Macroeconomic Analysis
ECON 6022
Fall 2017

Sept 5, 2017

1 General Information

Instructor: Dr. Heng CHEN
Office: 915 KKL
Office Hours: Wednesday 3:30-4:20pm and by appointment
Email: hengchen@hku.hk
Class Meeting: Wednesday 6:45pm-9:45pm (A) and Saturday 9:30am-12:30pm (B)
Mid-term Exam: 10:00am-12:00pm, Saturday, October 14.
Teaching Assistant: Mr. Wenhao Zhang (rwhzhang@connect.hku.hk).
Textbook: Macroeconomics: A modern approach, Robert Barro, Thomson
Lecture Notes: Lecture notes will be posted on the course website a few days prior to the class.
Problem Sets and Tutorial: Problem sets are important part of the course and they are intended to help students better understand the class materials. Some of the questions are taken from the main textbook (Barro). Others are complimentary to the lectures. Students are encouraged to work in groups, but it is compulsory to turn in solutions individually. Occasionally, optional problems are assigned. They are on average more challenging but not counted in students’ grades. However, students who are eager to gain deeper understanding of the lectures should work on those questions.

2 Course Description

This course is an overview of modern macroeconomics. We focus on four important topics: Economic growth, business cycles, money as well as government and central banks. The goal of the course is to equip students with analytical tools that are popular in modern macroeconomics. Methodology wise, we mainly make use of dynamic models and inter-temporal optimization tools. Comparing to Econ 6012, Advanced Macroeconomic Theory, this course is less technically demanding: only basic knowledge is required on multi-variable calculus and optimization with constraints. The focus of this course is to introduce ideas and analytical framework rather than formal mathematical tools.
We will start by covering some important growth models, which help us understand long run performances of both developing and developed countries. Before switching to the discussion of economic fluctuations, we present the analysis of inter-temporal choices, the key of dynamic models and the foundation of business cycles analysis. Business cycle is another important theme of this course, on which we spend three weeks. These two topics complete the real side of macroeconomics. We also offer discussion on money and prices as well as optimal policy in the second half of the course.

One of the main goals of this course is to help students develop analytical skills to understand real world issues with economic theories they learn from the course. Therefore, articles from various sources are provided for each topic. They are chosen based on the following criteria: they have to be relatively new; and priority is given to articles on China, U.S. and Hong Kong. Some of the articles demonstrate how economic theories can be applied in the analysis of real-world issues. Others provide or describe interesting economic phenomena, which can be analyzed with theories from the course. Students are advised to read those articles, although they are optional.

3 Course Objectives and Learning Outcomes

3.1 Course objectives:

The course aims to

- equip students with modern macroeconomics knowledge;
- and help students develop skills and intuition for the analysis of the economy from the macroeconomics perspective.

3.2 Learning outcomes:

By the end of the course, students should be able to

- process and analyze macroeconomic data;
- analyze real world macroeconomic issues with macro models;
- and provide critical analysis of macroeconomic policies.

3.3 Alignment of program and course outcomes

<table>
<thead>
<tr>
<th>Program Learning Outcome</th>
<th>Course Learning Outcome</th>
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<tbody>
<tr>
<td>PLO1. Understanding of fundamental theories and new development in economics</td>
<td>ILOs 1, 2 and 3</td>
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<tr>
<td>PLO2. Mastering of skills in analyzing economic data</td>
<td>ILOs 1, 2 and 3</td>
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<tr>
<td>PLO3. Demonstration of ability to apply economic knowledge and analytical skills to address policy and business problems</td>
<td>ILOs 1, 2 and 3</td>
</tr>
<tr>
<td>PLO4. Awareness of ethical concerns in economic issues</td>
<td>ILOs 1, 2 and 3</td>
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<tr>
<td>PLO5. Mastering of communication skills</td>
<td>ILOs 1, 2 and 3</td>
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4 Course Information

4.1 Prerequisites

- **Prerequisites:** *Introduction to Economics I and II* (Principle Micro and Macro).

- Students are expected to be comfortable with **multi-variable calculus**, and **basic optimization with constraints**. Students without any calculus background would find the course very challenging.

4.2 Teaching and Learning Activities

- Lectures on Major Concepts and Issues: Interactive lectures with power-point slides will be conducted with the lecturer explaining and illustrating the concepts and analytical skills. Students will be invited for active participation for in-class discussion, to share their views and experiences in applying the concepts. (ILOs 1, 2 and 3)

- Consultation: Instructor held weekly consultation time to answer students questions after class (ILOs 1, 2 and 3)

- Review Questions: Selected textbook problems and related review questions will be assigned for students to practice and gain better understanding of the concepts and issues discussed. (ILOs 1, 2 and 3)

4.3 Assessment:

<table>
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<tr>
<th>Assessment Method</th>
<th>Weighting</th>
<th>ILOs</th>
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<tbody>
<tr>
<td>1. Bi-weekly Problem Set</td>
<td>20%</td>
<td>ILOs 1, 2 and 3</td>
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<tr>
<td>2. Mid-Term Exam</td>
<td>20%</td>
<td>ILOs 1, 2 and 3</td>
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<tr>
<td>3. Final Exam</td>
<td>60%</td>
<td>ILOs 1, 2 and 3</td>
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<tr>
<td>Total</td>
<td>100%</td>
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4.4 Topics and Schedule

- **Week 1 : Economic Growth I: Facts**
  Lecture note 1;
  Appendices: [https://siepr.stanford.edu/sites/default/files/publications/487wp.pdf](https://siepr.stanford.edu/sites/default/files/publications/487wp.pdf)
  Appendices: [http://ihome.ust.hk/~socholz/ClassificationSystemDataSources.html](http://ihome.ust.hk/~socholz/ClassificationSystemDataSources.html)
• Week 2 : Economic Growth II: Solow Model

Lecture note 2;

- Paul Krugman, 1994, The Myth of Asia's Miracle, Foreign Affairs; Vol.73, Iss. 6; pg. 62

• Week 3 : Consumption and Saving

Lecture note 3; Charles Jones Chapter 22

• Week 4: Business Cycles I: Facts
  Lecture note 4; Barro, Chapter 8

• Week 5: Business Cycles II: A Framework
  Lecture note 5; Barro, Chapter 8

• Week 6: Mid-term Exam (Evening, October 22)

• Week 7: Business Cycles III: Extensions
  Lecture note 6; Barro, Chapter 9, Williamson, Chapter 17

• Week 8: Money and Prices I: Demand and Supply
  Lecture note 7; Barro, Chapter 10

• Week 9: Money and Prices II: Inflation
  Lecture note 8; Barro, Chapter 11

• Week 10: Money and Prices III: Non-neutrality and Policy
  Lecture note 9; Barro, Chapter 15, 16
  – Note on “Rational expectation”

• Week 11: Government and Optimal Fiscal Policy
  Lecture note 10;
  – Note on “Ricardian Equivalency”
– Note on “Tax Smoothing”
– Feldstein, Martin, and Jeffrey Liebman, 2006, Realizing the Potential of China’s Social Security Pension System, China Economic Times

• Week 12: Central Bank and Strategic Monetary Policy
  Lecture note 11:
  – Note on “Commitment and Discretion”

5 Class Conduct

• Cheating in exams is not allowed. Students found cheating will be punished.

• Please be on time when coming to class.

• Please turn off mobile phones and any devices that would cause disturbance to others.