Economic Development and Growth
Econ 4434 – Spring 2026

Time and Location		Contact Info	
Time	Tuesday 09:00 - 10:20 AM Thursday 09:00 - 10:20 AM	Instructor Email	SHIUE, Carol H. shiue@ust.hk
Location Zoom link	LSK 1033 See https://canvas.ust.hk/	TA Email Office Hrs.	CHEN, Emily eckuan@ust.hk Thurs 2:30-3:30pm LSK 6066

1. Office hours: Tue 2-3pm and by appointment. My office is located in LSK, room 6075.
2. Tutorial time and location: Tuesday 6:00 – 6:50 PM in LSK 1033. Tutorial sessions will be used for reviewing for exams and to go over assignments, and for TA office hours. Check Canvas announcements. No tutorials unless explicitly scheduled.

Course Description

The aim of this course is to synthesize recent ideas and approaches in economic growth and to survey leading explanations for the causes of growth. The first part of the course examines the degree to which income variations across countries can be attributed to variations in capital as one of the determinants of factor accumulation. The second part focuses on the role of population and labor. In the third part, we study how productivity and technology explain income differences. We also spend some time exploring the deeper or fundamental characteristics of countries that may underlie differences in factor accumulation and productivity across countries. Textbook material will be supplemented with articles about country experiences and other contemporary topics of interest.

Prerequisites: ECON3014 or ECON3133

Required Textbook
Economic Growth, 4rd edition, by Quamrul H. Ashraf and David N. Weil. Routledge.

Assessment Scheme

Your course grade will have the following components:

1. Midterm (30%)
   - Short-answer and longer-answer problem solving questions.
   - There are no makeup dates. If you miss the midterm due to a valid documented emergency, your midterm grade will be reweighed by the final exam. You must inform the instructor by email before the midterm and obtain medical proof within the day. Failure to do so will result in a zero being entered in the gradebook.

2. Article Presentation and Discussion (10%)
   - You will present an article on the reading list (15-20 minutes) and facilitate a class discussion, as part of a team. These are labelled Student Article Presentations in the syllabus.
   - The team will guide a discussion (~10 minutes) based on open-ended questions crafted by the team. Questions may draw on the paper or on own perspectives, to encourage further class discussion about the article.
   - One presenter from the team must email me the presentation slides and discussion questions by 5pm of the day before the presentation.

3. Class Participation (10%)
   - Those not presenting will be asked to participate in the article discussions presented by student teams throughout the semester.
   - There will be short in-class writing prompts and quizzes to gauge student understanding. Grades are based on effort.

4. Assignments (5%)
   - Assignments are for review of the material covered in lecture and will consist of short-answer questions to be submitted in Canvas. There will be 3 assignments.

5. Final Exam (45%)
   - The Final Exam is comprehensive.
   - If you miss the final exam for a valid documented reason, a new exam will be scheduled at the discretion of the instructor; this exam may be a written exam or an oral exam.

Intended Learning Outcomes

This course emphasizes quantitative reasoning in application to questions of economic growth. We will focus on understanding economic modeling, the analysis of data, and applications to global events. The format of classes will consist of lectures, in-class problem solving, and student presentation of articles and in-class discussion. Tutorials will support your learning: the time will be used to go over assignments, review for exams, and provide assistance as needed. Please refer to the Program Intended Learning Outcomes list (link) for details of the learning goals. Upon completion of this course, you will be able to:

1. Gain a thorough understanding of the stylized facts of growth and apply analytical and statistical techniques to evaluate factors contributing to income differences across countries. (Learning Goal #1)
2. Collaborate effectively in group projects and presentations that examine topics relevant to economic growth, present and discuss academic research on economic growth clearly and critically. (Learning Goal #2)
3. Use economic data to decompose growth into contributions from capital, labor, human capital, and productivity, and understand how quantitative evidence may be used to assess policy-relevant explanations for growth outcomes. (Learning Goal #3)
4. Examine how institutions, inequality, demographic change, and social norms affect long-run economic growth. (Learning Goal #4)

Grading Rubrics

The following rubric will be used to guide course grades.

Grade	Short Description	Elaboration
A	Excellent Performance	Students demonstrate a strong grasp of course materials, effectively utilize tools discussed, perform exceptionally on exams, presentations, and final projects. 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 exams, presentations, and final projects. 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 exams, presentations, and final projects. 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 exams, presentations, and final projects. 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 exams, presentations, and final projects. They show little to no participation in class discussions.

Additional Course Information

1. Course website
   - Website address: http://canvas.ust.hk.
   - Course materials will be posted on the course website.

2. Communication
   - Check Canvas Announcements regularly to make sure you receive all updates.
   - Keep me informed if you are facing difficulties and be proactive by suggesting possible solutions.
   - Assessment marks for individual assessed tasks will be communicated via Canvas within two weeks of submission. Feedback on assignments will include strengths and areas for improvement. Students who have further questions about the feedback, including marks, should consult the instructor within five working days after the feedback is received.

3. Class participation and attendance is important.
   - Attendance will be taken randomly.
   - Everyone automatically receives 3 excused absences at the start of semester to cover contingencies such as minor illnesses and personal emergencies.
   - Beyond 3 absences, each recorded absence will negatively impact the final course grade by 1-percentage point.
   - Late assignments are not accepted.

4. AI Policy
   - You are prohibited from using generative artificial intelligence (AI) to produce any materials or content related to the assessment of task.

5. Electronic Devices
   - You may use electronic devices during class to take notes or support learning objectives for this class.
   - Electronic devices should not be used for non-class-related tasks (texting, social media, etc.), or in a way that is distracting to anyone in the class.

6. Academic Honesty
   - Academic honesty and integrity are central to HKUST. Please familiarize yourself with university rules and the HKUST academic honor code. The code will be strictly enforced, and any violation cases will be reported to the university.

Topic Outline

The schedule below is an outline of the topics covered this semester. The schedule will adapt to class progress as needed.

Module	Dates	Topics
Part I:		
Module 1	Feb 3, 5	Intro course; research; what is econ history
Module 2	Feb 10, 12	Growth Equation, PPP
	Feb 17-19 Lunar-year break	
Module 3	Feb 24	Poverty and Inequality
Module 4	Feb 26, Mar 3	Physical Capital
Module 5	Mar 5	Evolution of Capital
Module 6	Mar 10, 12	Optimal Savings

Midterm review: Mar 24
Midterm exam: Mar 26, 9-10:20AM

Module	Dates	Topics
Part II:		
Module 7	Mar 17, 19	Population and Demographics
Module 8	Mar 31, Apr 2	Human Capital: Health
	Apr 3-7 Mid-term break	
Module 9	Apr 9, 14	Human Capital: Education

Module	Dates	Topics
Part III:		
Module 10	Apr 16, 21	Productivity
Module 11	Apr 23, 28, 30	Technological Change
Module 12	May 5, 7	Fundamentals of Growth