

# Course Code Advanced Macroeconomics I 2025 Second Module

#### **Course Information**

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Classes:

Lectures: Tuesday & Friday, 13:30-15:20

Venue: TBD

Course Website:

If any.

## 1. Course Description

## 1.1 Context

#### Course overview:

This course is a fundamental course. It introduces basic growth facts and macro models used for analysing the sources of economic growth. It mainly covers David Romer's textbook "Advanced Macroeconomics". The course will also present several papers related to the Chinese economy, particularly China's economic growth and its efficiency. As a miracle economy, China has witnessed a very fast GDP growth (around 10% annually) in the last three decades, after it transitioned to a market economy and started to open internationally. Several sources of the engines of the Chinese economy, such as the massive physical and human capital accumulation, TFP growth, and increases in innovative activities, will be discussed in the class.

#### Prerequisites:

Mankiw, Gregory "Principle of Macroeconomics" 5th Edition Advanced Mathematics (at least know how to use Lagrange method)

## 1.2 Textbooks and Reading Materials

David Romer's Advanced Macroeconomics 4<sup>th</sup> edition Class notes

Various papers downloadable.

# 2. Learning Outcomes

# 2.1 Intended Learning Outcomes

| Learning Goals                                                             | Objectives                                                                                                                                                                                                 | Assessment (YES with details or NO)           |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Our graduates will be effective                                            | 1.1. Our students will produce quality business and research-oriented documents.                                                                                                                           | No.                                           |
| communicators.                                                             | 1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.                                                                                         | Yes, through group discussions                |
| 2. Our graduates will be skilled in team work and leadership.              | <ul><li>2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.</li><li>2.2. Students will be able to apply</li></ul>                                      | Yes, group<br>discussion                      |
| 3. Our graduates will be trained in ethics.                                | leadership theories and related skills.  3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it. | N                                             |
|                                                                            | 3.2. Our students will practice ethics in the duration of the program.                                                                                                                                     | Yes, strict<br>discipline                     |
| 4. Our graduates will have a global perspective.                           | 4.1. Students will have an international exposure.                                                                                                                                                         | Yes, global<br>economy will be<br>introduced. |
| 5. Our graduates will be skilled in problem-solving and critical thinking. | 5.1. Our students will have a good understanding of fundamental theories in their fields.                                                                                                                  | Yes, fundamental macro-theories.              |
|                                                                            | 5.2. Our students will be prepared to face problems in various business settings and find solutions.                                                                                                       | Yes, macro-setting is basic.                  |
|                                                                            | 5.3. Our students will demonstrate competency in critical thinking.                                                                                                                                        | Yes, one major goal of this course.           |

## 2.2 Course specific objectives

## 2.3 Assessment/Grading Details

Class Participation (30%): each student will have one 30-minute group presentation. Depending on the total amount of students, the presentation will be done jointly by a group of several students. The presentation requires describing a specific country's growth experience based on data and some literature (e.g., how did Japan grow over the last 40 years and what policy did Japan use? Were these policies useful?) The schedule will be announced in class.

Homework (20%): Part of final exam will be from homework. Late homework is never accepted.

Final Exam (50%) The schedule will be announced in class.

Class discipline - read carefully. Violating each will deduct totally score by 5 points. 1, entry and exits within class time should be quiet and non-distracting.

## 2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

#### AI tools requirements:

Using AI tools to complete assignments or assessments without the approval of the course instructor will be regarded as an act of academic dishonesty. Depending on the severity of the situation, penalties will be implemented in accordance with the provisions of the Peking University Graduate Student Handbook.

For more information of plagiarism, please refer to PHBS Student Handbook.

#### 3. Topics, Teaching and Assessment Schedule

Teaching Schedule (T is short for teaching. \* denotes the paper I will cover in Class):

#### T1. Growth facts and review of undergraduate growth model

Kaldor, Nicholas. 1961. "Capital Accumulation and Economic Growth," in F.A. Lutz and D.C. Hague, eds., The Theory of Capital, St. Martins Press, 1961, pp. 177–222.

Baumol, William J. (1986). "Productivity Growth, Convergence, and Welfare: What the Long-Run Data Show". *The American Economic Review*. 76 (5): 1072–1085.

Gollin, Douglas. 2002. "Getting Income Shares Right". Journal of Political Economy, 110.

Klenow, Peter J and Rodríguez-Clare, Andrés. 2004. "Externalities and Growth." NBER Working Paper 11009.

Hsieh, Chang-Tai and Peter J. Klenow. 2007. "Relative Prices and Relative Prosperity". *American Economic Review*, 97 (3): 562-585.

Jones, Charles I., and Paul M. Romer. 2010. "The New Kaldor Facts: Ideas, Institutions, Population, and Human Capital." *American Economic Journal: Macroeconomics*, 2 (1): 224-45.

#### T2. Solow-Swan Model

Solow, Robert M. 1956. "A contribution to the theory of economic growth". *Quarterly Journal of Economics*. 70 (1): 65–94.

Swan, Trevor W. 1956. "Economic growth and capital accumulation". *Economic Record*. 32 (2): 334–361.

Mankiw, N. Gregory; Romer, David; Weil, David N. 1992. "A Contribution to the Empirics of Economic Growth". *The Quarterly Journal of Economics*. 107 (2): 407–437.

\*Hansen, Gary, D., and Edward C. Prescott. 2002. "Malthus to Solow ." *American Economic Review*, 92 (4): 1205-1217.

Acemoglu, Daron. 2009. "The Solow Growth Model". Introduction to Modern Economic Growth. Princeton: Princeton University Press. pp. 26–76.

Romer, David. 2011. "The Solow Growth Model". Advanced Macroeconomics (Fourth ed.). New York: McGraw-Hill. pp. 6–48.

### T3. Ramsey and OLG Model

Barro, Robert J. and Sala-i-Martin, Xavier. 2004. "Growth Models with Consumer Optimization". Economic Growth (Second ed.). New York: McGraw-Hill. pp. 85–142.

Acemoglu, Daron. 2009. "The Neoclassical Growth Model". Introduction to Modern Economic Growth. Princeton: Princeton University Press. pp. 287–326.

Miao, Jianjun. 2014. "Neoclassical Growth Models". Economic Dynamics in Discrete Time. Cambridge: MIT Press. pp. 353–364.

Romer, David. 2011. "Infinite-Horizon and Overlapping-Generations Models". Advanced Macroeconomics (Fourth ed.). New York: McGraw-Hill. pp. 49–77.

Dirk Krueger. 2012. "Macroeconomic Theory". Manuscript.

## **T4. Endogenous Growth Model**

Romer, Paul. 1986. "Increasing Returns and Long-run Growth." *Journal of Political Economy*, Vol. 94, No. 5 (Oct., 1986), pp. 1002-1037.

Romer, Paul. 1990. "Endogenous Technological Change." *Journal of Political Economy*, Vol. 98, No. 5, (Oct., 1990), pp. S71-S102.

Grossman, Gene M. and Helpman, Elhanan. 1991. "Quality Ladders in the Theory of Growth." *The Review of Economic Studies*, Vol. 58, No. 1 (Jan., 1991), pp. 43-61.

Aghion, P. and P. Howitt. 1992. "A Model of Growth Through Creative Destruction." *Econometrica*, 60, pp. 323-351.

# **T5. Development Accounting**

Caselli, Francesco. 2005. "Accounting for Cross-Country Income Differences," Handbook of Economic Growth, in: Philippe Aghion & Steven Durlauf (ed.), Handbook of Economic Growth, edition 1, volume 1, chapter 9, pages 679-741 Elsevier.

Klenow, Peter J. and Rodriguez-Clare, Andres. 1997. "The Neoclassical Revival in Growth Economics: Has It Gone Too Far?". In Bernanke, Ben S.; Rotemberg, Julio (eds.). NBER Macroeconomics Annual 1997, Volume 12. National Bureau of Economic Research. pp. 73–114

### **T6. Chinese Economy**

Fisman, Raymond, and Shang-Jin Wei. 2004. "Tax Rates and Tax Evasion: Evidence from 'Missing Imports' in China." *Journal of Political Economy* 112 (2004): 471-96.

Bai, Chong-En, Chang-Tai Hsieh, and Yingyi Qian. 2006. "The Return to Capital in China." NBER Working Paper 2006.

Nancy, Qian. 2008. "Missing Women and the Price of Tea in China: The Effect of Sex-Specific Earnings on Sex Imbalance." *The Quarterly Journal of Economics*, Vol. 123, No. 3 (Aug., 2008), pp. 1251-1285

\*Hsieh, Chang-Tai and Klenow, Peter. 2009. "Misallocation and Manufacturing TFP in China and India." *The Quarterly Journal of Economics*, Volume 124, Issue 4, November 2009, Pages 1403–1448.

Wei, Shang-Jin, and Robert Feenstra. China's Growing Role in World Trade. Chicago, IL: University of Chicago Press, March 2010.

\*Song, Zheng, Kjetil Storesletten, and Fabrizio Zilibotti. 2011. "Growing Like China." *American Economic Review*, 101 (1): 196-233.

\*Loren Brandt, Johannes Van Biesebroeck, and Yifan Zhang. 2012. "Creative Accounting or Creative Destruction: Firm Level Productivity Growth in Chinese Manufacturing", *Journal of Development Economics* 97 (2) (2012), 339–351.

\*Wei, Shang-Jin, Zhuan Xie, and Xiaobo Zhang. 2017. "From "Made in China" to "Innovated in China": Necessity, Prospect, and Challenges." *Journal of Economic Perspectives*, 31 (1): 49-70.

Chen, Zhao, Zhikuo Liu, Juan Carlos Suárez Serrato, and Daniel Yi Xu. 2021. "Notching R&D Investment with Corporate Income Tax Cuts in China." *American Economic Review*, 111 (7): 2065-2100.

Chen, Yi, Ziying Fan, Xiaomin Gu, and Li-An Zhou. 2020. "Arrival of Young Talent: The Send-Down Movement and Rural Education in China." *American Economic Review*, 110 (11): 3393-3430. Song, Zheng, Michael Koenig, Kjetil Storesletten and Fabrizio Zilibotti. 2021. "From Imitation to Innovation: Where Is All that Chinese R&D Going?" Working Paper.

A lot more...

# Tentative Detailed Schedule (will change depending on actual time spent)

| Nov. 14    | Syllabus and Undergraduate Macro         |
|------------|------------------------------------------|
|            | Review                                   |
| Nov. 18    | Growth Facts                             |
| Nov. 21    | Solow Model                              |
| Nov. 25    | Solow Model                              |
| Nov. 28    | Ramsey Model                             |
| Dec. 2     | Ramsey Model                             |
| Dec. 5     | OLG Model                                |
| Dec. 9     | OLG Model                                |
| Dec. 12    | Endogenous Growth                        |
| Dec. 16    | Endogenous Growth                        |
| Dec. 19    | Development Accounting                   |
| Dec. 23    | Development Accounting                   |
| Dec. 26    | Brandt, Biesebroeck, and Zhang (2012)    |
| Dec. 30    | Hsieh and Klenow (2009)                  |
| Jan. 2     | Wei, Xie, and Zhang (2017)               |
| Jan. 6     | Chen, Liu, Serrato, and Xu (2021)        |
| Jan. 9     | Song, Storesletten, and Zilibotti (2011) |
| Jan. 13    | Review of Whole Course                   |
| Jan. 15-16 | Final Exam                               |

#### 4. Miscellaneous