ECON 13310/01 - Introduction to Macroeconomic Analysis: A Data Driven Approach

Oscar Galvez-Soriano

Autumn 2024

Instructor: Oscar Galvez-Soriano
E-mail: ogalvez@uchicago.edu
Personal web page
Office: SHFE 431

Class Room: Rosenwald Hall 015
Class Hours: TuTh 12:30-1:50pm
Office Hours: MonWed 9:30-10:30am
Discussion Section: Mon 6:30-7:20pm in SHFE 146

Teaching Assistant: Sania Zeb
E-mail: saniazeb@uchicago.edu

Office: SHFE (outside Room 146)
Office Hours: MonWed 10:30-11:30am

Course Description

This course offers a comprehensive exploration of neoclassical macroeconomic models, designed for students who have previously studied the principles of macroeconomics. The course is divided into five key modules: (i) economic growth and production, (ii) consumption and savings, (iii) business cycle and unemployment, (iv) fiscal policy, and (v) monetary policy and forecasting. Throughout each module, we extensively utilize relevant data to enhance the understanding of theoretical concepts. By the end of the course, students will not only possess the ability to interpret macroeconomic news and articles but also analyze policies through a model-based framework.

Required Materials

I have set up a Canvas course website that contains the lecture notes, problem sets, and other learning resources.

The following textbooks are not required, but serve as the main references for this course:

- Jones, Charles (2020). Macroeconomics (Fifth Edition). W W Norton & Company
- Miller, Merton H. and Upton, Charles (1986). Macroeconomics: A Neoclassical Introduction. The University of Chicago Press
- Romer, David (2019). Advanced Macroeconomics (Fifth Edition). McGraw Hill
- Williamson, Stephen D. (2016). Macroeconomics (Sixth Edition). Pearson

Prerequisites

In order to register for this course all students should have completed ECON 10000/20000, ECON 10200/20200, and either ECON 11010/21010/11020 or STAT 22000/23400/24400/24410. Additionally, you must have a good command of high school Algebra, graphical analysis and, preferably, basic knowledge of Calculus. If you do not meet these prerequisites and you choose to take this course, then it is your responsibility to work on your math skills in order to be able to follow the materials taught in this course.

Requirements and Grading

Each student's cumulative score for this course will be based on performance on problem sets and exams with the weights given in the grading scheme below. This cumulative score will then be mapped into a letter grade at the end of the course.

1. Problem sets: four problem sets, with the lowest score dropped (**15%**)
2. Monthly reports: seven reports, with the lowest score dropped (**15%**)
3. Midterm exam. Thursday, November 7 (**25%**)
4. Final project. Tuesday, December 3 (**20%**)
5. Final exam. Tuesday, December 10, 12:30pm-2:30pm (**25%**)

All grades are final except for correcting obvious grading mistakes. For example, points are added up incorrectly, or obviously correct answers are mistakenly marked wrong. Please bring these to the teaching assistant's attention as soon as possible. For other cases, please discuss questions with the teaching assistant or me.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	F
Cum. Score	95	90	85	80	75	70	65	60	55	50	<50

Any student scoring higher than the cutoff given above will earn at least that grade in the course. You may request Pass/Fail grading no later than Monday, December 9 at 5PM CT. If you wish to withdraw from the course without a W on your transcript you must do so before Friday, October 18 at 5PM CT. A withdrawal after this date but before Monday, November 25 at 5PM will result in a W grade on your transcript. A withdrawal may not be granted after this time except in extenuating circumstances, and you must submit a petition to withdraw with your academic advisor. You cannot switch back to a letter grade after withdrawing or opting for Pass/Fail, so you should discuss the ramifications with your academic advisor before requesting either.

Problem Sets: Problem sets will be assigned on Canvas and should be submitted the following week (also on Canvas) by the time of the discussion section. Solutions to problem sets will be available right after the submission date and will be explained during the discussion section. Graded problem sets will be returned one week after submission. You should examine the solutions to review any areas of confusion or questions marked as incorrect. Note I cannot give deadline extensions for the problem sets; however, I do drop the lowest problem set grade, which gives you some flexibility in handling unexpected events.

Exams: Exams will draw on material from lectures, problem sets, and the textbook. You will have 80 minutes to complete the midterm and 100 minutes to complete the final exam. Both exams will take place in person. No book, notes, phone or internet access of any kind is allowed during the exam. Examinations are to be attempted individually. No communication with others about any aspect of the course is permitted during the exam. No part of the examinations may be copied, shared, posted on a website or otherwise distributed at any time. Any student who violates these examination policies will fail the course and be referred to the Dean of Students.

If you have a reasonable excuse to miss the midterm, you need permission from me before its scheduled time to miss it, otherwise, you will receive a zero for the midterm. If granted permission to miss it, your final exam score will substitute the score for your missed midterm. It is impossible to take the final exam at a different day or time than the one established by the University Registrar.

If you miss the final with an excuse that meets University standards you will receive an incomplete for the course and will be required to resolve it in the upcoming quarters in order to receive a letter grade. Please note that travel plans are not an approved excuse for missing an exam. If you make travel plans that conflict with the final for any reason other than a university approved excuse, you will receive a zero for the final.

Final Project: Students will collaborate in groups of four to work on a project guided by a prompt I will provide later on in the course. Students will put into practice one of the five main topics covered in this course. The topics will be randomly assigned, but the students have the freedom to use data from the country they prefer and also have the option to swap topics from a set of optional questions I will prepare. Each group will give a ten-minute, five-slide presentation of their results. This final project is worth 20% of your grade, and the grade will be based solely on the presentation.

While grading the presentation, I will consider the following: on a scale of 0-100, **60 points** come from the quality of the presentation itself. In particular, I will take between 5-10 points off for incorrect statements/explanations, poor-quality graphs and tables, and for missing members of the team during the presentation. During the presentation, I want one member of the team explaining the "data", including only relevant descriptive statistics in form of tables and/or graphs (maximum two slides); one or two members of the team will explain the "model" or the "empirical strategy", which must include your main equation(s), and a description of your equation(s); finally, one or two member(s) will explain the "results and conclusions", including tables and/or graphs (maximum three slides). The remaining **40 points** will come from one question that I will make to each member of the team, each question is worth 10 points. These questions will draw mainly from the model and the results, and I will choose who answers each question.

Monthly Reports: Students will write about seven individual reports during the quarter, which must be uploaded on Canvas. These reports are expected to contain one or two relevant graphs of the economic indicator to be reported and only one single paragraph explaining the graph(s). These reports will be a maximum of one page long and will be graded based on a 0-100 scale, with only four potential grades: 0, 80 (check-minus), 90 (check), and 100 (check-plus). Students

will receive a zero for not submitting the report or for submitting it after the deadline. We will award a check-minus if the report has more than one mistake, either in the formatting of the graph(s) or its interpretation. We will award a check if the report has only one mistake and check-plus for reports with zero mistakes. Formatting issues will be considered as mistakes.

Attendance: Students are expected to attend every lecture and participate in lecture activities. Note that the lectures contain the material you are expected to know, and the textbook is not a perfect substitute for the lectures.

General Policies

Our Class Meetings

We will meet every Tuesday and Thursday between October 1st and December 5th. Lectures will begin at 12:30pm and end at 1:50pm.

Academic Honesty

To cultivate an environment of academic integrity, the University of Chicago expects students to abide by the University's Academic Honesty and Plagiarism Policy, found in the University of Chicago Student Manual.

Student Code of Conduct

Students are expected to abide by the University of Chicago's Student Code of Conduct.

Sexual Misconduct Policy

In accordance with the University of Chicago's Policy on Harassment, Discrimination, and Sexual Misconduct, your instructor is a "responsible employee" for reporting purposes under Title IX regulations and state law and must report incidents of sexual misconduct (sexual harassment, non-consensual sexual contact, sexual assault, sexual exploitation, sexual intimidation, intimate partner violence, or stalking) about which they become aware to the Title IX office. Please know there are places on campus where you can make a report in confidence. More information can be found on the Title IX website.

Special Accommodations and Accessibility

The University of Chicago is committed to ensuring equitable access to our academic programs and services. Students with disabilities who have been approved for the use of academic accommodations by Student Disability Services (SDS) and need a reasonable accommodations) to participate fully in this course should follow the procedures established by SDS for using accommodations. Timely notifications are required in order to ensure that your accommodations can be implemented. Please meet with me to discuss your access needs in this class after you have completed the SDS procedures for requesting accommodations.

Phone: (773) 702-6000
Email: `disabilities@uchicago.edu`

For exam accommodations, it is recommended that students send their Instructor Notification Letters at the beginning of the quarter, or as soon as possible. Instructor Notification Letters must be sent no later than 7 days prior to the first quiz/exam date for the class for each class for which a student is seeking to use accommodations.

We will request that SDS proctor the ECON 13310 exams. Students must submit an exam request/schedule through the SDS Portal at least 7 days prior to an exam date. These steps should be followed for each exam. One option that students may utilize is submitting the exam requests for all known exam dates early in the quarter and

may be done in one sitting if the dates are available in the syllabi. Currently, SDS may be unable to make arrangements for exam requests submitted less than 7 days in advance of an exam date. Remote Exams are not available.

To submit an exam request, students should complete the following steps after they have sent their Instructor Notification Letter:

1. Log in to the AIM Student Portal (https://rainier.accessiblelearning.com/UChicago)
2. Select "Alternative Testing" on the left-hand side of the page.
3. Select the course for which you are scheduling with SDS from the drop-down menu at the top of the page.
4. Click "Schedule an Exam".
5. Complete the required fields on the exam detail form.
6. Click "Add Exam Request".
7. Students will receive a confirmation e-mail to verify that their exam request was received and may check the status of their request in their AIM Student Portal. SDS may proctor in-person exams at locations across campus and the locations will be listed in the status update in AIM. Locations are determined by SDS and may include Ida Noyes Hall, David Rubenstein Forum, and other campus locations.

Diversity and Inclusion

The University of Chicago believes that a culture of rigorous inquiry demands an environment where diverse perspectives, experiences, individuals, and ideas inform intellectual exchange and engagement. I concur with that commitment and expect to maintain a productive learning environment based upon open communication, mutual respect, and nondiscrimination. The University does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes as required by law.

Use of AI Tools

In this course, we will be developing skills and knowledge that are important to discover and practice on your own. Because use of AI tools inhibits development of these skills and knowledge, students are not allowed to use any AI tools, such as ChatGPT or Dall E 2, in this course. Students are expected to present work that is their own without assistance from others, including automated tools. If you are unclear if something is an AI tool, please check with your instructor. Using AI tools for any purposes in this course will violate the University's academic integrity policy.

Syllabus Changes

Notice that I may need to adjust the syllabus, depending on our progress in the course. In such case, I will notify you about these changes during the lectures and through our Canvas website.

Course Outline and Schedule

The following schedule is tentative and subject to minor changes.

Week	Date	Lecture	Topics	PS/Project due
1	10/1	1	Introduction; Review on Statistics and Time Series	
	10/3	2	Economic Growth I: Malthus and Solow Models	
2	10/8	3	Economic Growth II: Steady State and Golden Rule	
	10/11	4	Economic Growth III: Calibration and Further Properties	
3	10/15	5	A Two Period Model of the Economy	PS1 (10/14)
	10/18	6	Permanent Income Hypothesis	
4	10/22	7	The Euler Equation	PS2 (10/21)
	10/25	8	Interest Rate, the Slutsky Equation and the Ricardian Equivalence	
5	10/29	9	Unemployment and the Business Cycle	
	10/31	10	Intertemporal Model with Investment	
6	11/5	11	Government and Fiscal Policy in Practice	PS3 (11/4)
	11/7	12	**Midterm**	
7	11/12	13	Government and TFP Shock	
	11/14	14	Money, Interest Rate, and Inflation	
8	11/19	15	The Phillips Curve, the Lucas Critique and the Taylor Rule	PS4 (11/18)
	11/21	16	Monetary Policy and Forecasting	
9	11/26		**Thanksgiving**	
	11/28		**Break**	
10	12/3	17	Presentations	Project
	12/5	18	Presentations	
11	12/10	Final	**Final Exam, Tuesday, December 10 (12:30pm-2:30pm)**	