Course Code
Advanced Macroeconomics I
2 thModule, 2025

Course Information

Instructor:
Office: PHBS Building, Room
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Office Hour: Wednesday 4:00-5:30 or by appointment

Teaching Assistant:
Phone:
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Classes:
Lectures: Tue & Fri 10:30-12:20
Venue: PHBS Building, Room 319

Course Website:
If any.

1. Course Description

1.1 Context

Course overview:

This is the first course in the graduate sequence in macroeconomics. Its purpose is to introduce the basic models macroeconomists use to study economic growth and fluctuations. Topics include the basic Ramsey–Cass–Koopmans model, overlapping generation model, Romer model, the RBC model or the labour/leisure choice, non-trivial investment decisions, money, price setting, the "new Keynesian" model, monetary policy, and fiscal policy.

Prerequisites:

1.2 Textbooks and Reading Materials

L. Ljungqvist and T. Sargent, Recursive Macroeconomic Theory
D.Romer, Advanced Macroeconomics

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment (YES with details or

		NO)
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	**YES**
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	**YES**
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**
	2.2. Students will be able to apply leadership theories and related skills.	YES
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
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	NO
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
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	YES
	5.3. Our students will demonstrate competency in critical thinking.	YES

2.2 Course specific objectives

Students are expected to be familiar with the basic models in macroeconomics and are expected learn some basic toolkits used in macroeconomists. These models are

a. dynamic programming and its application in macroeconomics.
b. Search, Matching, and Unemployment
c. Ramsey–Cass–Koopmans model and phase diagram
d. Growth models and growth accounting
e. RBC model and solution to linear rational expectation models
f. Multiple equilibrium
g. Consumption theory and equity premium
h. New Keynesian model
i. Shocks and identification
j. Financial frictions (if time allows)

2.3 Assessment/Grading Details

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.

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

3. Topics, Teaching and Assessment Schedule

Requirements

Homework:	24%
Midterm Exam:	30%
Final Exam:	46%

Course Outline

Part 1. Introduction to Macroeconomics (1 week)

1. Macroeconomic Facts

2. The revolution of Macroeconomic Theory

3. Introduction to Dynamic Program

Reference:

a. Romer "Introduction"
b. Jones , “The Facts of Economic Growth”, 2016
c. Mark, and Gopinath. “Emerging market business cycles: The cycle is the trend”, Journal of Political Economy (2005) 115(1):69-102.
d. Olivier Blanchard, “What do we know about macroeconomics that Fisher and Wicksell did not?” , QJE 115, no.4 (November 2000): 1375-1410
e. Woodford, M., “Revolution and Evolution in Twentieth-Century Macroeconomics.”
f. N. Gregory Mankiw, “The Macroeconomist as Scientist and Engineer.”
g. V. V. Chari and Patrick J.Kehoe, "Modern Macroeconomics in Practice: How Theory Is Shaping Policy."
h. Homework 1: Facts of Economic Growth in China

Part 2. Growth Theory (4 weeks)

1. Solow Model and the Neoclassical Aggregate Production function (1 week)

Reference:

a. D.Romer, Chapter 1
b. Prescott, “Robert M. Solow's Neoclassical Growth Model: An Influential Contribution to Economics”
c. H. S. Houthakker, “The Pareto Distribution and the Cobb-Douglas Production , The Review of Economic Studies, Volume 23, Issue 1, 1955, Pages 27–31
d. Hsieh, Chang-Tai, and Peter J. Klenow. "Misallocation and manufacturing TFP in China and India." The Quarterly journal of economics 124.4 (2009): 1403-1448.
e. Lagos, Ricardo, “A model of TFP”, The Review of Economic Studies 73.4 (2006): 983-1007.
f. Homework 2

2. The Ramsey-Cass-Koopmans Model (1 weeks)

Reference:
a. D.Romer, Chapter 2
b. Strotz, “Myopia and inconsistency in dynamic utility maximization.” The review of economic studies 23.3 (1955): 165-180.
c. Laibson, David. "Golden eggs and hyperbolic discounting." The Quarterly Journal of Economics 112.2 (1997): 443-478.
d. Homework 3

3. Overlapping Generation Model (1 weeks)

Reference:
a. Diamond, Peter A. "National debt in a neoclassical growth model." The American Economic Review 55.5 (1965): 1126-1150.
b. Blanchard, Olivier J. "Debt, deficits, and finite horizons." Journal of political economy 93.2 (1985): 223-247.
c. Weil, Philippe. "Overlapping families of infinitely-lived agents." Journal of public economics 38.2 (1989): 183-198.
d. Tirole, Jean. "Asset bubbles and overlapping generations." Econometrica: Journal of the Econometric Society (1985): 1499-1528.
e. Homework 4

4. Endogenous Growth Theory (1 weeks)

Reference:
a. Paul Romer, “Endogenous technological change,” Journal of Political Economy 98 (Part 2), S71-S102.
b. Lucas, Robert, E. Jr. “On the Mechanics of Economic Development,” *Journal of Monetary Economics,* Vol. 22, 1988:3—42
c. Homework 5

Part 3. Theory on Fluctuations (5 weeks)

1. The canonical Real Business cycle model (1.5 weeks)

Reference:

a. R. King, S. Rebelo, and C. Plosser, “Production, growth, and the business cycle,”JME 21 (1988), 195-232.

b. Lecture note on Calibration, log-linearization, and solution methods.

c. D. Romer, Chapter 4.

d. Homework 6

2. Consumption Theory and Investment theory (1 weeks)

   a. Equity Premium, welfare cost of business cycle
   b. Recursive Utility
   c. Reference dependence Utility
   d. Q-theory
   Homework 7

3. Asset Bubbles in infinite period (1 week)

   References:

   a. Miao and Wang (2012, 2018)
   b. Miao, Wang and Xu (2015)
   c. Dong, Miao and Wang (2024)

4. Informational friction (1weeks)
   a. Lucas (1973)
   b. Sticky Information Model (2001)
   c. Benhabib, Wang and Wen (2015, 2024)
   d. Homework 8