Faculté des sciences sociales | Faculty of Social Sciences
Département de science économique | Department of Economics

PhD Macroeconomic Theory II
ECO 79250-A00 (Part II)
Winter, 2025

Course Information

Class Schedule:
Thursdays 08:30 - 11:20 A.M.
In presence
FSS 4014

Instructor Information:
Name: Yazid Dissou
Email: ydissou@UOTTAWA.CA
Office Hours: Wednesdays: In presence; 15:00-16:00
Communication Preferences: Emails

Other instructor(s)/TAs: TBA

Before emailing a question, please read this syllabus and explore the associated resources. The answers to many questions can be found in this document and students may be referred to the syllabus if the answer is already available. Please allow at least two **(2) business days** for responses to inquiries before pursuing another route of communication.

Official Course Description

Modern dynamic stochastic general equilibrium models, such as real-business-cycle models, models of labour-market and financial frictions, and heterogeneous-agent models. Students also learn computational techniques to solve and estimate these models.

Additional Course Description

PhD Macroeconomic Theory II is the second PhD course in macroeconomics. It deals with modern techniques used to understand economic fluctuations and labour market frictions.

This second part of the course will focus on dynamic general equilibrium models in a stochastic framework. The topics covered will include real business cycles (RBC) models without and with frictions and dynamic stochastic general equilibrium (DSGE) models with nominal rigidities. Finally, students will be introduced to the computational techniques used to simulate these models.

Teaching Methods

The second part of the course is delivered in person and is structured as a weekly lecture. It will start on March 11^h, 2025. Course materials will be available in PDF format on Brightspace. Students are encouraged to expand their knowledge by reading the textbook and suggested journal articles. They will also be able to master the material covered in class through graded homework assignments.

Course Calendar

- **March 11, 2025: Lecture 1: RBC models I (The basic RBC model)**
- **March 18, 2025: Lecture 2: RBC models I (The basic RBC model) cont'**
- **March 18, 2025: Release of Assignment (due for March 26, 2024, at 18:00)**
- **March 25, 2025: Lecture 3: RBC models II (Extensions of the basic RBC model)**
- **April 01, 2025: Lecture 4: The Basic New-Keynesian DSGE model**

Assessment Strategy

The evaluation of this second half of the course will be based on one assignment and one final exam:

- Assignment **released** on **March 20, 2025,** and due on **March 27, 2025, at 18:00** (15.0%).
- An in-presence final exam (TBA). (35%).

Assessment Policies and Expectations

Attendance

To ensure they succeed in all courses of their program of study, students have the responsibility to participate in the various learning and assessment activities for each of their courses.

EIN (fail) Grading Policy

In all economics courses, students who fail to complete work (either a single piece of work or a combination of work) worth a total of 25% or more of the final grade will receive a grade of EIN in the course. The EIN grade is equivalent to a failure mark (F). See Regulation A-3 (https://www.uottawa.ca/about-us/policies-regulations/academic-regulations/a-3-grading-system) for details. Please note that a denied request for a deferral may therefore lead to failing the course.

Students who have not completed evaluations worth at least 25% of the total course grade by **March 21** must withdraw from the course. Otherwise, they will receive an EIN grade and will automatically fail the course.

Missed exams and requests for deferral

As per Academic Regulation A-8, absence from any examination on medical grounds or due to exceptional personal circumstances, must be reported by submitting the online Declaration of Absence from an Evaluation form within the five

(5) following working days of the examination. If a deferred evaluation is granted for the final exam, the evaluation must take place as soon as possible, but no later than six (6) months of the end of the term for undergraduate studies and no later than three (3) months for graduate studies.

Students who defer an exam will be required to write a deferred evaluation, except where the professor offers a re-weighting scheme. (If available, such a scheme is described in this syllabus).

A $60 administrative fee will be charged for each submission of the Declaration of Absence from an Evaluation form.

All students must write the final exam of the course.

Deferred final examinations will take place on May 10, 2025.

Students should reflect deeply before requesting a deferred evaluation. Students who are struggling to keep up with their schedule may find it worthwhile to withdraw from the course and take it again at a later date. For further information on withdrawing from the course , consult the link https://www.uottawa.ca/course-enrolment/withdrawing-from-a-course .

Exam conflicts

Any conflict with a midterm exam schedule should be reported to the Professor at the beginning of the term. This request is especially applicable to the type 3 conflict (two in-class exams back-to-back) for students with special learning needs.

Any conflict with a final exam schedule should be reported to the Faculty's undergraduate office as soon as the final examination schedule is released.

Late Assignments

All assignments are to be submitted by their due date and time.

All late submissions will be immediately docked 5%, with an additional 5% for each subsequent day late to a maximum of 3 days, *including weekends.* **After 3 days all outstanding assignments will be given a zero (0%) grade.**

Required Materials

No textbook will be followed exactly. Lectures will be based on journal articles, chapters from some textbooks, and handouts provided on the course website. However, the recommended textbooks are:

- M. Azzimonti, P. Krusell, A. McKay, and T. Mukoyama (2024). Macroeconomics. Available online at **https://phdmacrobook.org/.**
- Romer, D. (2019) Advanced Macroeconomics, McGraw-Hill/Irwin, 5th edition.

Bibliography

Real Business Cycles Models and DSGE Sticky Prices Models

- Bils, M. and P. Klenow (2004), "Some evidence on the importance of sticky prices", *Journal of Political Economy*, 112(5), 947-985
- Blanchard, O. J., & Kahn, C. M. (1980). The solution of linear difference models under rational expectations. *Econometrica*: Journal of the Econometric Society, 1305-1311.

- Boldrin, M., Christiano, L. J., & Fisher, J. D. (2001). Habit persistence, asset returns, and the business cycle. *American Economic Review*, 91(1), 149-166.
- Calvo, G. A. (1983). Staggered prices in a utility-maximizing framework. *Journal of Monetary Economics*, 12(3), 383-398.
- Campbell, J. Y. (1994) Inspecting the Mechanism: An Analytical Approach to the Stochastic Growth Model. *Journal of Monetary Economics*, 33, 3.. 463-506
- Cho, Seonghoon and Antonio Moreno (2006), "A Small-Sample Study of the New-Keynesian Macro Model", *Journal of Money, Credit and Banking*, 38(6), 1461-1481
- Christiano, L. J., Eichenbaum, M., & Evans, C. L. (2005). Nominal rigidities and the dynamic effects of a shock to monetary policy. *Journal of political Economy*, 113(1), 1-45.
- Christiano, L. J., & Fitzgerald, T. J. (2020). The Business Cycle: It's Still a Puzzle. In *Handbook of Monetary Policy* (pp. 25-62). Routledge.
- Clarida, R., J. Gali and M. Gertler (2000), "Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory", *The Quarterly Journal of Economics*, 115(1), 147-180.
- Cogley, T., & Nason, J. M. (1995). Output dynamics in real-business-cycle models. *The American Economic Review*, 492-511.
- Erceg, C. J., Henderson, D. W. and A. T. Levin (2000), "Optimal monetary policy with staggered wage and price contracts", *Journal of Monetary Economics*, 46(2), 281-313
- Fuhrer, J. C. (2000). Habit formation in consumption and its implications for monetary-policy models. *American Economic Review*, 90(3), 367-390.
- Galí, J. (2015), Monetary Policy, *Inflation, and the Business Cycle* (2nd ed.). Princeton University Press, Princeton
- Gali, J., and P. Rabanal. "Technology shocks and aggregate fluctuations: How well does the RBC Model Fit Postwar U.S. Data?" *NBER Macroeconomics Annual* (2004).
- Hansen, G. D. (1985). Indivisible labor and the business cycle. *Journal of monetary Economics*, 16(3), 309-327.
- Hayashi, F. (1982). Tobin's marginal q and average q: A neoclassical interpretation. *Econometrica*: Journal of the Econometric Society, 213-224.
- King, R., & Rebelo, S. (2000). Resuscitating Real Business Cycles, Ch. 14 in *Handbook of Macroeconomics*, JB Taylor & M. Woodford Ed.
- Klein, P. (2000). Using the generalized Schur form to solve a multivariate linear rational expectations model. *Journal of Economic Dynamics and Control*, 24(10), 1405-1423.
- Kydland, F. E., & Prescott, E. C. (1982). Time to build and aggregate fluctuations. *Econometrica*: Journal of the Econometric Society, 1345-1370.
- Kydland, F. E., & Prescott, E. C. (1990). Business cycles: Real facts and a monetary myth. *Federal Reserve Bank of Minneapolis Quarterly Review*, 14(2), 3-18.
- Long, J. and C. Plosser (1983), Real Business Cycles, *Journal of Political Economy*, 39-69.
- Lucas, R. E. (1976, January). Econometric policy evaluation: A critique. In *Carnegie-Rochester conference series on public policy* (Vol. 1, No. 1, pp. 19-46).
- Lucas Jr, R. E., & Prescott, E. C. (1971). Investment under uncertainty. *Econometrica*: Journal of the Econometric Society, 659-681.
- Mankiw, N. G., & Reis, R. (2002). Sticky information versus sticky prices: a proposal to replace the New Keynesian Phillips curve. *The Quarterly Journal of Economics*, 117(4), 1295-1328
- Rogerson, R. (1988). Indivisible labor, lotteries and equilibrium. *Journal of Monetary Economics*, 21(1), 3-16.
- Rotemberg, J. J., & Woodford, M. (1997). An optimization-based econometric framework for the evaluation of monetary policy. *NBER Macroeconomics Annual*, 12, 297-346.

- Smets, F., & Wouters, R. (2003). An estimated dynamic stochastic general equilibrium model of the euro area. *Journal of the European Economic Association*, 1(5), 1123-1175.
- Söderlind, P. (1999). Solution and estimation of RE macromodels with optimal policy. *European Economic Review*, 43(4-6), 813-823.
- Uhlig, H. (1999), "A Toolkit for Analysing Nonlinear Dynamic Stochastic Models Easily," in *Computational Methods for the Study of Dynamic Economies*, ed. by R. Marimon, and A. Scott, pp. 30–61. Oxford University Press, London
- Yun, T. (1996). Nominal price rigidity, money supply endogeneity, and business cycles. *Journal of Monetary Economics*, 37(2), 345-370.

Indigenous Affirmation

ANISHINÀBE
Ni manàdjiyànànig Màmìwininì Anishinàbeg, ogog kà nàgadawàbandadjig iyo akì eko weshkad. Ako nongom ega wìkàd kì mìgiwewàdj.
Ni manàdjiyànànig kakina Anishinàbeg ondaje kaye ogog kakina eniyagizidjig enigokamigàg Kanadàng eji ondàpinangig endàwàdjin Odàwàng.
Ninisidawinawànànig kenawendamòdjig kije kikenindamàwin; weshkinìgidjig kaye kejeyàdizidjig.
Nigijeweninmànànig ogog kà nìgànì sòngideyedjig; weshkad, nongom; kaye àyànikàdj.

[Listen to the audio file](#)

ENGLISH
We pay respect to the Algonquin people, who are the traditional guardians of this land. We acknowledge their longstanding relationship with this territory, which remains unceded.
We pay respect to all Indigenous people in this region, from all nations across Canada, who call Ottawa home.
We acknowledge the traditional knowledge keepers, both young and old.
And we honour their courageous leaders: past, present, and future.

Important additional information: This information is also available on the Faculty of Social Sciences website, on the [Student Hub](#) webpage under «[Ressources, administrative policies and academic Regulations](#) »

- **Intellectual Property Rights of Course Content**: The professor retains copyright to all material created as part of their course, including online courses, unless they have entered into another copyright agreement. Visit the [Copyright Office webpage](#) or consult your professor.

- **Artificial intelligence (AI) and academic integrity:** Consult your professor to obtain the parameters of using AI to complete your assignments in his or her course.

- **Health and wellness:** There are many [resources available](#) to help you.
- [Student Health and Wellness Centre](#)
- [Academic support](#)

- **Institutional Policies and Academic Regulations:** It is very important to know the institutional policies and academic regulations associated with your academic success. Listed below are some of the key academic regulations you should familiarize yourself with:

    o **Academic Integrity and Academic Misconduct**: If you would like clarification regarding academic integrity and misconduct, please consult Academic Regulation A-4 or consult your professor.

    o **Bilingualism at the University of Ottawa:** Per Academic Regulation A-1 : « Except in programs and courses for which language is a requirement, all students have the right to produce their written work and to answer examination questions in the official language of their choice, regardless of the course's language of instruction.»