

Syllabus for Econ 308 - Money & Banking

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We will meet twice a week: Mondays and Wednesdays from 12.30-1.50pm in Tech LR 5. The TA, Bruno Nunes Fava, will lead discussion sections on Fridays at the same time and place. Office hour details (mine and Bruno's) will be posted on Canvas.

You are allowed to use a laptop or tablet in class, but to do so you must be sitting in one of the first two rows.

All students are required to wear masks in class, at all times. I will take off my mask to lecture, as is permitted for fully-vaccinated instructors. I'll talk more about classroom policy when we first meet; for now take a look at the statement in section 4.3.

1 Course overview

This is a course in monetary economics. The aim is to convey the fundamental of monetary theory and policy, and to examine select topics in finance and in monetary history. It is not a course in 'pure' finance and not designed to prepare you for a career in investment banking. You will not learn how to price esoteric options or read banks' balance sheets, although asset pricing and balance sheets will both turn up somewhere. You will instead learn something about economists think about 'money' more generally, in particular regarding the problems faced by monetary policymakers. The course does not consist entirely of analysis of the 2007-8 financial crisis, but does culminate in a week or two of this sort of thing.

Prerequisites for the course are 201, 202, 281, 310-1, 311, Math 220, Stat 210. Students should already be comfortable with basic differential calculus; I might show you some integrals at some point, but you will not have to actually perform any integration. You should also be familiar with with the standard IS/LM macroeconomics framework. We'll review the IS/LM model near the start of the course, but will go over it fairly quickly.

1.1 The first two weeks

The current (as of 12/28/21) plan is for remote instruction during the first two weeks of class.

- **Lectures will be asynchronous.** For each meeting we would have had if life were normal, I will release a few recordings of me talking mostly about economics. My advice is to keep up with my suggested Mon/Wed viewing schedule. While the recordings for a given day might be very slightly over 80 minutes, I will make sure that, taken together, a given week's recordings will amount to less than the 160 minutes of allotted class time.¹
- **Official meeting times will be office hours.** I will hold office hours over Zoom in the Mon/Wed 12.30-1.50pm slots during which we would ordinarily meet in person. Attendance is not required at these office hours. The idea is that you watch the recordings (whenever you like) and then come to talk to me if there is something that doesn't make sense.
- **Sections will be run similarly.** I will post supplementary questions along with videos where I go through these questions.² The scheduled sections will actually be office hours held by the TA over Zoom. Attend them if you have questions about the supplementary problems (after watching the associated videos) or about class material in general. Again, office hour attendance is not mandatory.

After the first two weeks we hopefully will return to regular instruction. Lectures and sections will be in person, and the TA and I will hold office hours separately. As long as we are only remote for those two weeks I do not anticipate changing any of the assignment or exam dates; should we be remote for longer then I reserve the right to change some of those dates, and will keep you informed.

1.2 Evaluation

- Two midterms in class on Wednesday January 26th and Wednesday February 16th. (30% each)
- Final exam on Wednesday March 16th (exam week) at 3pm. (40%)

The final exam will focus on the final third of the class, but will also touch on the first two thirds. That's why it's weighted more heavily than the midterms.

As we proceed through the quarter I will keep you informed of your standing in the class by occasionally publishing score-grade correspondences. These will indicate the letter grade to which your current weighted average provisionally corresponds. It is possible that the score-grade correspondence will differ from the one that some of you will have seen in US high schools.

1.3 Sections

Section attendance is not mandatory but will be useful. Each week I will post supplementary questions on Canvas. The TA will go through some or all of these questions in sections; I strongly recommend that you consider them beforehand. You will get a lot more from the course, and find the midterms and final much easier, if you attend sections.

¹The lecture videos will be available as mp4 files posted directly on Canvas. I suggest you download the files to a local drive and then watch them. [Canvas somewhat mysteriously treats mp4 files in an inconsistent manner. Some are downloaded when one clicks on the Canvas link, while others open automatically as videos in a new browser tab. In the latter case you can (at least with Chrome) still right-click on the video in the new tab and save it locally.]

²I suggest that you attempt the problems yourselves before you watch these videos. Economics is one of those disciplines where the answers can often seem obvious ex post, once you have them in front of you, but not ex ante.

2 Course materials

There will be slides for each topic posted on Canvas. These will be covered in lectures. There will be three versions of the slides available: one identical to that I use in lectures; one in ‘handout’ form that omits the dynamic overlays but otherwise resembles the version I go through; and one in ‘article’ form that’s even more compact. These slides will constitute the core material for this course. The exams will be based on their contents and on the supplementary questions I post.

In addition to the posted slides I will provide supplementary readings where appropriate, and occasional notes when no suitable source is available.

As for a textbook, below I list readings from two books: Frederic Mishkin’s ‘*The Economics of Money, Banking and Financial Markets*’ [8th edition], hereafter **FM**; and ‘*Money, Banking, and Financial Markets*’ [1st edition] by Laurence Ball (**LB**). Each covers a wide range of topics at an intermediate level, and as such is not pitched at the ideal level for this course. We will cover fewer topics than either book and will sometimes go a little deeper into theoretical issues than they do. We will also cover some topics that they ignore completely. While the books make for good preparatory and background reading, and will be sufficient for some areas, the slides I present in class will constitute the main resource for students. You should consider **FM** and **LB** as optional, as it’s perfectly possible to do the course without buying either one of them. My sense is that most people do not buy a textbook and do not regret this decision.

3 Lecture topics and references

The plan is to tackle the following subjects in order. If it looks like we’re falling behind, certain sections will be abbreviated. I will keep students informed of potential adjustments to the syllabus as soon as they look likely. Textbook readings are obviously only relevant if you choose to buy a textbook.

3.1 Introduction/revision/basic concepts

Review of basic concepts, and a roadmap for the rest of the course.

- functions and definitions of money
- the quantity equation and money neutrality
- short-run non-neutrality in the IS/LM framework

Readings: **FM** Ch. 3, Ch. 19 (pp.493-500), Chs 20-22; **LB** Ch. 2 (pp.25-36), Ch. 14 (pp.413-417) [note that **LB** has nothing on IS/LM, which is perhaps in its favour].

3.2 Hyperinflations and fiscal credibility

The importance of fiscal rectitude in underpinning the value of the medium of exchange.

- the Cagan model of hyperinflation

- the ends of big inflations: the role of fiscal policy

Readings: <http://gregmankiw.blogspot.com/2006/04/time-inconsistency.html>

3.3 Money demand: theory and evidence

Examination of the main theories of money demand.

- transactions demand and the Baumol-Tobin model
- portfolio demand: money as an asset
- empirical evidence

Readings: My supplementary notes.

3.4 Monetary policy instruments

Consideration of the policy tools traditionally used by central banks.

- institutional arrangements in the US
- central bank control of the money supply
- choice of monetary target: quantity or price?

Readings: **FM** Ch. 12 (pp.311-322), Ch. 13, Ch. 14 (not the appendix), Ch. 15; **LB** Ch. 11.

3.5 The term structure of interest rates

What can the bond market tell us about expected Fed policy?

- bond pricing
- no-arbitrage and the yield curve

Readings: **LB** Ch. 4 (pp.102-109), Ch. 13 (pp.383-390).

3.6 The monetary transmission mechanism

How does money affect aggregate demand?

- evidence on the traditional ‘interest rate’ channel
- information asymmetries, lending and the importance of net worth
- the credit channel

Readings: **FM** Ch. 8 (pp.181-192, 195-198), Ch. 23 (pp.596-609); **LB** Ch. 11, Ch. 13 (pp.390-399).

3.7 Modern policymaking

Discussion of the appropriate objectives for policymakers.

- the 3-equation framework
- time inconsistency and solutions
- inflation persistence and structural uncertainty

Readings: **FM** Ch. 16 (omit the section on Monetary Targeting; skim the rest); **LB** Ch. 12 (pp.352-377), Ch. 15, Ch. 16; supplementary notes;
<http://gregmankiw.blogspot.com/2006/04/time-inconsistency.html> again

3.8 The credit crunch

Examination of financial crises and consequent policy responses.

- what happened in 2007/8?
- unconventional monetary policy

Readings: **LB** Ch. 14 (pp.433-438), Ch. 18 (pp.543-651); other readings to be provided.

4 Various statements

All instructors have been asked to include the following statements on syllabi this quarter.

4.1 Academic Integrity Statement

Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic Guide". All papers submitted for credit in this course must be submitted electronically unless otherwise instructed by the professor. Your written work may be tested for plagiarized content. For details regarding academic integrity at Northwestern or to download the guide, visit: <https://www.northwestern.edu/provost/policies/academic-integrity/index.html>

4.2 Accessibility Statement

Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: accessiblenu@northwestern.edu; p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

4.3 COVID-19 Classroom Expectations Statement

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the COVID-19 Code of Conduct.³ With respect to classroom procedures, this includes:

- *Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.*
- *In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.*
- *No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.*
- *Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.*

[Note from RW: as I said earlier, I will take off my mask to lecture. I do not plan to assign seats.]

4.4 COVID-19 Testing Compliance Statement

To protect the health of our community, Northwestern University requires unvaccinated students who are in on-campus programs to be tested for COVID-19 twice per week.

Students who fail to comply with current or future COVID-19 testing protocols will be referred to the Office of Community standards to face disciplinary action, including escalation up to restriction from campus and suspension.

4.5 Exceptions to Class Modality

Class sessions for this course will occur in person. Individual students will not be granted permission to attend remotely except as the result of an Americans with Disabilities Act (ADA) accommodation as determined by AccessibleNU.

4.6 Guidance on Class Recordings

This class or portions of this class will be recorded by the instructor for educational purpose and available to the class during the quarter. Your instructor will communicate how you can access the recordings. Portions of the course that contain images, questions or commentary/discussion by students will be edited out of any recordings that are saved beyond the current term.

[Note from RW: I am not currently planning to record anything, but am including the above just in case that changes.]

³<https://www.northwestern.edu/communitystandards/about-us/northwestern-university-student-expectations-covid-19-code-of-conduct.html>

4.7 Prohibition of Recording of Class Sessions by Students

Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact AccessibleNU. Unauthorized use of classroom recordings - including distributing or posting them - is also prohibited. Under the University's Copyright Policy, faculty own the copyright to instructional materials - including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

4.8 Support for Wellness and Mental Health

Northwestern University is committed to supporting the wellness of our students. Student Affairs has multiple resources to support student wellness and mental health. If you are feeling distressed or overwhelmed, please reach out for help. Students can access confidential resources through the Counseling and Psychological Services (CAPS), Religious and Spiritual Life (RSL) and the Center for Awareness, Response and Education (CARE). Additional information on all of the resources mentioned above can be found here:

<https://www.northwestern.edu/counseling/>

<https://www.northwestern.edu/religious-life/>

<https://www.northwestern.edu/care/>

5 Comments, policies

- The midterm and final dates/times are not negotiable. There will be no early finals to accommodate family holidays, unfortunately-timed job interviews, internships, etc. If you have an internship that clashes with the final, ask the firm with which you're interning if you can take the final on their premises (this is usually possible).
- If you miss an exam for whatever reason (illness, wedding, prison. . .) then you will have to do a makeup exam, your percentage score on which will be capped at the average of the other two exams. For example, say you missed a midterm and your average on the other two exams ends up being 80%. If you get 70% on the makeup-midterm then you will receive a score of 70% for that midterm. If you get 90% on the makeup-midterm then you will receive a score of 80% for that midterm.
- If you think you were unfairly denied marks on an exam, you may request a regrade. I reserve the right to regrade the entire exam, and to deduct points as well as add them.
- Will I be grading on a curve? I'm not sure what that (very common) question means. In general, I do not have any preconceived idea of some particular grade distribution I want to see, and the letter-grade/numerical-score correspondence may differ from that you are accustomed to.
- If you don't understand something as we're going through it, that's fine. Just be sure to see me or your TA very quickly to sort things out. The nature of the course means that falling behind is a bad thing.

- There will be no *ex post* reweighting of the relative contributions of assignments and exams to the final grade. Please don't ask, as I find saying no painful, though not painful enough never to say it.