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ECON 642-1
Topics of Applied Macroeconomics
MASTER OF SCIENCE IN APPLIED ECONOMICS PROGRAM
UNIVERSITY OF MARYLAND, WINTER 2022

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Instructor: Pablo Cuba-Borda

Class hours: Wednesdays 6:45pm – 9:30pm, with a 15 minute break at 7:45pm. via Zoom.

Office Hours: Mondays 5:30pm - 6:30pm via Zoom

Contact: pcubabor@umd.edu

Teaching Assistant: Kenji Higa-Flores

Office Hours: Tuesdays 5:30pm - 6:30pm via Zoom

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Zoom links for synchronous lectures and the instructor's office hours are available on ELMS-Canvas by opening the Zoom tab. Zoom links for TA office hours will be emailed to you.

Overview

This is the core macroeconomics course in the Applied Economics M.S. program. Macroeconomics is focused on understanding the behavior of the aggregate economy in the long and short run. The course will study data properties of the main macroeconomic aggregates-—gross domestic product (GDP), inflation, and unemployment—-and the fundamental macroeconomics models of growth and business cycles dynamics, including the effects of monetary and fiscal policies. Knowledge of micro and macro at principal level is presumed, as well as algebra and elementary differential calculus.

COVID Information

Up-to date information about UMD Covid-19 policies and guidance are posted at `https://umd.edu/4Maryland`. Given the evolving nature of the pandemic, the guidance and polices are subject to change. The plans are always coordinated with state and county health officials, with additional guidance provided by the University System of Maryland. The focus will always be on the health and well-being of our entire campus community. We strongly urge all students, staff and faculty to read announcements they receive about Covid-related guidance and policy, and to stay familiar with the current guidance. We thank you all for your individual efforts to help protect the collective health of our entire community.

Objectives

The Master's of Science in Applied Economics at the University of Maryland lists the following general objectives for the program:

1. Ability to understand, evaluate, and analyze economic data

2. Ability to understand and interpret statistical evidence from economic data

3. Ability to apply empirical evidence to assessing economic arguments

4. Ability to apply macroeconomic theories to policy discussions

5. Ability to apply microeconomic theories to policy discussions

6. Ability to communicate economic ideas to a broader audience

7. Ability to evaluate the effectiveness of policy programs using sound economic techniques

This course focuses developing skills related to objectives **1, 3, 4**, and **6**.

Course Requirements

Evaluation for the course will be based on numerical points on a scale from 0-100 with the following distribution of points for each graded activity

- Midterm exam: **25 points**

- Final exam: **35 points**

- Problem sets (x4): **20 points, 5 points each**

- Group presentation: **10 points**

- Online discussions (x10): **10 points, 1 point each**

Numerical grades

Each activity will receive a numerical grade corresponding to the number of points described above. There will be a total of 4 problem sets, each with an equal value of 5 points. Similarly, there will be a total of 5 online discussions each with a value of 2 points. The final numerical grade for the course will be the cumulative sum of all the grades you received on each activity.

For example, imagine you score 20 points on the midterm exam and 30 points on the final, 10 points in the group presentation and obtained 10 points in the online discussion and 15 points in the problem sets. Then you will numerical grade will be equal to $20 + 30 + 10 + 10 + 15 = 85$.

Letter grades

At the end of the term, every student will have a numerical course grade between 0 and 100. I will decide upon the numerical cutoffs between various letter grades based on my professional judgement. I will consider students' performance relative to the class. I will also consider absolute standards of professional competence. Highly competent students will get A's. Barely competent students will get B's. Incompetent students will get B-'s or worse. The cutoffs that I use will respect the ordinal ranking of numerical course grades. No student with a given numerical course grade will receive a lower letter grade than someone else with a lower numerical course grade.

Exams

The midterm and final are closed book exams. The midterm will be **in person at the D.C. location on Wednesday, January 12th**, and covers all the synchronous and asynchronous material, including online discussions. The final exam is schedule for **Wednesday, February 12, in the D.C. location** and is cumulative, inclusive of topics discussed during group presentations. Each exam will begin at 6:45pm on the day of the exam and last for **two (2) hours**. Further instructions on how the exams will be administered will be posted on the ELMS in due course.

Problem sets (PS)

There will be four problem sets throughout the term. You will have at least two weeks to complete each problem set. The due date of the problem sets is listed in **Course Outline and Schedule** section. All problem sets will be due at the start of class on the indicated due date. Late submissions will not be accepted. Students are permitted and encouraged to discuss the problem sets with one another, however each student must turn in their work individually. Identical copies of a problem set will be assigned the lowest numerical grade. Submitted work must be legible, clearly written, and neatly presented.

Group presentations (GP)

Students, working in groups of two, will be required to prepare a short presentation of less than 15 minutes. Groups have to choose from the list of papers listed in the syllabus. Topics will be allocated as follows. On the specified date in the course outline, groups will submit a list of 5 papers ranked by interest. If multiple groups share an interest, I will assign papers through a lottery. If groups are unmatched to papers in the first round, I will use your second choice, and so on. Groups are free to propose a different paper if it is more in line with their interests, but must get prior approval from me before proceeding. If approved, that group will not enter the lottery. **Groups will be notified of their selected paper at the end of week 3.**

A successful presentation would achieve the following:

- Clearly identifies the central topic and question of the paper

- Summarizes the relevant evidence discussed by the authors

- Explains policy implications, policy trade-off or provides intuition for the results

- Offers an assessment using tools learned in class and during the M.S. program.

Tips to prepare your presentation:

- Keep your slides simple. Do not crowd the slides with text

- Ensure figures and tables are legible to the audience

- Use a reasonable number of slides. For a 15 minute presentation, aim for 5-7 slides.

- Practice, practice, practice!

Synchronous Lectures

Because this course is being offered online lectures will consist of both synchronous (Zoom) lectures, and asynchronous material. Students are equally responsible for both components. With the synchronous component held over Zoom, I will try not to span the entirety of the required 3-hour per week course meetings. Rather, we will generally meet in two 60-minute blocks, the first running from approximately 6:45pm—7:45pm and the second from approximately 8:00pm—9:00pm. However, if we need additional time to cover course content. I reserve the possibility to use the full time slot assigned by the university and will do my best to notify students in advance of such situations.

Because of the winter break, we will not have class on December 29th. We will have a make-up synchronous session on Saturday, February 12 from 10:30AM - 1:15PM.

Asynchronous Material

To complement the live lecture, and to satisfy the 3-hour per week course meeting requirement, students will participate in the following asynchronous activities:

Recorded lectures

Short recorded lectures of 10—20 minutes will be available as needed during the term. On a given week, I will post recorded material no later than the Friday following the Zoom meetings. These recordings may consist of additional explanations of material covered in class, examples and practice problems related to the material covered during Zoom lectures, and or additional material not covered in the synchronous component.

Online Discussion

Students are asked to participate in online discussions of selected topics. Topics will be posted by 11:59 PM EDT on Wednesdays of the weeks indicated in the **Course Outline and Schedule**. By 11:59 PM EDT of Sunday of the same week students will have commented on one and only one topic. Each student will be limited to participate **at most twice** in each discussion, either in the form of independent comments on the selected topic, as a reply to comments by fellow students, or in response to follow up questions by the instructor.

You need to prepare in order to participate in the online discussions by reviewing the lecture notes and designated textbook chapters, reviewing recorded material, reading assigned supplementary material. **Online discussions are not opinion contests**.

Topics before midterm. The instructor will post discussion topics related to material covered in class, recorded lectures, or in reference to supplementary readings. All students are expected to take part during the designated discussion window.

Topics after midterm. The groups assigned a presentation on that week will submit 3-4 discussion topics related to their presentation. Submission of topics are due no later than the beginning of the scheduled online class. Students in the presentation groups will be exempt from responding to their own discussion topics, but will be graded on the quality of their proposed topics and must engage in discussion by other presenting groups.

Discussion guidelines: To maintain an organized forum we will follow these guidelines:

- Online discussion should help you and others learn to think analytically

- Group postings are not accepted, but students are permitted to discuss with classmates

- Comment should be made on the basis of class material.

- You will be graded on participation, content, and ability to provide constructive feedback

Course Material

Required text

The lectures will combine material from the following two textbooks. Required chapters are indicated in the course outline.

- A Course in Modern Macroeconomics, 2020. Pablo Kurlat (PK). Online version available for purchase here: `https://sites.google.com/view/pkurlat`

- Intermediate Macroeconomics, 2021 (mimeo), Julio Garin, Robert Lester, and Eric Sims. Version 3.0.1. (GLS). Text freely available at `https://juliogarin.com/files/textbook/GLS_Intermediate_Macro.pdf`

Supplementary Readings

- Supplementary readings from academic journals, working papers and non-technical articles will be posted in ELMS.

Course Outline and Schedule

Schedule of Topics (subject to change)

Week	Date	Topics	Readings	Assignment
1	12/1/21	**Macroeconomic Measurement**		
		GDP and national accounts	PK 1	Discussion 1 begins
		Beyond GDP	PK 2	
2	8/12/21	**Economic Growth I**		
		Growth facts	PK 3	Discussion 2 begins
		The Solow model	PK 4	
3	12/15/21	**Economic Growth II**		PS 1 due
		Theory and evidence	PK 5, GSL 7	Discussion 3 begins
		Overlapping generations	GSL 8	
4	12/22/21	**Microeconomic Foundations I**		
		Consumption and Savings	PK 6	Discussion 4 begins
		Labor and Leisure Choice	PK 7	GP topics due
5	12/29/21	**Winter break, no class**		
6	01/05/22	**Microeconomic Foundations II**		
		Investment	PK 8	Discussion 5 begins
		General Equilibrium	PK 9	PS 2 due
7	01/12/22	**Midterm Exam (in person)**		
8	01/19/22	**Medium Run I**		
		The Neoclassical model	GSL 18, PK 13	GP 1
		Shocks in the Neoclassical model	GSL 19, PK 13	Discussion 6 begins
9	01/26/22	**Medium Run II**		GP 2
		Money, inflation and interest rates	PK 10, 11	Discussion 7 begins
		Business cycles facts	PK 12	PS 3 due
10	02/02/22	**Short Run I**		
		Monopoly power and sticky prices	PK 14	GP 3
		The New Keynesian model: demand	GSL 24	Discussion 8 begins
		The New Keynesian model: supply	GSL 25	
11	02/09/22	**Short Run II**		GP 4
		Dynamics and the Phillips curve	GSL 27	Discussion 9 begins
		Fiscal and monetary policy	GSL 28, PK 15	
11*	02/12/22	**Short Run III**		GP 5
		The zero lower bound	GSL 29	Discussion 10 begins
		The open economy	GSL 30	PS 4 due
12	02/16/22	**Final Exam (in person)**		

Notes: ($*$) make-up class for 12/29/21 session. Might be scheduled outside usual class day or time.

Reading List for Group Presentations

Below is a list of approved readings for group presentations. If you want to present something different I will first have to clear the topic and paper.

1. Noam Angrist, Pinelopi Koujianou Goldberg, and Dean Jolliffe. Why is growth in developing countries so hard to measure? *Journal of Economic Perspectives*, 35(3):215–42, August 2021. URL `https://www.aeaweb.org/articles?id=10.1257/jep.35.3.215`

2. Anmol Bhandari, Serdar Birinci, Ellen R. McGrattan, and Kurt See. What do survey data tell us about us businesses? *American Economic Review: Insights*, 2(4):443–58, December 2020. URL `https://www.aeaweb.org/articles?id=10.1257/aeri.20190304`

3. Olivier Blanchard. Should we reject the natural rate hypothesis? *Journal of Economic Perspectives*, 32(1):97–120, February 2018. URL `https://www.aeaweb.org/articles?id=10.1257/jep.32.1.97`

4. Kristin Forbes. Inflation Dynamics: Dead, Dormant, or Determined Abroad? NBER Working Papers 26496, National Bureau of Economic Research, Inc, November 2019. URL `https://ideas.repec.org/p/nbr/nberwo/26496.html`

5. Kristin Forbes, Joseph Gagnon, and Christopher G Collins. Low inflation bends the phillips curve around the world. Working Paper 29323, National Bureau of Economic Research, October 2021. URL `http://www.nber.org/papers/w29323`

6. Gene M Grossman and Ezra Oberfield. The elusive explanation for the declining labor share. Working Paper 29165, National Bureau of Economic Research, August 2021. URL `http://www.nber.org/papers/w29165`

7. Robert E Hall and Marianna Kudlyak. Why has the us economy recovered so consistently from every recession in the past 70 years? Working Paper 27234, National Bureau of Economic Research, May 2020. URL `http://www.nber.org/papers/w27234`

8. Patrick J. Kehoe, Virgiliu Midrigan, and Elena Pastorino. Evolution of modern business cycle models: Accounting for the great recession. *Journal of Economic Perspectives*, 32(3):141–66, August 2018. URL `https://www.aeaweb.org/articles?id=10.1257/jep.32.3.141`

9. Amartya Lahiri. The great indian demonetization. *Journal of Economic Perspectives*, 34(1):55–74, February 2020. URL `https://www.aeaweb.org/articles?id=10.1257/jep.34.1.55`

10. Joseph Vavra. Tracking the pandemic in real time: Administrative micro data in business cycles enters the spotlight. *Journal of Economic Perspectives*, 35(3):47–66, August 2021. URL `https://www.aeaweb.org/articles?id=10.1257/jep.35.3.47`

Program and University Policies

Course Website

Copies of the course syllabus, your grades synchronous lecture videos, the online discussion board, student presentations, and other relevant links and documents will be posted on the course website. Problem sets and exams will also be submitted through the course webpage. You can access the site via www.elms.umd.edu. You will need to use your University of Maryland "directory ID" and password.

Email communication

The University has adopted email as the primary means of communication outside the classroom. It will be used to inform students of important announcements. Students are responsible for updating their current email address via the website link `http://www.registrar.umd.edu/current/`. (Under the first major heading of "Online Transactions" there is a link to "Update Contact Information.") I will do my best to respond to email within 24 hours.

Work Load and Contact Hours

Mastering the material covered in this course requires a significant amount of work outside of class. Students should expect to spend more time outside of class than in class – typically at least twice as much time. The courses in our DC program are 12-week courses that cover all the same material as a traditional semester-long 3-credit course (15 weeks). The compressed schedule makes it possible to complete our degree in just 15 months if you take 2 courses each term. But the compressed schedule also implies an accelerated pace with an average of 25% more work per week in a given course (15/12 = 1.25). The normal full-time load in a master's program is 3 courses per semester, or 6 courses per year. The weekly work load when taking 2 of our DC courses per term is equivalent to the load from 2.5 "normal" 15-week courses - so 2.5/3.0=83% of a full-time load. However, the DC program takes just 1 week off between terms. Students who take 2 courses per quarter in our program complete 8 courses per year. So over the course of a year, taking 2 courses per quarter in our DC program is equivalent to 133% of a "normal" full-time load in the traditional semester-based program (8/6 = 1.33).

Building Access

The midterm and final exams in this course must be taken in person with a proctor on the dates indicated in the Course Outline and Schedule. Details about how to access the building and out program suite will be provided by the Program Coordinator.

Academic Integrity

The University of Maryland has a nationally recognized Code of Academic Integrity. You should inform yourself about the UMD policies related to academic misconduct: `https://www.studentconduct.umd.edu/home/current-students`.

Cases of academic misconduct, including plagiarism and giving or receiving unauthorized assistance on exams, will be referred to the UMD Office of Student Conduct. If found responsible for academic misconduct, students can be subject to sanctions. The standard sanction for graduate students found responsible for cheating on exams is expulsion from the university. The exams in this course will ask students to affirm the UMD Honor Pledge: "I pledge on my honor that I have not given or received any unauthorized assistance on this examination."

Student Conduct

Students are expected to be active contributors to the lectures when attending and should be prepared to ask and answer questions during the lectures and to participate in the online discussion boards. Students are expected to refrain from any behavior that would distract the instructor or fellow students during synchronous lectures and to conduct themselves professionally at all times.

Excused Absences

The University of Maryland's policy on excused absences is posted here: `http://www.president.umd.edu/administration/policies/section-v-student-affairs/v-100g`. Please note: If you miss any class meetings for any reason, you are still responsible for all material covered during the meeting you missed. It is your responsibility – not the instructor's – to get yourself caught up in the course. Instructors routinely facilitate things by posting lecture notes, etc.

If you need to miss an exam or other graded course requirement because of illness, injury, or some other emergency: Follow doctor's orders and get documentation. Get in touch with the instructor as soon as you're able – preferably prior to missing the exam or deadline. Communicate with the instructor to make up the course requirement as soon as possible. You are entitled to recover before you make up the course requirement, but you are not entitled to extra days to study beyond the time the doctor's note says you're incapacitated. If you are incapacitated for more than a week or so beyond the end of the term, your grade in the course will be an "Incomplete." In such cases you must negotiate a plan with your instructor for completing the course requirements. Once you make up the course requirement the instructor will change your "I" to the appropriate letter grade.

School Closing and Delays

In the unlikely event that weather or some other event causes a delay or closing, information can be found on the campus website and the snow phone line: (301) 405- SNOW (405-7669). The program director will always announce cancellation information to the program as an announcement on the program's ELMS/Canvas site. This will generally be done by 1:00 PM on days when weather or other factors are an issue.

UMD Counseling Center

Sometimes students experience academic, personal and/or emotional distress. The UMD Counseling Center in Shoemaker Hall provides comprehensive support services that promote personal, social, and academic success. The cost of these services is covered by the fees you already paid when you

registered for classes, and there is no additional charge if you use the services. Proactively explore the range of services available, including the Counseling Service, Accessibility and Disability Service, Learning Assistance Service, and the Testing Office, all described at `http://www.counseling.umd.edu/`.

Students with Disabilities

The University of Maryland does not discriminate based on differences in age, race, ethnicity, sex, religion, disability, sexual orientation, class, political affiliation, or national origin. Reasonable accommodations will be arranged for students with documented disabilities. Students who have an accommodations letter from the Accessibility and Disability Service (ADS) should meet with me during the first week of the term to discuss and plan for the implementation of your accommodations. If you require reasonable accommodations but have not yet registered with ADS, please contact the Accessibility and Disability Service at 301-314-7682 or `adsfrontdesk@umd.edu`.

Academic Progress

The UMD Graduate School requires that students maintain a GPA of at least 3.0. Students whose cumulative GPA falls below 3.0 will be placed on academic probation by the graduate school. Students on academic probation must ask the program's director to petition the graduate school if they want to remain enrolled in the program. The petition must include a plan for getting the student's GPA up to at least 3.0. Students who do not live up to their plan can have their enrollment in the program terminated without having earned the degree. Note: a grade of "B" corresponds to a GPA of 3.0. A grade of "B-" corresponds to a GPA of 2.7.

Graduate Academic Counselor

The UMD Graduate School also has an academic counselor available to support students who are having difficulty navigating mental health resources on campus, are considering a leave of absence and/or need assistance finding mental health care off campus. The Graduate Academic Counselor also facilitates bi-weekly Graduate Student Circle Sessions which provide an opportunity to learn about resources and connect with other graduate students. Students can learn more about the Graduate Academic Counselor by going to: `https://gradschool.umd.edu/gradcounselor`.