Carleton University Department of Economics

ECON 5021 W
MA Macroeconomic Theory
2024 Winter

Instructor: Abeer Reza
Office: TBD
Email: abeerreza@cmail.carleton.ca
Office Hours: By appointment

TA: TBD

Lectures: Mondays, 6:05 pm - 8:55 pm (in person), View location on Carleton Central or Brightspace
Tutorials: Tuesdays, 7:35 pm - 8:55 pm (in person), View location on Carleton Central or Brightspace

Course Website: Brightspace

Course Description

Calendar description: *An introduction to graduate-level macroeconomic theory, including topics such as economic growth, consumption, investment, real and nominal frictions in the goods, labour, and credit markets, models of short-run economic fluctuations, and monetary and fiscal policy design.*

This course precludes additional credit for ECON 5002 (no longer offered).

This course is an introduction to advanced techniques in macroeconomic theory at a Master's level. The course will cover the fundamentals of macroeconomic theory, including business cycles, economic growth, components of the national accounts, and labour markets; as well as how to relate macroeconomic data to theoretical models.

Learning Outcomes

The main objectives of the course are:

- To develop analytical skills for studying a range of dynamic general equilibrium models.

- To understand how macroeconomic theory can explain movements in aggregate macro data.
- To highlight some important contemporary issues and policy debates in macroeconomics.
- To lay a solid foundation for students seeking to continue their studies at the doctoral level.

Textbook and Lecture Notes

There is no required textbook for the course. A recommended text is David Romer (DR), *Advanced Macroeconomics*, either the 4^{th} or 5^{th} Edition, McGraw-Hill.

Some students may benefit from a refresher on the mathematical background necessary for the course. A recommended text at the upper undergraduate level is *Mathematics for Economics*, by Hoy, Livernois, McKenna, Rees and Stengos, MIT Press. Students wishing to continue to doctoral studies may benefit from *Mathematical Methods and Models for Economists*, by de la Fuente, Cambridge University Press.

The course will be taught mainly from lecture notes developed by myself or by our Carleton colleague Prof. Dana Galizia. Students may still find the textbook useful as it provides a different exposition for the materials covered in the lecture notes.

All materials for the course (lecture notes, assignments, etc.) will be posted on the Brightspace course website. Brightspace will also be my principal means of communicating important information about the course. Please ensure that you are set up on Brightspace prior to the course start date.

All lectures will be held in person only. No recordings will be made available.

Course Outline

A preliminary outline of the course topics are provided below. Related chapters from the Romer textbook is provided in parenthesis.

1. Introductory basics
2. Dynamic Equilibrium Models: two-period economies (parts of DR Ch. 5)
3. Economic Growth (parts of DR Ch. 1-3)
4. Business Cycles (DR Ch. 5)
5. Consumption (DR Ch. 8)
6. Labour Markets in Macroeconomic Models (parts of DR Ch. 11)

A tentative schedule of topics to discuss, assignments to submit, and tutorial session dates are posted below. Please note that I reserve the right to make modifications to the list of contents, or to the dates noted below as the term proceeds. If I make a modification, I will provide advance warning either in class or through Brightspace.

Date	Topics	Assignments	Tutorials
January 8	Introduction: Data and Rational Expectations		
January 15	Basics of Dynamic Optimization	Assignment 1 posted	January 16
January 22	A simple two-period economy		January 23
January 29	Economic Growth: Solow model	Assignment 1 due; Assignment 2 posted	January 30
February 5	Economic Growth: Ramsey-Cass-Koopmans Model		February 6
February 12	Consumption	Assignment 2 due	February 13
February 19	Winter break		
February 26	Midterm		February 27
March 4	Business Cycles: Measurement and stylized facts	Assignment 3 posted	
March 11	Business Cycles: Canonical RBC model		March 12
March 18	Asset Pricing	Assignment 3 due; Assignment 4 posted	March 19
March 25	Search and Matching I		March 26
April 1	Search and Matching II	Assignment 4 due	April 2
April 8	Revision		

Tutorials

In weeks when an assignment is due, the TA will use the tutorial class to work through solutions to the assignments. In weeks when no assignments are due, the TA will work through supplementary problems during the tutorial.

Evaluation

Each student's grade will be calculated as follows:

- Written assignments: 40% (four assignments worth 10% of the final grade each).
- Midterm exams: 30%
- Final exam: 30%.

Assignments

There will be four assignments, each worth 10% of the final grade. Assignments will provide an indication of the type of questions that will be on the exams. While students are encouraged to discuss the

assignment material with classmates, each student must ensure that their submitted work is their own. Please see the statement on plagiarism below.

Students are free to use Generative Artificial Intelligence tools (e.g. ChatGPT) to help prepare for their assignments. However, it is unlikely that ChatGPT would be able to solve the types of questions posed in the assignment. In any case, note that 60% of grades are 'performance-based'. I.e., you will have to solve the problems in a set period of time in person, at the exam hall, to succeed in the course. Therefore, rely on ChatGPT at your own peril.

Only physical copies of assignments will be accepted, and must be received by the due date and time indicated on the assignment. **Late assignments will not be accepted, and will receive a mark of zero.** In case of an unexpected emergency, you can scan the assignments (either using a proper scanner, or using your smartphone with some kind of scanning app) and submit it to me electronically via email **before** the due date and time, along with an explanation for why you were unable to deliver the assignment in person.

While every effort will be made to return graded assignments to students in a timely manner, sometimes delays are unavoidable. It is therefore recommended that students **retain some form of copy of their completed assignment** when handing it in.

Midterm Exam

If you miss the midterm, the weight of that midterm will be automatically added to the final exam. There will be no deferred/make-up midterm exams. If it is possible to do so, students must inform me in advance if they are unable to write a midterm for some reason. I reserve the right to request a Self-Declaration form or PMC letter of accommodation. Note that missing the mid-term means that 60% of your grades will depend on your performance on the Final exam, which increases the risk of a bad outcome.

Final Exam

The final exam will take place during the term examination period at a time set by the University. Students are not to make travel plans during the exam period as that is not a valid reason for missing a final exam. The final exam will cover content from the entire course.

Re-grading

Any request for the remarking of an exam or assignment must be submitted in writing within one week of exam/assignment grades being returned to the class. The request should contain a detailed explanation of why you feel you should receive a higher mark. Please note that remarking will apply to the entire assignment/exam, not just the contentious question. As a result, the revised mark could end up being higher than, lower than, or the same as the original mark.

Final Course Grade

Students must write the final exam in order to achieve a passing grade. Students who do not write the final exam because of illness or other circumstances beyond their control may apply to write a deferred final exam by contacting the Registrar's Office no later than three working days after the original final exam was scheduled. In the event that a student writes a deferred exam, the deferred exam will carry the same weight as the final exam in determining the course grade. Any deferred exam will not be identical to the original final exam.

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

Plagiarism, Resources and Mental Health, Academic Accommodations

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found here.

Treatment of Course Materials