
Economic Growth, Econ 4794

Spring 2023

MWF 12:30-1:45 p.m. in MUEN E131

Course Outline

Professor: C. H. Shiue

Office: Economics 206B

Office Hours: Tuesday and Thursday 11-11:30 a.m. & 2:00 – 3:00 p.m.

Email: shiue@colorado.edu

Required Text

David N. Weil, Economic Growth, 3rd edition.

Objectives of the course

The aim of this course is to synthesize recent ideas and approaches in economic growth and to survey 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 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.

Communication Check Canvas regularly for announcements and class materials. Also, check your university email account as I will use email to communicate information about classes.

Course Requirements

There is an emphasis on quantitative reasoning and problem-solving in this course, plus a focus on the analysis and interpretation of data. The format of classes will consist of lectures and problem-solving demonstrations. 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.

The course grade will have the following components:

Review Assignments (5% x 3 Review Assignments)	15 %
2 Quizzes (15% x 2 Quizzes)	30 %
Student Presentation of an Article in the Syllabus	10 %
Country Analysis Paper	25 %
Final Exam	20 %

In summary, proctored exams will count for 50% of your grade and the remainder will consist of a variety of take-home projects and assignments.

Attendance and Class Participation Class participation is important and you should attend class unless you are ill. 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. I will take attendance with some frequency. Everyone will automatically get 4 excused absences, no questions asked. Beyond 4 classes, each recorded absence will negatively impact your final grade by 1 percentage point.

Review Assignments Review assignments consist of multiple-choice and short response questions that provide a review of concepts we have covered in the textbook and are meant to help you prepare for an upcoming quiz or exam. There will be 3 such assignments, each given the week before an upcoming quiz or exam. I will replace your lowest Assignment grade with your Final Exam grade if the latter is higher than the former.

Student Presentation of an Article on the Syllabus Every student will be responsible for a presentation (about 25 minutes) of one article on the syllabus, plus a discussion (about 10 minutes). Most presentations will be by a team of 2 or more students; the number of students in each team will depend on class size. You will be informed of your assigned article a week in advance of your presentation. The discussion will be based on each presenter crafting at least one question directed to the class to initiate a discussion about the article. The questions can be open-ended and can relate to anything mentioned in the paper that you think the class might be interested to discuss further, whether in the context of the paper or in the context of your own perspective(s). The goal is to generate further thoughts and class participation. Be sure to email me your presentation slides in PDF or Powerpoint format by 9 a.m. on the morning of your presentation. This will ensure that I can set up your presentation on my laptop prior to the start of class.

Country Analysis Paper This is a longer project that allows you to explore the economic growth of countries that interest you within a 10-12 page paper. You may work with 1-2 other students in a group. Your paper will compare the growth performance of a country of your choice with the performance of any two other countries. Your goal is to assess the causal factors behind the performance of the country in question. For example, you may compare the growth performance of Columbia over the years 1970 to 2016 with that of two other countries in Latin America. In preparation for the project, you will need

to do the following: 1) before **February 3**, research 3 countries that would be suitable for the project, 2) by **March 14**, write a 5-page preliminary draft. I will be meeting with students the following classes to discuss the draft and provide feedback. The paper is due on Canvas **12 NOON Tuesday, May 2**. Students will be asked to give a brief and informal verbal summary of their findings to the class on the due date. Additional details about the project plus the scoring rubric will be given within the first weeks of the semester.

Policy on Late Work and Missed Quizzes Course policy on work turned in after posted deadlines is as follows. Late work will see a deduction of 15% per day late, for up to three days. E.g., an assignment that would have received 100% had it been handed in on time will receive instead an 85% if was handed in at any time in the 24-hour period after the deadline, and a 70% if it is late by another 48-hours. After three days, the maximum achievable score is a 55%.

There are no makeup dates for missed quizzes. If you miss one of the quizzes due to a documented personal emergency, your grade will be reweighed by the final exam. There are no extra credit provisions. All students must take the final exam to pass the course.

Quizzes There are two quizzes, which will be held in class. These will be a combination of short-answer multiple choice and longer-answer questions.

Final Exam The Final Exam will be comprehensive but will have a larger share of questions from the last third of the course. All students must take the final exam to pass the course. A total of 75 minutes has been allotted for the final exam, which will take place on **Saturday, May 6, 1:30-2:45 pm**.

Policy on Electronic Devices Unless we are actively using laptops as part of a class activity, electronic devices (cellphones, tablets, and laptops) should be stowed away for use until after class.

Institutional Policies

Classroom Behavior—

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the [Links to an external site.classroom behaviorLinks to an external site.](#) policy, the [Links to an external site.Student Code of ConductLinks to an external site.](#), and the [Links to an external site.Office of Institutional Equity and ComplianceLinks to an external site.](#).

Requirements for COVID-19—

As a matter of public health and safety, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements and all public health orders in place to reduce the risk of spreading infectious disease. CU Boulder currently requires COVID-19 vaccination and boosters for all faculty, staff and students. Students, faculty and staff must upload proof of vaccination and boosters or file for an exemption based on medical, ethical or moral grounds through the MyCUHealth portal.

The CU Boulder campus is currently mask-optional. However, if public health conditions change and masks are again required in classrooms, students who fail to adhere to masking requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct and Conflict Resolution. For more information, see the policy on classroom behavior and the Student Code of Conduct. If you require accommodation because a disability prevents you from fulfilling these safety measures, please follow the steps in the “Accommodation for Disabilities” statement on this syllabus.

If you feel ill and think you might have COVID-19, if you have tested positive for COVID-19, or if you are unvaccinated or partially vaccinated and have been in close contact with someone who has COVID-19, you should stay home and follow the further guidance of the Public Health Office (contacttracing@colorado.edu). If you are fully vaccinated and have been in close contact with someone who has COVID-19, you do not need to stay home; rather, you should self-monitor for symptoms and follow the further guidance of the Public Health Office (contacttracing@colorado.edu). If you miss classes due to illness or quarantine, notify the instructor by email.

Accommodation for Disabilities—

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Links to an external site.Disability Services websiteLinks to an external site.](#). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition, see [Links to an external site.Temporary Medical ConditionsLinks to an external site.](#) on the Disability Services website.

Preferred Student Names and Pronouns—

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

Honor Code—

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu; 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office websiteLinks to an external site.](#).

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation—

CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, protected-class discrimination and harassment, and related retaliation by or against members of our community on- and off-campus. These

behaviors harm individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these policies, and individuals who believe they have been subjected to misconduct can contact OIEC at 303-492-2127 or email cureport@colorado.edu. Information about university policies, [Links to an external site.reporting optionsLinks to an external site.](#), and support resources can be found on the [Links to an external site.OIEC websiteLinks to an external site.](#).

Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of any issues related to these policies regardless of when or where they occurred to ensure that individuals impacted receive information about their rights, support resources, and resolution options. To learn more about reporting and support options for a variety of concerns, visit [Links to an external site.Don't Ignore ItLinks to an external site.](#).

Religious Holidays—

Reasonable and fair consideration will be made to all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, students should inform the instructor as early as possible of conflicts. See the [campus policy regarding religious observancesLinks to an external site.](#) for full details.

Topic Outline and Readings

The schedule below is an outline of the topics covered this semester and is subject to change based on class progress. Additional, supplementary material will be made available on Canvas.

I. Introduction and Preliminaries

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; inequality.

Readings:

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

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: Alvaredo, Facundo, Anthony B. Atkinson, Thomas Piketty, and Emmanuel Saez. 2013. "The Top 1 Percent in International and Historical Perspective." *Journal of Economic Perspectives*, 27 (3): 3-20.

II. Factor Accumulation

Chapter 3: Capital's Role in Production

Theory: Harrod-Domar Model; the Solow Model.

Reading:

- Ray, pp. 47-57.

Chapter 4: The Role of Population in Economic Growth (skip appendix).

Theory: The Malthusian Model; Fertility Transition.

Readings:

- Tiloka de Silva and Silvana Tenreyro. 2017. "Population Control Policies and Fertility Convergence," *Journal of Economic Perspectives*, 31(4): 205-228.

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

Chapter 6: The Effect of Human Capital on Growth

Theory: Returns to Education.

Student Presentation D: Tessa Bold et al. 2017. "Enrollment without Learning: Teacher Effort, Knowledge, and Skill in Primary Schools in Africa." *Journal of Economic Perspectives*, 31(4): 185-204.

Student Presentation E: Deming, David J. 2022. "Four Facts about Human Capital." *Journal of Economic Perspectives*, 36 (3): 75-102.

III. Productivity

Chapter 7: How much does productivity growth differ among countries?

Theory: Growth Accounting, Total Factor Productivity

Reading:

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

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

Chapters 8 and 9: Can technological gaps explain differences in productivity?

Theory: Model of Technological Change

Reading:

Student Presentation G: Kerr, William R., and Frederic Robert-Nicoud. 2020. "Tech Clusters." *Journal of Economic Perspectives*, 34 (3): 50-76.

Student Presentation H: Michael Bailey, Rachel Cao, Theresa Kuchler, Johannes Stroebel, and Arlene Wong. 2018. "Social Connectedness: Measurement, Determinants, and Effects." *Journal of Economic Perspectives*, 32 (3): 259-80.

Chapter 10: How much of the productivity differences across countries come from inefficiency?

Theory: Decomposing productivity into technology and efficiency

Reading:

Student Presentation I: Sergei Guriev, Daniel Treisman. 2019. "Informational Autocrats." *Journal of Economic Perspectives*, 33(4).

Student Presentation J: Corrado, Carol, Jonathan Haskel, Cecilia Jona-Lasinio, and Massimiliano Iommi. 2022. "Intangible Capital and Modern Economies." *Journal of Economic Perspectives*, 36 (3): 3-28.

IV. Historical (Fundamental) Factors of Growth

Chapter 15: Historical Influences Explaining Differences in Economic Performance Today

Reading (optional):

- Jared Diamond. *Guns, Germs, and Steel: The Fates of Human Societies*, Chapter 10.
- Anthony Venebles. 2016. "Using Natural Resources for Development, Why Has it Proven So Difficult?" *Journal of Economic Perspectives*, 30(1).

Postscript: Cultural Differences and Growth, Weil, Ch. 14.

Reading:

- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2006. "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives*, 20 (2): 23-48.