why Are Interest Rates So Low?”](#) Ben Bernanke, Mar 30 and 31, Apr 1 and 13, 2015.

[“What Tools Does the Fed Have Left?”](#) Ben Bernanke, Mar 18 and 24, Apr 11, 2016.

[“Secular Stagnation: Facts, Causes and Cures”](#), Coen Teulings, Richard Baldwin, Aug 15, 2014.

[“Quantitative Easing for the People,”](#) John Muellbauer, Project Syndicate, Nov 5, 2014.

7. Short-Run Economic Fluctuations: Aggregate Demand and Supply

- (1) Introduction to Aggregate Demand and Components of Real Aggregate Expenditures (Consumption, Investment, Net Export)
- (2) The Aggregate Demand (AD) Curve
- (3) The Long-run Aggregate (LRAS) Supply
- (4) The Short-run Aggregate (SRAS) Supply
- (5) Macroeconomic Equilibrium in the Short Run and Transition to the Long-run Equilibrium

Readings: *Mankiw, chapter 10

*[“The US Business Cycle Expansions and Contractions,”](#) NBER Business Cycle Dating Committee.
[“Will the Economic Recovery Die of Old Age?”](#) Glenn Rudebusch, FRBSF Economic Letter, Feb 4, 2016.

[“Learning from a Century of US Recessions,”](#) US Economics Analyst, Goldman Sachs, Jan 20, 2019.

[“U.S. Resilience,”](#) Goldman Sachs, Jan 11, 2021.

[“Sticky Situations,”](#) (on price stickiness) The Economist, Nov 7, 2006.

- Asset Price Bubbles and The Consequences

[“Making Sense of Elevated Stock Market Prices,”](#) Robert Shiller, New York Times, March 5, 2021.

[“Bubbles, Credit, and Their Consequences”](#) Òscar Jordà, Moritz Schularick, and Alan Taylor, FRBSF Economic Letter, Sept 12, 2016.

8. Aggregate Demand I: IS-LM Model

Readings: *Mankiw, chapter 11

9. Aggregate Demand II: IS-LM Model

- The Great Depression in the 1930s, Today’s Japan and Europe Problem, and the U.S. 2007-09 Great Recession, and the Global Pandemic

Readings: *Mankiw, chapter 12

- The Japan’s Great Economic Stagnation

*[“Japan’s Stimulus Plan Is Not Courageous But Foolhardy,”](#) Financial Times, William White November 20, 2014

[“Preventing Deflation: Lessons from Japan’s Experience in the 1990s,”](#) The Federal Reserve Board, Discussion Paper, No. 729, June 2002.

- Policy Response to the Global Financial Crisis and the Pandemic

- *[“The Federal Reserve's Response to the Financial Crisis,”](#) Ben Bernanke, March 27, 2012.
- *[“Can Government Spending Help to Escape Recessions?”](#) Regis Barnichon, Davide Debortoli, and Christian Matthes, FRBSF Economic Letter, Feb 1, 2021.
- [“Fiscal Follies in the COVID Recovery,”](#) Daniel Gros, Project Syndicate, March 5, 2021.
- [“Rethinking Macro Policy II: Getting Granular,”](#) Olivier J. Blanchard, Giovanni Dell'Ariccia, Paolo Mauro, April 15, 2013.

10. Monetary and Fiscal Policies, Budget Deficits, and Government Debt

- Tradeoff between Inflation and Unemployment: NAIRU

Readings: *Mankiw, chapter 14.

- [“Unemployment: Lower for Longer?”](#) Nicolas Petrosky-Nadeau and Robert Valletta, FRBSF Economic Letter, Aug 19, 2019.
- [“The NAIRU in Theory and Practice,”](#) Laurence Ball and N. Gregory Mankiw, Working Paper, Harvard University, April 2002.

- Fiscal Policy

- [“Comment: Is There a Role for Discretionary Fiscal Policy?”](#) Martin Feldstein, Presented at a symposium sponsored by Kansas Fed, Jackson Hole, Wyoming, August 2002.
- [“Government Spending: An Economic Boost?”](#) Daniel J. Wilson, FRBSF Economic Letter, February 6, 2012
- *[“Has austerity gone too far?”](#) Giancarlo Corsetti, 2 April 2012
- [“A Debt Crisis Is on the Horizon”](#), By Michael J. Boskin, John H. Cochrane, John F. Cogan, George P. Shultz and John B. Taylor, Washington Post, March 27, 2018.
- *[“A Debt Crisis Is Coming. But Don’t Blame Entitlements,”](#) Martin Neil Baily, Jason Furman, Alan B. Krueger, Laura D’Andrea Tyson and Janet L. Yellen, April 8, 2018.
- [“Public Debt and Growth,”](#) Manmohan Kumar and Jaejoon Woo, IMF Working paper, July 2010.
- [“The 2021 Long-Term Budget Outlook,”](#) Congressional Budget Office (CBO), March 4, 2021.