

# ECON 3123: Macroeconomic Theory I

## 1. WHO ARE THE INSTRUCTORS?

### General Information

- Instructor: Byoungchan Lee ([bclee@ust.hk](mailto:bcleee@ust.hk))
- Section Time and Location (3 Units)
  - Mon/Wed 12:00 noon – 1:20 PM, LSK1014.
- Office hours: Tue 3:00 – 5:00 PM, LSK6068.
- Course Website: <https://canvas.ust.hk>

### Teaching Assistant

- Emily K Chen ([eckuan@ust.hk](mailto:eckuan@ust.hk))
  - T1: Wed 6:00 PM – 6:50 PM, LSK1009
  - Office hours: Thu 2:30 – 3:30 PM, LSK6066
- Weekly Tutorials
  - In tutorials, we will review course material, sharpen analytical techniques, and cover exercise questions.
  - The first tutorial will be held on February 11.

## 2. WHAT IS THIS COURSE ABOUT?

### Course Description

This is an introductory course to macroeconomic theory. It covers business cycles in both closed and open economies. This course deals with theory, data, and economic policies to develop a balanced perspective on the real-world economic environment.

We define major macroeconomic variables, such as gross domestic product, price level, and unemployment rate. Then, we will investigate how the goods and money markets move in the short run (IS-LM). Building on the IS-LM model, we introduce the labor market and prices into the analysis and develop the IS-LM-PC framework for the short and medium run. Using the theoretical framework, we study what a fiscal authority and a central bank can do to stabilize macroeconomic fluctuations. Finally, we extend our framework to open economies and investigate the interactions of domestic macroeconomic variables with exchange rates, trade, and foreign economic conditions.

### Required Textbook

- Blanchard, Olivier (2021), *Macroeconomics*, 8<sup>th</sup> ed., Pearson.
- Chapters from the textbook will be assigned as readings. You are expected to read them.
- Because this textbook's 7th and 8th editions are substantially different from the previous editions, you are strongly advised to have the recent editions.

### Macroeconomics Sequence

- Building on the materials covered in this course, students will learn more advanced topics in Macroeconomic Theory II (ECON 3143).
- The topics covered in ECON 3143 include, but are not limited to, long-run economic growth, micro foundation of macroeconomics, business cycles, and the open economy.
- Students will learn more formal and rigorous analytical tools, methods, and modern models in ECON 3143.

## References

This list is only for those who find macroeconomics fascinating and want to study further in the future. They are not included in the required readings.

- Garin, Julio, Robert Lester, and Eric Sims (2021). *Intermediate Macroeconomics*.  
[https://www3.nd.edu/~esims1/gls\\_textbook.html](https://www3.nd.edu/~esims1/gls_textbook.html)
- Schmitt-Grohe, Stephanie, Martin Uribe and Michael Woodford (2022), *International Macroeconomics*.
- Landefeld, J. Steven, Eugene P. Seskin, and Barbara M. Fraumeni (2008). “Taking the Pulse of the Economy: Measuring GDP.” *Journal of Economic Perspectives* 22(2): 193–216.  
<https://www.aeaweb.org/articles?id=10.1257/jep.22.2.193>
- Romer, David H. (2000). “Keynesian Macroeconomics without the LM Curve.” *Journal of Economic Perspectives* 14(2): 149–69.  
<https://www.aeaweb.org/articles?id=10.1257/jep.14.2.149>
- Bernanke, Ben (2013), “A Century of US Central Banking: Goals, Frameworks, Accountability.” *Journal of Economic Perspectives* 27(4): 3-16.  
<https://www.aeaweb.org/articles?id=10.1257/jep.27.4.3>

## Course Intended Learning Outcomes (ILOs) and their Mapping to School Intended Learning Outcomes (SILOs) and Program Intended Learning Outcomes (PILOs)

Upon successful completion of this course, you should be able to:

- ILO1) Identify important macroeconomic variables and understand their relationships. (SILO #3, PILOs #1 and 3)
  - ILO2) Gather and organize the relevant macroeconomic information for a given context. (SILO #3, PILOs #1 and 3)
  - ILO3) Apply tools learned in class to analyze some historical and current macroeconomic events. (SILOs #1 and 4, PILOs #3 and 4)
  - ILO4) Discuss the consequences of a macroeconomic shock or a policy intervention. (SILOs #2 and 4, PILO #2)
  - ILO5) Develop an appreciation for macroeconomics and a desire to continue further study. (SILOs #2 and 3, PILO #4)
- For the details of SILOs and PILOs, please refer to the following link:
    - (SILO) <https://bmundergrad.hkust.edu.hk/academics/academic-programs/learning-outcomes>
    - (PILO) <https://econ.hkust.edu.hk/programs-n-courses/econ/econ-curriculum>

### Course Outline and Tentative Schedule

- I. Introduction and Measurement (Chapters 1 and 2): Week 1
  
  - II. The Short Run
    - a. The Goods Market and The IS Relation (Chapter 3): Week 2
    - b. Financial Markets and The LM Relation (Chapter 4): Week 3
    - c. Goods and Financial Markets: The IS-LM Model (Chapter 5): Week 4
    - d. Financial Markets II: The Extended IS-LM Model (Chapter 6) with Expectations (Chapters 14-16): Week 5
  
  - III. The Medium Run
    - a. The Labor Market (Chapter 7): Week 5
    - b. The Phillips Curve, the Natural Rate of Unemployment, and Inflation (Chapter 8): Weeks 5-6
    - c. From the Short to the Medium Run: The IS-LM-PC Model: Week 7
  
  - IV. The Short Run in an Open Economy
    - a. Openness in Goods and Financial Markets (Chapter 17): Week 8
    - b. The Goods Market in an Open Economy (Chapter 18): Week 9
    - c. Output, the Interest Rate, and the Exchange Rate (Chapter 19): Week 10
  
  - V. The Long Run
    - a. The Facts of Growth (Chapter 10): Week 11
    - b. Saving, Capital Accumulation, and Output (Chapter 11): Week 12
    - c. Technological Progress and Growth (Chapter 12): (if time permits)
- There will be no lessons on February 16, February 18, April 6, and April 8.

### 3. ASSESSMENT / EXAMS / PROBLEM SETS

#### Assessment Scheme

Problem Sets	20%	4 problem sets
Midterm	40% or 25%	In-class, March 18, Wednesday
Final	40% or 55%	TBA

- $20\% * \text{Problem Sets} + \text{Max}\{ 40\% * \text{Midterm} + 40\% * \text{Final}, 25\% * \text{Midterm} + 55\% * \text{Final} \}$
- Attending lectures and tutorials is not mandatory but strongly recommended.
- The assessment marks will be released on Canvas within two weeks.

#### Exam, Review Session, and Regrading Policy

- The final exam is cumulative but focuses on the materials discussed after the midterm.
- If there is an issue that prevents you from taking an exam, please contact the instructor BEFORE the exam.
- Regrading policy. If you believe that there is an error in the grading:
  - You can file a formal, typed regrading request to your TA. The request should list the question you want to be regraded and an explanation of why.
  - The request should be emailed to your TA within 7 days after the paper-checking session.
  - The TA reserves the right to regrade the entire exam. Scores may increase or decrease as a result.
  - The TA further reserves the right to reject any request for fewer than 3 points.

#### Problem Sets

- We will have four problem sets, and all of them will be counted toward the letter grade.
- Working in groups is welcome and recommended. However, each student should submit individually written reports.
- Late submissions will not be accepted.
- Graded problem sets will be returned through Gradescope. An invitation will be sent to your HKUST email account.

#### Mapping of Course ILOs to Assessment Tasks

- Problem Sets (Course ILOs 1-5). Some problem set questions are designed to investigate the relationship between macroeconomic variables using real-world data (ILO 1). Students can learn how to access, organize, analyze, and display economic data when answering the problem set questions (ILO 2). Furthermore, by looking at time series data through the framework of macroeconomic models we would develop

in the course, students could explain macroeconomic development in the past and present (ILOs 3 and 4). Finally, understanding the course content's real-world relevance could stimulate students' academic desire and intellectual curiosity for further study in related topics (ILO 5).

- Midterm and Final (Course ILOs 1-5). The importance of major macroeconomic variables in understanding business cycles and their dynamics will be emphasized throughout the semester and tested in exams (ILOs 1 and 2). A formal investigation of the variables, specifically their joint covariation, required tools to be discussed in the course (ILO 3). It will be checked whether students can apply the tools to various macroeconomic events, especially real-world events, for a systematic understanding of them (ILOs 3 and 4). Similar to the problem set, realizing the macroeconomic framework's power in understanding complex macroeconomic dynamics would make students develop an appreciation for macroeconomics and a desire to continue further study (ILO 5).

### **Final Grade Descriptors**

- A (Excellent Performance). Demonstrate a deep understanding of macroeconomic variables, their measurement, their systematic relationships over business cycles, and stabilization policies' workings. Exhibit superb skills to identify the key drivers of macroeconomic dynamics and propose necessary policies by governments and central banks to address potential difficulties over business cycles. Effectively communicates complex logic and chain of events using equations, graphs, and intuitions.
- B (Good Performance). Shows a solid grasp of macroeconomic variables, their measurement, their systematic relationships over business cycles, and stabilization policies' workings. Demonstrate good skills to identify the key drivers of macroeconomic dynamics and propose necessary policies by governments and central banks to address potential difficulties over business cycles. Explains major parts of macroeconomic phenomena using equations, graphs, and intuitions.
- C (Satisfactory Performance). Possesses an adequate understanding of macroeconomic variables, their measurement, their systematic relationships over business cycles, and stabilization policies' workings. Display satisfactory skills to identify the key drivers of macroeconomic dynamics and propose necessary policies by governments and central banks to address potential difficulties over business cycles. Communicates parts of macroeconomic phenomena using equations, graphs, and intuitions but may lack depth in analyses.
- D (Marginal Pass). Understand the basics of macroeconomic variables, their measurement, systematic relationships over business cycles, and stabilization policies' workings. Shows limited skills to identify the key drivers of macroeconomic dynamics and propose necessary policies by governments and central banks to any potential difficulties over business cycles. Communicates limited parts of macroeconomic phenomena using equations, graphs, and intuitions but may lack depth in analyses and may do it incorrectly.

- F (Fail). Demonstrate insufficient understanding of macroeconomic variables, their measurement, their systematic relationships over business cycles, and stabilization policies' workings. Lacks skills to identify the key drivers of macroeconomic dynamics and propose necessary policies by governments and central banks to address any potential difficulties over business cycles. Struggles to explain macroeconomic phenomena using equations, graphs, and intuitions.

## 4. WHEN YOU HAVE QUESTIONS OR SUGGESTIONS...

### Email policy

- Please add [ECON3123] in the title line of your email. It may take up to 2 or 3 days to respond during busy exam periods.

### Office Hours

- Time and Location: Tue 3:00 – 5:00 PM, LSK6068.
- If you are unavailable during the above time, we can arrange a separate meeting. Alternatively, we can just talk before or after each lecture.
- You can also go to the TA's office hours.
- Questions asked right before exams and due dates of problem sets may not be answered.

## 5. STUDENT COUNSELING

Many students experience personal and family problems, as well as emotional difficulties, such as depression, suicidal thoughts, and anxiety, while in college. The Counseling and Wellness Center is available to consult with you regarding various emotional health issues that may affect you or your friends. The Counseling and Wellness Center is in Room 5332, Academic Building (via Lift 3). Their telephone number and email address are 2358 6699 and [counsel@ust.hk](mailto:counsel@ust.hk), respectively. You can also make an online appointment with student counselors

([https://counselapp.hkust.edu.hk/do.php?p=https%3A%2F%2F%2Fcounsel.hkust.edu.hk%2Fmake\\_an\\_appointment.php](https://counselapp.hkust.edu.hk/do.php?p=https%3A%2F%2F%2Fcounsel.hkust.edu.hk%2Fmake_an_appointment.php)). Outside office hours, you can call 8208 2688, which is a 24-hour helpline for all HKUST students.