## GENERAL INFORMATION

**Instructor:** Lichen ZHANG  
**Email:** lichenz@hku.hk  
**Office:** 901 KKL  
**Phone:** 64358041  
**Consultation times:** TBA

**Tutor:**

**Pre-requisite(s):** ECON2220 and ECON1280 (or STAT1601/STAT1602/STAT1603/STAT2601/STAT2901)  
**Co-requisite(s):**

**Mutually exclusive:**

**Course website:** Moodle via HKU Portal e-learning  
**Other important details:**

## COURSE DESCRIPTION

Inequality and growth are always among the most important topics in economics and the most pressing issues of our times as well. Widening income and wealth gap between the rich and the poor is not only experienced by developed economies like the United States, but also by emerging economies like China. Particularly, Hong Kong is one of the most unequal cities in the world, which desperately calls for policies to tackle its worsening income and wealth gap. However, policies that reduce the inequality can sometimes hurt the efficiency, thus the economic growth. This requires extra painstakingness when policy makers are designing the policies.

This course focuses on the relationship between inequality and growth, which consists of three major parts: data, model, and policy. We will start with empirical facts on inequality issues in economies over the world, in particular, U.S., China, and Hong Kong. Then we will revisit two-period Solow growth model so that we can build up the infinite-horizon Solow growth model and heterogeneous agent model to set up our framework to learn inequality and growth. Finally, we will use the model and empirical techniques we learn to provide policy guidance that can be used to deal with inequality issues and stimulate economic growth.

## COURSE OBJECTIVES

1. To provide a thorough introduction to empirical facts on inequality and growth  
2. To apply statistic methods to measure inequality and growth using micro and macro data  
3. To build up theoretical framework that can be used to learn the relationship between inequality and growth  
4. To use theoretical framework to provide policy guidance on inequality and growth

## FACULTY LEARNING GOALS (FLGs)

- **FLG1:** Acquisition and internalization of knowledge of the programme discipline  
- **FLG2:** Application and integration of knowledge  
- **FLG3:** Inculcating professionalism  
- **FLG4:** Developing global outlook  
- **FLG5:** Mastering communication skills  
- **FLG6:** Cultivating leadership

## COURSE LEARNING OUTCOMES (CLOs)

<table>
<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>Aligned Faculty Learning Goals (FLGs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand empirical facts as well as issues and challenges on inequality and growth</td>
<td>FLG 1,4</td>
</tr>
<tr>
<td>2. Use micro and macro data to measure inequality and growth</td>
<td>FLG 1,2,3,4</td>
</tr>
<tr>
<td>3. Obtain useful information from data and figures on inequality and growth</td>
<td>FLG 2, 3, 5</td>
</tr>
<tr>
<td>4. Use Solow growth model and heterogeneous agent model to study the relationship between inequality and growth</td>
<td>FLG 1,2,3,4</td>
</tr>
<tr>
<td>5. Use theoretical models to provide policy guidance on dealing with inequality issues and stimulate economic growth</td>
<td>FLG 2,3,4,6</td>
</tr>
</tbody>
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## Course Teaching and Learning Activities

<table>
<thead>
<tr>
<th>Course Teaching and Learning Activities</th>
<th>Expected Study Hours</th>
<th>Study Load (% of study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>36</td>
<td>30%</td>
</tr>
<tr>
<td>Tutorials</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>Self-study</td>
<td>72</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

## Assessment Methods

<table>
<thead>
<tr>
<th>Assessment Methods</th>
<th>Brief Description (Optional)</th>
<th>Weight</th>
<th>Aligned Course Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects and assignments</td>
<td>5-minute in-class data &amp; figure presentation (students need to collect data and produce figures by themselves)</td>
<td>40%</td>
<td>CLO 1-5</td>
</tr>
<tr>
<td>Presentations</td>
<td></td>
<td>10%</td>
<td>CLO 1-3</td>
</tr>
<tr>
<td>Midterm</td>
<td></td>
<td>20%</td>
<td>CLO 1-5</td>
</tr>
<tr>
<td>Final examination</td>
<td></td>
<td>30%</td>
<td>CLO 1-5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

## Standards for Assessment

<table>
<thead>
<tr>
<th>Course Grade Descriptors</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+, A, A-</td>
<td>Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.</td>
</tr>
<tr>
<td>B+, B, B-</td>
<td>Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.</td>
</tr>
<tr>
<td>C+, C, C-</td>
<td>Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis.</td>
</tr>
<tr>
<td>D+, D</td>
<td>Evidence of basic familiarity with the subject.</td>
</tr>
<tr>
<td>F</td>
<td>Little evidence of basic familiarity with the subject.</td>
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</tbody>
</table>

## Assessment Rubrics for Each Assessment

(Please provide us the details in a separate file if the space here is not enough)

## Course Content and Tentative Teaching Schedule

**Week 1:**
A brief introduction to inequality and growth: why they matter?
Macro measurement and national accounts (BEA-NIPA)

**Week 2:**
Micro data (CPS, PSID, CEX etc.) and inequality measurements
Empirical facts on income inequality in the U.S.

**Week 3:**
Cross-country comparisons on income inequality: developed countries
Income inequality issues in China
Income inequality issues in HK

**Week 4:**
Consumption inequality
Wealth inequality
Entrepreneurs and wealth inequality

**Week 5:**
Inequality and business cycles
Inequality during 2007-2009 financial crisis and recessions

**Week 6:**
In-class midterm

**Week 7:**
Stylized facts on growth
2-period Solow growth model revisit
infinite horizon Solow growth model

**Week 8:**
Bellman equation and basic dynamic programming
Simple heterogeneous agent model

**Week 9:**
Inequality and growth: why inequality matters for growth

**Week 10:**
Inequality over life-cycle

**Week 11:**
Inequality and welfare: how to measure welfare
Policy instruments to deal with inequality and stimulate growth: part I

**Week 12:**
Policy instruments to deal with inequality and stimulate growth: part II
Some further topics on inequality and growth

**REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS (e.g. journals, textbooks, website addresses etc.)**
The course will not have a specified textbook and will be based on the lectures notes that I write, together with a list of papers.

**MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE**

- ✔ conducting mid-term survey in additional to SETL around the end of the semester
- ☐ Online response via Moodle site
- ☐ Others: ____________________________ (please specify)

**COURSE POLICY (e.g. plagiarism, academic honesty, attendance, etc.)**

1. Lecture PDF files will be posted on Moodle before each class. Please download and bring them to class.

2. Bring paper and be prepared to take notes in each lecture.

3. Tutorials:

3.1 Tutorials start in the *first* week of class.

3.2 The tutorials serve as a complementary to the lecture. The TA will not give you another mini-lecture to summarize precious week’s lecture.

4. Assignments: **All assignments must be typed.** This is a course policy that applies to all subclasses in all academic years. You can use either MS Word or Latex/Lyx.

5. Elaboration and some examples/handouts will be done only in class. You will miss a lot of material if you skip
6. STATA: You will be taught to use STATA to deal with data in this course

7. Midterm examination policies: No supplementary midterm examination will be given. If you have a legitimate reason for missing the midterm, its weight will be added to the final exam. The only legitimate reason is sickness. If you cannot attend the midterm exam, you must inform the instructor or TA in person or via email (preferred) before the exam starts. In the case of sickness, you must provide a medical certificate to verify that you have sought medical treatment prior to the exam and that you are unfit to take the exam.

8. Final examination policies: if you have a legitimate reason for unable to attend the final exam on the scheduled time, you need to apply for a make-up exam by yourself via: http://www.exam.hku.hk

8. Do check your email regularly for course announcements from the instructor. But do not abuse the convenience of emails.

a. Do not ask about things you are supposed to know, such as those appear in Moodle or emails from the instructor/TA.

b. Email is only for very quick questions that instructor and TA can answer within 1-2 sentences. For questions such as “I don’t understand how to do Question #1 or I don’t understand the answer key to that question, could you help me?”, instructor and TA will not be able to answer them via email. For long questions, please come to the office hour of the instructor or TA, or talk to instructor after each week’s lecture.

9. Classroom conduct: Be a considerate and mature person. The instructor and TA have the discretion to impose penalty in case of classroom misconduct.
   1. Do not videotape or audio record the lectures.
   2. Please observe the following good practice:
      • Come to class and return from the break on time.
      • In case you are late, minimize disruption to the class by sitting at the back.
      • If you have to leave the class early, please inform the instructor beforehand and sit close to the door.
      • Stay attentive and do not chat with your classmates.
      • Use of mobile phone for any purposes is strictly prohibited. Remember to turn it off.

10. Academic Conduct
The University Regulations on academic dishonesty will be strictly enforced! Please check the University Statement on plagiarism on the web: http://www.hku.hk/plagiarism/

Academic dishonesty is behavior in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

a. Plagiarism - The representation of someone else's ideas as if they are one's own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one's own work. Paraphrasing of someone else's ideas is still using someone else's ideas, and must be acknowledged.

b. Unauthorized Collaboration on Out-of-Class Projects - The representation of work as solely one's own when in fact it is the result of a joint effort. Where a candidate for a degree or other award uses the work of another person or persons without due acknowledgement:
   (1) The relevant Board of Examiners may impose a penalty in relation to the seriousness of the offence;
   (2) The relevant Board of Examiners may report the candidate to the Senate, where there is prima facie evidence of an intention to deceive and where sanctions beyond those in (1) might be invoked.

Plagiarism will automatically result in at least a zero score in the plagiarized assignment or examination. Serious cases will be referred to the University's Disciplinary Committee.

ADDITIONAL COURSE INFORMATION (e.g. e-learning platforms & materials, penalty for late assignments, etc.)