

# ECO5021F - Advanced Macroeconomics

School of Economics, University of Cape Town

Semester 1, 2025

## General Information

**Lecturer:** A/Prof. Hylton Hollander

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**Lectures:** Mondays and Wednesdays, 11h00 - 12h45 (in-person)

**Tutorials:** Fridays, 09h00 - 10h45 (in-person)

**Consultation:** By appointment via email

## Course Description

This course provides a rigorous, graduate-level introduction to modern macroeconomics, covering both long-run economic growth and business cycle fluctuations. The first part covers growth models, while the second part explores business cycle theories and macroeconomic policy. The course integrates theoretical models with empirical evidence and discusses applications in monetary and fiscal policy.

## Prerequisites

Students must have completed: Intermediate Macroeconomics, Intermediate Microeconomics, Advanced Calculus, Linear Algebra. Familiarity with statistical and computational software: MATLAB, R, Python, or Julia is recommended but not required.

## Course Texts

**Main Textbook:** [Romer](#), D. Advanced Macroeconomics (2019, 5th Ed.)

**Note:** *Additional Readings* and *Podcasts* are provided in each section, but they are not prescribed.

# Course Outline

## Part I: The State of Macroeconomics & Economic Growth

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### Session 1: Introduction to Modern Macroeconomics

Readings: [Caballero \(2010\)](#), [Romer \(2016\)](#), [Reis \(2017\)](#), [Korinek \(2017\)](#), [Uhlig \(2012\)](#).

*Podcasts:*

- EconTalk: Diane Coyle on the Soulful Science (2008). [Link](#)
  - EconTalk: William Easterly on Benevolent Autocrats and Growth (2011). [Link](#)
  - Macro Musings: Mark Koyama on How the World Became Rich (2024). [Link](#)
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### Session 2: The Solow Growth Model

Reading: [Romer \(2019\)](#), Chapter 1: the Solow Model.

*Additional Readings:* [Sala-i Martin \(1997\)](#), [Du Plessis and Smit \(2007\)](#).

*Podcasts:*

- EconTalk: Paul Romer on Growth (2007). [Link](#)
  - EconTalk: Paul Romer on Charter Cities (2010). [Link](#)
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### Sessions 3: The Ramsey-Cass-Koopmans Model

Reading: [Romer \(2019\)](#), Chapter 2A: the RCK Model

*Podcasts:*

- EconTalk: Paul Romer on Urban Growth (2015). [Link](#)
  - EconTalk: Paul Romer on Growth, Cities, and the State of Economics (2019). [Link](#)
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### Session 4: The Diamond (Overlapping Generations) Model

Reading: [Romer \(2019\)](#), Chapter 2B: the OLG Model.

*Additional Readings:* [Diamond \(1965\)](#).

*Podcasts:*

- Macro Musings: Jesús Fernández-Villaverde on Demographic Trends, Recent Macroeconomic Developments, and AI's Implications for Economic Growth (2023). [Link](#)
  - LSE Podcasts: Gertjan Vlieghe on Debt, Demographics and the Distribution of Income: new challenges for monetary policy (2016). [Link](#)
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## Part II: Business Cycles & Monetary Policy

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### Session 5: Real Business Cycle (RBC) Theory

Reading: [Romer \(2019\)](#), Chapter 5: RBC Theory.

*Additional Readings:* [Kehoe et al. \(2018\)](#), [Nakamura and Steinsson \(2018\)](#).

*Podcasts:*

- EconTalk: Lee Ohanian on the Great Recession and the Labor Market (2010). [Link](#)
- Macro Musings: Brian Albrecht on Business Dynamism (2025). [Link](#)

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### Session 6: Nominal Rigidities and Price Dynamics

Reading: [Romer \(2019\)](#), Chapter 6: Nominal Rigidities and Fluctuations.

*Additional Readings:* [Nakamura and Steinsson \(2013\)](#). Interview with Emi Nakamura on Macroeconomics (2022). [Link](#)

*Podcasts:*

- Hoover Institute: Greg Mankiw on New Keynesian Macro, Growth and Econ Policy (2024). [Link](#)
- MacroMusings: Ben Moll on the Basics of HANK Models and How They Can Be Applied to Policymaking (2020). [Link](#)

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### Session 7: The Canonical New Keynesian DSGE Model

Reading: [Romer \(2019\)](#), Chapter 7: the NK Model

*Podcasts:*

- Macro Musings: Eric Sims on New Keynesian Modelling and the Future of Macroeconomics in a Low Interest Rate Environment (2020). [Link](#)
- Macro Musings: Jonathon Hazell on Phillips Curves, Wage Rigidity, and How to Measure R-Star (2024). [Link](#)

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## Part III: Asset Pricing, Credit Cycles, and Financial Crises

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### Session 8: Models of Investment and Consumption (Asset Pricing)

Reading: [Romer \(2019\)](#), Chapter 8: Consumption & Chapter 9: Investment.

*Podcasts:*

- EconTalk: Robert Shiller on Housing and Bubbles (2008). [Link](#)
- EconTalk: Luigi Zingales on the Costs and Benefits of the Financial Sector (2015). [Link](#)

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## Session 9: Credit Cycles and Financial Crises

Reading: [Romer \(2019\)](#), Chapter 10: Financial Markets and Financial Crises

*Additional Readings:* [Kiyotaki and Moore \(1997\)](#), [Gertler et al. \(2016\)](#).

- EconTalk: Robert Townsend on Development, Poverty, and Financial Institutions (2011). [Link](#)
  - EconTalk: Anat Admati on the Financial Crisis of 2008 (2018). [Link](#)
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## Tutorials

- Weekly tutorials will cover problem sets related to the lectures.
- Students are expected to attempt problem sets before the tutorials.
- Some tutorials will include computational exercises in MATLAB/Dynare.

## Assessment

- Coursework & Midterm Test: 40%
- Final Exam: 60%

Coursework involves Problem Sets for tutorial sessions. The midterm test covers Part I of the course. The final exam covers all course content except the Solow model, Ramsey-Cass-Koopmans, and OLG models (i.e., Part I).

## Academic Integrity

Plagiarism and academic dishonesty are serious offenses. All students must adhere to UCT's [Academic Integrity Policy](#).

## References

- Caballero, R. J. (2010). Macroeconomics after the crisis. *Journal of Economic Perspectives*, 24(4):85–102.
- Diamond, P. A. (1965). National debt in a neoclassical growth model. *American Economic Review*, 55(5):1126–1150.
- Du Plessis, S. and Smit, B. (2007). South africa's growth revival after 1994. *South African Journal of Economics*, 75(2):185–207.

- Gertler, M., Kiyotaki, N., and Prestipino, A. (2016). Wholesale banking and bank runs in macroeconomic modeling of financial crises. In Taylor, J. B. and Uhlig, H., editors, *Handbook of Macroeconomics*, volume 2, pages 1345–1425. Elsevier.
- Kehoe, P. J., Midrigan, V., and Pastorino, E. (2018). Evolution of modern business cycle models: Accounting for the great recession. *Journal of Economic Perspectives*, 32(3):141–166.
- Kiyotaki, N. and Moore, J. (1997). Credit cycles. *Journal of Political Economy*, 105(2):211–248.
- Korinek, A. (2017). Thoughts on dsge macroeconomics: Matching the moment, but missing the point? *Stiglitz Festschrift*.
- Nakamura, E. and Steinsson, J. (2013). Price rigidity: Microeconomic evidence and macroeconomic implications. *Annual Review of Economics*, 5(1):133–163.
- Nakamura, E. and Steinsson, J. (2018). Identification in macroeconomics. *Journal of Economic Perspectives*, 32(3):59–86.
- Reis, R. (2017). Is something really wrong with macroeconomics? *CESifo Working Paper Series*, 6446(6446).
- Romer, D. (2019). *Advanced Macroeconomics*. McGraw-Hill, 5th edition.
- Romer, P. (2016). The trouble with macroeconomics. *The American Economist*.
- Sala-i Martin, X. (1997). I just ran two million regressions. *American Economic Review*, pages 178–183.
- Uhlig, H. (2012). Economics and reality. *Journal of Macroeconomics*, 34:29–41.