



Sungkyunkwan University (SKKU) International Summer Semester (ISS) 2021

## **Economic Development Growth**

**Shu-Chin Lin, Sungkyunkwan University**

+82-2-760-0410; [sclin@skku.edu](mailto:sclin@skku.edu)

<https://sites.google.com/view/shuchinlin>

### **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 will 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) 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.

### **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: (Data analysis) 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: (Data analysis) 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: (Data analysis) 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: (Data analysis) 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: (data analysis) 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: (data analysis) contribution of production 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

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

### 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 #6: (data analysis) 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 #7: (data analysis) 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 #7: (data analysis) how income inequality is related to economic growth

### Tuesday (13 July)

#### 12. The Role of Culture in Economic Development

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

Weil, Chapter 15

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

Exercise #8: (data analysis) how natural resources/pollutions are related to economic growth

### Thursday (15 July)

Online Final Exam