

## ECON 5021A MACROECONOMIC THEORY

Chinese University of Hong Kong

Fall 2017

### Course Information

Instructor: Yin-Chi Wang ([ycwang@cuhk.edu.hk](mailto:ycwang@cuhk.edu.hk)), ELB 932

Office Hours: Mon 4:30-5:15 p.m. or by appointment

Lectures: Mon 9:30 am - 12:15 pm, Hui Yeung Shing Bldg 501, 4 Sep ~ 27 Nov

No class on 2 Oct (the day following National Day).

### 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 basic economic intuitions and modeling techniques needed for further exploration in macroeconomic research. Topics such as the Solow model, optimal growth model, endogenous growth model, basic RBC model, overlapping-generations model and search models will be covered.

### Grading

The course grade will be determined by homework (10%), class participation (5%), midterm exam (40%) and final exam (45%).

### Assignments

There will be three assignments throughout the semester. Students are required to hand in their assignment individually. Assignments will be collected for record but will not be graded. Part of the assignments will be discussed in class.

### Assignment due dates

First homework: Online on or before 15 Sep, due on 29 Sep.

Second homework: Online on or before 6 Oct, due on 21 Oct.

Third homework: Online on or before 3 Nov, due on 24 Nov.

All the assignments are due at 5 pm of the due dates specified above. Students should hand in their assignment to the instructor's *assignment box* located on the 9th floor of the ELB as well as upload their assignments to the eLearning system. No late assignment will be accepted.

### Exam Schedule

Midterm exam 5:30 pm - 8:15 pm, 20 Oct (Fri), WMY 507

Final exam 27 Nov (in class)

No reschedule of the midterm exam will be given. Please be noted that if you cannot attend either the midterm or the final exam, you need to send an email to the instructor BEFORE the exam, and you are required to provide proofs for your absence. Only medical or family emergency are accepted as reasons for absence from examination. If you miss the midterm exam, your performance will be evaluated based on homework (10%), class participation (5%) and final exam (85%). Please be noted that late-drop of the course is not permitted unless you can provide very strong justification.

### Course Materials

The materials covered in this course are taken from several sources, including textbooks, handbooks and journal articles. All the lecture notes will be available in the CUHK eLearning system, and students should check the eLearning system regularly for announcements and updates of the course. Below a list of textbooks is provided. You will find the listed textbooks to be useful at various occasions.

(AC) Daron Acemoglu, *Introduction to Modern Economic Growth*, Princeton University Press.

(DR) Romer, D. (2005), *Advanced Macroeconomics*, McGraw-Hill.

(BS) Barro, R. and X. Sala-i-Martin (1995), *Economic Growth*, McGraw-Hill.

(BF) Blanchard, O. and S. Fischer (1989), *Lectures in Macroeconomics*, MIT Press.

(LS) Ljungqvist, L. and T. Sargent (2000), *Recursive Macroeconomic Theory*, MIT Press.

(SL) Stokey, N. and R. Lucas with E. Prescott (1989), *Recursive Methods in Economic Dynamics*, Harvard University Press.

### **Topics to be covered and references (subject to changes)**

Other than the lecture notes used in this class, you are recommended to read the references listed below if you have time. (\* strongly recommended; + recommended)

#### 1. Introduction: Stylized facts and growth empirics

\*(AC), ch1, 4

+(BS), chI.

#### 2. Growth accounting and development accounting

\*Caselli, F. (2005) "Accounting For Cross-country Income Differences," *Handbook of Economic Growth* 1A: 680-741.

\*Hall R. E. and Jones, C. I. (1999) "Why do Some Countries Produce So Much More Output per Worker than Others?" *The Quarterly Journal of Economics* 114 (1): 83-116.

Córdoba, J. C. and Ripoll, M. (2008) "Endogenous TFP and Cross-country Income Differences," *Journal of Monetary Economics* 55(6): 1158–1170.

Restuccia D., Yang, D. T. and Zhua, X. (2008), "Agriculture and Aggregate Productivity: A Quantitative Cross-country Analysis," *Journal of Monetary Economics* 55(2): 234–250.

Schoellman, T. (2012) "Education Quality and Development Accounting," *Review of Economic Studies* 79 (1): 388-417.

Waugh, M.E. (2010) "International Trade and Income Differences," *American Economic Review* 100: 2093-2124.

Weil, D. N. (2007) "Accounting for the Effect of Health on Economic Growth," *The Quarterly Journal of Economics* 122 (3): 1265-1306.

#### 3. Neoclassical growth models

❖ Growth models with exogenous saving rates: The Solow-Swan mode

\* (BS), ch 1.1-1.2

\* (AC), ch1

❖ The neoclassical and endogenous growth models

- \* (BS), ch 1.3-1.5, 2-5
- \* (AC), ch2, 3, 5-8
- +Lucas, R. E., Jr. (1988), "On the Mechanics of Economic Development," *Journal of Monetary Economics* 22(1): 3-42.
- +Jones, L. and R. Manuelli (1990), "A Convex Model of Equilibrium Growth: Theory and Policy Implications," *Journal of Political Economy* 98(5): 1008-1038.
- +Bond, E., P. Wang and C. Yip (1996), "A General Two-Sector Model of Endogenous Growth with Physical and Human Capital: Balanced Growth and Transitional Dynamics," *Journal of Economic Theory* 68(1): 149-173.
- 4. Overlapping-generations model
  - \*(AC) ch9
  - \*(BF) ch3
  - +(BS), chI.
- 5. Stochastic growth models
  - \* (AC), ch16-17
- 6. Growth with endogenous technological change
  - \* (AC), ch12-14
- 7. Search and matching models
  - \* Williamson, S. (2006). "Notes on Macroeconomic Theory," ch7.
  - +(LS) ch6.
  - +Diamond, P. A. (1982), "Aggregate Demand Management in Search Equilibrium," *Journal of Political Economy* 90(5): 881-894.
  - +Kiyotaki, N. and Randall Wright (1993), "A Search-Theoretic Approach to Monetary Economics," *American Economic Review* 83(1), 63-77.