

ADVANCED MACROECONOMICS
COLUMBIA UNIVERSITY ECONOMICS DEPARTMENT
COURSE SYLLABUS FOR FALL 2023

Course Objective.

The goal of this course is to introduce students to the ideas, structures, tools, and way of thinking in modern macroeconomics. Modern macroeconomics emphasizes explicit microeconomic foundations and general equilibrium analysis. In this class we will build on microeconomic foundations to study the theoretical underpinnings of economic growth and business cycles fluctuations.

This class is intended to prepare students for taking a first-year PhD course in macro.

Lectures.

This class meets in person on Tuesdays and Thursdays, 1:10 – 2:25 p.m. in 503 Hamilton Hall.

Lectures run from Tuesday, September 5, 2023 until Thursday, December 7, 2023. The final exam will take place during final exam week.

Office Hours.

You may contact me at jenlao@columbia.edu

Office Hours: Thursdays, 3:00-4:00 pm, or by appointment in IAB 1014C.

Teaching Assistant and Recitations.

The Teaching Assistant for this course is Emilio Zaratiegui.

Emilio's email is ez2292@columbia.edu

Emilio will hold weekly recitations in order to cover new material, review material taught in lecture, and answer questions.

Prerequisites.

Intermediate Micro (Econ UN3211), Intermediate Macro (Econ UN3213), and Introduction to Econometrics (Econ UN3412) must be successfully completed before enrolling in this course.

Setting expectations.

This class will be rigorous, analytical, and heavily theory-based. Familiarity and comfort with calculus, constrained optimization, and probability, will be extremely useful. **Do Not** take this class if you feel uncomfortable with these tools.

Knowledge of Advanced Microeconomics (GU 4211) will furthermore be helpful. You are encouraged to revisit those notes if you have taken that class. The same applies to knowledge of constrained optimization such as Lagrangian methods, Kuhn-Tucker conditions, convex optimization. Familiarity with these tools and concepts will allow for a deeper understanding of the microeconomic foundations of macroeconomic theory.

Textbooks.

There are no required textbooks for this course; I will teach from my lecture notes.

That said, my lecture notes will draw on material from the following textbooks:

Romer, David. *Advanced Macroeconomics*. McGraw-Hill, 2018.

Kurlat, Pablo. *A Course in Modern Macroeconomics*. Independently published, 2020.

Cooley, Thomas F., *Frontiers of Business Cycle Research*. Princeton University Press, Princeton, New Jersey, 1995.

Llungqvist, Lars and Thomas J. Sargent. *Recursive Macroeconomic Theory*. The MIT Press; Cambridge, Massachusetts.

Please see the **Course Outline** for a more detailed list of the topics I plan to cover.

Course Website.

All lecture notes and problem sets will be posted on the Courseworks website.

Midterm and Final.

There will be a midterm exam.

The final exam will be during final exam week.

Course Grade.

Your final grade in this course will be determined as follows:

- 40% Problem Sets
- 30% $\text{Max}\{\text{Midterm}, \text{Final}\}$
- 30% Final Exam

Problem Set Collaboration.

You are permitted and encouraged to collaborate with each other on the problem sets. However, each person must submit their own individual (separate) problem set.

No Make-up Exams.

For this class there is a strict no make-up exam policy. **If you miss the midterm, you will not be granted a make-up exam.** Instead, all weight for your midterm will be transferred to your final. Specifically, your overall grade for the class will then consist of 40% from problem sets and 60% from the final.

If you miss the final, there is a Columbia University policy for this occurrence. The University governs the administration of all missed final exams. Students who miss the final exam (for whatever reason) will receive an “Incomplete.”

Re-grading.

A regrade request for an exam must be submitted to the TA within 7 days after we return the exam to you. The request for a regrade must be written and attached to the exam when submitting the exam for a regrade. The request must include a description of what the problem is and why you think the exam should be graded differently. In such cases, we will regrade the *entire* exam—not just the question you identified.

Honor Code.

Even if not explicitly stated on any exam, the honor code is always in effect. By taking this course, you explicitly pledge your honor that you will not cheat, nor help others to cheat, in any way on the exams. Any violations will be punished to the greatest extent allowed.

Questions and Communication.

If you have any questions or concerns regarding course policies, material, and the like, please contact the TA or myself via email.