

ECON 5021A/B MACROECONOMIC THEORY

(For MSc Economics) 2022-2023 Term 1

Course Description

This course introduces the approaches and methods used in modern macroeconomics at an entry graduate level. The main goal of this course is to equip students with the basic economic intuition and modeling techniques needed for further exploration in macroeconomic research.

This course is formally divided into two parts:

Part 1 – Teaching Period (Sep 7 – Oct 12, every Wednesday)

Economic Growth (Professor Chong-Kee Yip): This part emphasizes on the analysis of economic growth. Basic growth theory and growth and development accounting will first be covered. Then new directions on the theories of growth and development are studied. It also provides an introduction of different models of endogenous growth and technological change.

Part 2 – Teaching Period (Oct 19 – Nov 23, every Wednesday)

Business Cycles and Monetary Policy (Professor Paul M. Kitney): This part of the course provides an introduction to business cycles with applications in monetary policy. It includes Real Business Cycle (RBC) models, Dynamic Stochastic General Equilibrium Models (DSGE), monetary models and models with New Keynesian frictions, including nominal rigidities and financial frictions.. We cover both analytical and numerical approaches, with calibration and simulation methods taught using Matlab , Octave and Dynare. Applications to policy and real World phenomena are emphasized throughout.

Learning Outcomes

1. To understand canonical macroeconomic models and the theories behind such models.
2. To understand the methods used in generating qualitative and quantitative forecasts.
3. To evaluate the effects of macroeconomic policies and shocks on the domestic economy in the short run and their implications on society.
4. To appreciate the driving forces behind growth and cycles of the macroeconomy and their implications for further research.

Instructors/Course Tutors

	Part 1 Teaching	Part 2 Teaching
Instructor	Professor C.K. Yip	Professor Paul M. Kitney
Email	chongkeeyip@cuhk.edu.hk	pmkitney@cuhk.edu.hk
Office	ELB 922	CYT 907
Office Hours	By Appointment	By Appointment
Tutor	Mr. Li FAN	Mr. Ting Yin YAN
Email	fanliecon@link.cuhk.edu.hk	yantinghin@cuhk.edu.hk
Office	TBC	TBC
Office Hours	TBC	TBC

Assessment

Your overall performance will be assessed based on:

- Part 1 Exam: 45% (Time: TBC (2-hour exam) / Venue: TBC)
- Part 1 Class Participation: 5%
- Part 2 Exam: 32.5% (Time: November 30, 10am-12pm (2- hour exam) / Venue: YIA LT1)
- Part 2 Group Assignments: 15%
- Part 2 Class Participation: 2.5%

Problem Sets for Part 1 will be given, they will not count towards the final grade.

Assignments for Part 2. You will be required to form groups of 5-7 students and submit 3 short assignments for each group. One assignment will be randomly marked and account for 12.5% of the 50% in Part 2. To minimize the impact of “Free Riding” there will be a peer evaluation grade of 2.5%, where you will grade your fellow team member’s contribution. Total mark for assignments is therefore 15%.

In case face-to-face teaching and assessment is not possible due to the pandemic, an online examination or a take home examination will replace the face-to-face examination.

No reschedule of the exams will be given except medical or family emergency. If you cannot attend the exam due to medical or family emergency, you need to send an email to the instructor **BEFORE** the exam, and later you will need to provide proofs for your absence. Failing to observe the rule will result in a complete loss of the 100% grade allocated to the exam.

Course Outline (Tentative and Not Necessary in Order)

Part 1 - Economic Growth (Prof. C K Yip)

1. Introduction
2. Growth and Development Accounting
3. The Neoclassical Growth Models
4. The Endogenous Growth Models
5. Models of Endogenous Technical Change: Product Variety and Schumpeterian

References

1. Vollrath, D., Jones, C. I., *Introduction to Economic Growth*, 3rd edition, W. W. Norton.
2. Aghion, P. and Howitt, P., *The Economics of Growth*, The MIT Press.
3. Zhu, X., 2012. Understanding China's Growth: Past, Present, and Future, *Journal of Economic Perspectives* 26 (4), 103-124.
4. Caselli, Francesco, Accounting for Income Differences across Countries, in *Handbook of Economic Growth*, Vol. 1A, P. Aghion and S. Durlauf, eds. (Amsterdam: Elsevier, 2005, Chap. 9).
5. Jones, C.I., The Facts of Economic Growth, in *Handbook of Macroeconomics*, Vol. 2A, (Amsterdam: Elsevier, 2016, Chap. 1)

Part 2 - Business Cycles and Monetary Policy (Prof. Paul M. Kitney)

1. Motivation, Data, and Evolution of Macroeconomic Theory
2. Introduction to Dynamic Optimization in Discrete Time (including Dynamic Programming)
3. Real Business Cycle Models (RBC)
4. New Classical to the Canonical Dynamic Stochastic General Equilibrium (DSGE) Model
5. Time Inconsistency – Rules vs Discretion in Monetary Policy using the NK DSGE Model
6. Financial Frictions and Monetary Policy in a fully-fledged NK DSGE Model

(Please note this is a tentative schedule. Topic order may be changed and some topics may be removed or modified, based on time constraints, student progression, and continuous improvement)

A more detailed list of references by topic area will be provided prior to the start of Part 2 of this course. You will also be provided with a details Part 2 course outline prior to the first lecture on October 19.

Text Book and Reference Books (Part 2)

There is no formal textbook but an open source (free) book pitched slightly easier than this course is:

1. Campante, F et al, 2021, *Advanced Macroeconomics: An Easy Guide*, London: LSE Press

We will draw upon slightly more advanced material selectively from the following:

2. Romer, David, *Advanced Macroeconomics*, Fifth Edition (or earlier), McGraw Hill, 2019
3. Walsh, Carl E., *Monetary Policy and Theory*, Fourth Edition (or earlier), MIT Press, 2022

For those with limited macroeconomic knowledge, I suggest the following background reading at a lower level:

4. Mankiw, NG., *Macroeconomics*, 6th Edition or Later Editions, Worth, 2007+
5. Mishkin, Frederic S., *The Economics of Money, Banking, and Financial Markets*, 12th Edition, 2019

Teaching Plan

ECON5021A: Every Wednesday, 9:30am-12:15pm (Venue: UCC_C1)

ECON5021B: Every Wednesday, 2:30pm-5:15pm (Venue: YIA_LT4)

Week	Date	Lecture Topic	Teacher
1	Sep 7	Introduction, Growth and Development Accounting	Prof. C K Yip
2	Sep 14	The Neoclassical Growth Models	Prof. C K Yip
3	Sep 21	The Neoclassical Growth Models	Prof. C K Yip
4	Sep 28	The Endogenous Growth Models	Prof. C K Yip
5	Oct 5	Models of Endogenous Technical Change: Product Variety and Schumpeterian	Prof. C K Yip
6	Oct 12	Models of Endogenous Technical Change: Product Variety and Schumpeterian	Prof. C K Yip
Part 1 Exam (2-hour exam)	Oct 21 (Friday)	Exam Time/Venue: 3:00-5:00pm (2-hour exam) LSK_LT5	

Week	Date	Lecture Topic	Teacher
7	Oct 19	Motivation, Data and Evolution of Macroeconomic Theory	Prof. Paul M. Kitney
8	Oct 26	Introduction to Discrete-time Dynamic Optimization	Prof. Paul M. Kitney
9	Nov 2	Real Business Cycle Models (RBC)	Prof. Paul M. Kitney
10	Nov 9	New Classical to the Canonical New Keynesian DSGE Model	Prof. Paul M. Kitney
11	Nov 16	Time Inconsistency – Rules vs Discretion in Monetary Policy using the Canonical NK model.	Prof. Paul M. Kitney
12	Nov 23	Financial Frictions and Monetary Policy in a fully-fledged, NK DSGE Model	Prof. Paul M. Kitney
Part 2 Exam (2-hour exam)	Nov 30	Exam Time/Venue: 10:00am-12pm (2 hour exam) YIA_LT1	

(Please note this is a tentative schedule. Topic order may be changed and some topics may be removed or modified, based on time constraints, student progression, and continuous improvement)

Honesty in Academic Work

Attention is drawn to university policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <http://www.cuhk.edu.hk/policy/academichonesty/> .