

Course Code Advanced Macroeconomics II 2024-2025 Third Module

Course Information

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Office Hours: Tuesdays & Fridays 9:00 am - 10:00 am

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Office Hours: tba

Classes:

Lectures: Tuesdays & Fridays, 10:30-12:20 am

Venue: tba

1. Course Description

1.1 Context

Course overview:

This course is a second part of the foundations of macroeconomics sequence. It starts off by introducing the fundamental concept of rational expectations used in solving models featuring uncertainty and the technique of dynamic programming used for writing down and analysing dynamic macroeconomic models. Then, the course introduces key topics in consumption (permanent income and random walk hypotheses, precautionary savings, asset pricing) and investment (cost of capital, Tobin's q, adjustment costs). Later part of the course covers topics on economic policy (taxation, debt, inflation, and the problem of dynamic inconsistency). The last part of the course introduces the baseline real business cycle/RBC (or dynamic stochastic general equilibrium/DSGE) model - the workhorse quantitative tool of modern macroeconomics - and its extensions.

Prerequisites:

Advanced Mathematics (at least know basic calculus and how to use Lagrange method) Basic Statistics
Passed Advanced Macroeconomics I.

1.2 Textbooks and Reading Materials

Selected chapters of the following textbooks:

- David Romer's "Advanced Macroeconomics," 4th edition
- Ben Heijdra's "Foundations of Modern Macroeconomics," 3rd edition.
- Lars Ljungqvist and Thomas Sargent's "Recursive Macroeconomic Theory," 4th edition (optional readings)

Class notes and academic papers will be distributed by TAs.

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment
Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Yes, students will practice producing and delivering presentations.
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Yes, through inclass discussions of homeworks and materials covered, and presentations of academic papers.
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	Yes, group discussions and group homeworks.
	2.2. Students will be able to apply leadership theories and related skills.	No.
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	No.
	3.2. Our students will practice ethics in the duration of the program.	Yes, building strict discipline in class and work ethic through regular assignments.
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Yes, global economy macroeconomic issues will be introduced.
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Yes, assessment of fundamental macro-theories.
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Yes, assessment of problem solving in macro-setting.
	5.3. Our students will demonstrate competency in critical thinking.	Yes, one of major goals of this course.

2.2 Course specific objectives

2.3 Assessment/Grading Details

Home works (20%): Four problem sets to solve. Submissions of problem sets can be done in groups of up to 4 students.

Class activity (5%): We will have 4 extra sessions for solving the homeworks. Students volunteering to present their solutions will be awarded extra credit, up to 5% of the final grade.

Final Exam (75%): takes place on the 20th or 23rd of April (closed book).

Class discipline - read carefully. Violating each will deduct total score by 5 points.

- 1, **no mobile phone use**. Laptops/tablets permitted only for taking notes.
- 2, entry and exits within class time should be quiet and non-distracting.

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

AI tools requirements:

Final exam will be closed book. AI tools may be used only as assistance in solving home works, but all final analysis must be done by students. Depending on the severity of the situation, penalties will be implemented in accordance with the provisions of the Peking University Graduate Student Handbook.

For more information of plagiarism, please refer to PHBS Student Handbook.

3. Topics, Teaching and Assessment Schedule

Teaching Schedule:

1. Rational expectations

• Heijdra's textbook – chapters 5.1-5.3

2. Dynamic programming

- Ljungqvist & Sargent's textbook chapter 3.
- Romer's textbook chapter 8.7.

3. Consumption

• Romer's textbook – chapter 8.

4. Investment

• Romer's textbook – chapter 9.

5. Economic policy

- Heijdra's textbook chapters 6 and 9.
- Romer's textbook chapter 13.

6. Real business cycle (dynamic stochastic general equilibrium) model

- Romer's textbook chapter 5.
- Heijdra's textbook chapter 18.
- Ljungqvist & Sargent's textbook chapter 12.
- Altug, Sumru and Young, Warren, 2013. "Real Business Cycles After Three Decades: A Panel Discussion with Edward Prescott, Finn Kydland, Charles Plosser, John Long, Thomas Cooley, and Gary Hansen," *Macroeconomic Dynamics*.
- Royal Swedish Academy of Sciences, 2004. "Finn Kydland and Edward Prescott's Contribution to Dynamic Macroeconomics: The Time Consistency of Economic Policy and the Driving Forces Behind Business Cycles."