FNCE 101

MONETARY ECONOMICS AND THE GLOBAL ECONOMY

THE WHARTON SCHOOL OF THE UNIVERSITY OF PENNSYLVANIA

PROFESSOR ANTHONY LANDRY SPRING 2018

COURSE DESCRIPTION

Monetary Economics and the Global Economy is an intermediate-level course in macroeconomics and the global economy with an emphasis on current events and policy applications. The goal of this course is to provide the foundation needed to recognize and understand broad economic and financial movements in the global economy. Key topics include national income accounting, production and economic growth, employment, consumption, investment, business cycles, monetary policy, and international trade and finance. By the end of this course, students will be able to evaluate and discuss the global economic environment in which business and financial decisions are made.

COURSE MATERIAL

Canvas

The Canvas website contains the syllabus, lecture notes, quizzes, teaching assistants' office hours and locations, regrade request forms, and other useful information. Canvas is also a useful hub to start and participate in course-related discussions. You need to have a Wharton account to access the website. You can apply for a Wharton account online if you do not have one.

Reading Material

The bulk of the course material comes from the lecture notes and course readings. The lecture notes are available on Canvas. Most course readings come from *The Wall Street Journal, The Financial Times, The Economist*, or from Federal Reserve Banks' publications. They are hyperlinked to web sources from within the syllabus.

There is no required textbook for this course. However, you will see references to sections of *Macroeconomics* (ninth edition) from Andrew B. Abel, Ben S. Bernanke and Dean Croushore, Addison-Wesley, 2017 (referred to as **ABC**) and *Macroeconomics* (fourth edition) from Charles I. Jones, Norton, 2018 (referred to as **Jones**) in the course outline section below. These are supplemental, but strongly recommended, readings that supplement our class discussions. These textbooks are available at the Bookstore and at the Lippincott library reserve. Moreover, the study guides that supplement these textbooks are useful in aiding students who would benefit from additional explanations and practice with the material.

Throughout the semester, you should keep current with economic news. A subscription to *The Wall Street Journal, The Financial Times, The Economist* or a close substitute is recommended. Selected articles from these sources may be added to the list of required readings later during the semester.

GRADING

Grades are based on two examinations (70%), six quizzes (10%), the Fed challenge (10%), and class participation (10%). Class participation includes attendance, but primarily depends on coming to class prepared to discuss the assigned material, and on your respectful and meaningful participation in class discussions and case studies.

Examinations

The midterm examination is on Monday, February 26, from 6:00 to 8:00pm. The final examination is tentatively scheduled on Thursday, May 3, from 6:00 to 8:00pm. The midterm and the final examinations are comprehensive and closed book. However, you may have one single-sided 8.5" x 11" page of handwritten notes for the midterm and one double-sided 8.5" x 11" page of handwritten notes for the final. These handwritten sheets can only contain your own notes in your own handwriting. In particular, they may not contain large portions of reproduced notes or any other course materials such as slides, solution manuals or answer keys. Calculators are permitted. The final examination is cumulative over the material from the entire course.

The midterm examination counts as one grade and the final examination counts as two grades. The total examination grade is computed as the average of the best two out of three grades. In other words, the lowest grade among these three grades is dropped. This policy of dropping the lowest examination grade provides you insurance against scheduling conflicts (inability to attend the midterm examination) and anomalous performances (a bad day). Because this insurance is being provided to you, **no requests to reschedule or retake the midterm examination will be entertained** unless specifically mandated by university policy. If you miss the midterm examination for any reason, you can simply use your insurance policy and drop that exam. The final examination can be rescheduled only if required by university policy and only during the official make-up period.

Regrade requests

Regrade requests must be submitted using the **regrade request form** and the **statement of honesty** posted on Canvas and must be accompanied by your exam. Requests must be submitted within one week from the date the examination is returned (whether or not you actually pick up the exam on that date). Regrade requests must be very specific. For any request, the entire exam will be automatically regraded; meaning, the grade may stay the same, go up or go down after regrading. Any alteration of the exam is therefore strictly forbidden and will be considered as a violation to the <u>Code of Academic Integrity</u>.

Quizzes

There will be six quizzes available on Canvas. The quizzes are designed to reinforce key concepts from the classes and to help you prepare for the examinations. Your final quiz grade will be the average of your best five quizzes. Due dates are indicated in the table below and under the course outline section of this syllabus. The quizzes must be submitted by 9:00am on the due date. **Quizzes will not be accepted late and no regrade requests will be entertained**. Answers to quizzes will be posted on Canvas shortly after the due date.

QUIZ#	TOPIC	AVAILABLE ON	DUE BY 9:00am ON
1	Introduction to macroeconomic data	Monday, January 22	Monday, January 29
2	Production, employment, and growth	Monday, February 5	Monday, February 12
3	Consumption, saving, and investment	Wednesday, February 14	Monday, February 19
4	The business cycle	Wednesday, March 14	Monday, March 19
5	Monetary policy	Wednesday, March 28	Monday, April 2
6	The global economy	Wednesday, April 11	Monday, April 16

Fed Challenge

The Fed Challenge is a team assignment designed to bring real-world economics into the classroom and to promote teamwork and communication. Each team will give an in-class presentation applying the course material to analyze economic and financial conditions, and formulate a monetary policy recommendation. Details will be provided in class and on Canvas in the second half of the semester. All students of a team will get the same grade regardless of their individual contributions.

ACADEMIC INTEGRITY

All relevant University policies regarding Academic Integrity must be followed. Please consult the <u>Code</u> <u>of Academic Integrity</u> for details.

CONTACT INFORMATION

Email: alandry@wharton.upenn.edu

Office hours: Tuesdays, 9:30 - 10:30am

Office: SHDH 2432

Most information about the course is posted on Canvas. All questions related to the course material should be posted on Canvas. <u>I will be happy to answer short and concise questions that are posted on Canvas</u>. This is an efficient way to clarify concepts and to disseminate information.

TEACHING ASSISTANTS

Name	Email address	Office hours	Location
Kenza Chamariq	kenzac@wharton.upenn.edu	W 4:00-5:00pm	SHDH 2406
Alexander Evelson	aevelson@wharton.upenn.edu	M 4:30-5:30pm	SHDH 2406
lan Kantor	ikantor@wharton.upenn.edu	M 12:00-1:00pm	
Anika Ranginani	anikar@wharton.upenn.edu	TH 10:30-11:30am	SHDH 2406
Rachel Walter	rawal@wharton.upenn.edu	TU 10:30-11:30am	SHDH 2406

COURSE SCHEDULE

LECTURE	DATE	TOPIC
1	Wednesday, January 10	National income accounting
	Monday, January 15	No class, Martin Luther King Jr. Day
2	Wednesday, January 17	The Financial Market and the Macroeconomy
3	Monday, January 22	Measuring economic changes over time
4	Wednesday, January 24	Production and economic growth
5	Monday, January 29	Drivers of productivity and global competitiveness
6	Wednesday, January 31	CASE STUDY: The Solow growth model unleashed
7	Monday, February 5	The labor market
8	Wednesday, February 7	Consumption and saving decisions
9	Monday, February 12	Investment and goods market equilibrium
10	Wednesday, February 14	The asset market, money, and prices
11	Monday, February 19	The business cycle and the IS/LM model
	Wednesday, February 21	Review session
	Monday, February 26	Midterm examination from 6:00 to 8:00pm
	Wednesday, February 28	No class
	Monday, March 5	No class, Spring break
	Wednesday, March 7	No class, Spring break
12	Monday, March 12	Firms' pricing behavior and the Phillips curve
13	Wednesday, March 14	Aggregate demand and aggregate supply
14	Monday, March 19	The Federal Reserve System
15	Wednesday, March 21	Monetary policy
16	Monday, March 26	CASE STUDY: The labor market and U.S. monetary policy
17	Wednesday, March 28	CASE STUDY: The term structure of interest rates
18	Monday, April 2	International trade
19	Wednesday, April 4	Exchange rates and international finance 1
20	Monday, April 8	Exchange rates and international finance 2
21	Wednesday, April 11	The government and the macroeconomy
	Monday, April 16	Fed Challenge
	Wednesday, April 18	Fed Challenge
	Monday, April 23	Fed Challenge
	Wednesday, April 25	Review session
	Thursday, May 3	Final Examination from 6:00pm to 8:00pm

COURSE OUTLINE AND READING LIST

Topic 1: Introduction to Macroeconomic Data

Wednesday, January 10: National Accounting

<u>Topics</u>: origin of national income accounting, definitions and measurements of Gross Domestic Product (GDP), GDP components, production, income, and expenditure approach of measuring GDP, saving and wealth

Readings: ABC Ch. 2.1-2.3

Jones Ch. 2.1 and 2.2

Will America's economy overheat in 2018? The Economist, December 2017

Monetary Policy and the Economic Outlook: A Fine Balancing Act, Economic Letter, Federal

Reserve Bank of San Francisco, December 2017

Wednesday, January 17: The Financial Market and the Macroeconomy

<u>Topics</u>: the stock market and financial investment, the arbitrage equation and stock prices, priceearnings ratio, efficient market hypothesis, stocks and bonds, asset prices and macroeconomic news

Readings: How bond yields got this low, The Wall Street Journal, September 2016

Stock market valuation and the macroeconomy, Economic Letter, Federal Reserve Bank of

San Francisco, November 2017

Monday, January 22: Measuring Economic Changes over Time

<u>Topics</u>: nominal and real GDP, GDP across countries, growth rates, the rule of 70, price indices and inflation, nominal and real interest rates, the Fisher equation

Readings: ABC Ch. 2.4 and 2.5

Jones Ch. 2.3 and 2.4

Nobody seems to know why there is no US inflation, The Financial Time, September 2017 Missing growth from creative destruction, Economic Letter, Federal Reserve Bank of San

Francisco, October 2017

Quiz #1 due on Monday, January 29 by 9:00am

Topic 2: Production and Economic Growth

Wednesday, January 24: Production and Economic Growth

<u>Topics</u>: production function, return to scale, Cobb-Douglas production function, capital and labor inputs, Total Factor Productivity, marginal product of capital and labor, diminishing marginal products, capital and labor inputs allocation, production and shocks to labor, capital or TFP, sources of economic growth, income differences across countries, growth accounting

Readings: ABC Ch. 3.1 and 6.1

Jones Ch. 4

What is the new normal for US growth? Economic Letter, Federal Reserve Bank of San

Francisco, October 2016

Monday, January 29: Drivers of Productivity and Global Competitiveness

<u>Topics</u>: the Solow growth model, innovation and economic growth, determinants of long-run living standards, international convergence, government policies and long-run growth

Readings: ABC Ch. 6.2-6.4

Jones Ch. 5

Is China growth miracle over? Economic Letter, Federal Reserve Bank of San Francisco,

August 2015

Wednesday, January 31: The Solow Growth Model Unleashed

Case study: "The Solow Growth Model Unleashed," by Nicolas Vincent and Pierre Yared

Columbia Business School ID#130304 on Study.Net

Topic 3: Economic Markets

Monday, February 5: The Labor Market

<u>Topics</u>: the U.S. labor market, labor demand, labor supply, income and substitution effects, labor market equilibrium, full-employment output, wages and inequality, labor market measurements, frictional vs. structural unemployment, natural rate of unemployment, Okun's law

Readings: ABC Ch. 3.2-3.6

Jones Ch. 7

Inequality is a threat to our democracies, The Financial Times, December 2017

Demographic transition and low U.S. interest rates, Economic Letter, Federal Reserve Bank of

San Francisco, September 2017

Quiz #2 due on Monday, February 12 by 9:00am

Wednesday, February 7: Consumption and Saving Decisions

<u>Topics</u>: consumption and saving decisions, the intertemporal budget constraint, income and wealth, income and substitution effects, permanent-income hypothesis, Ricardian equivalence, borrowing constraints, empirical evidence on consumption

Readings: ABC Ch. 4.1 and appendix 4.A

Jones Ch. 16

Monday, February 12: Investment and Goods Market Equilibrium

<u>Topics</u>: firms' investment decisions, the user cost of capital, desired capital stock and investment, components of physical investment, saving and investment equilibrium, the real interest rate

Readings: ABC Ch. 4.2-4.3

Jones Ch. 17

Why are interest rates so low?, by Ben Bernanke, March 2015

Why are interest rates so low, part 2: Secular stagnation, by Ben Bernanke, March 2015
Why are interest rates so low, part 3: The Global Savings Glut, by Ben Bernanke, April 2015

Wednesday, February 14: The Asset Market, Money, and Prices

<u>Topics</u>: monetary aggregates, portfolio allocation and the demand for assets, money demand, money supply creation, the quantity theory of money, asset market equilibrium, money growth and inflation, the costs of inflation

Readings: ABC Ch. 7

Jones Ch. 8

Quiz #3 due on Monday, February 19 by 9:00am

Monday, February 19: The Business Cycle and the IS/LM Model

<u>Topics</u>: business cycle trends and fluctuations, actual and potential output, overview of the short-run model, equilibrium in the labor, goods, and asset markets, macroeconomic shocks and the IS/LM model

Readings: ABC Ch. 8 and 9.1-9.4

<u>The Perennial Problem of Predicting Potential</u>. *Economic Letter*, Federal Reserve Bank of San Francisco, November 2017.

Wednesday, February 21: Review session

Midterm Examination: Monday, February 26, from 6:00 to 8:00pm

Topic 4: Business Cycle Models

Monday, March 12: Firms' Pricing Behavior and the Phillips Curve

<u>Topics</u>: firms' pricing behavior, unemployment and inflation, the Phillips curve, the role of inflation expectations

Readings: ABC Ch. 11.2 and 12

Jones Ch. 12

Has the Wage Phillips Curve gone Dormant? Economic Letter, Federal Reserve Bank of San

Francisco, October 2017

The Natural Rate of Unemployment over the past 100 years. Economic Letter, Federal

Reserve Bank of San Francisco, August 2017

Wednesday, March 14: Aggregate Demand and Aggregate Supply

<u>Topics</u>: aggregate demand curve, aggregate supply curve, the AS/AD framework, the liquidity trap, the dangers of deflation, expectations and economic activity

Readings: ABC Ch. 9.5-9.6

Jones Ch. 13

Quiz #4 due on Monday, March 19 by 9:00am

Topic 5: Monetary Policy

Monday, March 19: The Federal Reserve System

<u>Topics</u>: the Federal Reserve System, central banking around the world, the Federal Open Market Committee, conventional monetary policy, open market operations, the federal funds market

Readings: **ABC** Ch. 14.1-14.3

"Central Banks and the Federal Reserve System," by Frederic Mishkin on Study.Net

"Tools of Monetary Policy," by Frederic Mishkin on Study.Net

Monetary policy, money, and inflation, Economic Letter, Federal Reserve Bank of San

Francisco, July 2012

Wednesday, March 21: Monetary Policy

<u>Topics</u>: monetary policy rules, the Taylor rule, the limits of conventional monetary policy, the Great Recession, unconventional monetary policy, financial stability

Readings: ABC Ch. 14.4-14.5

"The Conduct of Monetary Policy: Strategy and Tactics," by Frederic Mishkin on Study.Net What tools does the Fed have left? Part 1, Part 2, Part 3, by Ben Bernanke, March 2016 How big a problem is the zero lower bound on interest rates? by Ben Bernanke, April 2017

Monday, March 26: The Labor Market and U.S. Monetary Policy

Case study: "What should Jerome Powell do?" by Anthony Landry on Canvas

Wednesday, March 28: The Term Structure of Interest Rates and Monetary Policy

Reading: "Term Structure of Interest Rates," by Frederic Mishkin on Study.Net

<u>Case study</u>: "The Yield Curve and Growth Forecasts," by Francis Warnock

Harvard Business School #UV5689 on Study.Net

Quiz #5 due on Monday, April 2 by 9:00am

Topic 6: The Global Economy

Monday, April 2: International Trade

<u>Topics</u>: facts about international trade, reasons for trade, risk sharing, absolute and comparative advantage, costs and benefits of international trade, trade and capital flows, twin deficits

Readings: Jones Ch. 19

Wednesday, April 4: Exchange Rates and International Finance 1

<u>Topics</u>: open-economy goods-market equilibrium, open-economy saving and investment, fiscal policy and the current account, the nominal and real exchange rates, exchange rate movements and trade flow

Reading: ABC Ch. 5

Has the dollar become more sensitive to interest rates? Economic Letter, Federal Reserve

Bank of San Francisco, June 2017

Monday, April 9: Exchange Rates and International Finance 2

<u>Topics</u>: open-economy IS/LM, open-economy AS/AD, interest rates and exchange rate movements, international transmission of monetary policy, fixed exchange rates

Readings: ABC Ch. 13

Jones Ch. 20

Topic 7: Fiscal Policy

Wednesday, April 11: The Government and the Macroeconomy

<u>Topics</u>: U.S. government spending and revenue, fiscal policy and aggregate demand, government debt and deficits, sustainability of public debt, the European debt crisis, problems of the 21st century

Readings: **ABC** Ch. 15.1-15.3 **Jones** Ch. 18

The Fed and fiscal policy, by Ben Bernanke, January 2017

How tax cuts affect revenue? The Wall Street Journal, December 2017

The Penn-Wharton Budget model

Quiz #6 due on Monday, April 16 by 9:00am

Monday, April 16: Fed Challenge

Wednesday, April 18: Fed Challenge

Monday, April 23: Fed Challenge

Wednesday, April 25: Review session

Final examination: Thursday, May 3, from 6:00 to 8:00pm