# THE UNIVERSITY OF HONG KONG FACULTY OF BUSINESS AND ECONOMICS

# ECON3223 Credit, Bubbles and the Macroeconomy Semester 1, 2022-23 Sub-class 1A

#### **GENERAL INFORMATION**

#### I. Lectures

Wed 9:30-12:20 MB142

#### II. Instructor

Dr. Lam Wing Tung

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### **III.** Pre-requisites

ECON2210 Intermediate Microeconomics; and ECON2220 Intermediate Macroeconomics; and

ECON2280 Introductory Econometrics

The most relevant preparation is to familiarize with the constrained optimization by households and firms, and the equilibrium conditions in competitive markets in ECON2210 and ECON2220.

Knowledge of econometrics is needed for a full understanding of empirical studies. Basic knowledge of finance e.g., time value of money and discounting, will be helpful.

#### **COURSE DESCRIPTION**

The first half of course is about the optimal allocation of resources across different periods. We study households' consumption and saving decisions, and firms' capital investment. We introduce the intertemporal Euler equations to analyze the trade-off. We emphasize the implications of credit market imperfections. We discuss both theoretical models and empirical evidence.

In the second half, we consider the market equilibrium. We study how changes in one market spill over to the others using the general equilibrium framework. We begin with capital misallocation due to credit constraints and study its effects on the labor market and productivity. We then introduce the overlapping generations framework, in which markets in different periods are interconnected. We discuss why asset bubbles may arise and persist, even though all investors are aware of the bubbles.

#### **COURSE OBJECTIVES**

This course introduces the methodology of modern macroeconomics. It requires the students to synthesize their knowledge of microeconomics, macroeconomics, and econometrics. Students are trained to study macroeconomic issues in a scientific manner.

The topics center around the implications of credit market imperfections on the economy. The students will learn a unified model framework of micro-foundations. They will gain exposure to recent empirical studies and their empirical strategies. By the end of the course, the students should be able to comprehend research articles under limited guidance.

## FACULTY LEARNING GOALS (FLGs)

FLG1: Acquisition and internalization of knowledge of the programme discipline

FLG2: Application and integration of knowledge

FLG3: Inculcating professionalism and leadership

FLG4: Developing global outlook

FLG5: Mastering communication skills

FLG6: Cultivating leadership

COURSE LEARNING OUTCOMES		
Course Learning Outcomes		Aligned Faculty Goals
CLO1 Understand the methodology of modern macroeconomics		FGL1-2
CLO2 Synthesize knowledge of microeconomics, macroeconomics	FGL1-2	
econometric to study macroeconomic issues.  CLO3 Understand the implications of credit market imperfections on households, firms and the economy		FGL1-2
CLO4 Comprehend selected empirical studies and their empirical strategies		FGL1-2, 5
CLO5 Work with mathematical models comfortably		FGL1-2
COURSE TEACHING AND LEARNING ACTIVITIES		
Course Teaching and Learning Activities	Expected contact hour	Study Load (% of study)

T&L1. Lectures	36	30%
T&L2. Tutorials	12	10%
T&L3. Exercises and self-study	72	60%
Total	120	100%
Assessment Methods	Weight**	Aligned Course Learning Outcomes
A1. Problem sets	40%	CLO 1-5
A2. Midterm Exam	20%	CLO 1-5
A3. Final Exam	40%	CLO 1-5
Total	100%	

<sup>\*\*</sup> Exact weight to be confirmed at the beginning of the Semester

# STANDARDS FOR ASSESSMENT

# **Course Grade Descriptors**

A+, A, A-	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesize
B+, B, B-	Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesize
C+, C, C-	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 to evaluate and synthesis
D+, D	Evidence of basic familiarity with the subject
F	Little evidence of basic familiarity with the subject

# **Assessment Rubrics for Each Assessment**

<b>Performance Level</b>	Assessment Rubics for Exams
Outstanding	Answers to all or almost all of the questions:
A+, A, A-	<ul><li>a) provide correct analysis of all the issues raised by the question, and</li><li>b) are presented in a clear and logical manner.</li></ul>
Proficient	Answers to most of the questions:
B+, B, B-	rovide correct analysis of the main issues raised by the question, and re presented clearly.
	and for the rest of the questions, most of the answers provide some easonable analyses of the main issues raised by the questions.
Competent	Answers to the majority of the questions provide correct analysis of the nain issues raised by the question.
C+, C, C-	and for the rest of the questions, some of the answers provide reasonable nalyses of some of the issues raised by the questions.
Adequate D	Answers to the majority of the questions provide reasonable analysis of he main issues raised by the questions.
Failure	Few of the answers provide reasonable analysis of the main issue raised by the questions
Failure F	± **

#### **COURSE CONTENT**

- Week 1: Introduction to modern macroeconomics
- Week 2-3: Life-cycle model in perfect credit market
- Week 4-5: Life-cycle model under liquidity constraint
- Week 6: Capital investment in perfect credit market
- Week 8-9: Capital investment under credit constraint
- Week 10: Capital misallocation and total factor productivity
- Week 11: Overlapping generations framework and economic growth
- Week 12-13: Rational bubbles

# **REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS** (e.g. journals, textbooks, website addresses etc.)

This is a course on special topics. Its scope stretches beyond any single textbook. The teaching materials is drawn from a variety of recent research articles and textbook chapters. You are not expected to purchase any textbook. The instructor will provide teaching notes and post reading assignments on a weekly basis.

The main reference for each topic is listed below

# Life-cycle model:

• Tullio Jappelli, Luigi Pistaferri (2017) *The Economics of Consumption: Theory and Evidence* Oxford University Press ISBN: 9780199383153

## Capital investment:

- Roberts, Michael R., and Toni M. Whited. "Endogeneity in empirical corporate finance." *Handbook of the Economics of Finance*. Vol. 2. Elsevier, 2013. 493-572.
- Jonathan Berk, Peter DeMarzo (2017) *Corporate Finance, Global Edition, 5<sup>th</sup> edition* Pearson ISBN: 9781292304151
- Schmalz, M. C., Sraer, D. A., & Thesmar, D. (2017). "Housing collateral and entrepreneurship". *Journal of Finance*, 72(1), 99-132.
- Bahaj, Saleem, Angus Foulis, and Gabor Pinter. 2020. "Home Values and Firm Behavior." *American Economic Review*, 110 (7): 2225-70.

#### Capital Misallocation:

- Song, Zheng, Kjetil Storesletten, and Fabrizio Zilibotti. "Growing like china." *American Economic Review* 101.1 (2011): 196-233.
- Cong, Lin William, et al. "<u>Credit allocation under economic stimulus: Evidence from China</u>" *Review of Financial Studies* 32.9 (2019): 3412-3460.

### Overlapping generations framework:

• David Romer (2018) *Advanced Macroeconomics*, 5<sup>th</sup> edition McGraw-Hill Education ISBN: 978-1260185218

#### Rational bubbles:

 Blanchard, O. J., and M. W. Watson (1982) "Bubbles, Rational Expectations, and Financial Markets" in *Crisis in the Economic and Financial Structure* Tirole, Jean. "<u>Asset bubbles and overlapping generations</u>." *Econometrica* (1985): 1499-1528

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

#### **Formative assessment: Problem Sets**

Grading: The problem sets are formative assessments, which purpose is to help you identify your weaknesses. Credits are awarded far more generously on homework questions than on exam questions. Partial credits will be awarded on any serious attempts.

Collaboration: You may discuss the questions with the fellow classmates, teaching assistants and the instructor. You must write your own answer and acknowledge your classmates' input in your submitted work. Please refer to the University's regulation on plagiarism in <a href="http://www.hku.hk/plagiarism/">http://www.hku.hk/plagiarism/</a>.

Late submission: All assignments will have a clear deadline. A grade penalty applies to late assignments unless you have a medical certificate. The grade penalty is as follows: If you submit the assignment before the solution is posted, you will receive at most 80% of the normal credit. No credits will be awarded once the solution is posted online. You are expected to notify the instructor as soon as you realize that you cannot meet the deadline. The instructor will postpone the release of the solution on a case-by-case basis.

#### **Summative assessment: Exams**

Absence: Exam dates will be announced in advance. Absence from the exams requires submission of a medical certificate within 72 hours. Otherwise, you will forfeit the marks of the missed exam. Appropriate remedial action(s) will be determined on a case-by-case basis. For the University regulations regarding the final exams, please refer to the Examinations Unit.

Open book exam: You may bring any notes or print materials. You may use a calculator.

#### Extra credit

You may earn a half point credit by reporting a material typo in the teaching materials, which may cause confusion or misconception. Grammatical errors such as missing articles or incorrect pronoun are not regarded as material. If multiples students report on the same typo, only the first student will be rewarded.