Professor Brock Office and email: Savery 326, plbrock@uw.edu Office hours: Fridays noon-1:20 Spring 2019 Classroom: Denny 112 Class meeting times: TTh 3:30-5:20

Econ 427: Central Banking

"The Federal Reserve is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up."

> William McChesney Martin Fed Chair (1951-1970)

Course Description:

This course will examine the role of central banks and monetary policy in the United States and Europe.

Learning Objectives:

By the end of the quarter students will be able to:

- Explain the rationale for central banks in modern monetary economies, drawing upon the operations of the Fed and the European Central Bank.
- Use the analytical tools developed in the course to assess central bank policy decisions and their likely impact on the economy.
- Engage in the analysis of current events pertaining to central banking and financial regulation in the United States and Europe.

Key topics include:

- Macroeconomic Stabilization
- Liquidity Provision and the Lender of Last Resort
- Modern Monetary Theory

Course Materials:

The readings in this course are of three types:

- Research papers. Published articles and working papers form an important part of the development of the course topics. They will be posted on the class website.
- Public documents. Central banks and international financial institutions have websites that contain information about their activities.
- Class notes

My background:

My research is in the fields of development, growth, and monetary economics. I have a regional interest in Latin America. I am currently working on the origins of central banking in Chile during the late-19th and early-20th centuries.

Course Website:

https://canvas.uw.edu/courses/1273207

This website will have the syllabus and course readings.

Use of email:

I will answer simple, clarifying email questions. For other questions, come to office hours.

Course Grading:

Lectures and associated readings will form the most important part of the class and exams. Class discussion of current events is also important and will form part of the material on the exams.

- **Quizzes**: Your grade will be partially based on six quizzes on material in the textbook and current events. The quizzes will be on April 9, 16, 23; May 14, 21, 28.
 - I will count your top five quiz results. Each of the top five results will be worth two percent of your grade. Missing a quiz for any reason will result in a zero for that quiz.
- **Exams:** There will be two exams on the following dates:

Test 1 on May 2 Test 2 on June 6 There is no final exam during finals week (i.e., no final on 6/13 at 4:30)

- Each exam is worth 40 percent of your grade. The exams will cover all lectures, material in the textbook, handouts, and class discussions of current events.
- If you miss one of the two exams you will be given an incomplete for the course, provided that you have been attending class, taking the quizzes, and turning in problem sets.
 University procedures will be followed for converting the incomplete to a grade. The relevant portion of university procedures for incompletes is included on page 6 of the syllabus.
- Missing both exams will automatically result in a failing grade.
- Problem Sets and Class Participation:
 - 10 percent of your grade is based on problem sets (5 percent) and class participation (5 percent). When I call on you in class I am involving you in the learning process, and am not grading your answers.

Recommendation letters:

I am happy to write letters of recommendation for students who do well in the course and have the appropriate qualifications to be competitive for grad school programs or employment opportunities. In general, that requires a course grade of at least 3.7, an overall GPA of 3.5, and an appropriate level of math background for the chosen grad school program or employment.

Course Schedule

Part I. Macroeconomic Stabilization

"Leading central banks were heading for the exit from crisis-era stimulus policies as recently as December. But in just a few weeks, global monetary policy has gone into reverse, with the Federal Reserve putting rate rises on hold. This week's decision by the European Central Bank to signal that interest rates would stay at record lows for longer, completed the transformation. But as ECB president Mario Draghi admitted, central banks cannot solve the underlying problem of 'pervasive uncertainty', which has hit confidence and left policymakers groping in the dark."

--Financial Times March 8, 2019

"Low inflation is one of the major challenges of our time, and there's no easy explanation for it....The natural rate of unemployment may be lower than people think."

--Fed Chairman Jerome Powell, March 27, 2019

This first section of the course will cover macroeconomic stabilization policies: the first important function of central banks. This material will build on the IS-LM-Phillips Curve framework.

Part II. Liquidity Provision and the Lender of Last Resort

"Illiquidity of assets provides the rationale both for the existence of banks and for their vulnerability to runs."

--Douglas Diamond and Philip Dybvig, Bank Runs, Deposit Insurance, and Liquidity (JPE 1983)

"Runs on short-term funding were a major contributor to the severity of the crisis....The risk of short-term funding runs has not been eliminated, particularly the risk of runs on nonbank institutions not subject to the new liquidity rules."

--Ben Bernanke, The Courage to Act (2015)

This section of the course covers the function of central banks as the stabilizers of financial systems. This is one of the most important functions played by central banks. The following are the topics for this section:

- Class Notes on Banking Structure
- Bank Runs and the Great Depression

Charles Calomiris and Charles Mason. 2003. "Fundamentals, Panics, and Bank Failures During the Depression." American Economic Review, 1615-1647.

• Diamond-Dybvig Model

Douglas Diamond and Philip Dybvig. 1983. "Bank Runs, Deposit Insurance, and Liquidity." Journal of Political Economy, 91, 401-419.

Douglas Diamond. 2007. "Banks and Liquidity Creation: A Simple Exposition of the Diamond-Dybvig Model." Richmond Fed Economic Quarterly, 93, 189-200.

• Bank Runs and the Financial Crisis, 2007-2008

Paul Goldsmith and Tanju Yorulmazer. 2010. "Liquidity, Bank Runs, and Bailouts: Spillover Effects During the Northern Rock Episode." Journal of Financial Services Research.

Hyung Song Shin. 2009. Reflections on Northern Rock: The Bank Run that Heralded the Global Financial Crisis. Journal of Economic Perspectives.

Gary Gorton and Andrew Metrick. 2012. "Securitized Banking and the Run on the Repo." Journal of Financial Economics, 104, 425-451.

• Memoir of the Financial Crisis

Ben Bernanke. 2015. The Courage to Act: A Memoir of the Crisis and Its Aftermath. W.W. Norton and Company, New York, Chapters 7-12.

Part III. Modern Monetary Theory: Central Banks and the Government Budget Constraint

"MMT [Modern Monetary Theory] starts with a really simple observation and that is that the U.S. dollar is a simple public monopoly. In other words, the United States currency comes from the United States government. It can't come from anywhere else. And therefore, it can never run out of money. It cannot face a solvency problem, bills coming due that it can't afford to pay. It never has to worry about finding the money in order to be able to spend. It doesn't need to go and raise taxes or borrow money before it is able to spend."

--Stephanie Kelton, proponent of Modern Monetary Theory (MMT), the economic rationale cited by rising political stars like Rep. Alexandria Ocasio-Cortez D-N.Y. She has served as chief economist for the Democrats on the U.S. Senate Budget Committee and was a senior economic advisor the 2016 presidential campaign of Bernie Sanders. Interview on CNBC, March 2, 2019.

"Well, it looks as if policy debates over the next couple of years will be at least somewhat affected by the doctrine of Modern Monetary Theory, which is that countries that (a) rely on fiat money they control and (b) don't borrow in someone else's currency don't face any debt constraints, because they can always print money to service their debt."

--Paul Krugman, New York Times February 12, 2019

"The idea that deficits don't matter for countries that can borrow in their own currency I think is just wrong."

--Fed Chairman Jerome Powell in US Senate testimony, February 27, 2019

"I think the modern monetary theorists have a point: We should not react automatically against new expenditures that increase the deficit. There do appear to be some urgent needs that might justify more debt for a while. But acknowledging this does not require a revolution in economic theory, and it does not license unlimited spending or carelessly adding debt upon debt."

--Robert Shiller (2013 winner of the Nobel Prize in Economics), New York Times, March 31, 2019

This last section of the course concerns the role of central banks in financing government spending, with a goal of understanding the current controversy over "modern monetary theory". This theory is likely to become part of the economic debate leading up to the 2020 presidential election. We will cover the following topics that will help us understand the controversy and what it implies for the Fed policymaking.

- The inflation tax
- Central Bank holdings of government debt
- Fiscal Theory of the price level
- Eurozone doom loop

University Procedures for Incompletes

See website:

http://www.washington.edu/students/gencat/front/Grading_Sys.html#GRADING

I **Incomplete** - An *Incomplete* is given only when the student has been in attendance and has done satisfactory work until within two weeks of the end of the quarter and has furnished proof satisfactory to the instructor that the work cannot be completed because of illness or other circumstances beyond the student's control. A written statement of the reason for the giving of the Incomplete, listing the work which the student will need to do to remove it, must be filed by the instructor with the head of the department or the dean of the college in which the course is given.

To obtain credit for the course, an undergraduate student must convert an *Incomplete* into a passing grade no later than the last day of the next quarter. For Spring Quarter, the following quarter is considered to be Fall Quarter. *The student should never reregister for the course as a means of removing the Incomplete*. An Incomplete grade not made up by the end of the next quarter is converted to the grade of 0.0 by the Office of the University Registrar unless the instructor has indicated, when assigning the Incomplete grade, that a grade other than 0.0 should be recorded if the incomplete work is not completed. The original Incomplete grade is not removed from the permanent record.

An instructor may approve an extension of the *Incomplete* removal deadline by writing to the Graduation and Academic Records Office no later than the last day of the quarter following the quarter in which the *Incomplete* grade was assigned. Extensions, which may be granted for up to three additional quarters, must be received by the Office of the University Registrar before the *Incomplete* has been converted into a failing grade.

In no case can an *Incomplete* received by an undergraduate be converted to a passing grade after a lapse of one year.

In no case shall an *Incomplete* on the record at the time a degree is granted be subsequently changed to any other grade.

An *Incomplete* grade does not count for registered hours nor in computation of grade-point averages.

Department of Economics Exam Taking Rules

1. Material allowed during a closed book exam.

i. All books, papers, notebooks etc. must be placed inside your bag (backpack etc.) and the bag must be securely and fully closed. If you do not have a bag, you must place all your material out of your reach (classroom window sill etc.) Note that individual instructors may have specific policies (open book exams etc.)

ii. Only keep writing tools and **basic calculators** (i.e. simple 4-functions calculators). Graphing calculators or calculators with memories will not be allowed. *Sharing of calculators is not permitted.*

iii. **Cellular phones** must be turned off before entering the class and placed in your closed bag (not in your pocket). You are not allowed to use a cellular phone during an exam. Doing so will result in the termination of your exam time (your exam being taken from you at this point). Likewise **i-pads** or **i-pods** (or similar devices) are not allowed. The use of **personal computers** is not allowed during an exam.

iv. Baseball caps with visors and any kinds of **headgear** hiding your eyes are not permitted.

2. Attendance and special accommodation

i. You are expected **not to leave the room** during the exam except in case of emergency. This includes restroom use; be sure to use the restroom before the beginning of the exam.

ii. If you arrive **late** to an exam, you cannot expect to get extra time after the official end of the exam to make up for the missing time at the beginning.

iii. If you have a **documented disability**, please show your instructor your documentation from the Office of Disability Resources for Students on the first day of class, so that your instructor can make all the necessary arrangements if you wish to take your exam in a separate place.

3. Academic honesty

i. Exams are individual work and cheating will not be tolerated. Students must not glance at their neighbors' exams. Students must not change their answers after they have turned their exam in.
ii. Check the student handbook for further information about cheating, plagiarism etc. Cheating of any kind may result in expulsion from the university. The Department of Economics will follow university policy in case of academic dishonesty. These rules complement/supplement the university rules, which are spelled out at

http://www.washington.edu/uaa/advising/help/academichonesty.php

Academic integrity is the cornerstone of the Department's rules for student conduct and evaluation of student learning. Students accused of academic misconduct will be referred directly to the Office of Community Standards and Student Conduct for disciplinary action pursuant to the Student Conduct Code and, if found guilty, will be subject to sanctions. Sanctions range from a disciplinary warning, to academic probation, to immediate dismissal for the Department and the University, depending on the seriousness of the misconduct. Dismissal can be, and has been, applied even for first offenses. Moreover, a grade of zero can be assigned by the instructor for the course.