Department of Economics
Hong Kong University of Science and Technology

Economics 3143
Macroeconomic Theory II- L2
Fall 2026

Lecture: Jenny Xu	**Office Hours:**
	Tuesdays 3-4 pm, or
Office Number: LSK 6071	**by appointment**
Phone: 2358-7604	
Time and Venue: Tuesdays/Thursdays 1:30-2:50 pm	
LSK 1011	
Email: jennyxu@ust.hk	
Please go to Canvas to find course related material.	

Teaching Assistant: Astor Fok, *Email: ecastor@ust.hk*
Office Hour: TBA.
Office Number: 6066

Required Textbook:

1. Garin, Julio, Robert Lester, and Eric Sims (2021). *Intermediate Macroeconomics* (here after, GLS)

For Long-run Growth, Microfoundation of Macroeconomics, Business Cycle

Textbook is available at

juliogarin.com/files/textbook/GLS_Intermediate_Macro.pdf

Lecture Notes: I will post power point slides for each chapter. However, during the lecture I will give more detailed explanation. **Use the lecture notes as your main reference for assignments and preparation of exams.**

Pre-requisites

This course is for BSc degrees in Economics (including ECOF and MAEC students). It is also available to other students as permitted by the regulations. Therefore,

1. Students are expected to have completed Econ 3123 or an equivalent intermediate macroeconomic course.
2. According to a curriculum change effective since Fall 2021, Microeconomic Theory I (ECON 3113) is a prerequisite for taking ECON 3123 and 3143. Please refer to the following website for the suggested study pathway:
   Study Pathway | HKUST Department of Economics
3. This requirement will be waived for two years of the transition period until Spring 2023.

Program Intended Learning Outcomes (PILOs) for ECOF

See the following link for PILOs: The Curriculum | HKUST Department of Economics

Course Intended Learning Outcomes (CILOs) and Mapped PILOs:

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

1. Have a general knowledge of macroeconomics. Describe the main questions in macroeconomics and the main components of standard Macroeconomic theories. Understand the determinants of economic growth and drivers of business cycles, as well as the role of economic policies in promoting long run growth and stabilizing short run fluctuations. (PILO # 1 #3 #4)
2. Apply the macroeconomic concepts, principles, and models to analyze economic phenomena, conduct economic analysis of the economy and society, and carry out independently applied research in macroeconomic problems. (PILO #3, #4)
3. Analyze qualitatively and quantitatively basic macroeconomic problems, apply your knowledge to practical situations and make sound economic decisions, and adapt to changes in business and social environments and professional requirements. (PILO # 1 #3 #4)
4. Communicate effectively in oral and written English. (PILO # 2)
5. Locate, gather, organize and use appropriate information for macroeconomic studies. (PILO # 1)
6. Demonstrate an understanding of the determinants of long run growth and economic fluctuations and their application to policy analysis and evaluation. Apply macroeconomics model to analyze macroeconomic issues and effects of conventional and unconventional monetary policies, fiscal stimulus, and current account imbalance. (PILO # 1 #3 #4)

Course Description:

In Macroeconomics I (Econ 3123), we have studied economies in the short and medium run. Specifically, we use the IS-LM model and the IS-LM-PC model to study how the output, the price level, and the employment are determined in the short-run and medium-run. We also examine the impact of various policies on the economy in the short run and in the medium run. In the short run, business cycles (fluctuations around the trend of growth) are important. In the medium run, we need to take the labor market into consideration. The IS-LM-PC framework provides a basic framework for economics and policy analysis. Then two extensions to the basic framework are analyzed. First, uncertainty and expectations into consideration. Expectations play a major role in most economic decisions, and by implication, play a major role in the determination of output. Second, the study is extended from closed economy to open economy models, and how openness in goods and financial market affect the output, price and exchange rate determination are explored.

Now you have an integrated view of macroeconomics, in this course we will have a formal examination of macroeconomic theory, which provides the foundations for macroeconomic analysis and the design of macroeconomic policies. The course aims to make students familiar with formal analytical tools in macroeconomics, particularly the dynamic general equilibrium approach. During the coursework, we apply these frameworks to explore quantitatively and empirically a broad set of economic questions regarding economic growth, real business cycles, current account dynamics, and fiscal and monetary policies.

After studying this course, students will have a general knowledge about the main questions (growth and fluctuations) in macroeconomics and understand the analytical tools and methods used in modern macroeconomic theory, which will help students to analyze the current macroeconomic events and policies and their impact on the business environment and the economy. It will also provide a bridge between UG-level macroeconomics and Master/PhD level macroeconomics and lay solid foundation for students who are interested in pursuing graduate studies in economics.

We will start with the economic growth, which determines the living standard in the long run. We will first explore the facts of growth, and then investigate the determinants of long-term economic growth, such as the role of capital formation and technological progress (Solow Model). Then we use the basic Solow model to study the large differences in standards of living across countries. We will find that to understand the observed facts, endogenous saving decisions should be considered, which provides a nice bridge to the following part of the course-the microfoundation of macroeconomic models. □□
□
A major achievement in economics over the last forty years has been to incorporate these microeconomic fundamentals into models designed to answer macroeconomic questions. We will first introduce some basic tools, including the general equilibrium and simple 2-period dynamic models where consumers, workers and firms optimize. Then we will use this framework to analyze macroeconomic fluctuations (real business cycle theory) and the drivers of business cycles. We will also explore whether or not predictions from the neoclassical model can produce business cycles observe in the data.

A treatment of the microeconomic foundations consumption and investment prepares the ground for a detailed analysis of macroeconomic policies. We will then go back to policy analysis, and use the micro-founded IS-LM-AD-AS framework to analyze yield curve, zero lower bound, fiscal stimulus and unconventional monetary policy that have been used by policy makers in the recent 2008 financial crisis.

Finally, we can use the dynamic general equilibrium approach to study some important questions in the real world, including the relationship between yield curve, macroeconomy and the monetary policy, and the policy response to financial crisis.

Course Objective:

This course aims

(i) to give formal examination of main macroeconomic questions by introducing the dynamic general equilibrium model and the microfoundation of macroeconomic analysis.
(ii) to help students to develop the necessary analytical concepts and tools to analyze the current macroeconomic events and its impact on the business environment and the economy; and help students to lay solid foundation for graduate studies in economics.
(iii) to enable students to understand and evaluate the effects of various government policies on the business environment and the economy;
(iv) to encourage students to think critically and creatively when making effective economic decisions and policy suggestions supported by macroeconomic theories and analytical and quantitative techniques.

Teaching Approach

This course is primarily delivered through lectures, tutorials, and class discussion.

Teaching and Learning Activities	**Roles in the Course**	**Course Learning Outcome addressed**
Lectures with in-class discussions	Explain key concepts and models to students	1, 2, 3, 4, 5, 6,7,8
Tutorials	Review basic model and concepts; Presenting answers to homework and exams; Review and introduction of empirical and quantitative tools; Presentation of Group Project;	3,4,5,7

Homework assignments and Essay Analysis	Practice problem solving, apply models to analyze current economic issues	3,4,5,6,7,8

Course Outline:

I Long-run Growth

1. Facts of Economic Growth (Notes, Chapter 4, GLS) -Week 1-2
2. The Solow Model (Notes, Chapter 5-6, GLS) - Week 2-3
3. Understanding Cross-Country Income Differences (Notes, Chapter 7, GLS) -Week 3-4

II Microfoundation of Macroeconomics

1. A simple two-period model of consumption and saving (Notes, Chapter 9, GLS) -Week 4-5
2. Production Economy and General Equilibrium Approach (Notes, Chapter 11-12 GLS) **–** Week 5-6

We will have a midterm during class time in Week 6 or 7 (tentatively Thursday, Oct. 15, 2026).

III Business Cycle

1. Real Business Cycle (Notes) - Week 6-8
2. New Keysian IS-LM-AS-AD Model (Notes,) **–** Week 8-11

Reference for Real Business Cycle is Chapter 18-20, GSL, and reference for New Keysian Model is Chapter 24-25. But these chapters are long and complicated. My notes will be simpler. You can focus on the notes.

IV Financial Market

Yield Curve and Monetary Policy (Blanchard Chapter 14.1-14.2, Chapter 34, GSL), Week 11-12

Remark*:* Depending on our progress, we may or may not cover all these topics. The associated chapters in GSL are in parentheses. You can focus on the class notes if you cannot read them all. But reading them is recommended for better understanding of the course material.

Grading Policy:

Problem Sets ---Each 6%, total 30%

Midterm ---25%
Final Exam ---40%

Class and Tutorial participation--5%
Class participation -----------------3.5%
Tutorial participation -------------1.5%

1. There will be **five** Problem Sets, each worth 6% of your final grade. Problem sets should be handed in through Canvas online (for all students, including those in HK) on or before the due date. In order to ensure the timely posting of the answer keys**, no late problem sets will be accepted.**

2. **Midterm Exam:** The midterm exam is tentatively scheduled for **Thursday, October 15.** The venue will be announced later, and there will be no lecture on that day. **There will be no make-up midterm exam.** If a student is unable to attend the midterm for a **legitimate and documented reason**, such as illness, medical emergency, or serious family emergency, the student must notify the instructor **BEFORE** the exam and provide appropriate supporting documentation. Upon approval, the weight of the midterm exam will be transferred to the final exam.

3. **Final exam:** The final exam is closed book and cumulative. No make-up examinations will be administered except under very unusual circumstances. If something prevents you from attending an exam on time, you should notify the lecturer **BEFORE** the exam. Note that outside activities or more than one exam in a day are not acceptable excuses for missing an exam or turning in an assignment late. (Please plan accordingly!) If I am not contacted in advance, where possible, I will reserve the right to assign a failing grade for the exam missed.

4. Exams are closed book and closed notes. You can request a review of the grade within two weeks after the exam is returned to you. After that period grades can NOT be revised.

5. Class participation mark will depend on attendance (Mentimeter Participation) and discussion performance. Tutorial participation will depend on tutorial attendance. Misconduct in class, such as late arrival, early leaving, chatting, and using mobile phones will result in losing part or all of class participation marks.

Mapping of Course ILOs to Assessment Tasks

Assessed Task	**Mapped ILOs**	**Explanation**
Homework	ILO1, ILO2, ILO3, ILO5, ILO6	The assignments assess students' ability to explain and apply macroeconomics concepts (ILO 1),

		evaluate their implications (ILO 2), critically analyze their role in society (ILO 3), locate, gather, organize and use data for macroeconomic studies (ILO 5), and synthesize a well-argued solution (ILO 6).
Midterm and Final Exams	ILO1, ILO2, ILO3, ILO4, ILO6	The exams assess students' understanding and reflection of knowledge learned in this course (ILO 1), ability to use the knowledge covered in the course to analyze macroeconomic questions (ILO2) and address economic problems (ILO6), and the ability to communicate in written English (ILO4).
Class and tutorial Participation	ILO1, ILO2, ILO3 ILO4	The class participation assesses students' understanding and reflection of knowledge learned in this course (ILO 1), students' ability to critically evaluate macroeconomic polies (ILO 3) and analyze economic problems (ILO 2), as well as communicate effectively in oral English (ILO4).

Rubrics for Final Grade

Grade	Short Description	Elaboration
A	Excellent Performance	Students demonstrate a strong grasp of course materials, effectively utilize tools discussed, excel in problem sets, and perform exceptionally on exams. They exhibit exceptional analytical skills, critical thinking, and effective participation in class discussions.

B	Good Performance	Students exhibit a solid understanding of course materials, proficient use of tools, and competent completion of problem sets. They show commendable analytical skills, effective critical thinking, and participation in class discussions.
C	Satisfactory Performance	Students demonstrate an adequate understanding of course materials, satisfactory use of tools, and completion of problem sets. They display acceptable analytical skills and participation in class discussions.
D	Marginal Pass	Students show limited understanding of course materials, inconsistent use of tools, and incomplete performance in problem sets. Their participation in class discussions is minimal.
F	Fail	Students display a lack of understanding of course materials, inadequate use of tools, and unsuccessful completion of problem sets. They show little to no participation in class discussions.

General Policies:

Lecture Notes: I will post power point slides for each chapter. However, during the lecture I will give more detailed explanation. Each student is responsible for lectures missed due to absences.

Academic Policy: Dishonesty or plagiarism will not be tolerated. Any student violating **HKUST Academic Integrity and Honor Code** (http://www.ust.hk/vpaao/integrity) will be subjected to disciplinary procedure. Any student observed cheating on exams, or plagiarizing material, will receive an "**X**" for the course, to show that the grade resulted from cheating. This X grade stays with your record until graduation. If you cheat again and "earn" another X grade, you will be dismissed from the University.

Classroom Courtesy: Class discussions will be conducted in an orderly fashion. Late arrival and early leave will not be tolerated. You should ask for my permission first if you have any emergent situation to attend. If a student must enter the classroom after class has begun, please do so as quickly and quietly as possible. You are welcome to bring your laptop to class in order to take notes. However, since we use a lot of graphs for illustration, it is recommended that you write notes down. **Note that you may not engage in distracting behavior such as using your laptop to surf the Web, to check e-mail, or to do instant-messaging. Chatting or using mobile phones in class is not allowed either.** Violators will lose part or all class participation marks. I will also reserve the rights to ask violators to leave the class room or not allowing violators to write the exams.

Please read the following files for good learning environment. https://drive.google.com/file/d/1Dx8_zdqBkeBGyRjo1AUoJtUtMnOSmFPV/view?usp=sharing

Please read the following link for regulations of student conduct.
https://acadreg.ust.hk/A_Regulations_for_Student_Conduct_20190219.pdf

No Make-up of Course Requirements: No make-up examinations will be administered except under very unusual circumstances. If something prevents you from attending an exam or from turning in an assignment on time, you should notify me, and we can make alternative arrangements **BEFORE** the exam or class period during which the assignment is due. Note that outside activities or more than one exam in a day are not acceptable excuses for missing an exam or turning in an assignment late. (Please plan accordingly!) If I am not contacted in advance, where possible, I will reserve the right to assign a failing grade for the exam missed.

Student Counseling: Students who are experiencing difficulty with the course should visit the instructor during office hours or by appointment.