

Course Code Advanced Macroeconomics II (Sessions F2 & F3) 2022-2023 Second Module

Course Information

Instructor: Karol Mazur

Office: PHBS Building, Room 665 Phone: 86-755-2603-2293 Email: <u>kmazur@phbs.pku.edu.cn</u> Office Hours: Tuesdays & Fridays 10:30 am - 12:30 pm

Teaching Assistant: Junbiao Chen

Email: junbiaochen@stu.pku.edu.cn Office Hours: TBA

Classes:

Lectures: Session F2: Tuesdays & Fridays, 8:30–10:20 am Session F3: Tuesdays & Fridays, 13:30–15:20 pm Venue: TBA (PHBS Building)

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.

Class notes and academic papers will be distributed by TAs.

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment
1. Our graduates will be effective	1.1. Our students will produce quality business and research-oriented documents.	No.
communicators.	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Yes, through in- class discussions.
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

Homework (25%): Homework assignments have to be submitted before deadlines announced by TAs, late submission will not be accepted.

Class Participation (5%): You can get additional credit for active class participation. We will have sessions dedicated to solving homework exercises, where students can volunteer to present their solutions on whiteboard. Furthermore, students will have possibility to participate in critical discussions of materials and papers covered.

Final Exam (70%): takes places on the 3rd or 4th of January 2023.

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.

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

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

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."

7. Introduction to DSGE models with heterogeneous agents (subject to time permitting)

- Aiyagari, R. (1994) "Uninsured Idiosyncratic Risk and Aggregate Saving," Quarterly Journal of Economics.
- Merz, M. (1995) "Search in the labor market and the real business cycle," Journal of Monetary Economics.
- Domeij, D. and Heathcote, J. (2004) "On the Distributional Effects of Reducing Capital Taxes," International Economic Review.
- Buera, F., Kaboski, J. and Shin, Y. (2011) "Finance and Development: A Tale of Two Sectors," American Economic Review.
- Kehoe, P. and Perri, F. (2002) "International Business Cycles with Endogenous Incomplete Markets," Econometrica.