# ECON 301A INTERMEDIATE MACROECONOMICS

Summer	2021
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Instructor:	Luis Diego Granera	Time:	MW 11:30am – 1:20pm PST
Email:	granera@uw.edu	Place:	CMU 230
Office Hours:	TBD	Office:	Econ 319A

Disclaimer: This syllabus is tentative and may be subject to change.

**Course Description:** Economics is a study of *choices*. Whether it is you choosing which class to take this quarter or a policymaker selecting which monetary policy to implement, our limited resources force us to make choices. In microeconomics you learned how *individuals* make optimal choices (like consumption and hours of work). Now we will shift our focus to the choices of the *whole economy* (or the "aggregate").

To that end, we will develop a theoretical framework to explain movements in aggregate economic variables in the short, medium, and long run, in both normal times and times of economic crisis. We start with the set of economic concepts that you learned in your principles courses, and develop them further by making greater use of mathematical models. While these models do not reflect the real economy as it is, they provide useful economic insights for us. As you will also find out over the next ten weeks, there is no one specific model that explains all facets of the economy. Thus, we will introduce different economic models for you to use and compare in the context of current events and policy debates.

Keeping this in mind, the goals of this class are for students to understand:

- The importance of microeconomics as a foundation for macroeconomics
- How aggregate economic activity is measured at the level of a nation
- How basic models of the economy summarize and explain the interactions between output, employment, and inflation
- What causes economic activity to fluctuate over the years, from recessions to full employment and back
- The role of government in trying to smooth out these fluctuations
- The links between the domestic economy and the rest of the world
- The differences between adjustment in the short run and adjustment in the long run
- The insights conveyed by the various schools of thought Keynesian economics with sticky prices, classical economics with flexible prices, and various syntheses of the two
- How the economy grows in the very long run through capital accumulation and technological progress
- Specific concepts like dynamics and expectations
- Media accounts of macroeconomic events.

**Prerequisites:** ECON 300, ECON 201 and one of MATH 112, 124, or 134. We will review any concepts from calculus as needed.

**Course Page:** https://canvas.uw.edu/courses/1477906. You are responsible for regularly checking it and staying on top of announcements, including the reading and homework schedules. You should make sure to be able to receive emails from Canvas.

#### **Required Textbook/Materials**

- M. Gregory Mankiw, Macroeconomics, Worth Publishers, 10th ed., 2019
- Access to Achieve (online learning resource, accessed through Canvas.)

You can purchase a hard copy from University Bookstore or directly purchase Achieve with an e-text online by following the information on Canvas.

#### Important dates

Quizzes	About every other week
Midterm	Wednesday, October 27th, or TBA.
Final Exam	Wednesday, December 15th

#### Grading

Quizzes	.25%
Midterm	.~30%
Final Exam	.30%
Achieve homework	.15%

This is my procedure for curving scores: Let S be a set of student scores, and  $s_i \in S$  the score of student i. For any category, student i's curved percentage,  $p_i$ , is  $p_i = \frac{s_i + \alpha(s_{max} - s_i)}{s_{max}}$ , where  $\alpha$  is such that the median curved percentage lies between 72.5% and 77.5%, and  $s_{max} \in S$  is the maximal element in S. At the end of the term, each student i receives a weighted-average curved percentage according to the formula  $\overline{p_i} = 0.25p_{i,quizzes} + 0.20p_{i,midterm} + 0.20p_{i,final} + 0.35p_{i,homework}$ . The table below provides the convertion from weighted-average curved  $\overline{p_i}$  percentages to final grades on the 4.0 grading scale. Here is some further information on interpreting grades on the 4.0 grading scale.

$\bar{p}_i$ score	4.0 scale	grade	$\bar{p}_i$ score	4.0 scale	grade
100	4.0	А	57.5	2.3	C+
97.5	3.9	А	55.0	2.2	C+
95.0	3.8	A-	52.5	2.1	С
92.5	3.7	A-	50.0	2.0	С
90.0	3.6	A-	47.5	1.9	С
87.5	3.5	A-	45.0	1.8	C-
85.0	3.4	B+	42.5	1.7	C-
82.5	3.3	B+	40.0	1.6	C-
80.0	3.2	B+	37.5	1.5	C-
77.5	3.1	В	35.0	1.4	$\mathrm{D}+$
75.0	3.0	В	32.5	1.3	$\mathrm{D}+$
72.5	2.9	В	30.0	1.2	$\mathrm{D}+$
70.0	2.8	B-	27.5	1.1	D
67.5	2.7	B-	25.0	1.0	D
65.0	2.6	B-	22.5	0.9	D
62.5	2.5	B-	20.0	0.8	D-
60.0	2.4	C+	17.5	0.7	D-

# Grade Scale

**Homework from Achieve**. There will be problem sets assigned in Achieve. These will be assigned approximately weekly and will be automatically graded. The questions in this type of assignment check your understanding of the concepts and, on a few occasions, ask you to analyze a problem using those concepts.

**Quizzes and Exams**. There will be a short quiz about every other week, as well as two exams, with the exams being conducted during the regular class time (PST). The final exam is not cumulative, but requires understanding of the material from the first part of the course. Be aware that exams will only be made up in cases of a properly-documented incapacitating illness or a family emergency.

The Department of Economics at UW requires that the median GPA for all undergraduate economics courses fall within the range of 2.8 - 3.1. A student who receives a median grade on every assignment can expect a final GPA somewhere in that range.

I reserve the right to reward students who do extremely well on the final and/or show a pattern of sustained improvement throughout the quarter.

# Content Guide

# PART I: INTRODUCTION - WHAT IS MACROECONOMICS?

1. How to Measure Different Aspects of the Macroeconomy (GDP, Price Index, Unemployment)

- Textbook: Mankiw, Chapters 1 and 2
- Further Reading:
  - Krugman, Paul, "How Did Economists Get It So Wrong?" The New York Times, Sep 2, 2009 (https://link.gale.com/apps/doc/A207313932/AONE?u=wash\_main&sid=AONE&xid=f00ee5b2).
  - "Grossly Distorted Picture," The Economist, Mar 13, 2008 (https://link.gale.com/apps/ doc/A176665112/ITOF?u=wash\_main&sid=ITOF&xid=919e79da).
  - "How Nigeria's Economy Grew 89% Overnight," The Economist, Apr 7, 2014 (http://www.economist.com/blogs/economist-explains/2014/04/economist-explains-2).
  - "The Jobless Market; Welfare and Work," The Economist, May 16, 2020 (https://link.gale.com/apps/doc/A623826675/AONE?u=wash\_main&sid=AONE&xid=92907456)

# PART II: CLASSICAL THEORY: THE ECONOMY IN THE LONG RUN

- 2. National Income: Where it comes from and where it goes
  - Textbook: Mankiw, Chapter 3
  - Further Reading:
    - "U.S. Consumer Spending Surges, Brightening Economic Outlook," New York Times June 25, 2015 (http://www.nytimes.com/2015/06/26/business/economy/us-consumer-spending-surgesbrightening-economic-outlook.html).
- 3. The Monetary System: What it is and how it works
  - Textbook: Mankiw, Chapter 4
  - Further Reading:
    - "Money From Heaven," The Economist, Apr 23rd, 2016 (https://link.gale.com/apps/doc/ A451181789/AONE?u=wash\_main&sid=AONE&xid=eba64921).
    - "The Quantity Theory of Money," Federal Reserve Bank of St Louis Economic Synopses, 2006 (https://files.stlouisfed.org/files/htdocs/publications/es/06/ES0625.pdf)
- 4. Inflation: Its causes, effects, and social costs
  - Textbook: Mankiw, Chapter 5
  - Further Reading:
    - "U.S. inflation coming off the boil as prices increase slowly in August," Reuters, Sep 14, 2021 (https://www.reuters.com/world/us/us-core-consumer-prices-slow-sharply-august-2021-09-14/).

- 5. The Open Economy
  - Textbook: Mankiw, Chapter 6
  - Further Reading:
    - "Why open markets matter," OECD (https://www.oecd.org/trade/understanding-theglobal-trading-system/why-open-markets-matter/).
- 6. Unemployment and the Labor Market
  - Textbook: Mankiw, Chapter 7
  - Further Reading:
    - "U.S. unemployment rate soars to 14.7 percent, the worst since the Depression era," Washington Post, May 8, 2020 (https://www.washingtonpost.com/business/2020/05/08/april-2020-jobs-report/).
    - "Unemployment rose higher in three months of COVID-19 than it did in two years of the Great Recession," Pew Research Center, June 11, 2020 https://www.pewresearch.org/fact-tank/ 2020/06/11/unemployment-rose-higher-in-three-months-of-covid-19-than-it-did-intwo-years-of-the-great-recession/
    - "U.S. unemployment rolls shrinking in boost to labor market recovery," Reuters, Aug 5, 2021 (https://www.reuters.com/business/us-weekly-jobless-claims-fall-layoffs-lowestmore-than-21-years-2021-08-05/)
    - Civilian unemployment rate, seasonally adjusted. Bureau of Labor Statistics. https://www. bls.gov/charts/employment-situation/civilian-unemployment-rate.htm

# PART III: GROWTH THEORY: THE ECONOMY IN VERY THE LONG RUN

- 7. Economic Growth I: Capital accumulation and population growth
  - Textbook: Mankiw, Chapter 8
  - Further Reading:
    - Cohen, Daniel, "When the Growth Model Fails" The New York Times, Feb 12, 2015 (https://advance.lexis.com/document/?pdmfid=1516831&crid=49d61f03-7e43-46b1-9495-72a02c2985f1&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3AcontentItem%3A5F92-CPF1-JBG3-634X-00000-00&pdcontentcomponentid=6742&pdteaserkey=sr0&pditab=allpods&ecomp=yzvnk&earg=sr0&prid=90e1524c-4a4c-436e-b813-ad12dc1a0477).
- 8\*. Economic Growth II: Technology, empirics, and policy (time permitting)
  - Textbook: Mankiw, Chapter 9
  - Further Reading:
    - "Economists are turning to culture to explain wealth and poverty" The Economist, Sep 5, 2020 (https://outline.com/ThAeU4).

# PART IV: BUSINESS CYCLE THEORY: THE ECONOMY IN THE SHORT RUN

- 9. Introduction to Economic Fluctuations
  - Textbook: Mankiw, Chapter 10
  - Further Reading:
    - "Demand, not supply, is restraining the economy," CBS News, March 28, 2012 (https://www.cbsnews.com/news/demand-not-supply-is-restraining-the-economy/).
    - "Economic Demand Is Back. Supply Is the Problem." Bloomberg, May 14, 2021 (https:// www.bloomberg.com/opinion/articles/2021-05-14/economic-demand-is-back-supply-isthe-problem).
- 10. Aggregate Demand: Building and applying the IS-LM model
  - Textbook: Mankiw, Chapter 11 and 12
  - Further Reading:
    - Krugman, Paul, "IS-LMentary" The New York Times, Oct 9, 2011 (http://www.sfu.ca/ ~kkasa/Krugman\_ISLM.pdf).
    - "The LM curve: A not so fond farewell," NBER working paper 10123, Nov 2003 (https://www.nber.org/system/files/working\_papers/w10123/w10123.pdf)

11<sup>\*</sup>. The Open Economy Revisited: The Mundell-Fleming model and the exchange-rate regime (time permitting)

- Textbook: Mankiw, Chapter 13
- 12. Aggregate Suuply and the Short-Run Trade-off Between Inflation and Unemployment
  - Textbook: Mankiw, Chapter 14
  - Further Reading:
    - "The Famous 'Phillips Curve' to Predict Inflation Isn't Working Like It Should," Fortune Magazine, June 14, 2019 (https://fortune.com/2019/06/14/phillips-curve-unemployment-inflation/).
    - "Supply versus demand: Unemployment and inflation in the Covid-19 recession" Vox EU, June 29, 2020 (https://voxeu.org/article/assessing-keynesian-spillovers-covid-19-recession).
    - "Why does low unemployment no longer lift inflation?," The Economist, Aug 22, 2020 (https: //www.proquest.com/docview/2436132155/392C38478D4E4236PQ/6?accountid=14784)

# PART V: WRAP-UP

- 13\*. The Microfoundations of Consumption and Investment (time permitting)
  - Textbook: Mankiw, Chapter 19
- 14\*. What We Know, What We Don't (time permitting)
  - Textbook: Mankiw, Epilogue

### How to study effectively:

- Read the relevant parts of the chapter(s) carefully <u>before</u> each lecture. Try to get a good idea of both the questions asked and the approach (the concept and the reasoning process) to addressing the questions in the textbook.
- Take notes during class, but it is not necessary to copy every slide. The slides will be posted online. You are welcome (and, in fact, *encouraged*) to ask questions during class. Someone else might have the same question!
- After the lecture, attempt the problems and make sure you fully write down the answer to each question using the relevant concepts you have learned. In order to successfully answer a question, ask yourself the following: i) what does the question want me to do? ii) What relevant information does the question provide? iii) How do I go from the given information to the answer? You want to use the concepts and tools for thinking that you have learned to answer the question.

# Additional resources/ help available:

**EUB tutoring** The Economics Undergraduate Union provides drop-in tutors at Savery 328. For more information, see http://depts.washington.edu/ecnboard/eub-tutoring/

The CLUE (Center for Undergraduate Learning and Enrichment) Program Econ 301 is a part of the CLUE Program on campus. The CLUE evening study sessions provide extra educational support for students. The CLUE dates and times for Econ 301 will be announced on their website: http://webster.uaa.washington.edu/asp/website/get-help/clue/home/

**Instructional Center** Under-represented minority, first-generation college, and economically-disadvantaged students are highly encouraged to use this tutoring resource. The IC offers academic support and mentoring, as well as the skills and tools for successful life-long learning in Math, Economics, Engineering, Writing, and many other areas.

### Academic integrity

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.

Behavior that constitutes academic misconduct includes but is not limited to cheating on exams or quizzes (copying answers from others, using unauthorized materials, a student not taking their own quiz/exam, etc.), copying homework answers, plagiarism.

You may read more at http://www.washington.edu/cssc/facultystaff/academic-misconduct/

#### Miscellaneous

There will be no extra papers, assignments, or any other way for you to increase your grade at any time during or after the quarter. In case you aim for a certain grade, in order to prevent the chance of a disappointing grade, you should aim about a 0.4 grade higher than the minimum grade you desire. For example, if you want to make sure you receive a 3.0 in this class please aim for at least a 3.4.

Students are strongly encouraged to ask questions and foster discussion in class. These questions and discussions are useful in helping us all understand economics better.

The text and lectures are considered complementary. That is, a student will be most successful in this class when using both, rather than one or the other. Some material from the lecture may not be covered in the text and vice versa, so it's extremely important to take good notes during lecture as well as read the assigned sections of the text.

Learning the economic way of thinking is a demanding undertaking. This discipline requires at least three sets of skills from students. You need to: i) learn new concepts, vocabulary and, essentially, the language of economics; ii) learn to use abstract tools to model human economic behavior; and iii) learn to apply those tools to understand the likely consequences of various forces (government policies as well as other economic, social and natural events).

As such, applying the tools of economic analysis and ultimately learning the economic way of thinking requires a lot of practice. It is a great idea to form a study group (2-4 members) among peers in your class to discuss the material of the course and/or do practice problems together.

Please do not address the problems in your head only. Rather, use the concepts you learn plus the reasoning process to write out the solutions in full. The analysis is graphical but it also uses a basic level of geometry, algebra, and arithmetic. You should also write out some explanations about your graphical and mathematical solutions.

### Exam Taking Rules

- 1. You are allowed to have and use one two-sided half sheet of notes during your exam.
- 2. Open book exam rules (for quizzes, and if necessary for virtual exams):
  - (a) You are allowed to use your notes, including any summaries you prepare, and your textbook.
  - (b) You may not consult the internet. Using resources like Chegg, CourseHero o googling answers constitutes cheating and will treated as such.
  - (c) You must be on Zoom with your video on during all quizzes and exams. If using Proctorio on Canvas, you must agree to all terms and conditions.
- 3. Attendance and special accommodation
  - (a) 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.
  - (b) The University of Washington is committed to providing access and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. For information or to request disability accommodation contact: Disability Resources for Students (Seattle campus, matriculated students) at (206) 543-8924, (206) 543-8925, or email at uwdss@uw.edu

### Covid-19 addendum

Lectures will be offered live at the regularly scheduled class time. Exams will be held in-person, and students are expected to be present for exams, subject to absences due to illness. If you are ill and must miss an exam, please contact the instructor immediately to receive information about the makeup exam. Makeup exams are scheduled on a one-to-one basis. If you have established accommodations with Disability Resources for Students (DRS), please contact the instructor immediately to discuss these accommodations.

### From https://www.washington.edu/coronavirus/status/:

Properly worn masks must be worn at all times while you are in class. You must stay home if you are sick, have COVID-19 symptoms, or if you test positive for COVID-19. Notify UW Environmental Health & Safety if you test positive for COVID-19 or have close contact with an individual who has tested positive. This requirement applies even if you're fully vaccinated. EH&S conducts public health follow-up, including contact tracing. Additional details and contact information are in the relevant FAQ.