ECON 5021A MACROECONOMIC THEORY

Chinese University of Hong Kong Spring 2017

Course Information

Instructor: Yin-Chi Wang (<u>ycwang@cuhk.edu.hk</u>), ELB 932 Office Hours: Mon 2:30-4:00 p.m. or by appointment Lectures: Mon 9:30 am - 12:15 pm, ELB 205, 9 Jan ~ 17 Apr

No class on 30 Jan (Chinese New Year holiday).

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, models with basic RBC models, overlapping-generations model and search models will be covered.

Grading

The course grade will be determined by homework (20%), midterm exam (40%) and final exam (40%).

Homework

There will be 4 homework assignments throughout the semester. Students are required to hand in their homework individually. Homework exercises will be collected for record but will not be graded. Part of the homework exercises will be discussed in class. Homework exercises are meant to help students be familiar with the course materials. Therefore, students are encouraged to work on them.

Homework due dates

First homework:	Online on or before 23 Jan, due on 6 Feb.
Second homework:	Online on or before 20 Feb, due on 6 Mar.
Third homework:	Online on or before 20 Mar, due on 27 Mar.
Fourth homework:	Online on or before 3 Apr, due on 17 Apr.

Exam Schedule

Midterm exam	9:30 am-12:15 pm, 11 Mar (Sat), ELB308
Final exam	10 Apr (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 me 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 (20%) and final exam (80%). Please be noted that late-drop of the course is not permitted unless you can provide very strong justification.

Textbooks

The materials will be from several sources, including textbooks, handbooks and journal articles. Here I listed some textbooks that may 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 (tentative, 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.