

Intermediate Macroeconomic Theory
Economics 30020-02
Fall 2024
The University of Notre Dame du Lac

Times and Locations:

Monday and Wednesday, 2-3:15 pm, DeBartolo Hall 126

Instructor:

Professor Eric Sims

3020 Jenkins & Nanovic Hall

esims1@nd.edu

[Personal Website](#)

Course Website: [Canvas](#)

Office hours: Mondays, 5:15-6:30 pm, JNH 3005

Thursdays, 10:00-11:00 am, JNH 3005

Course Overview:

This is an intermediate-level course in macroeconomic theory. Macroeconomics concerns the behavior of the aggregate economy. In the course, we will examine macroeconomic data and study models designed to help us understand those data. We will pay special attention to the role of policymakers in shaping macroeconomic outcomes. We will closely examine the 2007-09 financial crisis and ensuing recession, as well as the COVID-19 recession and subsequent inflation.

The course presumes knowledge of both micro and macro at the principles level, as well as differential calculus and high school-level algebra. It is helpful, though not necessary, to have taken intermediate micro. You should also be comfortable with a spreadsheet program like Microsoft Excel. The TAs will hold review sessions covering basic topics in mathematics and Excel early in the semester.

Exams and Grading:

There will be two midterm exams and a final. The dates for the midterms are Monday, September 30 and Monday, November 11. Midterms will be held in the normal class time and location. The final exam will be held on December 17 from 10:30 am - 12:30 pm (location TBD). Should you have a valid, University-approved conflict with any of these exam times, you should consult with me at least one week before the exam date. Failure to consult with me at least one week in advance may result in alternative arrangements being unavailable.

I will hold additional office hours and will host a review session prior to each exam. In addition, I will provide you with copies of old exams to assist you in your studying. I will provide you with typed solutions to the old exams. I am happy to discuss or work through them during office hours or the review session. Exams will contain a mixture of objective true/false and/or multiple-choice questions and several free-response questions requiring you to use math, graphs, and/or words in your answer.

Each midterm exam will count for 20 percent of your final course grade. The final exam will count for 30 percent and will be cumulative. The remaining 30 percent of your course grade will come from problem sets and quizzes. There will be five problem sets assigned over the course of the semester. Collectively, the problem sets will count for 15 percent of the course grade. There will be 11 quizzes administered online (in Canvas) over the course of the semester. These are short, weekly quizzes with objective true/false and/or multiple-choice questions. You may drop your lowest quiz score, with the remaining 10 quizzes accounting for 15 percent of the course grade.

You will be given numerical scores for all problem sets, quizzes, and exams. These will be based on a 100-point scale. Exam scores may be curved, with the objective of having an average letter grade of B for the exams. Exams will only be curved in the upward direction. Combined with the problem sets and quizzes (which typically bring up student grades), my objective (in accord with departmental norms) is for the average letter grade across students for the entire semester to be close to a B+. But this is not set in stone – the average course grade could end up either higher or lower depending on a number of factors.

The following is a conversion for points into letter grades, where g denotes total points:

A	$g \geq 94$
A-	$90 \leq g < 94$
B+	$87 \leq g < 90$
B	$83 \leq g < 87$
B-	$80 \leq g < 83$
C+	$77 \leq g < 80$
C	$73 \leq g < 77$
C-	$70 \leq g < 73$
D	$65 \leq g < 70$
F	$g < 65$

You may work on the homework assignments in groups of up to four students. If you work in a group, you can turn in one assignment, but please make sure that the names of all group members legibly appear on the first page of the assignment. All group members will receive the same grade on the assignment. While you are permitted to work in groups, note that it is to your detriment to rely on your group members to do the work for you.

As noted above, quizzes will be administered online via Canvas. The quizzes are open-book and open-note but will be timed (no more than 10 minutes). You will have a 24-hour window in which you can complete each quiz at a time of your choosing. You are to work on quizzes alone and are not to consult with other members of the class concerning quizzes until after the window closes. Failure to comply with this rule may result in an Honor Code violation.

I will be using the grading feature on the course website through Canvas. This allows you to keep close track of your performance in the course.

To summarize, grading for the course can be broken down as follows:

- Midterm #1: 20 percent
- Midterm #2: 20 percent
- Problem sets: 15 percent
- Quizzes: 15 percent
- Final exam: 30 percent

Textbook and Readings:

The required textbook for the course is *Intermediate Macroeconomics*. This is the third draft of a textbook authored by yours truly along with two former Notre Dame PhD students in economics – Julio Garin of Claremont McKenna College and Robert Lester of Colby College. The book features thirty-eight chapters and three appendixes (the appendix includes reviews for math and statistics). At present, the book is over 1000 pages long. A .pdf copy of the book will be provided to you free of charge on the course website and is also available on my personal [website](#). I realize that you have to pay to print, but if I turned this into a course packet you would be paying for that as well. And if this ever gets turned into an actual published book, you would be paying through the roof for the nice hardbound cover and glossy pages. You need not print any or all of the book, and can instead read it on your computer or mobile device. In referencing the textbook, I will call it “GLS” for “Garin, Lester, and Sims.” I would *not* recommend printing the whole thing out at once at the beginning of the term (we will not cover the entire book). Should you prefer to print, I would print chapter-by-chapter as we move along.

The textbook is an extension of the online course notes which I have used for this course for the last several years. It is a work in progress and there are likely typos. I would greatly appreciate any feedback you have on the book – from pointing out typos, to stating where things are confusing, to comments on the structure of the book.

The textbook has blue hyperlinks that direct you to outside readings. These are not required but are meant to supplement the textbook. Some of these are simply Wikipedia pages on a particular topic, others are links to formal academic papers. These links will work simply by clicking on the link in the .pdf document. This is an advantage of reading the book on a computer or mobile device.

At the end of each chapter, there is a chapter summary (in bullet points), key terms (in bullet points), and both “Questions for Review” and “Exercises.” I will refer to the former as “Questions” and the latter as “Exercises.” The Questions typically only require a shorter written response and are meant to review the material presented in the textbook. The Exercises are longer, often featuring multiple parts, and require you to do some math and draw graphs. Some of the Exercises include an Excel component. The Questions and Exercises are included for your own self-review. Some of them may be included on assigned problem sets. Other problem set questions will not be from the textbook.

Attendance:

There is no formal attendance or participation grade. That being said, I do monitor attendance patterns. If I notice that you are missing an inordinate number of classes, I may reach out, and I reserve the right to reduce your final course grade if absences are excessive.

Office Hours:

I will hold two sets of regularly scheduled office hours. The first set of office hours will be from 5:15-6:30 pm on Mondays and the second will be 10:00-11:00 am on Thursdays. For both sets of office hours, I have reserved 3005 in JNH (which is labeled “classroom”). If you take the elevator to the third floor, this room is just down the hall directly across from the bathrooms.

I reserve this space because my physical office will only accommodate a couple of students at most. In my experience, many students show up to office hours. My preference is to hold office hours as “group sessions” where all are welcome at the same time. I think that students benefit from hearing the questions asked by other students. If you need to meet with me individually about a matter you do not wish to discuss in front of other students, please try to arrange something outside of the regularly scheduled office hour times.

Please note: while I have reserved JNH 3005 for office hours, if there are no customers I will typically be in my office (JNH 3020, which is just down the hall). If you show up to 3005 and I’m not there, just come find me in my office.

In addition to regularly scheduled office hours, I am also available for lunch and discussion with students in either North or South Dining Halls. I enjoy getting to know you, and in a perfect world would go to lunch with everyone. If you’d like to catch lunch with me, please do not hesitate to reach out and ask. It usually works best if it’s a small group of students from class, but I’m also willing to do lunch with an individual.

The best way to communicate with me is via email. Please include “Intermediate Macro” in the subject of the email. I will do my best to get back to you within 24 hours.

Teaching Assistants:

There will be two undergraduate teaching assistants helping out with the course this semester: Nolan Fletes (nfletes@nd.edu) and John Falger (jfalger@nd.edu). They will each hold one office hour per week. These will be held in the evenings (to facilitate attendance) in DeBartolo.

Nolan: Mondays 6:45-8:15 pm, location 210 DeBartolo
John: Tuesdays 6:45-8:15 pm, location 210 DeBartolo

Nolan and John have taken Intermediate Macro and have excelled. I hope that you will take advantage of their help. You should try to reserve any questions for them for the regularly scheduled office hours. Emails with questions about the course and other logistical details should be directed to me. I will let you know as soon as I have locations for these office hours.

TA office hours at the regularly scheduled times will begin the week of Monday, September 2. There will be no TA sessions the first week of class.

Please also note that the Department hosts “peer tutoring” sessions for students in our core course (Intermediate Micro and Macro, Statistics, and Econometrics). These are drop-in sessions, and are available on Monday, Tuesday, and Wednesday evenings from 6:30-8:30 in DeBartolo 244.

Prayer Before Class:

I will open each class with a free-form prayer asking God to guide us as we seek to better understand the world around us. My Catholic faith is important to me, and at a Catholic university I think it is crucial that we ask for God's assistance as we engage in important endeavors. If you would like to add a prayer intention, please email me your intention before class and I will include it in my opening prayer.

Important Dates:

Both midterms are on Mondays. With the exception of the last one, problem sets will be due on Wednesdays (at the beginning of class). The timed quizzes will become available on Thursdays at 6:00 pm and will be available until Fridays at 6:00 pm (with a 10-minute window once you begin the quiz). Below, quiz dates are listed as Fridays (though they are available to be completed starting Thursday evening). There are two exceptions to the quiz timing, both on Fridays the 13th: Quiz #2 will be available starting at 6:00 pm on Wednesday, September 11 and open through Thursday, September 12 (to accommodate Fr. Dowd's inauguration festivities on September 13), and Quiz #11 will be available starting at 6:00 pm on Wednesday, December 11 and open through Thursday, December 12 (to accommodate the reading day on December 13).

Below is a detailed outline of due dates and other important dates:

- August 28: first class meeting
- September 2: Labor Day (class in session)
- September 3: last day for course discontinuance
- September 6: Quiz #1
- September 11: Problem Set #1 due
- September 12: Quiz #2 (note this is on a Thursday, rather than a Friday, due to Fr. Dowd's inauguration)
- September 20: Quiz #3
- September 25: Problem Set #2 due
- September 27: Quiz #4
- September 30: Midterm #1
- October 11: Quiz #5
- October 16: Problem Set #3 due
- October 18: Quiz #6
- October 21: no class (Fall Break)
- October 23: no class (Fall Break)
- November 1: Quiz #7
- November 6: Problem Set #4 due
- November 8: Quiz #8
- November 11: Midterm #2
- November 22: Quiz #9
- November 27: no class (Thanksgiving)
- December 6: Quiz #10
- December 9: Problem Set #5 due (note this is a Monday, not a Wednesday)

- December 12: Quiz #11 (note this is a Thursday, not a Friday, due to the reading day on December 13)
- December 17: final exam (10:30-12:30)

Course Outline (tentative and subject to revision):

(1) Introduction (approximately 1 lecture)

- Math Review (GLS Appendixes A-B, math review handout)
- Basic economic concepts (GLS Ch. 1)
- What is a model (GLS Ch. 2)
- Brief history of economic thought (GLS Ch.3)

(2) Economic Growth (approximately 5 lectures)

- Stylized facts (GLS Ch. 4)
- Solow growth model (GLS Ch. 5-6)
- Cross-country differences in standards of living (GLS Ch. 7)

(3) Consumption (approximately 5 lectures)

- Two-period consumption-saving problem (GLS Ch. 9)

Midterm #1

- Endowment Economy Equilibrium (GLS Ch. 11)
- Fiscal policy and Ricardian Equivalence (GLS Ch. 13.1-13.2)

(4) Neoclassical Business Cycle Model (approximately 7 lectures)

- Production and labor supply (GLS Ch. 12)
- Money (GLS Ch. 14)
- Neoclassical business cycle model (GLS Ch. 18-19)
- Taking the model to the data (GLS Ch. 20)
- Money, inflation, and interest rates (GLS Ch. 21)
- Policy implications and critiques (GLS Ch. 22)

Midterm #2

(5) New Keynesian Model (approximately 6 lectures)

- IS-LM-AD model (GLS Ch. 24)
- IS-LM-AD-AS model (GLS Ch. 25-26)
- Dynamics and the Phillips Curve (GLS Ch. 27)
- Monetary Policy and the Zero Lower Bound (GLS Ch. 28-29)

(6) Topics and Applications (approximately 2 lectures)

- Financial Crisis and Great Recession (GLS Ch. 37)
- COVID-19 and Inflation (handout)

Final Exam