

Econ 326: Economics of Developing Countries

Fall Quarter 2020

Instructor: Prof. Seema Jayachandran (seema@northwestern.edu)
Class time: Assigned synchronous slot is Tues. & Thurs., 11:20 am to 12:40 pm
Most material will be taught through pre-recorded sessions.
On Tuesdays, we will meet synchronously online from 12:00 to 12:40 pm.
Office hours: Monday, 4 to 6 pm on Zoom
Teaching asst: Eduardo Campillo Betancourt
(eduardocampillo2023@u.northwestern.edu)
Sections: Tuesday 9 to 10 am & Wednesday 10 to 11 am, both on Zoom
TA office hours: Tuesdays and Wednesdays 2 to 3 pm, on Zoom

Course objectives

The aim of this course is to expand your understanding of the economic lives of people residing in low-income countries, the policy approaches that can help address the economic problems they face, and the reasons some countries are poor. The emphasis will be on microeconomic issues.

The questions we will investigate include: Why don't individuals in poor countries invest more in health and education? Why do financial markets as well as other markets often function inefficiently in poor countries? To what extent are informal institutions able to fill this gap?

Another important course objective is to learn how to use both the theoretical and empirical tools of economics to investigate applied, policy-oriented questions such as those above. Therefore, theoretical models and especially econometric techniques will feature prominently in the course.

Prerequisites

The key prerequisites are Econ 281 and 310-1. The readings and lectures will draw upon a fair amount of econometrics and microeconomics, and a solid understanding of the material in these prerequisites will enable you to benefit from and enjoy this course more. Building on the foundation from the prerequisites, the course will equip you with a solid microeconomic framework within which to analyze important issues in development and, more broadly, economic and social policies.

Class meetings

- The main class meetings will be pre-recorded and asynchronous. The pre-recorded material will average around 1 hour per class, usually broken into two recordings.
 - Within Pages on Canvas, there is a page for each class meeting where the videos are posted.
 - I recommend you download the videos to watch them. When viewed through Canvas, the video quality is degraded.
 - The recordings for each class, as well as the accompanying slides, will be posted by 8:00 p.m. the night before the regular class time.

- Because Northwestern is capping our storage space on Canvas, the videos will only be posted for 1 month. ****Please make sure you watch or download the videos within 1 month of the class date.**** (It’s frustrating that our storage space is capped given that cloud storage is inexpensive, and I have tried hard to get them to change the policy. Please direct any concerns about this policy to NUIT and the Dean’s office.)
- We will have a synchronous meeting each Tuesday from 12:00 noon to 12:40 pm on Zoom.
 - **The Zoom instructions for joining these sessions (as well as the TA sections and office hours) are on the class’s homepage on Canvas.**
 - In the ‘Schedule of Lectures’ section of the syllabus, the days with a synchronous meeting are indicated with ”[+ sync].” The first one is Sept. 22.
 - The synchronous meeting will be tied to that day’s lecture and the previous Thursday’s.
 - You are expected to have watched the lecture videos and done the readings before these sessions.
 - For the first 15 minutes, I will answer questions. Please post your questions to the Canvas discussion page. I will start by answering the posted questions, prioritizing those with the most ‘likes.’
 - The remaining 25 minutes will use breakout rooms in which you will discuss material in smaller groups, and then we will re-convene to share your group’s comments.
 - If this session length or split of time turns out to be too short or long, we will re-adjust as the quarter proceeds.
 - These sessions are intended as supplementary, in the sense that I will not teach new material during them.
 - I will record the portion of these discussions when you are not in breakout rooms for educational purposes. These recordings will be shared only with students enrolled in the course and will be deleted at the end the Fall 2020 course. I will communicate how you can access the recordings.
- The TA will hold a synchronous weekly section on Zoom. You can choose which of the two sessions to attend. They will also be recorded for educational purposes.

Textbook, other required reading, and software

- We will use select chapters from the textbook *Development Economics* by Debraj Ray. Electronic copies of the relevant chapters are posted on Canvas in a folder under Files.
- The second text is *Poor Economics* by Abhijit Banerjee and Esther Duflo, which is available as an [e-book](#) or you can purchase it on Amazon or elsewhere. You may find it helpful to read *Poor Economics* from cover to cover at the beginning of the quarter (it’s written for a general audience), though I have assigned relevant chapters throughout the quarter.
- The reading list also includes academic journal articles, policy reports, etc., which are available through the library’s electronic journals or are available for free online. The syllabus links to most of these readings.
- The problem sets will ask you to use Stata, a statistical software package. Northwestern provides online access through this website: <https://northwestern.apporto.com>. In Canvas, under Files, there is a video tutorial on how to access Northwestern’s remote desktop workspace where you can run Stata. In addition, you can buy Stata at the discounted [student rate](#). Note that you should not purchase the “IC” version which does not allow enough variables or observations for the exercises on the problem set. You need the “SE version” (or higher).

Requirements

- **Readings.** The first requirement is to do the starred readings for each class meeting which are listed below in the “Schedule” section. While I cannot directly enforce this requirement, the problem sets and exams will assume knowledge of the readings. You’ll also understand lectures better if you have done the reading. The unstarred readings are optional.

Your grade for the course will be determined based on the following assignments and exams:

- **20%: End-of-class writing assignments**
 - After watching each lecture, spend 10 minutes writing up a short response, around 100 to 200 words long, to the question(s) posed on the last slide of the class, which asks you to reflect on some of the material covered.
 - The four exceptions when there is no response note assigned are Sept 17 (first class), Oct. 22 (midterm), Nov. 3 (election day), and Nov. 24 (no class). A response note is assigned for the other 16 classes.
 - These writing assignments should be your solo work.
 - Your write-up is due at 12:40 pm the day after the class, so Wednesday, 12:40 pm for Tuesday classes and Friday, 12:40 pm for Thursday classes.
 - This assignment should be submitted using the Google form linked to on the Canvas page for that class.
 - You will be graded based on the quality and coherence of your ideas and how well you relate your answer to the course material. To earn a perfect score (10/10), your comments should be exceptionally insightful or creative in addition to relating to the lecture. Responses that are very solid (cogent answer that relates to lecture material) will earn a 9/10. Responses that either are hard to follow, are incorrect in some way, or don’t relate to the lecture material will receive an 8/10. Those that fall short on more than one of those dimensions will receive a lower score.
 - You can drop your lowest two scores; that is, only your highest 14 grades for these 16 assignments will count toward your grade.
- **30%: Problem Sets**
 - There will be 4 problem sets during the quarter which will be due at 12:40 p.m. on the following dates: Oct. 1; Oct. 15; Nov. 6; Nov. 20. All four will count toward your grade, with equal weight. The assignment will be distributed one week before the due date.
 - Completed problem sets should be turned in to your TA electronically.
 - Collaboration with others is allowed and encouraged, but the work you submit should reflect a good deal of individual effort. Each individual should turn in a problem set and indicate with whom he or she worked.
 - The data analysis problems will require you to use Stata software. The TA will give a Stata tutorial in the first section.
- **20%: Midterm Exam (asynchronous)**
 - There will be a “take home” midterm exam that will be available Thursday at 11:20am CT. It will be a timed exam, 80 minutes long, that you need to complete by Friday at 9:00 am CT.
 - It will be timed; you will be able to choose a 1 hour, 20 minute block of time in which to complete the exam.

- The midterm will cover material up through the Oct. 15 class.
- **30%: Final Exam (synchronous)**
 - The final exam will on December 3, from 12 to 2 pm. It will be cumulative, covering material that we discussed both before and after the midterm exam.

Course policies

- **Missed exam:** Students are required to take the final exam on the scheduled date. Exam dates will not be changed for individual students to accommodate job interviews, family events, etc. Exceptions will be made only for serious medical reasons or in the event of a death in the family. In the case of a medical problem, you are required to provide a letter from a doctor stating that the medical problem prevents you from taking the exam.
- **Requests for re-grading:** Re-grade requests should be submitted in writing (by email) to me within a week from when we return your work. Students should not approach either me or the TA with an oral request before making their written request.
- **Late assignments:** Problem sets can be turned in up to 3 days (72 hours) late, with 25% of the total points possible deducted from the grade. We will not accept late end-of-lecture writing assignments, but you can drop your two lowest grades.
- **Office hours:** The last 30 minutes of my office hours will be two 15-minute slots that you can reserve if you have a personal question. Please email me to sign up for one of these slots if you have something private or non-course related that you would like to discuss. If your question is about Econ 326 material, then please come to the first 1 hour, 30 minutes of office hours.
- **Contacting me:** Please use email if you'd like to reach me. I don't check messages on Canvas regularly, so will not see any messages you post there.

College/university policies

- **Recording and use of recordings by students:** Unauthorized student recording of classroom or other academic activities (including breakout rooms and office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact AccessibleNU. Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's Copyright Policy, faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.
- **Students with documented disabilities:** Any student with a verified disability requiring special accommodations should speak to the Office of Services for Students with Disabilities (847-467-5530) and then provide documentation to me as early as possible in the quarter, ideally in the first week, to arrange appropriate accommodation. All discussions with me, with the Office of Services for Students with Disabilities and with Academic Services will remain confidential.

- **Academic integrity:** Suspicion of academic integrity violations will be referred immediately to the Academic Dean's office; University rules prohibit subsequent discussion of the situation with the student. Northwestern University's understanding and expectations in regard to issues of academic honesty are articulated in the Undergraduate Catalog. While you are a Northwestern student, you will be treated as an adult and will be held accountable for your actions; consequently you are expected to know and abide by the rules of the institution. It is important that you read and understand the ethical use of information (see Academic Integrity at Northwestern: A Basic Guide). Whether intentional or not, improper use of materials can be considered a violation of academic honesty. For example, you should not refer to prohibited materials (notes, another student's exam, a calculator) during an exam, alter an exam for re-grading, or fabricate excuses or lie in connection with your academic work. If you are unsure as to what is permissible, please consult us, because ignorance is not a valid excuse.

Schedule of lectures

Thurs Sept 17 Introduction to the economics of developing countries

- Course overview: topics, requirements, policies
- Basics facts about economic development
- ★ *Ray, Chapter 2*
- ★ *Banerjee and Duflo, Chapters 1 to 3*

Tues Sept 22 Deep causes of development [+ sync]

- Geography
- Historical institutions
- ★ *Sachs, "Institutions Matter, but Not for Everything," Finance and Development, 2003*
- ★ *Acemoglu, "Root Causes," Finance and Development, 2003*

Thurs Sept 24 Refresher on empirical analysis

- Interpreting empirical results
- How income affects health
- ★ *Ray, Appendix 2*
- ★ *Re-read the treatment of these topics in your econometrics textbook. I recommend *Mastering Metrics* by Angrist and Pischke.*

Tues Sept 29 Income and nutrition [+ sync]

- Effects of transfer programs on nutrition
- Randomized controlled trials
- ★ *Duflo, Glennester, and Kremer "Using Randomization in Development Economics Research: A Toolkit," Discussion paper, 2007, sections 1 to 3*

- ★ *Hidrobo et al, “Cash, Food, or Vouchers? Evidence From a Randomized Experiment in Northern Ecuador,” Journal of Development Economics, vol. 107, pp. 144-156, 2014*

Thurs Oct 1 Poverty traps [PS 1 due]

- Effect of health on income
- Theory of nutritional poverty traps
- Inequality in developing countries
- ★ *Ray, Chapter 8 + Chapter 13 pp. 489–504*
- ★ *Kraay and MacKenzie, “Do Poverty Traps Exist? Assessing the Evidence,” Journal of Economic Perspectives 28(3): 127-148, 2014*
- *Jayachandran, “Think Positive, Climb Out of Poverty? It Just Might Work,” New York Times, 2018*

Tues Oct 6 Link between health and education [+ sync]

- Effect of health on education
- Estimating spillover effects
- ★ *Miguel and Kremer, “Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities,” Econometrica 72(1): 159-217, 2004*
- ★ *Policy brief on “Worms”*
- *Jayachandran, “Why Public Health Insurance Could Help, Even if You Don’t Want It,” New York Times, 2017*

Thurs Oct 8 Education

- Basic facts about education in developing countries
- Modeling how the family decides how much schooling to invest
- Review of instrumental variables in
- ★ *Banerjee and Duflo, Chapter 4*

Tues Oct 13 Returns to education [+ sync]

- Estimating the economic returns to schooling
- Improving school inputs
- ★ *Duflo, “Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment,” American Economic Review 91(4): 795-813, 2001*
- ★ *Glewwe, Kremer, and Moulin, “Many Children Left Behind? Textbooks and Test Scores in Kenya,” American Economic Journal 1(1): 112-135, 2009 (you can skip sections 1B to 1D and 3D)*
- *Jayachandran, “When a Disappointment led to a Nobel Prize,” New York Times, 2019*

Thurs Oct 15 Quality of education and health care [PS 2 due]

- Absenteeism at schools and health clinics
- Watch “*The Name of the Disease*” (45-minute documentary)
- ★ Chaudhury et al, *Missing in Action: Teacher and Health Worker Absence in Developing Countries*, *Journal of Economic Perspectives* 20(1): 91–116, 2006
- ★ Muralidharan, Singh, and Ganimian, “In Delhi Experiment, Software Sparks Success,” *Education Next*, 2019

Tues Oct 20 Gender inequality [+ sync]

- Gender bias and “missing women”
- Parental spending on children
- ★ Jayachandran, “*The Roots of Gender Inequality in Developing Countries*” *Annual Review of Economics*, vol. 7, pp. 63-88, 2015
- ★ Ray, Chapter 8 pp. 279–288

Thurs Oct 22 Midterm Exam

Tues Oct 27 Microcredit [+ sync]

- Theory of credit markets
- Group lending
- Evidence on microcredit
- ★ Ray, Chapter 14
- ★ Banerjee and Duflo, Chapters 6 and 8
- Banerjee et al., “*The Miracle of Microfinance? Evidence from a Randomized Evaluation*,” *American Economic Journal: Applied Economics*, vol. 7, pp. 22–53, 2015

Thurs Oct 29 Risk and insurance

- Risks faced by the poor
- Informal insurance
- ★ Ray, Chapter 15
- ★ Banerjee and Duflo, Chapter 5

Tues Nov 3 Shorter class and no synchronous meeting – Election day

- How voting affects policy
- ★ Pande, “*Can Democracy Work for the Poor*,” *Science*, 369: 1188–1192, 2020
- Fujiwara, “*Political Inclusion and Development Outcomes: Brazil Introduces Electronic Voting*,” *VoxDev* blog post, October 24, 2017

Thurs Nov 5 Behavioral economics and development [PS 3 due tomorrow 11/6]

- “Present bias”
- Scarcity and cognition
- ★ *Datta and Mullainathan, “Behavioral Design: A New Approach to Development Policy,” Center for Global Development Policy Paper, November 2012*
- ★ *Mani, Mullainathan, Shafir, and Zhao, “Poverty Impedes Cognitive Function,” Science 341(6149): 976-980, 2013*

Tues Nov 10 Land, agriculture, and incentives [+ sync]

- Theory of land ownership and incentives
- ★ *Ray, Chapters 11 and 12 (can skip 12.4)*

Thurs Nov 12 Corruption

- Theory of corruption
- Evidence on corruption
- ★ *Banerjee and Duflo, Chapter 10*
- ★ *Olken, “Monitoring Corruption: Evidence from a Field Experiment in Indonesia,” Journal of Political Economy, 115(2), 200-249, 2007.*
- *DiTella and Schargrodsky, “The Role of Wages and Auditing during a Crackdown on Corruption in the City of Buenos Aires,” Journal of Law and Economics, 46(1), 269-292, 2003. (For PS #4)*

Tues Nov 17 Firms and markets [+ sync]

- Management practices in developing countries
- Impacts of mobile phones
- ★ *Jensen, “The Digital Divide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector,” Quarterly Journal of Economics, 122(3), 2007*
- *Bloom et al., “Does Management Matter,” Quarterly Journal of Economics, 128(1), 2013*

Thurs Nov 19 Environment [PS 4 due tomorrow 11/20] (last class)

- Environmental conservation
- Impacts of climate change in developing countries
- ★ *Jayachandran et al., “Cash for Carbon: A Randomized Trial of Payments for Ecosystem Services to Reduce Deforestation,” Science, 357(6348), 2017*

Tues Nov 24 NO CLASS

Thurs Dec 3, 12-2 pm Final exam