University of Notre Dame du Lac
Monetary Theory and Policy
ECON 40364-01
Spring 2020

Location:
Geddes Hall B001

Times:
Tuesdays and Thursdays, 9:30-10:45 am

Instructor:
Eric Sims
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(574) 631-6309
Personal website
Course website on Sakai
Office hours: 12:50-1:50 pm Tuesdays (3036 JNH)
2:00-3:15 pm Wednesdays (3036 JNH)

Teaching Assistants:
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One of the TAs will hold office hours each Wednesday evening (starting January 22) from 6:00-7:30 pm in DeBartolo 117. Additional office hours will be scheduled around exams.

Textbooks:
Mishkin: The Economics of Money, Banking, and Financial Markets. 11th edition
Garin, Lester, and Sims: Intermediate Macroeconomics. Available online

Course Overview:
What is money? What determines the prices of the goods and services we buy? Why have we experienced persistent inflation since the early 20th century? What is a central bank? What are the important features of central bank function and design? What do we mean by liquidity, and why is it important? What is an interest rate, and why are there so many interest rates? How do central banks affect interest rates, and how do interest rates affect the economy? What is a yield curve? What should central banks do during a recession? What happens during a financial crisis? How should central banks react to financial crises?

This course is focused on monetary theory and how monetary policy interacts with the aggregate economy. It aims to provide students with some tentative answers to the questions listed in the paragraph above, as well with a set of tools to continually evaluate these and similar questions in the future. The course builds off of the basic tools of micro and macroeconomics. It is assumed that students have taken both intermediate micro and macro and have a working grasp of calculus.
The course will be divided into roughly three parts. In the first part of the course, we will study the origins and role of money; the meaning of liquidity; the factors determining money demand and supply, the aggregate price level, and nominal interest rates; and an aggregate demand-supply model of the economy which one can use to study what we will refer to as “conventional” monetary policy. By “conventional” monetary policy we refer to the adjustment of short term nominal interest rates to hit targets for inflation and some measure of economic activity. Much of the first part of the course ought to be at least somewhat familiar. The first part of the course will conclude with brief discussions about central bank mandates and design, the time inconsistency problem, and the recent interest in so-called “modern monetary theory.”

The second and third parts of the course build on the first. The second part of the course focuses on asset pricing, the risk and term structure of interest rates, the stock market, financial structure, and banking. For much of this part of the course we will not talk explicitly about money per se but these are topics of great interest to monetary policymakers. The third part of the course studies financial crises and monetary policy responses thereto. We will compare and contrast the Great Depression and the Great Recession. We will use tools learned in the first and second parts of the course to study and analyze “unconventional” monetary policy, including tools such as large scale asset purchases, quantitative easing, exotic lending facilities, forward guidance, and negative interest rates. We also discuss financial regulation and important questions that have arisen in the wake of the Great Recession.

Textbook and Readings:
There are two required texts for this course. The first is by Frederic Mishkin, *The Economics of Money, Banking, and Financial Markets*, 11th edition. This book is often assigned in Money, Credit, and Banking courses but also works well for a course in monetary theory and policy. The author of the book was a Governor of the Federal Reserve Board in the lead-up to, and early stages of, the recent financial crisis, so he brings a solid perspective. We will follow some parts of the book more closely than others, will not cover all chapters, and will not progress through the book in a linear fashion.

Some of the material presented in class will be at a higher level than that contained in Mishkin’s book. To assist with this material, I am also assigning several chapters from my intermediate macro text, which you can freely access online. The most recent edition of the text has an entire part devoted to money, banking, and finance. These are the chapters from which we will draw in this particular class. In the course outline, I abbreviate the title of the book as “GLS.”

I understand that textbooks are exorbitantly expensive and feel somewhat bad for assigning one for which you must pay. But Mishkin’s book is actually pretty good and provides some good background on much of the material we will cover in the course. I think you will benefit from reading the assigned chapters before class discussions and then going back through the assigned chapters after lectures. You will not be responsible for anything in either Mishkin’s or my texts which is not covered in class. If you want to try to get by without Mishkin’s book I will not try to stop you, though I think you will benefit from it. If you’re looking for a way to save some money, I would suggest you try sharing a book with another member of the class. You are also welcome to purchase older (or newer) editions of the book, but I do not have access to these and cannot guarantee that the material in older (or newer) editions is the same as in the 11th edition.
There will be other outside readings assigned throughout the semester. These include academic journal articles, blog posts, or shorter articles in popular periodicals. Several of these readings are already listed in the course outline. Some additional readings may (or may not) be added as the semester progresses. Links to these readings will be provided on the course webpage. As the outside readings are all related to the course lectures, for exams you will be responsible for the material contained in assigned outside readings, regardless of whether we explicitly discuss these readings in class.

Course Website:
I will maintain an active course website online through Sakai. On the website you can find the syllabus, lecture slides, problem sets and solutions, exam solutions, and outside assigned readings. I will also use the Sakai site as a gradebook so that you may follow your progress over the course of the semester. I will also enable the chat room feature, which you can use to post questions. I will periodically check this and will try to respond to any posted questions. Other members of the class should also feel free to attempt to answer any posted questions.

Evaluation:
Evaluation for the course will be based on graded problem sets and exams. There will be seven assigned problem sets due roughly every two weeks throughout the semester. Problem sets can be worked on in groups but must be turned in individually. Problem set questions may include questions that ask you to download data, produce graphs, or conduct computations in Microsoft Excel. I assume that by now you have some working familiarity with Excel. If not, the internet is a good resource.

There will be one in-class midterm exam and a comprehensive final exam. The midterm will be on March 5 and will cover all course material covered up to and including the class on March 3. As per the Registrar’s schedule, the final exam will take place on Monday May 4 from 10:30-12:30. It will be cumulative.

The cumulative grade on the problem sets will count for 35 percent of the course grade. No problem set scores will be dropped from the calculation of the problem set grade. The midterm will count 32 percent of the course grade and the final exam will count for the other 33 percent. I will be using a conventional, high school level 0-100 grading scale. The mapping between points and letter grades can be found below, where g denotes numeric points:

- A \( g \geq 94 \)
- A- \( 90 \leq g < 94 \)
- B+ \( 87 \leq g < 90 \)
- B \( 83 \leq g < 87 \)
- B- \( 80 \leq g < 83 \)
- C+ \( 77 \leq g < 80 \)
- C \( 73 \leq g < 77 \)
- C- \( 70 \leq g < 73 \)
- D \( 65 \leq g < 70 \)
- F \( g < 65 \)

I don’t particularly care for such a scale, but I think it is useful for students to know where they stand. I may curve scores on problem sets or exams. If I do so, I will give students the formula
converting raw scores into curved scores (the curve may be linear or non-linear). I also may not curve scores, depending on my assessment of the absolute difficulty of the exam or assignment as well as the overall class performance. In the interest of being completely transparent, I anticipate that the average grade for the semester will be around a 3.3 (roughly a B+), though this is only a rough guide and I make no promises.

There is no class participation grade or formal attendance policy. You are adults and are responsible for managing your own time. While there is no explicit attendance policy, I am loosely aware of attendance patterns. Keep in mind that as instructor I will be more willing to work with a student and/or show leniency when I sense that the student is putting forth solid effort. You are welcome to alert me if you have to miss class for any reason, though this is not necessary. Some of you are seniors looking for jobs, some of you may be athletes, and others may be involved in university clubs or activities. Many of you may well have commitments that force you to miss class from time to time, and this is understood. But it should also be understood that you are responsible for any material presented in class when you are absent for any reason. Although I’m happy to work with you outside of class, it is not my responsibility to repeat lectures you had (or chose) to miss.

If you have to miss an exam for any reason, you must notify me a week in advance. If the conflict is legitimate (e.g. a university-sponsored event), we can jointly set alternative arrangements. Failure to alter me of any potential conflict at least a week in advance may result in no alternative arrangements being available. If you have a conflict and are unable to take the midterm at an alternative time within a one or two day window of the rest of the class, you may be offered the choice to have the weight of the midterm shifted to the final exam.

**Office Hours and Out of Class Meeting Times:**
I will hold two sets of regularly scheduled office hours. The first is 12:50-1:50 pm on Tuesdays. The second is 2:00-3:15 pm on Wednesdays. My office is 3036 Jenkins-Nanovic Hall (JNH). There are a couple of rooms on the third floor of JNH (such as the “enclave” near the elevators) where I may move office hours should more than one or two students show up. Should I do so, I will alert the class via email.

I am generally in my office during regular business hours. You are more than welcome to stop by at any time, but if it is outside of scheduled office hours I reserve the right to turn you away. You may email to make appointments outside of scheduled office hours, though I cannot promise to meet you outside of the regularly scheduled office hour slots.

The course will have two teaching assistants: Amanda Addiego and Dominic Ferrante. They have both taken this course and excelled. One of them will be available for office hours weekly on Wednesdays from 6:00-7:30 pm in DeBartolo 117. They will hold additional office hours around exam times.

I enjoy getting to know students outside of the formal classroom setting. I encourage you to invite me to lunch at South Dining Hall (or North, which shockingly is now superior to South) any day of the week. Just send me an email. I may also schedule other class social gatherings outside of the normal class time. These would be for fun and completely optional.

The best way to contact me is via email. I will do my best to respond promptly but keep in mind that I sleep more or less normal hours, unlike many of you. Middle of the night emails will not be
responded to until the next day. To ensure a prompt response, please put “Monetary Theory” or something similar in the subject line of any email.

Prayer before Class:
I will open each class with a free-form prayer asking God to guide us as we seek to better understand the world around us. My Catholic faith is important to me, and at a Catholic university I think it is crucial that we ask for God’s assistance as we engage in important endeavors. You are welcome to participate in the prayer however you best see fit. If you are not the praying kind, that’s fine and I want you to feel welcome, but please be respectful.

If you would like to add a prayer intention, please email me your intention before class and I will include it in my opening prayer. Please limit yourself to non-frivolous intentions. While former head football coach Gerry Faust famously used to ask his players to recite a Hail Mary before important plays, and while I (and I’m sure some of you) are guilty of this practice as well, I will not entertain intentions for athletic victories in the opening class prayer.

Course Outline (tentative and subject to revision):

1) Traditional Monetary Theory and Conventional Monetary Policy
   a) Money supply (Mishkin Ch. 3; Ch. 14; Ch. 15 pg. 341-348; GLS Ch. 31; Rendahl and Freund “Banks do not Create Money out of Thin Air”)
   b) Money demand (Mishkin Ch. 19)
   c) Conventional monetary policy and the macroeconomy (Mishkin Ch. 20, Ch. 21, Ch. 23 pg. 553-569)

2) Topics in Finance, Financial Markets, and Banking
   a) Bond pricing and the term and risk structure of interest rates (Mishkin Ch. 4; Ch. 5 pg. 85-100; Ch. 6; GLS Ch. 33; Poole “Understanding the Term Structure”)
   b) Stock market (Mishkin Ch. 7; GLS Ch. 34)
   c) Adverse selection, moral hazard, and financial structure (Mishkin Ch. 8; Economist “Secrets and Agents”)
   d) Banking (Mishkin Ch. 9; GLS Ch. 30; GLS Ch. 32; Diamond “Banks and Liquidity Creation”)

3) Crises and Unconventional Monetary Policy
   a) Financial crises (Mishkin Ch. 12 pg. 267-282); Great Depression and Great Recession (Bernanke “On Milton Friedman’s 90th Birthday”; Wheelock “Lessons Learned”; Gorton “Questions and Answers”; Mishkin “Over the Cliff”; Cecchetti “Crisis and Responses”)
   b) Unconventional monetary policy and mapping crises and policy responses into the AD-AS model (Mishkin Ch. 15; pg. 355-361; Mishkin Ch. 23; pg. 569-578; Bernanke “Targeting Long Rates”; Wu “Did Quantitative Easing Work?”)
c) Financial and banking regulation (Mishkin Ch. 10; Mishkin Ch. 12 pg. 283-289; Gorton and Metrick “The Federal Reserve and Panic Prevention”; Hanson, Kashyap, and Stein “A Macroprudential Approach”)

d) Questions to ponder (Bernanke “Should the Fed Keep its Balance Sheet Large?”; Applebaum “US Inflation Remains Low”; Fischer “Why are Interest Rates so Low?”; Williamson “Neo-Fisherism”; Rogoff “Dealing with Monetary Paralysis”)

Assignments, Due Dates, and Other Important Dates:

- Problem Set #1 due January 23
- Problem Set #2 due February 6
- Problem Set #3 due February 20
- Midterm March 5
- Problem Set #4 due March 19
- Problem Set #5 due April 2
- Problem Set #6 due April 16
- Problem Set #7 due April 28
- Final exam May 4