



Economic Development Growth

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COURSE DESCRIPTION

This course provides an intensive overview of the field of economic growth and development. The course is designed primarily for economics majors, but is also appropriate for international studies, business, history, or political science majors seeking a comprehensive understanding of both theoretical and empirical aspects of growth and development. We will study the underlying determinants economic growth, including factor accumulation and technological progress. We also will explore the extent to which political and social institutions influence the process of economic development. Our overriding goal will be to explain why some countries experience rapid increases in their standard of living while others do not. A central feature of our discussion will be the role policy plays in affecting economic success or failure across countries. We will learn about these issues by using both economic models and data interactively and infer policy implications for developing countries to promote economic growth. Given the comprehensive coverage of the course, the workload is heavy and expectations for students are high.

READING MATERIALS

Required Text: Economic Growth, third edition, by David N. Weil, Pearson Addison-Wesley, 2013. This book provides a thorough coverage of the theory and empirics of economic growth.

COURSE REQUIREMENTS AND GRADING

Prerequisites: Students have successfully completed Principles of Economics and Intermediate Micro and Macro Economics.

Homework assignments: I will assign assignments (including hands-on work), possibly from the problems at the ends of chapters of the Weil textbook. The assignments will be posted on the course website.

Grading: (i) Attendance (20%), (ii) homework assignments (50%), and (iii) *take-home* final exam (30%)

It is noted that ISS classes are pass/fail based on the student academic achievement evaluated by grades on a scale of 100 points (grade of 60 or above is Pass).

Academic Integrity: All work on homework assignments and the final exam is your own. According to SKKU regulation, students are required to attend at least 80% of all classes.

Students fail if violation of the above requirements.

LECTURE TYPES AND OFFICE HOURS

Lecture types: All lecture materials are pre-recorded and will be uploaded onto the LMS (i-campus platform)

Office hours: I will hold my office hours (Tuesdays and Fridays 14:00~16:00) via Zoom <https://zoom.us/j/8208404356?pwd=aGFJWHhMNFM0VUdCZ1hQMFJkQ09Zdz09>

The best way to communicate with me is email.

COURSE SCHEDULE (subject to change)

– WEEK I –

Part I. Introduction and Overview

Thursday (24 June)

1. The Facts to Be Explained and a Framework for Analysis
Weil, Chapters 1 and 2.

- 1-1 Differences in the Level of Income among Countries
- 1-2 Differences in the rate of income growth among countries
- 2-1 Neoclassical production function
- 2-2 Sources of economic growth

Introduction of popular databanks for economic growth and development

Exercise #1: (Excel assignment) how to calculate long-run economic growth

Part II. Factor Accumulation

Friday (25 June)

2. Physical Capital
Weil, Chapter 3

- 3-1 The role of physical capital
- 3-2 Solow growth model
- 3-3 The convergence hypothesis

Exercise #2-1: (Excel assignment) The relationship between saving and investment

– WEEK II –

Monday (28 June)

3. Population and Economic Growth
Weil, Chapters 4 and 5.

- 4-1 Population growth in the Solow growth model
- 4-2 Explaining population growth
- 4-3 Explaining fertility transition

Exercise #2-2: (Excel assignment) Check the existence of convergence hypothesis

Tuesday (29 June)

3. Population and Economic Growth

Weil, Chapters 4 and 5.

Solow, R., "A Contribution to the Theory of Economic Growth" The Quarterly Journal of Economics, Vol. 70, No. 1 (Feb., 1956), pp. 65-94

5-1 Forecasting future population

5-2 Economic consequences of demographic changes

Exercise #3: (Excel assignment) How population growth/fertility/age structure are correlated to economic growth

Wednesday (30 June)

4. Human Capital

Weil, Chapter 6.

Mankiw, Romer, and Weil, "Does the Solow Model Explain the International Variation in the Standard of Living?" Quarterly Journal of Economics, 1992.

6-1 Human capital in the form of health

6-2 Human capital in the form of education

6-3 Education in the Solow growth model

Exercise #4: (Excel assignment) contribution of education

Part III. Productivity

Thursday (1 July)

5. Measuring Productivity

Weil, Chapter 7.

Jones and Klenow, "Beyond GDP? Welfare Across Countries and Over Time," NBER Working Paper 16352, September 2010.

7-1 Productivity in the production function

7-2 Differences in the level of productivity among countries

Exercise #5: (Excel assignment) contribution of productivity and factor production

– WEEK III –

Friday (2 July)

6. The Role of Technology in Growth

Weil, Chapter 8.

- 8-1 The nature of technological progress
- 8-2 How changes in resources devoted to technology creation affect economic growth
- 8-3 How technological progress spills across countries
- 8-4 Barriers prevent the transfer of technology from the rich to the poor

Exercise #6: (Excel assignment) R&D investment and long-run growth

Monday (5 July)

- 7. Explaining Technological Change
Weil, Chapter 9.

- 9-1 The speed with which technology advances and the factors determining that advance
- 9-2 The future course of technological progress

Exercise #7: (Excel assignment) female labor participation and productivity

Tuesday (6 July)

- 8. Productivity, Technology and Efficiency
Weil, Chapter 10.

- 10-1 The evidence of efficiency differences among countries
- 10-2 Determine how much of observed variations in productivity is attributed to differences in technology and to differences in efficiency

Wednesday (7 July)

- 9. International Openness and Economic Growth
Weil, Chapter 11.

- 11-1 How does being open to the world economy affect a country's economic growth?
- 11-2 What are the particular channels through which openness affects growth?
- 11-3 Why are some people opposed to openness?

Exercise #8: (Excel assignment) how trade is related to economic growth

Part IV. Fundamentals Behind Economic Growth

Thursday (8 July)

- 10. Government Policies
Weil, Chapter 12.

- 12-1 How government should act
- 12-1 How government affect growth
- 12-3 Why governments sometimes do things that are bad for growth
- 12-4 Why poor countries have bad governments

Exercise #9: (Excel assignment) how governance is related to economic growth

– WEEK IV–

Monday (12 July)

11. Income Inequality and Economic Development

Weil, Chapter 13.

James, J., “The College Wage Premium,” Economic Commentary, Federal Reserve Bank of Cleveland, 2012-10.

Short, K., “Supplemental Poverty Measure: 2011, Current Population Reports, Census Bureau, P60-244, November 2012.

- 13-1 The facts of income inequality
- 13-2 The sources of income inequality
- 13-3 How income inequality affects economic growth
- 13-4 Income inequality and economic mobility

Exercise #10: (data analysis) how income inequality is related to economic growth

Tuesday (13 July)

12. The Role of Culture in Economic Development (optional)

Weil, Chapter 14.

- 14-1 The effect of culture on economic growth
- 14-2 What determines culture
- 14-3 Cultural change

Wednesday (14 July)

13. Geography, Climate, and Natural Resources (optional)

Weil, Chapter 15

- 15-1 Geography
- 15-2 Climate
- 15-3 Natural resources

Exercise #11: (Excel assignment) how natural resources/pollutions are related to economic growth

Thursday (15 July)

Take-home Final Exam: 9:00am~9:00pm

Instructions on Completing your Take Home Final Exam:

The take-home exam question file will be available from the LMS (the i-campus platform) at 9:00am.

- You have 12 hours (from 9:00am to 9:00pm) to submit your exam script. You do not need to wait until the deadline to submit your exam script and can submit at any point during the 12-hour time period.
- If your completed exam script is typed, please use a minimum 12-point font and 1.5 line spacing to ensure that the text is readable. Please include a header containing your student ID number (but **not your name**).
- If your completed exam script is hand-written, please ensure that handwriting is legible. Please write your student ID number (but **not your name**) at the top of each page and ensure that your answers are clear in the photos of your script.
- Please ensure that you clearly identify which question you are answering.
- If you encounter any problems while taking this exam – such as IT problems or home circumstances – please ensure you make a note of them at the end of the exam script.
- Give yourself plenty of time to prepare your exam script files for upload – please don't leave this to the last half hour before the 12-hour period expires.

Academic integrity

- In taking this exam, you are allowed to consult any notes you've made on the course, any course material, any previous assignments you have completed, any books or articles, any internet source, and anything else you find useful.
- The exam script must be your own work. You must undertake the exam on your own and without collusion, i.e. without assistance from other people; without collaborating or discussing the exam; without sharing answers with anyone else (this includes on social media), as posting or providing your own solutions or responses to others is also academic misconduct.