GENERAL INFORMATION

Instructor: Dr. Lei Zhang  
Email: econlei@hku.hk  
Office: K.K. Leung Building 831  
Phone: TBA  
Consultation times: TBA

Class: semester 2: Tuesday, 2:00pm – 5:00pm in KK1119  
Tutor: TBA  
Pre-requisites: NA  
Co-requisites: NA  
Mutually exclusive: NA

Course Website: TBA  
Other important details: NA

COURSE DESCRIPTION

This is a special-topics course on macroeconomics (i.e., the study of aggregate or economy-wide behavior). Presumably, the topics may vary from year to year, depending on the interest of the instructor. In any case, they will be related in one way or another to the central issues of (long-run) growth and (short-run) fluctuations, as well as the analysis of growth and stabilization policies. This year the course will focus on macro-finance, firm dynamics, and heterogeneous agent models. This course is aimed to introduce PhD students the research frontier of dynamic and quantitative models in macroeconomics and finance. Students are expected to use these tools to study economic growth, business cycles, consumption, savings, investment, asset pricing, and government policies.

COURSE OBJECTIVES

1. I will try to bring you as close as possible to frontier research in macroeconomics and finance, around two different topics: macro-finance models of financial frictions, and models of heterogeneous agents/firms in macroeconomics.

2. Students are expected to learn and use tools that we cover in the class to a wide range of research topics. We will review some of stochastic differential equations, and recursive methods.

COURSE LEARNING OUTCOMES

Course Learning Outcomes | Aligned Faculty Goals
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CLO1 Understand fundamental theories and new development in macroeconomics | Goal 1, 2
CLO2 Learn and apply different tools in macroeconomics to various problems | Goal 1, 2
CLO3 Read and replicate important literature | Goal 1, 5
CLO4 Develop new research ideas | Goal 1, 2, 3

COURSE TEACHING AND LEARNING ACTIVITIES

Course Teaching and Learning Activities | Expected contact hour | Study Load (% of study)
| T&L1. Lectures | 36 hours | 25% |
| T&L2. Assignments | 72 hours | 50% |
| T&L3. Self-study | 36 hours | 25% |
| **Total** | **144 hours** | **100%** |

<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>A1. Participations/ Presentations</td>
<td></td>
<td>25%</td>
<td>CLO 1, 3</td>
</tr>
<tr>
<td>A2. Referee Report</td>
<td></td>
<td>30%</td>
<td>CLO 1, 3, 4</td>
</tr>
<tr>
<td>A3. Examinations</td>
<td></td>
<td>45%</td>
<td>CLO 1, 2, 3, 4</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100%</strong></td>
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**STANDARDS FOR ASSESSMENT**

**Course Grade Descriptors**

<table>
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<tr>
<th>Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>A+, A, A-</td>
<td>Candidate has consistently demonstrated a thorough grasp of the subject as evidenced by original or exceptionally astute analysis and synthesis, critical interpretation and presentation of principles, concepts and arguments presented within this course.</td>
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<tr>
<td>B+, B, B-</td>
<td>Candidate frequently demonstrated a substantial grasp of the subject as evidenced by an astute analysis and synthesis, critical interpretation and presentation of principles, concepts and arguments presented within this course.</td>
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<tr>
<td>C+, C, C-</td>
<td>Candidate has occasionally demonstrated a general grasp of the subject as evidenced by some analysis and synthesis, critical interpretation and presentation of principles, concepts and arguments presented within this course.</td>
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<tr>
<td>D+, D</td>
<td>Candidate has demonstrated a partial grasp of the subject as evidenced by little analysis and synthesis, critical interpretation and presentation of principles, concepts and arguments presented within this course.</td>
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<tr>
<td>F</td>
<td>Candidate has demonstrated a poor grasp of the subject with evidence of largely inaccurate understandings of principles, concepts and arguments presented within this course.</td>
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**Assessment Rubrics for Each Assessment** (Same as in the Course Grade Descriptors)

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Rubric</th>
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<tbody>
<tr>
<td>Referee Report</td>
<td>Two reports, 8-15 pages (excluding tables and graphs)</td>
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<tr>
<td>Final Exam</td>
<td>Open books, open notes</td>
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**COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE**

We shall try to cover as many of the following topics (not necessarily in the same order) as time permits.

- Mathematical Preliminaries, dynamic programming, stochastic calculus
- Macroeconomics models with financial frictions
- Bewley models, and firm dynamics
- Aggregate implications of heterogeneous agents models
- Asset pricing and continuous time models
REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS (e.g. journals, textbooks, website addresses etc.)

There is no required text. Lectures will be based on my own notes and some papers and book chapters (to be posted on Moodle). The following books are for general reference.


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

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

- The use of mobile phones and any devices that may cause disturbance to anyone is strictly prohibited. Those found violating this rule would be invited to leave the lecture room immediately.
- Cheating in exams is a "crime" under University Regulations. Students found cheating would be subject to severe punishment.
- Plagiarism and copying of copyright materials are serious offences and may lead to disciplinary actions. You should read the chapters on "Plagiarism" and "Copyright" in the Undergraduate/Postgraduate Handbook for details. You are strongly advised to read the booklet entitled, What is Plagiarism?, distributed to you upon your admission into the University, a copy of which can be found at www.hku.hk/plagiarism. A booklet entitled, Plagiarism and How to Avoid it, is also available from the Main Library.

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