Econ 326: Economics of Developing Countries

Fall Quarter 2018

Instructor: Prof. Seema Jayachandran (seema@northwestern.edu)

Lectures: Tuesday and Thursday, 11:00 am to 12:20 pm, Frances Searle 1441

Office hours: Wednesday, 10:15 am to 12:00 pm, KGH 3439

Teaching asst: Ashley Wong (AshleyWong2021@u.northwestern.edu)

Sections: Wednesday 2:00 to 3:00 pm & Friday 9:00 to 10:00 am, both in KGH 3417

TA office hours: Monday 2:00 to 4:00 pm in KGH 3496

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.

Textbook, online readings, and software

- The main textbook is *Development Economics* by Debraj Ray. The second text is *Poor Economics* by Abhijit Banerjee and Esther Duflo. 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 assigned relevant chapters throughout the quarter. These books are available at the bookstore.
- The reading list also includes academic journal articles, policy reports, etc., and in lieu of a photocopied course reader, electronic copies of these readings are available through the course website or the library's electronic journals.
- The problem sets will ask you to use Stata, a statistical software package. It is available through the university computer clusters, or you can buy it 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 as follows:

• 30%: Problem Sets

- There will be 4 problem sets during the quarter which will be due at 4:00 p.m. on the following dates: Tuesday, Oct 9; Tuesday, Oct 23; Thursday, Nov 15, and Thursday, Nov 29. They will each carry equal weight toward your grade. The assignment will be distributed one week before the due date.
- Completed problem sets can be turned in either by handing them to your TA in class on the due date or putting them in her mailbox in the economics department (Global Hub). Please make sure you put it in the TA's mailbox, as whether it is counted as late or not is based on when the TA receives it.
- Collaboration with others is allowed, 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.

• 30%: Midterm Exam

- There will be an in-class midterm exam on Tuesday, October 30.

• 40%: Final Exam

- The final exam will be on Tuesday, December 11 from 12 noon to 2 pm in the regular classroom. It will be cumulative, covering material that we discussed both before and after the midterm exam.

Other course policies

• Missed exam: Students are required to take the midterm and final exams on the scheduled dates. 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. There will be no make-up midterm exams; for students who miss the midterm exam for the aforementioned allowed reasons, the final exam will count for 70% of their final grade.

Students on Northwestern varsity athletic teams who anticipate an exam conflict due to an NCAA event should work with Margaret Akerstrom (m-akerstom@northwestern.edu) in Academic Services and ask her to contact me on your behalf.

- Requests for re-grading: Re-grade requests should be submitted in writing 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: Assignments can be turned in up to 1 day (24 hours) late but 25% of the total points possible on the problem set will be deducted from your grade. Problem sets turned in after 4 pm on the due date are considered a day late. Assignments will not be accepted more than 24 hours after the due date/time.

- 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 the 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.
- Office hours: The first 30 minutes of my office hours will be two 15-minute slots that you can reserve. 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 any of those slots are not filled in advance, I'll meet with students who drop by as usual.
- Contact information: Please use email if you'd like to reach me. I don't check messages on Canvas so will not see messages you post there.
- Copies of lecture notes: Copies of the lecture slides for the upcoming class will be posted on the course website by 9:30 am on the day of class.

Schedule of lectures

Thurs Sept 27 Introduction

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

Tues Oct 2 Deep causes of development

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

Thurs Oct 4 Refresher on empirical analysis

- Interpreting empirical results
- Why income can affect health and health can affect income

- * Ray, Appendix 2
- * Pomeranz, "Impact Evaluation Methods in Public Economics," <u>Public Finance Review</u> 45(1):10-43, 2017
- * Re-read the treatment of these topics in your econometrics textbook. I recommend Mostly Harmless Econometrics by Angrist and Pischke.

Tues Oct 9 Income and health

- Effects of iron supplementation on health and labor market outcomes
- Review of causal estimation and instrumental variables
- * Thomas et al, "Causal Effect of Health on Labor Market Outcomes: Experimental Evidence," working paper, UCLA, 2006

Thurs Oct 11 Nutritional poverty traps and inequality

- Inequality in developing countries
- Theory of nutritional poverty traps
- \star Ray, Chapter 8 + pp 489-504
- * Banerjee and Duflo, Chapters 2 and 3

Tues Oct 16 Health and education

- Effect of health on education
- Effect of education on health
- * 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"

Thurs Oct 18 Quality of education and health care

- Absenteeism at schools and health clinics
- Viewing of "The Name of the Disease" (documentary)
- * Chaudhury et al, Missing in Action: Teacher and Health Worker Absence in Developing Countries, Journal of Economic Perspectives 20(1): 91–116, 2006

Tues Oct 23 Education

- Basic facts about education in developing countries
- Modeling how the family decides how much schooling to invest in
- * Banerjee and Duflo, Chapter 4
- * Edmonds and Pavenik, "Child Labor in the Global Economy," <u>Journal of Economic Perspectives</u> 19(1): pp 199–220, 2005
- Public Report on Basic Education in India (PROBE), Chapter 3, 1999

Thurs Oct 25 Returns to education

- Estimating the economic returns to schooling
- * 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

Tues Oct 30 Midterm exam

Thurs Nov 1 Gender inequality and intrahousehold decision-making

- Gender bias and "missing women"
- Parental spending on children
- * Jayachandran, "The Roots of Gender Inequality in Developing Countries" <u>Annual Review of Economics</u>, vol. 7, pp. 63-88, 2015
- * Ray, pp. 279-288

Tues Nov 6 Microcredit

- Theory of credit markets
- Evidence on microcredit
- * Ray, Chapter 14
- * Karlan, "Social Connections and Group Banking," Economic Journal, 117(Feb.), F52-F84, 2007
- * Banerjee and Duflo, Chapters 6 and 8
- Banerjee et al., "The Miracle of Microfinance? Evidence from a Randomized Evaluation," <u>American</u> Economic Journal: Applied Economics, vol. 7, pp. 22–53, 2015

Thurs Nov 8 Risk and insurance

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

Tues Nov 13 Behavioral economics and development

- "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," <u>Science</u> 341(6149): 976-980, 2013

Thurs Nov 15 Land, agriculture, and incentives

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

Tues Nov 20 Corruption

- Theory of corruption
- Evidence on corruption
- * Banerjee and Duflo, Chapter 10
- * Olken, "Monitoring Corruption: Evidence from a Field Experiment in Indonesia," <u>Journal of Political</u> 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 27 Firms and markets

- Management practices in developing countries
- Impacts of mobile phones
- * Jensen, "The Digital Provide: 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 29 Environmental conservation (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 Dec 11 Final exam, 12 to 2 pm