

ECON 450

Advanced Economic Theory 1 - Honours

Department of Economics
McGill University
Winter 2024

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Office hours: Tuesdays, 3pm-4pm, or by email appointment. I will also make heavy use of the Discussion Board under myCourses, students are strongly encouraged to post questions about the course material.

Regular classes: Tuesdays and Thursdays, 4.05pm-5.25pm, Rutherford Physics Building 114.

Teaching assistant: Jiyoung Kim, jiyoung.kim4@mcgill.ca.

Course Overview and Learning Outcomes

- This course introduces students to a formal treatment of modern Macroeconomic Theory. There are two main components, carefully building and understanding the basic economic model, and then applying it to address specific topics. For example, we will examine the following substantive questions:
 - What are the determinants of sustained, long-run economic growth? Why are some countries so much poorer than others? Should we expect poorer countries to converge to richer ones?
 - Why are there business cycles over the short-run? What explains how income per capita, investment, and employment behave over the business cycle? What role can economic policy play?
 - To what extent should the government redistribute income in society?
 - Why have real interest rates been so low for so long, and why have they been increasing more recently?

- Why have average stock returns been so much higher historically than the return on government bonds?

While most topics might have been previously covered in other Macroeconomics courses, namely ECON 353/4, the emphasis will now be on a more rigorous treatment.

- The course is aimed at ambitious students wishing to further their understanding of Macroeconomics, and to enhance their ability to think critically about the current economic debate and policy evaluation. It will also provide a good bridge between undergraduate and graduate-level studies.
- A good knowledge of both Macroeconomic and Microeconomic Theory is critical, as well as proficiency in calculus and basic statistics. The formal prerequisites are ECON 250D1/D2 and ECON 353/4.

Course Materials

There is no required course textbook. The outline follows Stephen Williamson's *Macroeconomics*, Sixth Canadian edition, Pearson Education Canada, 2021, which is very strongly recommended. Students are expected to have a very good knowledge of the material contained in this book.

The course material expands upon Stephen Williamson's more advanced notes for his book, available through myCourses. Most sections in the course content have a correspondence to these notes, and are indicated with a 'W' below. Further references will be added, mostly for further discussion and to highlight applications and related current events. Class attendance is extremely important.

Course Content

1. Introduction.
 - (a) Motivation and overview.
 - (b) Empirical facts.
2. Labor, consumption, and production decisions in a static model (W, Sections 1.1 and 5.1).
 - (a) Applications: government spending (W, Section 1.2), optimal redistribution.
3. Dynamic model without investment (W, Section 1.3).

- (a) Applications: permanent income hypothesis (W, Section 6.1), Ricardian equivalence (W, Section 1.3).
4. The neoclassical growth model without uncertainty (W, Chapter 3).
 - (a) Competitive equilibrium.
 - (b) Efficient allocation.
 - (c) Dynamic programming.
 - (d) Steady-state and dynamics.
 - (e) Applications: real interest rate determination, cross-country income differences.
 5. The neoclassical growth model with uncertainty (W, Section 5.2).
 - (a) Competitive equilibrium, efficient allocation, steady-state and dynamics.
 6. Endogenous growth (W, Section 4.2).
 7. Asset pricing (W, Section 6.2).
 - (a) Application: equity premium puzzle.

Evaluation

The final grade for the course will be based on:

1. Problem sets (25%), there will be three of them throughout the semester, only a random subset of the questions will be graded per problem set.
2. Midterm exam (30%) on Thursday, February 29, during regular class time, based upon the material covered until then. This exam is mandatory.
3. Final exam (45%), covering all the material. This exam is also mandatory.

Notes:

- The weighting cannot be changed on the basis of performance. The weight of the midterm can be moved to the final only via properly justified (e.g. medical note) absences. Absences to the final exam also need to be properly justified, and need to be followed-up by an official request for a deferral on Minerva.
- Supplemental examination for those eligible will cover all the course material, and will count for 100% of the course grade.

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