Economics 30020: Intermediate Macroeconomic Theory
Spring 2018
The University of Notre Dame du Lac

Times and Locations:
Section 01: Tuesday and Thursday, 11:00 – 12:15 pm, DeBartolo 140
Section 02: Tuesday and Thursday, 9:30 – 10:45 am, DeBartolo 140

Instructor:
Professor Eric Sims
3036 Nanovic Hall
esims1@nd.edu
(574) 631-6309
Personal Website
Course Website: Sakai
Office hours: Tuesdays, 3:30-5:00 pm, Nanovic 3005 (or 3036)
Wednesdays, 5:00-7:00 pm, Nanovic B062

Course Overview:
This is a course in macroeconomic theory at the intermediate level. Macroeconomics is concerned with the behavior of the aggregate economy. In the course we will be examining macroeconomic data and studying models designed to help us understand those data. We will pay special attention to the role of policymakers in shaping macroeconomic outcomes, and will also take a close look at the recent financial crisis and ensuing recession. A detailed description of topics is available in the course outline at the end of the syllabus.

The course presumes knowledge of both micro and macro at the principles level, as well as elementary 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 Tuesday, February 20 and Thursday, March 29. Both of these exams will be administered from 8:00 – 9:15 am to both sections simultaneously. The location for these exams will be 101 Jordan Hall. These dates are official university "departmental exams" and take precedence over other commitments. The spring 2018 departmental exam schedule can be found on the Registrar's page. We *will* have class at the regularly scheduled times during those weeks (including the days of the exams). As of now, I do not plan on having to cancel any classes, but the need may arise once the semester gets going. Having class on these days gives us some wiggle room. It also ensures you (or your parents, or the government subsidizing your education through loans) get your money's worth.

The final exam will be held on Friday, May 11 from 1:45 – 3:45 pm. The final will be administered to both sections simultaneously, and will be held in a location to be determined. The final exam

schedule for spring classes can also be found on the Registrar's page. Note that this is literally *the last* scheduled exam slot of finals week. This stinks, but there is nothing I can do about it. Please make note of the date now. I will not administer the exam early to anyone who has booked early travel home.

Should you have a valid, University-approved conflict with any of these exam times, consult with me at least a week ahead of an exam date to make alternative arrangements in accord with University guidelines. Failure to resolve exam conflicts at least a week in advance may mean that no alternative arrangements will be available.

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 them or work through them in office hours or in the review session. Exams will contain a mixture of objective true/false and/or multiple choice questions, along with several free response questions requiring you to use math, graphs, and or words in your answer.

Each midterm exam will count 25 percent of your course grade. The final exam will count for 30 percent of your course grade and will be *cumulative*. The remaining 20 percent of your course grade will come from graded homework. There will be ten problem sets assigned throughout the semester. These will all be collected for a grade. Each problem set therefore accounts for 2% of your overall course grade. Late homework assignments will not be accepted for credit without a valid excuse. 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%. I will provide detailed, typed solutions to all problem sets after they have been turned in.

You will be given numerical scores for all problem sets 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 (which usually bring up student grades), my objective (in accord with departmental norms) is for the average letter grade 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 in groups of up to four students on the homework assignments. 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. The groups may be comprised of students from either of the two sections I am teaching. 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.

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

Textbook and Readings:

The required textbook for the course is *Intermediate Macroeconomics*. This is the second 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 almost 800 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" (not to be confused with generalized least squares). Because the book remains a work in progress, I may make small edits to it here and there over the course of the semester. This may change page numbers, etc. Hence, for this reason, I would *not* recommend printing the whole thing out at once at the beginning of the term. 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.

Throughout the textbook, there are blue hyperlinks which 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, other 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 policy. Because of limited space in the classrooms, I do ask that you attend the lecture of the section to which you are assigned. For special circumstances (e.g. an

interview), you can attend an alternate section without permission as long as space permits, but please do not make a habit out of this.

Office Hours:

I will hold two sets of regularly scheduled office hours. The first set of office hours will be from 3:30-5:00 pm on Tuesdays and the second will be 5:00-7:00 pm on Wednesdays. I have reserved room 3005 in Nanovic Hall (which is labeled "classroom") for both sets of office hours. If you take the elevator up to the third floor, this room is just down the hall to your left across from the bathrooms. I have reserved this larger space because of the large number of students enrolled in the class combined with the fact that my physical office can only comfortably accommodate a couple of students at a time. If no students show up to this office hour, I will typically hang out in my actual office (Nanovic 3036), which is just a few steps down the hall from 3005. So if I'm not in the classroom, I'll be in my actual office. I will not hold office hours during the first week of class. Formal office hours will begin the week beginning Monday January 22. I will hold additional office hours around exam times.

My preference is to hold office hours where many students can come at once and benefit from questions other students are asking. Problem sets will typically be due on Thursdays, and both office hours are set prior to problem set due dates intentionally. I do not have a problem working through problem set questions with students prior to the problem sets being due. If you have questions or concerns which need to be addressed one-on-one, I would advise that you email me for an appointment, as I anticipate a handful of students will be present during most regularly scheduled office hours.

In addition to regularly scheduled office hours, I am also available for lunch and discussion at 12:30 on Tuesdays and Thursdays in either South or North Dining Hall (i.e. right after class ends). I enjoy getting to know students, and in a perfect world would go to lunch with everyone, either individually or in small groups, over the course of the semester. If you'd like to go to lunch, either email me in advance or contact me after class. *Please do not be shy about asking me to join you for lunch. I want to get to you know better outside of class.* If you are unable on Tuesdays and Thursdays I am also available for lunch on other days of the week at either North or South Dining Halls.

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: Matthew Lupo (mlupo@nd.edu) and Cary Palmer (cpalmer5@nd.edu). They will each hold one office hour per week. These will be held in the evenings (to facilitate attendance) in DeBartolo. At present I cannot give you an exact location because the Registrar will not allow us to reserve rooms prior to the first day of classes.

Cary: Tuesdays 6:30-7:30 pm, DeBartolo 215
Matt: Wednesday 9-10 pm, DeBartolo 208

Cary and Matt 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 set for these office hours.

TA office hours at the regularly scheduled times will begin the week beginning Monday January 22. Things will be a bit different the first week of class. Though there is no problem set due the first full week of class, the TAs will hold a review session covering basic concepts in math and how to navigate in Microsoft Excel (several problem set questions will include an Excel component). If you are at all uncomfortable with math or Excel, you should try to make it to one of the TA office hours in the first week. I will not be spending significant class time reviewing math and Excel. These review sessions will be n Wednesday January 17 at 5:00 pm and Thursday January 18 at 5:00 pm, both in DeBartolo 213.

Course Website:

All course materials will be available to you on Sakai. There is one Sakai page for both combined sections. I will also be using Sakai to record your grades.

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. Please limit yourself to non-frivolous intentions. While former head football coach Gerry Faust famously used to ask his players to recite a Hail Mary before important plays, and while I (and I'm sure some of you) are guilty of this practice as well, I will not entertain intentions for sport victories in the opening class prayer.

Important Dates:

The first midterm is on a Tuesday, second midterm is on a Thursday, and the final exam is on a Friday. All problem sets are due on Thursdays at the beginning of class. Please make note of the following important days:

January 16: first day of class
January 25: Problem Set 1 due
February 1: Problem Set 2 due
February 8: Problem Set 3 due
February 15: Problem Set 4 due
February 20: Midterm Exam 1, 8:00-9:15 AM, 101 Jordan
March 1: Problem Set 5 due
March 8: Problem Set 6 due
March 13 and 15: spring break, no class
March 22: Problem Set 7 due
March 29 (Holy Thursday): Midterm Exam 2, 8:00-9:15 AM, 101 Jordan
April 12: Problem Set 8 due
April 19: Problem Set 9 due
April 26: Problem Set 10 due
May 1: last class meeting

May 11: Final exam, 1:45-3:45 PM, location TBD

Course Outline (tentative and subject to revision):

(1) Introduction (approximately 1 lecture)
- a. Math Review (GLS Appendix A)
- b. Basic economic concepts (GLS Ch. 1)
- c. What is a model (GLS Ch. 2)
- d. Brief history of economic thought (GLS Ch.3)

(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)

(3) Consumption (approximately 5 lectures)
- a. Two period consumption-saving problem (GLS Ch. 8)
- b. Endowment Economy Equilibrium (GLS Ch. 10)
- c. Fiscal policy and Ricardian Equivalence (GLS Ch. 12.1-12.2)

(4) Neoclassical Business Cycle Model (approximately 7 lectures)
- a. Production and labor supply (GLS Ch. 11)
- b. Money (GLS Ch. 13)
- c. Neoclassical business cycle model (GLS Ch. 15-16)
- d. Taking the model to the data (GLS Ch. 17)
- e. Money, inflation, and interest rates (GLS Ch. 18)
- f. Critiques (GLS Ch. 19)

(5) New Keynesian Model (approximately 7 lectures)
- a. IS-LM-AD model (GLS Ch. 21)
- b. IS-LM-AD-AS model (GLS Ch. 22-23)
- c. Dynamics and the Phillips Curve (GLS Ch. 24)
- d. Monetary Policy and the Zero Lower Bound (GLS Ch. 25-26)

(6) Topics in Finance and Macro (approximately 4 lectures)
- a. Basics of banking (GLS Ch. 28)
- b. Liquidity transformation and bank runs (GLS Ch. 30)
- c. Financial crises and the Great Recession (GLS Ch. 33)