ECON164-1: Theory of Economic Growth

September 2017

Instructor:	Saki Bigio
Time:	M-W (L1) 2-3:15pm (L2) 3:30pm-4:45pm
Email:	sbigio@econ.ucla.edu **Place:** HAINES A18.

Course Pages:

1. https://moodle2.sscnet.ucla.edu/course/view/16S-ECON164-1

2. http://saki-bigio.squarespace.com/

Office Hours: M 5:00-6:00pm. My office is located at 9282 Bunche Hall.

Main References: The main reference are my class notes and presentations for the course. My class notes are essentially a textbook. However, you may wish to follow some textbooks to accompany the class. Please find access to a copy of these texts.

- David N. Weil, *Economic Growth, Third Edition,* Pearson, 2013. Contains most of the *key concepts* for the course and presents most of the discussion we will study in class. Yet, it contains few of the models like those covered in my class.

- Charles I. Jones and Dietich Vollrath, *Introduction to Economic Growth*, Norton & Company Inc., 2013. A more technical reading than Weil, contains 50% of the models we will discuss in class.

- Elhanan Helpman, *The Mystery of Growth*, Harvard University Press, 2010. A complimentary non-technical reading to key concepts discussed in the course.

Objectives: The goal of this course is to answer one of the most fundamental questions in economics: ***why do some economies grow and some others don't?*** This is an advanced topics in macroeconomics class and as such, we will study some formal models and statistical analysis to answer this question, in the most scientific way possible. My commitment is to teach you some classic themes in the theory of growth and expose you to some recent research and debates at the frontier of the theory of economic growth.

Why should you care about this course? The obvious answer is that you are soon to become professional economists and this is one of the most interesting questions in economics. There is also a practical reason. Should you decide to take a job in the business world, it will be useful, for the rest of your life, to understand if a certain region (i.e., a country, state, city or neighborhood) is expected to grow or not. Where should you expand your industry? This course will build that intuition. Should you decide to seek a policy career in Government, a multilateral organism or an NGO, this course will cover the primary reason for the existence of your job.

Prerequisites: An undergraduate-level understanding of calculus is assumed. For example, you should be familiar with exponentials and logarithms, the solutions of linear differential equations. We will work out some examples in excel.

Grading Policy: Homework Assignments (10%), Lab Presentation (20%), Midterm (20%), Final (50%). If you do better in the final than in the midterm: Midterm=0% and Final=70%.

Important Dates:	Midterm:	SEC1	M November 13, 2017
	Midterm:	SEC2	M November 13, 2017
	Final:	SECS 1,2	S December 09, 2017

Course Policy:

- Please sign up for the course on time to confirm your enrollment.

Class Policy:

- Regular attendance is essential and expected.

Academic Honesty: I expect the highest standard of academic honesty. All of your work has to be individual and use of any references has to cited. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. I will not hesitate on punishing any form of plagiarism following university rules.

Tentative Course Outline:

1. **The Questions and Some Facts (2 Lectures)**

    ❙ Cross-Country Growth Facts ❙ Kaldor Facts

2. **Math Review (2 Lectures)**

▎Difference Equations ▎Simulation in Excel ▎Exponentials and differential equations

3. **Neoclassical Growth (3 Lectures)**

▎The Ramsey (Solow) model ▎Comparative Statics ▎Growth Accounting ▎Cross-Sectional Evidence

4. **Growth Traps (1-2 Lectures)**

▎The Malthus Trap ▎Poverty (Savings) trap ▎Convergence Clubs

5. **Endogenous Growth (1-2 Lectures)**

▎The AK model ▎Schumpeterian ladders ▎The multiple variety models of Romer

6. **Human Capital and Externalities (1 Lectures)**

▎The Lucas model ▎Mankiw-Romer-Weil regressions

7. **Directed Technological Change (1 Lecture)**

▎Acemoglu's model ▎A Marxist model of android workers ▎Recent evidence on automation

8. **Missallocation (1-2 Lectures)**

▎The Moll model ▎The Jones model

9. **Institutions (1-2 Lectures)**

▎Institutions ▎Institutions Debates ▎Empirical Evidence

10. **Infrastructure (1 Lecture)**

▎The Murphy, Schleiffer and Vishny model ▎Why can't poor governments tax? ▎Value of Infrastructure

11. **The Wealth Distribution (1 Lecture)**

▎Atkinson and Piketty's evidence ▎Current explanations to the distribution of wealth

12. **Demographic Transitions (1-2 Lectures)**

❙ Unified Growth ❙ Industrialization ❙ Urbanization & Migration ❙ Land Reform

13. **Disasters (1 Lectures)**

❙ Natural Disasters ❙ Epidemics ❙ Man made disasters

14. **Green Growth (1 Lecture)**

❙ Growth with exhaustible resources ❙ The fisheries model ❙ Clean energy growth