# Syllabus for Econ 201 - Introduction to Macroeconomics

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Office hours: days/times to be announced.

**Important:** we are officially due to 'meet' at the following days and times: Monday, Wednesday and Friday, 9.10-10.00am. The general asynchronicity of this class notwithstanding, you **cannot** take it if you have another class that conflicts. This is because the midterms will occur during these times, and because I will follow the registrar's schedule for the final exam (so it will coincide with the final of any conflicting class).

All times indicated for office hours and assignments/exams are CST, i.e. Evanston time.

# 1 Logistics

The class lectures will be asynchronous. I will pre-record me talking about macroeconomics, and will plan to release one or two recordings for each lecture that we would have had if life were normal. We have 150 minutes of allotted class time per week, and together a given week's recordings will amount to less than that. I will make clear just which of these lectures correspond to which days, and my advice is to keep up with my suggested Monday/Wednesday/Friday viewing schedule.

The lecture videos will be available either via Zoom links or as mp4 files posted directly on Canvas. If it's the latter then I suggest you download the files to a local drive and then watch them.

# 1.1 sections

Students choose a particular section time when they register for the class. After registration is complete, each of you will be assigned a TA as well; this might take a few days. **Important: sections will not operate as they normally would.** The plan is as follows.

- For each week I will post 'supplementary questions' on Canvas.
- Each week a single TA will post a video where he or she goes through these supplementary questions. [I suggest that you attempt the problems yourselves before you watch this video. 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.]

• The scheduled sections, i.e. the TA/time to which each of you is assigned, will actually be office hours over Zoom. Attend them if you have questions about the supplementary problems (after watching the weekly TA video) or about class material in general. Your TA will also hold additional office hours and you can go to those as well. Office hour attendance is not mandatory.

You may attend my office hours and those of the TAs as it suits you. Again, attendance is not mandatory. If you do want to meet with one of us then register beforehand using the link(s) that will at some point appear on the front page of Canvas; there will be different links for the different office hours. Please register using your full name and your Northwestern email address. I will be using a Zoom waiting room for office hours, which means I will manually admit people as they arrive. If I don't admit you immediately just be patient, as it only means I haven't seen yet you because I'm talking to someone already in the meeting. You don't have to be there at the start of office hours but can turn up any time, just like in the real world.

There are advantages and disadvantages of the asynchronous approach that I'm largely adopting. Advantages include minimisation of technical problems, reduced duplication of effort by TAs and greater flexibility for students. The main disadvantage is that students might be less likely to engage with their instructors. I strongly encourage you to get to know your TA via Zoom!

# 1.2 What should you do each week?

On Canvas I will organise things by week using the 'Modules' section. For each week there will be a 'material' page that has everything you need to read and watch for that week. It will contain the slides that I will use in my pre-recorded lectures, links to the corresponding recordings, occasional written notes, supplementary questions (and answers, posted later in the week) and whatever else I want you to absorb that week. Note that there will be no textbook readings on Canvas, as strictly speaking the textbook is optional (see below).

So, each week you should make sure to:

- Read and watch everything on that week's material page.
- Do the supplementary questions before watching the TA video and perhaps attending office hours. This will be good practice for the assignments.
- If it's an assignment week (see below), complete the assignment. Practical instructions will follow. If there's an exam on the horizon, prepare for the exam.

# 2 Evaluation

- Three assignments, due at 6pm on Friday October 2<sup>nd</sup>, Friday October 23<sup>rd</sup> and Friday November 20<sup>th</sup>. [10% each.]
- Two midterms at 9.10am on Friday October 9<sup>th</sup> and Monday November 2<sup>nd</sup>. [21% each.]
- A final exam on Monday December 7<sup>th</sup> at 3pm. [28%.]

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. [More precisely, ten twelfths of the final exam will be on the final third of the class material, with one twelfth on each of the first two thirds. This makes each third of the class carry equal weight in the three exams overall.]

The two midterms and the final will be administered online, via either Canvas or Crowdmark, while the three assignments will be submitted through Canvas. The latter will be due at 6pm on the respective Fridays.

The midterms will be administered 'live'. That is, the questions will be posted at 9.10am on the respective Fridays and you will have until 10am to submit your answers on Canvas/Crowdmark. The final will be similarly administered, with the questions posted at 3pm on December 7<sup>th</sup>; the final will be longer than the midterms, but less than two hours. See the end of this syllabus for my policies on missed exams.

As we proceed through the quarter I will keep you informed of your relative standing in the class by occasionally publishing score-grade correspondences. These will indicate the letter grade to which your current weighted average provisionally corresponds. [So, don't panic if you are averaging (say) 70%, as this might correspond to a decent letter grade; just look at the published correspondence.]

# 3 Course Overview

This is an introductory course in economics with an emphasis on macroeconomics. The first, more 'microeconomic' third of the course will cover general topics such as scarcity, choice, how the market system works and the effects of government intervention. This will take us up to the first midterm. We'll then turn to long-run macroeconomics and consider such things as economic growth and unemployment. This should take us through to the second midterm. We'll then look at money and inflation. We'll finish with short-run macroeconomics, with a focus on the role of monetary and fiscal policy in stabilising the business cycle. En route, time permitting, we will consider issues such as the role of economic policy in addressing environmental concerns and the 2007-8 financial crisis in the US. We might even talk about the macroeconomic effects of the current pandemic.

The only prerequisite for the course aside from an interest in the subject is high-school algebra. There will be some equations. There will also be lots of diagrams containing such things as supply and demand curves; you will be expected to (learn how to) interpret and manipulate such diagrams yourselves.

# 4 External support

There are two external sources of support for the class, both provided through Academic Support & Learning Advancement (https://www.northwestern.edu/academic-support-learning/). These are entirely optional.

## 4.1 Quarter-Long Virtual Study Group Opportunity – Registration Required

Any student in Econ 201 can register for a Peer-Guided Study Group. From https://tinyurl.com/y6tztdqn:

Students enrolled in an array of first-and second-year courses have the option of enrolling in a Peer-Guided Study Group alongside the course. Study Group participants meet weekly in groups of about 5 to 7 with a peer facilitator - another student who has taken and done well in the course (or, in some cases, an equivalent course). In the two-hour meetings, students talk through key concepts from the course, ask questions on points of confusion and help answer one another's questions, and work through practice problems or exercises together. The Study Groups are highly collaborative,

comfortable environments where undergraduates can learn from one another and help one another succeed.

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Registration for study groups is through CAESAR and opens on the first day of classes.

Contact Borislava Miltcheva at borislava.miltcheva@northwestern.edu with any questions.

## 4.2 Virtual Drop-In Peer Tutoring – No Appointment Needed

Students can also take advantage of Drop-In Peer Tutoring. From https://tinyurl.com/y3fxgxth:

Peer tutoring sessions provide a friendly, collaborative environment where you can come to get help, tackle homework, or study. Drop-in tutoring is a great way to get support with a specific question or issue, or just talk through course material with others. Tutors are experienced with the course material, and trained to help students learn and understand effectively. No registration is required; just come on by when you want, for as long as you want.

Contact Una McGeough at una.mcgeough@northwestern.edu with any questions.

# 5 Course materials

The textbook will be 'Modern Principles: Macroeconomics' [2nd edition, 2012] by Tyler Cowen and Alex Tabarrok. I recommend that you buy this book if you buy any book. A 3rd and now 4th edition are available, but I'm sticking with the 2nd as used copies might be easier to find and these textbooks are absurdly expensive. If you want to buy the later editions then that's fine; you will have to find the appropriate readings yourself or ask me over Zoom. Amazon has used copies available: https://goo.gl/Hr2uu5.

I think it's possible to do the class without the textbook. I tend to wander away from the book at various points, so there won't always be readings in it that help very much with the class material.

Again, there will be slides for each topic posted on Canvas. These will be covered in my recordings. 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 weekly problems I post. The textbook readings are there to supplement the slides. Again, for some topics there might be no appropriate textbook reading, and the slides may be your only resource. I may add readings from outside the textbook as we go along.

# 5.1 Recording policy

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

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.

# 6 Lecture topics

The plan is to tackle the following topics in order. If it seems we are falling behind schedule, my preference is to drop material from the syllabus rather than speed up. I will alert you as soon as this looks likely.

**CT** refers to the textbook.

## <u>Microeconomics</u>

## [1] Key concepts

How economists think (that people think). Tradeoffs and opportunity costs. Production possibility frontiers, specialisation and the wonders of trade.

**CT** ch 1 (skim), ch 2. Notes on reading: just skim the '10 Big Ideas' in chapter 1, as I won't be paying much attention to half of them at this stage. Chapter 2 is important; if you have the 1st edition the same material is tucked away in the first half of Chapter 18, pp.381-387.

#### [2] Markets and welfare

Supply curves. Demand curves. Equilibrium prices and quantities. Consumer and producer surplus. Efficiency.

CT ch 2, ch 3. Notes on reading: none right now.

#### [3] Government intervention

Price controls, quantity controls and taxation. Inefficiency, deadweight loss and elasticity. Externalities and the environment.

**CT** ch 4. Notes on reading: the textbook is not good for the externalities/environment material; slides will be best resource here.

### The Macroeconomy in the Long Run

## [4] National income accounting

Measurement. The circular flow: income equals output equals expenditure. Price indices.

**CT** ch 6. Notes on reading: chapter 6 only covers the first half of this set of slides, i.e. the 'Income, expenditure and production' section. The textbook does have material on measuring inflation and CPI vs GDP deflator (see pp. 252-3, not much detail) and also on real vs nominal interest rates (see pp. 262-3)

#### [5] Growth, investment and finance

The importance of economic growth. How the financial system allocates savings to investment projects. Some basic finance. Growth, the environment and intergenerational equity (time permitting).

 $\mathbf{CT}$  ch 7, ch 8, ch 9 (pp 175-184). Notes on reading: these readings more or less match my slides, but with slight differences of emphasis and also in a different order; for example I will cover the Solow model (which is in ch 8) after I talk about savings and investment (which is in ch 7). If we have time I'll also cover some material on the environment, but alas for this  $\mathbf{CT}$  is not so good. It only covers 'present values' (which we'll need to discuss intergenerational equity) in the bond pricing appendix to ch 9, and I don't really want to talk about bond pricing. I think you're better off looking at the slides. I'll provide further readings on the environment if need be.

#### [6] Unemployment

Frictional unemployment, structural unemployment. Unions, efficiency wages, hysteresis.

 $\mathbf{CT}$  ch 11. Notes on reading: as usual the slides deviate a little in terms of info and presentation, but I follow the book fairly closely. The main exception: I won't talk about determinants of the labor force, so you can skip the section on Labor Force Participation (pp.240-5). Also note that I don't talk about firing costs on the slides, but the topic does turn up in the discussion section.

#### [7] Money and inflation

What is money? The quantity equation and the classical dichotomy. Expectations, money velocity and hyperinflations.

 $\mathbf{CT}$  ch 12. Notes on reading: as usual the slides deviate a little in terms of info and presentation, but the book is decent. One section I don't really follow is the bit on wealth redistribution, pp.262-4; skim it but no more. I also talk more about (i) the role and evolution of money, and (ii) the mechanics of hyperinflations.

#### The Macroeconomy in the Short Run

#### [8] Short-run fluctuations and policy

Short-run aggregate supply and aggregate demand. The role for government policy, fiscal and monetary.

Notes on reading: the textbook is **not** useful for this topic. They approach things using a rather unusual framework for an intro macro class, one that I do like but that would only make sense to use if we had much more time. I will be **much** more concise than the book, and in fact will present things very differently. I've tried to make the slides as self-explanatory as possible here.

## [9] Monetary policy and the credit crunch

How the Fed actually 'controls' the money supply. How did we get from subprime mortgage defaults to the financial crisis?

 $\mathbf{CT}$  ch 15. Notes on reading: book is pretty good here. The appendix to this chapter covers the deposit creation process in some detail, as I do on the slides (but with pictures). Note that the book mentions a recent Fed policy innovation that I do not plan to cover, namely the payment of interest on reserves.

# 7 Comments, policies

- The midterm and final dates/times are not negotiable.
- If you miss an exam for whatever reason (illness, wedding, prison...) then I might allow you 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.
- Makeup exams might not happen until late in the quarter (e.g. finals week), or even next quarter; when a student misses an exam I often require that they take that exam the next time I teach the class. I teach Econ 201 again in Winter 2021.
- If you don't understand something as we're going through it, that's fine. Just be sure to come to office hours (mine or your TA's) very quickly to sort things out. The nature of the course means that falling behind is a bad thing.
- There will be no expost 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.