Contact Info:  mwitte@northwestern.edu
Class meets:  MWF 3:00-5:00 (I intend to video record all of these.)
Office Hours:  After class (5:00-6:00), and also at other times by appointment
Materials  Readings & notes:  https://sites.google.com/site/markwitteeconomics/
            Class videos and notes will be posted on “Pages” in Canvas.

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**Week of June 22 - Introduction & Multiple Equilibrium, Consumption, Investment, Growth**

**Recommended (but not required):** Watch HBO’s **Panic**

**Intro** - Fred Lessons, Blanchflower, Case & Deaton
Models of Equilibria
- 45-degree line, equations, multiplier
- Babysitting Co-op - Babysitting Co-op, Desert Island
- Hare & Stag
  Recorded: Goods market equilibrium (45-degree line)

**Models of Consumption & Saving**
- Keynes’ Consumption Function
- Friedman’s Permanent Income Hypothesis (PIH)
- Modigliani’s Life-Cycle Hypothesis (LCH)
- Ramsey’s Euler Equation Model of Consumption
  Recorded: Three models of consumption

**Investment**
- Investment - Tobin’s q and Q
- Investment & Savings: The IS Curve
  Recorded: Investment, Savings, and Interest Rates

**Supply Side:** Firms and Imperfect Competition - Micro Handout
  Recorded: Model of imperfect competition, monopolistic competition

**LR Growth:** Neoclassical Solow Model (Perfect Competition, Constant Returns to Scale)
  Steelman & Weinberg, Gordon, Rosling
  Recorded: Solow Computations

**LR Growth:** New Growth Theory (Romer & Others, Increasing Returns to Scale) - Klenow, xkcd

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**Week of June 29: The Supply Side, IS-LM, Phillips Curve**

**Supply Side:** Wage Bargaining, Efficiency Wages - Core sections 9.1-9.6
Labor Markets: Flows, Beveridge Curve, Unemployment - Taylor, Jaimovich & Siu, Auter
Changing jobs - Gawande

**IS-LM** (Investment-Savings versus Liquidity Preference for Money) - IS-LM - Krugman, Keynes
Taylor Rules & Loss Functions - Policy Rules - Cecchetti
**Recorded: Taylor Rule**

**Phillips Curve** - Phillips Curve - Cecchetti, Inflation

### Week of July 6: The 3 Equation Model of Macro Policy

3 Equation Model: IS, Phillips Curve, Policy Rule  
3 Equation Model: Monetary Policy - FDR’s First Fireside Chat, Fed Video 1, Fed Video 2  
3 Equation Model: Fiscal Policy  
Recorded: 3 Equation Model practice (Several)

### Week of July 13: The Financial System and Monetary Policy

Leverage - Admati, Capital - Cecchetti  
**Recorded: Leverage tricks**  
Bank Balance Sheets & Leverage - Moral Hazard - Cecchetti  
Bubbles  
Financial Sector Crises - Jim Cramer rant, Santelli rant, Stress Tests - Cecchetti, Adverse Selection - Cecchetti, Christiano

### Week of July 20: Finish Monetary Policy, Government Debt, International

Monetary Policy - Surowiecki, POW Camp, Fed Independence - Cecchetti, Lender of Last Resort  
Forward Guidance - Brave New World MP - Cecchetti, Unconventional MP  
**Recorded: Forward Guidance**  
Government Debt Dynamics - Debt Sustainability - Cecchetti, Time Consistency - Cecchetti, Budget Basics  
**Recorded: Debt Dynamics**  
International Macroeconomics  
Capital flows  
Exchange Rates: Big Mac Index - Cecchetti, Mundell-Fleming, China & US Bonds

### Friday, July 24: Final Exam

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage of Class Grade</th>
<th>Exam Date and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>35%</td>
<td>Wednesday, July 8, 3:00-5:00 Chicago time</td>
</tr>
<tr>
<td>Final</td>
<td>45%</td>
<td>Friday, July 24, 3:00-5:00 Chicago time</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

The following are questions that many of you will have about the class.

Q: How are office hours going to work?  
A: I’ll stick around after I get done lecturing for any questions anyone has (and these questions can be about previous lectures or readings or whatever). If you’d like to talk or Zoom with me at another time, send me an e-mail about what you want to talk about (it can be just stuff in general), what times might work for you, and what the best medium for communication would be (phone, Zoom, semaphore flags,
Q: How is the teaching going to work?  
A: I will pre-record video of some of the material and also record “lectures” where hopefully you will have questions as we go along.

Q: Are you good at running this sort of online class? Will it be a disaster?  
A: No. Probably.

Q: How is the grading going to work?  
A: This class will have normal A/A-/B+/B/etc. grading. You can take it P/N, but then it won’t count for your economics requirements.

Q: I can see that half of the people in this class are harder working than I am and the other half of the students are lazier than I am. What grade will I get in here?  
A: Somewhere around a low B or B-. You are the median or middle student. Half the class will get grades of B or better and the other half will get grades of B/B- or worse. However, this doesn’t hold exactly in a small class. In smaller classes, I usually end up grading by the method of “significant differences.” I compute weighted points for everyone in the class. Some of you will do really well, then there will be a bit of a gap in the scores, then there will be another bunch, and then a gap in the scores, then another bunch, then, a gap, etc. The top bunch will be the A’s, the next bunch the B’s, etc. with the minus/plus grades falling in between. The grades on the midterms give guidance toward where you are likely to be in this distribution (where midterm points matter, but grade breaks don’t). The points from the homeworks move you up or down in that distribution.

Q: How does the homework work?  
A: We will post questions and you will submit answers through Canvas. The computational problems will be graded by Canvas, and you will get three chances to get them right. You can collaborate with your peers on these and ask questions through Piazza (anonymously if you wish). Some of the homework will involve you submitting hand drawn graphs or hand written summaries of the lecture contents through Crowdmark.

Q: What will the tests cover?  
A: Some problem solving, some graphing, some essays. The homeworks will give you examples of the sorts of problems I am apt to ask. Also, you are expected to go to the bathroom before the exam and then hold it until the exam is over. Interesting fact: On the Crowdmark portions of the tests, we will give you points for leaving a question blank. On any given problem or graded sub-problem, we will give you 20% of the points if you leave the question completely blank (or clearly cross out what you’ve written). This is intended to remove the incentive to pursue “pity points” on questions where you really don’t know what I’m asking, and instead allow you to devote your time to doing the best you can on the material you know best. Of course...you’ll probably just choose to write complete and perfect answers to every question on every test, but we wanted you to have the option.

Q: How will the exams be given?  
A: You will take the exam in front of your computer while logged into Zoom with your camera and audio on, and also with your smartphone logged into Zoom and attached by a rubber band to a tall waterbottle or similar stand and arranged so that I can see what’s on your computer screen and what you’re working on. Hmm...that doesn’t seem any less crazy now that I’ve written it out. I’d really rather be able to give
you the exams while we’re all together in one room, but that’s not our current reality. Unfortunately, some people cheat; they are bad and should do this; and I’m trying to minimize this.

Q: Wait, what?! Will this class be recorded?
A: “This class or portions of this class will be recorded by the instructor for educational purposes. These recordings will be shared only with students enrolled in the course and will be deleted at the end of the Spring Quarter. Your instructor will communicate how you can access the recordings.

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.”

Q: What are the “learning objectives” for this class?
A: This course should give students frameworks and economic reasoning for understanding short and long run macroeconomic phenomena, and the possibilities and limits of macroeconomic policy.

Q: I am not now nor have I ever taken the prerequisites. Am I in trouble in here?
A: Probably; this class uses the tools of Econ 201 Introduction to Macroeconomics and Econ 202 Introduction to Microeconomics, as well as some algebra and differential calculus.

Q: What’s the deal with the readings?
A: There are a variety of readings for this class and you can find them linked from my syllabus and webpage for this class. Other relevant readings may be assigned as the quarter goes forward. If you can, try to watch the HBO Vice Report Panic: The Untold Story of the Financial Crisis, about the crisis. (This movie is not available in all parts of the globe.)

Q: What are the basic work expectations for the class?
A: I hope that you will do about two hours of study for every hour of lecture, and that you will read the material assigned for the lecture before class (and yes, you’ll have to catch up on the first lecture assigned reading too).

Q: What is your electronics communication policy?
A: (1) I expect you to have your preferred e-mail address entered into Canvas so that I can send messages to the class, and I expect you to check that e-mail on a daily basis. (2) Use Canvas’s Piazza discussion forum (found in Canvas’s “Modules”) to post questions that would be of general use to your classmates. (Yes: “What does MR stand for?” No: “I got 11 points on the midterm; does that mean I’m going to flunk the class?”) [Piazza is a discussion forum that allows anonymous posts. The story about its creation is pretty cool.] (3) If you e-mail me about something related to the class, please be sure to put “361” in the header.

Q: What about asking questions in class?
A: If I haven’t been clear about a definition or abbreviation or something, it is a Kantian imperative that
you raise your hand and get me to fix it! Otherwise, I’m just wasting everyone’s time. Seriously, if you’re puzzled by something, then probably everyone else is as well, so you’d be serving Northwestern’s educational mission by getting it cleared up. If you’ve got a question about something related to what we’re doing, but not directly part of the lecture, that’s good too, but raise it in office hours or Piazza. Thanks!

Q: Can I expect any leniency if I'm caught cheating or engaging in any unethical behavior?
A: No. I will probably give you a grade of "F" for the class and I will certainly notify the Dean who will be asked to pursue further action. It’s not fun for anyone involved.

Q: What happens if I fall suddenly ill and am unable to make it to a test?
A: If you do not reach me or leave a message on my e-mail (mwitte@northwestern.edu), your misfortune will be doubled. You will get a zero on the test for a grade of F that cannot be made up. Any problem that causes you to be physically unable to take a test must be carefully documented by an independent source who can confirm that you were incapacitated.

Q: In studying for the tests, should I stress studying the notes or the readings?
A: Well, both, but particularly the notes. I'll make sure that I don’t inflict any math problems on the exams that I haven't already given you on a homework. Note however, that not everything that is important for the class, or that I cover in lecture or the readings will make it onto the test. Some material is important for you to learn, but does not lend itself to good test questions. I’m also inclined to have you do math on homework to build that level of understanding there, and then use graphs on exam questions so as to minimize the chance of algebra mistakes causing you to miss points on something where you had a good level of understanding.

Q: What are the math requirements for this class?
A: You will need to be able to do really simple calculus, graphing, exponentials, and algebra. I will do some more complicated math for the purposes of exposition but I will not ask you to reproduce it on the exams although you should understand the underlying ideas. As a guide, I will try to preview any math or exposition you might need in a homework.

Q: This syllabus is pretty long; do you think that anyone is still reading?
A: We’re about to find out!

Q: What is the deal with these homeworks?
A: There will be a bunch of these over the course of the quarter and they will usually follow what we did in lecture, and have some predictive value for what will be on the exams. Your first homework will be to get you familiarized with the use of Piazza, so you will need to post an interesting article relating to international trade in the “post_to_piazza_homework “ on Piazza (in “Modules” in Canvas). When you post your article, don’t send it to the whole class but rather only to me, and be sure to put your last name in the header so I know it’s from you. In general, when you post on Piazza about specific homework or exam questions, it’s very helpful if you cut-and-paste the actual question into what you write in Piazza. I will post questions and you will submit answers through Canvas. The computational problems will be graded by Canvas, and you will get three chances to get them right. You can collaborate with your peers on these and ask questions through Piazza (anonymously if you wish). Some of the homework will involve you submitting hand drawn graphs or hand written summaries of the lecture contents through Crowdmark.
Q: What do economists read to learn about what’s going on in macro?
A: https://marginalrevolution.com/ I check them every morning. Also, this guy is pretty great: https://www.bloomberg.com/opinion/authors/ARbTQjRLjE/matthew-s-levine

Q: What if I have concerns about accessibility for this class?
A: Any student with a documented disability needing accommodations is requested to speak directly to the AccessibleNU (accessiblenu@northwestern.edu, 847-467-5530) and to me, as early as possible in the quarter (preferably within the first two weeks of class). All discussions will remain confidential.

Q: What is the most important thing?
A: Most important, please be assured that I want students to learn and to receive the good grades they deserve. So please make an appointment with me should you have undue difficulty with your work in the course.