

# Economics 30020: Intermediate Macro Theory Spring 2019

### **Professor:**

Benjamin Pugsley 3029 Jenkins Nanovic Halls bpugsley@nd.edu

### Teaching Assistants:

Anthony DiPaulo (adipaulo@nd.edu), Head TA Julia Reyes (jreyes3@nd.edu) William Stewart (wstewar3@nd.edu)

#### Lectures:

ECON30020-01: Mon and Wed 9:30 AM - 10:45 AM, DeBartolo Hall 136 ECON30020-02: Mon and Wed 11:00 AM - 12:15 PM, DeBartolo Hall 136

### Office Hours:

Mon 1:15-2:15 PM and Wed 2:30-3:30 PM in 3029 Jenkins Nanovic Hall.

The best way to communicate with me is via email. Please include "Intermediate Macro" in the subject of the email. Emails with questions about the course and other logistical details should be directed to me. I typically allocate Monday and Thursday afternoons to answer emails about the course. If your question is urgent, please indicate this in the subject line and I will try to respond sooner.

### **TA Review Sessions:**

Anthony: Tues 9 PM, 240 DeBartolo Hall Julia: Tues 7 PM, 240 DeBartolo Hall William: Mon 6 PM, 205 DeBartolo Hall

Office hours and TA review sessions start the week of 1/21. The first week of review sessions will cover the math in GLS Appendix A and Microsoft Excel (which is used in some problem set questions) since I will not cover these during class time. The remaining weeks will review topics from the lectures.

#### Coffee Chats:

I want to get to know everyone, and I would like to invite small groups of students to join me for lunch or coffee throughout the semester. Lunch will be in South Dining Hall (meal plan) and Coffee Chats will be in the cafe at the north end of Duncan (my treat). Signups on Sakai, if interested.

## Course Textbook and Website:

Garín, Lester, and Sims (GLS), Intermediate Macroeconomics, v3.0.0, download from Sakai.

All course materials, including the textbook, are posted on Sakai (http://sakai.nd.edu). There is one Sakai page for both combined sections. Problem sets are also submitted through Sakai.

# Course Description

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 2008 financial crisis and the Great Recession.

# Outline (tentative):

Topic 1-Introduction

- 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)

## Topic 2–Economic growth

- 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)

# Topic 3–Dynamics and equilibrium

- a. Two period consumption-saving problem (GLS Ch. 9)
- b. Endowment economy equilibrium (GLS Ch. 11)
- c. Fiscal policy and Ricardian equivalence (GLS Ch. 13.1-13.2)

### Topic 4-Neoclassical business cycle model

- a. Production and labor supply (GLS Ch. 12)
- b. Neoclassical business cycle model (GLS Ch. 17-18)
- c. Money (GLS Ch. 14)
- d. Money, inflation, and interest rates (GLS Ch. 20)
- e. Taking the model to the data (GLS Ch. 19), Critiques (GLS Ch. 21)

### Topic 5-New Keynesian model

- a. IS-LM-AD model (GLS Ch. 23), IS-LM-AD-AS model (GLS Ch. 24-25)
- b. Dynamics and the Phillips Curve (GLS Ch. 26)
- c. Monetary Policy (GLS Ch. 27)
- d. Zero Lower Bound (GLS Ch. 28)

**Prerequisites:** The course presumes knowledge of both micro and macro at the principles level, as well as elementary differential calculus and high school level algebra. Intermediate micro is helpful, though not necessary. 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 the second week of class.

# Homework, Exams and Grading

 $Grade = 25\% \times 2 \text{ midterms} + 30\% \text{ final} + 16\% \text{ homework} + 4\% \text{ participation}$ 

I will curve (up but not down) the overall grade at the end of the semester and give a letter grade for the course. Expect the average letter grade over both sections to be around B+.

**Homework:** There will be nine problem sets assigned throughout the semester, which are collected on Sakai according to the schedule at the bottom of the syllabus. Only the best 8 of 9 assignments will be counted towards your grade, and thus each accounts for 2% of your overall course grade.

I encourage you to work on solving homeworks in study groups, and you may work in groups of up to four students on the assignments, but only one group member should turn it in. Please make sure that the names of all group members are listed (legibly) on the first page. All group members will receive the same grade. The problem sets are the best preparation for the exam so it is in your interest to actively participate in solving each problem.

Assignments are submitted (by only one group member) via Sakai. Scan in any hand-written component and attach it with an accompanying Excel file when applicable. Scanning on campus is free. See https://nd.service-now.com/kb\_view.do?sysparm\_article=KB0010725. Please make sure then entire problem set pdf is legible before submitting. Illegible problem set responses receive 0 credit.

Problem sets are graded on a  $\checkmark+$ ,  $\checkmark$ ,  $\checkmark-$  scale, which correspond to 100%, 85%, and 50%, respectively. Late homework assignments will be bumped down one grade, e.g. from  $\checkmark+$  to  $\checkmark$  and from  $\checkmark-$  to 0. This deduction applies to everyone in the group. Homeworks submitted after the solutions are posted or not submitted at all receive 0 credit.

Some of the homework problems are from the textbook (GLS). At the end of each chapter in GLS, there are 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.

**Exams:** There are two midterms and one final. See the schedule at the end of the syllabus and mark your calendar. All the exams are closed-book individual exams, but you may bring one letter size (both sides) hand-written "cheat sheet". The final exam will be cumulative.

**Reschedule:** 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. Formal documentation is required.

**Regrade:** Clerical errors will be corrected without any hassle. Other regrade requests must be submitted in writing within one lecture of the exam's return. To discourage "grade grubbing", the entire exam will be subject to regrading. You need to explain which question, how many points, and why. Statements like "I think I am right. My answer looks like the solution to me. The part I got right (wrong) should be worth more (less) points." do not count as reasoning. Exams written in pencil or any erasable pen will not be re-graded.

Attendance and Participation: Relevant questions, insights, and discussion are encouraged throughout the course. Because of limited space in the classrooms, I 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.

Homework and Exams Schedule: all homework submissions are through Sakai. The deadline is 9 am on Wednesdays, and the deadline is binding. Plan to submit well ahead of the deadline, in case of connection issues. I do not accept physical or email submissions.

1/16 Wed: First day of class 1/23 Wed: No problem set 1/30 Wed: Problem set 1 due 2/6 Wed: Problem set 2 due 2/13 Wed: Problem set 3 due 2/20 Wed: Midterm exam 1, in class 2/27 Wed: Problem set 4 due 3/6 Wed: Problem set 5 due 3/13 Wed: SPRING BREAK! 3/20 Wed: Problem set 6 due 3/27 Wed: Midterm exam 2, in class 4/3 Wed: Problem set 7 due 4/10 Wed: Problem set 8 due 4/17 Wed: Problem set 9 due 4/24 Wed: No problem set 5/1 Wed: Last day of class

**Final exam**: Monday May 6 at 1:45-3:45 PM (both sections)

Honor code: The Honor Code can be found here: https://honorcode.nd.edu.

As a member of the Notre Dame community, I acknowledge that it is my responsibility to learn and abide by principles of intellectual honesty and academic integrity, and therefore I will not participate in or tolerate academic dishonesty.