

---

# Economic Growth, Econ 4794

## Spring 2016

Tues & Thurs 9:30-10:45 a.m. in ECON 117

### Course Outline

---

Professor: Carol H. Shiue

Office: Economics 206B

Office Hours: TTh 11:00 a.m. – 12:30 p.m.

Phone: 303-492-5169

Email: [shiue@colorado.edu](mailto:shiue@colorado.edu)

#### **Text**

There is one required text: David N. Weil, Economic Growth, 3<sup>rd</sup> edition. Copies have been ordered at CU Bookstore.

#### **Objectives of the course**

Economic Growth has emerged as an independent area of active field of research within economics. The aim of this course is to synthesize recent ideas and approaches to understanding economic growth at the undergraduate level, and to survey the leading explanations for the causes of growth. This course is organized into three substantive sections. The first examines the degree to which income variations across countries can be attributed to variations in factor accumulation, and, the determinants of factor accumulation. In the second part of the course, we study of the role of productivity and technology in explaining income differences. The third section explores the deeper or fundamental characteristics of countries that may underlie differences in factor accumulation and productivity among countries. We will supplement textbook material with articles about the economic history of country experiences and contemporary topics of interest.

#### **Prerequisites**

Econ 1088 Math Tools for Economists II or equivalent.

Econ 3070 Intermediate Micro or Econ 3080 Intermediate Macro.

Prerequisite courses should be completed with earned credit before taking this class. If you are uncertain whether you have the prerequisites, please find out immediately. Students without the necessary prerequisites will be administratively dropped.

**Class Email:** I will be using the class email list for this course to communicate information about classes. Please check your CU email account to ensure that you will be up to date with the latest announcements.

### **Course Requirements and Evaluation**

There will be an emphasis on quantitative reasoning and problem solving. The format of classes will consist of lectures and lab demonstrations. Lab demonstrations basically consist of empirical problems that we will solve in class and hands-on examples of how data may be used to analyze issues in economic growth. These exercises will not be handed in for a grade but will be crucial for understanding how to answer questions that may appear on your exams.

Evaluation will be based on a midterm, a final exam, a group presentation of a published research article, and a research report analyzing the growth of chosen countries.

Your grade will have the following components:

Midterm	25%
Country Analysis Report and Presentation	25%
Presentation of an Article on the Syllabus	15%
Final Exam	35%

### **Country Analysis Report**

In your report you will compare the growth performance of a country of your choice with the growth performance of two other countries. For example, you may compare the growth performance of Columbia over the years 1970 to 2006 with that of two other countries of similar income and size during the same period. The goal of the paper is to explain the growth performance of the country in question, drawing on concepts covered in class, while demonstrating your competence in quantitative methods and qualitative interpretation. By the fourth week of class (Feb. 4), students should organize into groups of three and decide which countries to study. Then, the group should prepare a preliminary outline or draft (around 3-5 pages) to turn in before March 10. I will schedule individual meetings with all groups on March 15 and March 17 to give feedback. The final draft of the paper, in hardcopy, is due in class on Thursday, April 21. The paper should be about 10 pages (double-spaced in at least 11 point font), including all references and tables and figures. On the due date, each group will give a short (5-6 minute) oral summary of their findings.

## **Presentation of an Article on the Syllabus**

Presentations will be randomly assigned and you will be responsible for a presentation (about 25 minutes) of an article on the syllabus, and, the crafting of three questions directed to the class to initiate discussion. The questions can be open-ended and can relate to anything mentioned in the paper that you think the class might be interested to talk about more, whether in the context of the paper or in the context of your own perspective(s). The goal is mainly to generate further thoughts and class participation. I will be choosing some of the papers and questions to include on the final exam. Students will be assigned together in teams to work together on the presentation. The size of the teams will depend on class size. Presentation slides must be emailed to me at least 1 hour ahead of class so that I can set up your presentation prior to the start of class.

**Class Attendance and Participation:** If you miss a class, you are strongly encouraged to make an appointment with me to discuss specific questions about the material after you have obtained notes from someone in class. Participation is important for this class and you should attend class unless you are ill. I will hand out sign-up sheets on randomly chosen dates to evaluate attendance. You can miss 4 classes for any reason. Beyond 4 classes, each recorded absence will negatively impact your final grade by 2-percentage points. There are 10-percentage points between each letter grade.

**Policy on Late Work and Exams:** There are no makeup examinations for missed exams. If you miss the midterm due to an emergency, your grade will be reweighted by the final exam. The report is a long-term project that cannot be missed because of an emergency. No late reports will be accepted. There are no extra credit provisions. All students must take the final exam to pass the course.

The final exam has been scheduled by the CU Registrar for Monday May 2 4:30-7 p.m. It is comprehensive. Students who have three or more final exams on the same day are entitled to reschedule the last exam or exams that day, but must make arrangements to do so no later than the tenth week of the semester. See University policy on final exam scheduling:  
[http://www.colorado.edu/policies/final\\_exam.html](http://www.colorado.edu/policies/final_exam.html).

### **University policies:**

*Disability Accommodations:* If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services by the third week of class so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities.

<http://www.Colorado.EDU/disabilityservices>

*Religious observance:* (see full details of this policy at [http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html)). If you have a conflict covered by this policy, let me know by the third week of class so as to allow ample time to make alternative arrangements.

*Honor Code:* Cheating and plagiarism are academic offenses and any student caught cheating or plagiarizing will be sanctioned. Plagiarism is defined as the use of another's ideas or words without appropriate acknowledgment. <http://www.colorado.edu/policies/academic-integrity-policy>.

*Classroom Behavior:* Courtesy in the classroom is expected. Disruptive conduct includes behavior that hinders or distracts the class from the subject matter or discussion, and may result in academic sanctions, see <http://www.colorado.edu/policies/student-classroom-and-course-related-behavior>.

### Topic Outline and Readings

The schedule is approximate and subject to change based on class progress. Articles in the *Journal of Economic Perspectives* are available on <https://www.aeaweb.org/jep/issues.php> or via electronic access from the CU library. Other readings will be made available for download from D2L.

#### **I. Introduction and Preliminaries**

(Week 1 and 2) Chapter 1 and 2: Differences in the level and rate of income growth among countries.

Theory: Working with growth rates; review of the logarithm function.

Readings:

- Debraj Ray, *Development Economics*, Ch. 2.
- Lant Pritchett, "Divergence, Big Time," *Journal of Economic Perspectives*, 11(3), 1997.

**Student Presentation A:** Abhijit Banerjee and Esther Duflo, "The Economic Lives of the Poor," *Journal of Economic Perspectives*, 21(1), Winter 2007.

**Student Presentation B:** Roger Fouquet and Stephen Broadberry, "Seven Centuries of European Economic Growth and Decline," *Journal of Economic Perspectives*, 29(4), Fall 2015.

#### **II. Factor Accumulation**

(Week 3 and 4) Chapter 3: Capital's Role in Production

Theory: Harrod-Domar Model; the Solow Model.

Reading:

- Ray, pp. 47-57.

(Week 5 and 6) Chapter 4: The Role of Population in Economic Growth (skip appendix).

Theory: The Malthusian Model; Fertility Transition.

Reading:

**Student Presentation C:** Karen N. Eggleston and Victor R. Fuchs, "The New Demographic Transition: Most Gains in Life Expectancy Now Realized Late in Life," *Journal of Economic Perspectives*, 26(3), 2012.

(Week 7 and 8) Chapter 6: The Effect of Human Capital on Growth

Theory: Returns to Education.

Midterm Review, March 1

Midterm, March 3

Before March 10, have ready a preliminary outline/draft of report to turn in for feedback

(Week 10) Meetings with groups to discuss draft of report

(Week 11) Happy Spring Break!

### III. Productivity

(Week 12) Chapter 7: How much does productivity growth differ among countries?

Theory: Growth Accounting, Total Factor Productivity

Reading:

**Student Presentation D:** Barry Bosworth and Susan M. Collins, "Accounting for Growth: Comparing China and India," *Journal of Economic Perspectives*, 22(1), Winter 2008.

(Week 13) Chapters 8 and 9: Can technological gaps explain differences in productivity?

Theory: Model of Technological Change

Reading:

**Student Presentation E:** William D. Nordhaus, "Two Centuries of Productivity Growth in Computing" *Journal of Economic History*, 67 (1), 2007.

**Student Presentation F:** Joel Mokyr, Chris Vickers, and Nicolas L. Ziebarth, "The History of Technological Anxiety and the Future of Economic Growth: Is This Time Different?" *Journal of Economic History*, 29 (3), Summer 2015.

(Week 14) Chapter 10: How much of productivity differences come from inefficiency?

Theory: Decomposing productivity into technology and efficiency

Reading:

**Student Presentation G:** Nicholas Bloom and John Van Reenen, "Why Do Management Practices Differ Across Firms and Countries?" *Journal of Economic Perspectives*, 24(1), 2010.

**Student Presentation H:** David Autor, "Why are There Still So Many Jobs? The History and Future of Workplace Automation" *Journal of Economic Perspectives*, 29(3), Summer 2015.

### IV. Fundamentals

(Weeks 15 & 16) Chapter 15: Historical Influences Explaining Differences in Wealth

Reading:

- Jared Diamond. *Guns, Germs, and Steel: The Fates of Human Societies*, Chapters 4-10.

- Daron Acemoglu, Simon Johnson, and James Robinson, “The Colonial Origins of Comparative Development, An Empirical Investigation,” *American Economic Review*, Dec. 2001.

**Student Presentation I:** Stanley Engerman and Kenneth Sokoloff, “Institutions, Factor Endowments, and Paths of Development in the New World,” *Journal of Economic Perspectives*, 14(3), 2000.

**Student Presentation J:** Nathan Nunn and Nancy Qian. “The Columbian Exchange: A History of Disease, Food, and Ideas,” *Journal of Economic Perspectives*, 24(2), 2010.

**Student Presentation K:** Emily Oster. “Witchcraft, Weather and Economic Growth in Renaissance Europe,” *Journal of Economic Perspectives*, 18(1), 2004.

**Student Presentation L:** Nico Voigtländer and Hans-Joachim Voth. “Gifts of Mars: Warfare and Europe’s Early Rise to Riches,” *Journal of Economic Perspectives*, 27(4), 2013.

#### Cultural Differences and Growth

Reading: Weil, Ch. 14.

Nathan Nunn and Wantchekon, “The Slave Trade and the Origins of Mistrust in Africa,” working paper.

**Student Presentation M:** Luigi Guiso, Paola Sapienza, and Luigi Zingales, “Does Culture Affect Economic Outcomes?” *Journal of Economic Perspectives*, 20(2), 2006.

#### V. A Framework of Thinking about Policy

(additional topics if time left over at the end of the course)

Reading: Weil, p. 275-180

- Besley and Burgess, “Halving Global Poverty,” *Journal of Economic Perspectives*, 17(3), 2003.
- Dani Rodrik, “Diagnostics before Prescription”, *Journal of Economic Perspectives*, 24(3), 2010.

Case Study: Market Failures in Developing Countries, What can be done?

#### Credit Markets and Microfinance

- Ray, Ch. 14.

Papers Due. Country Analysis Presentations, April 21 (5-6 minutes)

