# University of Notre Dame

## **Department of Economics**

## Economics 30020 – Intermediate Macroeconomics Theory Sections 02 and 03 Spring 2021

Instructor:	Prof. César Sosa-Padilla	Class times:		
	3013 Jenkins Nanovic Hall	Section 02	MW 9:35am-10:50am	Zoom
	E-mail: csosapad@nd.edu	Section 03	MW 11:10am-12:25pm	Zoom
	https://sosapadilla.github.io/			

## **Course Description**

Our broad objective is to develop the foundations of modern macroeconomic theory, which build explicitly on the principles of microeconomic theory, and use them for studying various macroeconomic issues. A key focus will be on the instruments by which fiscal policy and monetary policy can affect the economy. We will also review some of the history of macroeconomic thought. Additionally, we will review the leading theories of long-run growth. Throughout the course the emphasis will be on theoretical and logical rigor and policy applications.

The course presumes knowledge of both micro- and macroeconomics at the principles level, as well as elementary differential calculus and high school level algebra. It is helpful, although not necessary, to have taken Intermediate Microeconomics Theory (Econ 30010) or a similar course. You should also be comfortable with a spreadsheet program like Microsoft Excel.

#### Student Learning Goals

Upon successful completion of this course, you will be able to:

- use micro-founded models to analyze macro data.
- understand the effect of government policy on various sectors of the economy.
- identify the major facts about long-run growth and interpret the theories that rationalize them.
- apply the material learned to evaluate the effects and merits of alternative policies.

#### **Textbook and Readings**

The main (and required) textbook for this course is *Intermediate Macroeconomics*, a book currently being written by Julio Garin, Robert Lester and Eric Sims. The pdf for the August 2020 version of this book is freely available at: https://www3.nd.edu/~esims1/GLS\_august\_2020.pdf. I will refer to it as *GLS*. The course will follow this book fairly closely, however I will also assign additional reading as we move along.

A great complement to the required textbook is *Modern Macroeconomics*, by Sanjay K. Chugh, MIT Press 2015. Some assigned readings will be from this book (I will refer to it as MM).

Apart from the above books, I may assign readings from newspapers or academic journals. I will make sure to post links to these readings on the course website.

## Mode of Instruction

Due to the multiple challenges posed by the global pandemic, this class will 100% online. This is not ideal, obviously, but I will do my best to minimize the inconveniences and leverage the few comparative advantages of e-learning.

The plan for most weeks is the following:

- every week I will upload 1 or 2 videos covering the main topic of that week. I will do this by (the previous) Sunday evening, at the latest.
- you are then responsible for watching the video(s) before Wednesday (either at the Monday class time, or at whatever time works best for you).
- on Wednesday, we meet at the regular class time to (i) review doubts about that week's topic, and (ii) go over practice questions.

However, some weeks may be different: depending on the topic (and at which point in the semester we are), it will be better to meet both days of the week. Barring any unforeseen circumstances, we will meet at least once every week. The current (preliminary and subject to change) plan is:

- 1. Meet **live on Zoom** every Wednesday of the semester
- 2. Meet live on Zoom the following Mondays: March 8 (the class before the first midterm exam), April 19 (the day of the second midterm exam) and May 10 (our last class of the term).

So, two things are key during this semester: flexibility and communication.

#### Communication and Course Website

I will mostly use e-mail to make announcements regarding the course. Please check regularly your ND email account. Additionally, I will do my best to post all announcements on the course website.

All the materials for this course will be posted on Sakai. Your grades will also be uploaded via Sakai.

#### Office Hours

Office hours begin the week of Monday February 8th. They will be **Monday and Wednesdays**, 2:15–3:15pm on Zoom. The link is: https://notredame.zoom.us/j/95521184849. The passcode is: 060395.

If you are taking the class from overseas, don't worry: I will be **very** flexible with additional office hours.

If my scheduled office hours and those of the TAs are in conflict with your schedule, you can request an appointment with me via email at csosapad@nd.edu. Please use "Intermediate Macroeconomics" in the subject line.

#### **Teaching Assistants**

- Parker Moorman (pmoorman@nd.edu). Office hours: Tuesdays, 5-7pm, E245 Corbett Family Hall.
- Maddie Penn (mpenn1@nd.edu). Office hours: Tuesdays 9.30-10.30am and 4-5pm, on Zoom. The link is: https://notredame.zoom.us/j/98167682717. The passcode is: 453256.

#### Assessment and Grading Scheme

- 1. Your final grade (FG) will depend on your performance on the following assessments: six problem sets (PS), two midterm exams (ME), and a final exam (FE).
- The final exam (FE) will be held on Monday, May 17 1:45pm 3:45pm. This date is determined by the University and there is nothing I can do about it. Please make note of the date now. The final exam will be online. Zoom link and other details to follow.
- 3. The first midterm (ME\_1) is scheduled for Wednesday March 10th. The second midterm (ME\_2) is scheduled for Monday April 19th. Both midterms will take place at the usual class time, and both will be online.
- 4. Should you have a valid, University-approved conflict with any of the exam times, consult with me at least a week ahead of the exam date to make alternative arrangements in accordance with the university guidelines. Failure to resolve exam conflicts at least a week in advance may mean that no alternative arrangements will be available.
- 5. Your final grade (FG) will be computed as follows: the FE is worth 35% of the grade and each ME is worth 25% of the grade. The remaining 15% of the final grade comes from the 5 mandatory problem sets (PS), each worth 3%.
- 6. Assessments will be graded by the TA according to my instructions. All the assessments will be graded on the scale of 0–100%. If you need a clarification about an assessment grade please contact the TA first and then contact me if you are unable to resolve the problem.
- 7. The problem sets are graded on a check plus, check, check minus scale, where check plus is 100%, check is 85%, and check minus is 50%. Failure to turn something in results in a 0%. All problem sets will be posted on Gradescope, under "Assignments." You have to **submit the answers through Gradescope** as well (see the course site for more details). I will provide detailed, typed solutions to all problem sets after they have been turned in.
- 8. The FG may be curved. Grades may be curved only in the upward direction. My objective (in accordance with departmental norms) is for the average letter grade for the entire semester to be close to a B+. The following is a conversion for points into letter grades:

FG > 94А  $90 \le FG < 94$ A-B+ $87 \le FG < 90$  $83 \le FG \le 87$ В  $80 \le FG < 83$ B-C+ $77 \le FG \le 80$ С 73 < FG < 77C-70 < FG < 73D  $65 \le FG < 70$ F FG < 65

9. **Regrading policy:** If, after going over your assignment and the assignment solutions, you believe some of your solutions were more correct than originally judged to be, you may submit, in writing, an exam regrade request. Your regrade request must specify which solutions(s) you believe were not graded appropriately and a substantive explanation for why you believe your solutions are more correct than originally judged (thus, regrade requests that consist of essentially nothing more than "I think I should have received more points on this question" will not be considered). Your entire exam is subject to regrade, so the overall grade may go up, down or remain unchanged. Exam regrade requests are due no later than 1 week (7 calendar days) after exams are returned.

- 10. All midterms and the final exams are **individual-work**. Problem sets can be worked on in groups of up to 3 students. If you choose to work in groups, **please** make sure to include the names of all group-members when you submit via Gradescope.
- 11. A student who does not respect the time limits during a test will get a 10% penalty on that test.
- 12. Methods of evaluation for PSs, MEs, and FE: short-answer questions, numerical calculations, mathematical derivations, true-false, multiple choice, and fill-in-the-blank questions.
- 13. Your grades on problem sets and exams will be posted on Sakai. Please immediately report to the instructor any discrepancy between the posted and actual grades.

#### Guidelines and Expectations

Students are expected to come to class and to participate in various ways in the lectures: either by asking questions, by pointing out errors on the slides, or by answering questions I ask during lectures.

Most of the time, I will deliver my lectures using slides. The slides will be posted on the course website after classes (and if I can, even before classes). Occasionally, I will use the blackboard/whiteboard to cover additional material. The slides are <u>not</u> lecture notes. They mainly provide an outline of what will be discussed in class.

A <u>reading schedule</u> is outlined in this syllabus (see below). Students are assumed to have <u>read the material ahead of</u> <u>the lectures</u>. Students should NOT expect me to talk about every single textbook page. The lectures will focus on the most important and challenging parts of the material. More basic material will be left for the students to study on their own. I will refer to this more basic material in the lectures, hence the need to read ahead to understand the lectures.

### Honor Code

Students are expected to understand and abide by the principles and procedures set forth in the University of Notre Dame Academic Code of Honor (http://honorcode.nd.edu) and uphold the pledge that "As a member of the Notre Dame community, I will not participate in or tolerate academic dishonesty."

#### **Important Dates**

February 3: First day of classes.
February 8: Office hours start.
February 16: PS\_1 due by 11pm. Submit through Gradescope.
March 2: PS\_2 due by 11pm. Submit through Gradescope.
March 10: Midterm Exam 1 (in class, note your section time). This is a Wednesday.
March 23: PS\_3 due by 11pm. Submit through Gradescope.
April 6: PS\_4 due by 11pm. Submit through Gradescope.
April 19: Midterm Exam 2 (in class, note your section time). This is a Monday.
April 21: Mini-break – no classes, no office hours.
May 4: PS\_5 due by 11pm. Submit through Gradescope.
May 10: Our last day of classes.
May 17 Final Exam.

## **Course Outline**

The tentative (and intentionally ambitious) outline for the course is as follows:

- 1. Introduction (approximately 1 lecture)
  - (a) Math Review (GLS Appendix A and MM Ch. 1 and Appendix)
  - (b) Basic economic concepts (GLS Ch. 1)
  - (c) What is a model (*GLS* Ch. 2 and Lucas, Robert E. "What economists do." Journal of Applied Economics 14.1 (2011): 1-4)
  - (d) Brief history of economic thought (GLS Ch.3, and MM Ch. 10-14.)
- 2. Economic Growth (approximately 5 lectures)
  - (a) Stylized facts (GLS Ch. 4)
  - (b) Solow growth model (GLS Ch. 5-6)
  - (c) Cross-country differences in standards of living (GLS Ch. 7)
  - (d) Overlapping generations (GLS Ch. 8)
- 3. Consumption (approximately 5 lectures)
  - (a) Two period consumption-saving problem (GLS Ch. 9)
  - (b) Multi-period consumption-saving problem (GLS Ch. 10)
  - (c) Endowment Economy Equilibrium (GLS Ch. 11)
  - (d) Fiscal policy and Ricardian Equivalence (GLS Ch. 13.1-13.2)
- 4. Neoclassical Business Cycle Model (approximately 6 lectures)
  - (a) Production and labor supply (GLS Ch. 12)
  - (b) Money (GLS Ch. 14)
  - (c) Neoclassical business cycle model (GLS Ch. 17-18)
  - (d) Taking the model to the data (GLS Ch. 19)
  - (e) Money, inflation, and interest rates (GLS Ch. 20)
  - (f) Critiques (GLS Ch. 21)
- 5. New Keynesian Model (approximately 6 lectures)
  - (a) IS-LM-AD model (*GLS* Ch. 23)
  - (b) IS-LM-AD-AS model (GLS Ch. 24-25)
  - (c) Dynamics and the Phillips Curve (GLS Ch. 26)
  - (d) Monetary Policy and the Zero Lower Bound (GLS Ch. 27-28)
- 6. Topics in Finance and Macro (approximately 3 lectures)
  - (a) Basics of banking (GLS Ch. 30)
  - (b) Liquidity transformation and bank runs (GLS Ch. 32)
  - (c) Financial crises and the Great Recession (GLS Ch. 36)

At certain points in the course it may make good sense to modify the course content described in this syllabus. The instructor reserves the right to modify elements of the course and will notify students accordingly (in class and post any changes in the course website).

February 2, 2021