

## Econ 525 Macroeconomic Theory 1

**Fall 2010**

**Instructor: Pengfei Wang**

**Department of Economics, HKUST**

**Lecture: Tue, Thu 14:00-15:50,**

**Classroom: 3588**

**Email: pfwang@ust.hk**

**Office Hours: Tuesday 10:00 pm to 12:00 pm or by appointment**

### Requirements

Homework:	10%
Class Participation:	10%
Midterm Exam:	30%
Final Exam:	50%

### Outcome based objectives:

Macroeconomics is about: (i) developing positive models that can help us understand the dynamics of key macroeconomic variables: employment, unemployment, interest rates, output, etc.; and (ii) using these models to make judgments about what policies the government should, or should not, pursue. Classic questions include the proper setting of taxes and money over the business cycle. The purpose of the course is to study basic tools useful for (i) and (ii), and to review (a subset of) the relevant substantive findings reported in the literature.

### Textbooks

**D.Romer, Advanced Macroeconomics (required).**

L. Ljungqvist and T. Sargent, Recursive Macroeconomic Theory, (optional).

### Course Outline

#### **Part 1. Introduction to Macroeconomics (1 week)**

1. What is Macroeconomics about?
  - Romer "Introduction"
2. The revolution of Macroeconomic Theory

- Olivier Blanchard, “What do we know about macroeconomics that Fisher and Wicksell did not?”, QJE 115, no.4 (November 2000): 1375-1410
- Woodford, M., “Revolution and Evolution in Twentieth-Century Macroeconomics.”
- N. Gregory Mankiw, “The Macroeconomist as Scientist and Engineer.”
- V. V. Chari and Patrick J.Kehoe, "Modern Macroeconomics in Practice: How Theory Is Shaping Policy."

## **Part 2. Growth Theory (3 weeks)**

1. Solow Model (1 week)
  - D.Romer, Chapter 1
2. OLG Model
3. The Ramsey-Cass-Koopmans Model (2 weeks)
  - D.Romer, Chapter 2
4. Endogenous Growth Theory (1 weeks)
  - Paul Romer, “Endogenous technological change,” *Journal of Political Economy* 98 (Part 2), S71-S102.
  - Lucas, Robert, E. Jr. “On the Mechanics of Economic Development,” *Journal of Monetary Economics*, Vol. 22, 1988:3--42

## **Part 3. Classic Real Business Cycle Theory (DSGE)(4 weeks)**

1. The canonical Real Business cycle model (3 weeks)
  - R. King, S. Rebelo, and C. Plosser, “Production, growth, and the business cycle,” JME 21 (1988), 195-232.
  - Lecture note on Calibration, log-linearization, and solution methods.
  - D. Romer, Chapter 4.
2. Indeterminacy and Sunspots (1 week)
  - Benhabib, J, and R.E Farmer (1994), “Indeterminacy and increasing return”, *Journal of Economic Theory* 63: 19-41
  - Wen Y. (1994), “Capacity utilization under increasing return to scale”, *Journal of Economic Theory*.
3. Firm dynamics (1 week)
  - Marc Melitz , “The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity”, *Econometrica*, Vol. 71, November 2003, pp. 1695-1725.

#### **Part 4. Methodology Applications of DSGE Model**

##### 1. Implication for Asset pricing

- Larry G. Epstein; Stanley E. Zin, “Substitution, Risk Aversion, and the Temporal Behavior of Consumption and Asset Returns: An Empirical Analysis”, *JPE*, Vol. 99, No. 2. (Apr., 1991), pp. 263-286.
- Urban J. Jermann, “Asset pricing in production economies”, *Journal of Monetary Economics*, Volume 41, Issue 2, 27 February 1998, Pages 257-275.

##### 2. Welfare cost of Business Cycle.

#### **Part 5. Models with Frictions (3 weeks)**

- D.Romer , Chapter 8
- Douglas Gale, Martin Hellwig, “Incentive-Compatible Debt Contracts: The One- Period Problem”, *The Review of Economic Studies*, Vol. 52, No. 4. (Oct., 1985), pp. 647-663.
- Charles T. Carlstrom; Timothy S. Fuerst, “Agency Costs, Net Worth, and Business Fluctuations: A Computable General Equilibrium Analysis”, *The American Economic Review*, Vol. 87, No. 5. (Dec., 1997), pp. 893-910.
- Nobuhiro Kiyotaki and John Moore (1997), “Credit Cycles.” *Journal of Political Economy*, 1997, 105(2), pp. 211–48”
- Bengt Holmstrom; Jean Tirole (1997), “Financial Intermediation, Loanable Funds, and the Real Sector”, *The Quarterly Journal of Economics*, Vol. 112, No.3, pp663-691.