

# 14.740x: Foundations of Development Policy

## Instructors:

- Esther Duflo, Abdul Latif Jameel Professor of Poverty Alleviation and Development Economics (MIT)
- Abhijit Banerjee, Ford Foundation International Professor of Economics (MIT)
- Benjamin Olken, Professor of Economics (MIT)

## Course Descriptions:

In this course, we will study the different facets of human development: education, health, gender, the family, land relations, risk, informal and formal norms, public policy and institutions. While studying each of these topics, we will ask: What determines the decisions of poor households in developing countries? What constraints are they subject to? Is there a scope for policy (by government, international organizations, or NGOs)? What policies have been tried out? Have they been successful? At the time, you will be exposed to modern empirical methods in economics, and in particular to Randomized Control Trials: throughout the course, we will expose you to all the facets of these projects, from experimental design to ethical issues to data collection and analysis.

If you are interested in getting an overview of the content and exercises covered in this course, or eager to find additional resources please check out our [course preview](#). A score of 60% or above in the course previews indicates that you are ready to take the course, while a score below 60% indicates that you should further review the concepts covered before beginning the course.

## This Course and the MicroMasters:

This course is part of the new MITx MicroMasters in Data, Economics, and Development Policy (DEDP). The program, which consists of five online courses and in-person proctored exams, is co-designed by and run by MIT's Department of Economics and the Abdul Latif Jameel Poverty Action Lab (J-PAL), a global leader in conducting randomized evaluations to test and improve the effectiveness of programs aimed at reducing poverty. The MicroMasters program is intended for learners who are interested in building a full set of tools and skills required for data analysis in the social sciences, understanding the problems facing the world's poor, and learning how to design and evaluate social policies that strive to solve them. You can learn more about this program and sign up today on the [MITx MicroMasters portal](#) – we hope that many of you will decide to join us!

## Prerequisites:

**Math:** You should be prepared to keep up with an approach to economics that is somewhat mathematical. We suggest that you have taken high school calculus or the equivalent. We will use algebra in the lectures, problem sets, and exams. **Statistics:** You should also have some basic understanding of statistics. For example, if you are not familiar with what a regression is, this class may be very challenging for you. In contrast to standard intermediate/introductory microeconomics courses, this is a heavily empirical class. For each topic, we will study several concrete examples chosen from around the world, and use statistics to understand these examples quantitatively. **Econometrics:** Econometrics is not a prerequisite for this class, but you may be expected to familiarize yourself with basic econometric methods on your own. We will go over many of the relevant econometrics material in class in detail, but this coverage may be too quick for a first exposure to the material.

## Assignments and Grading Scheme:

For most weeks during the course, there will be a homework assignment that covers the main topics in that unit. Homework assignments will be released on Mondays along with the videos, and will be due Sunday. In addition, there will be a final exam. Please see the online calendar for further information. There is also a pdf schedule that you can download and keep for offline use.

Grades of the edX course are calculated as follows:

- Homework Assignments: **45%**
- Finger Exercises: **30%**
- Final Online Exam: **25%**

Students who are taking this course in pursuit of the **MicroMasters credential** will also have to sit an in-person, proctored exam.

To be eligible to register for the proctored exam, you first will have to pass the online component of the course on edX as outlined above. Your final MicroMasters course grade will be calculated as follows:

- edX Course: **40%**
- Proctored Exam: **60%**

## **Lectures and Time Commitment:**

The material for each topic will be posted weekly, and you should keep pace with the rest of the class. There will be about two lectures per week. You will have access to videos of the lecture presented in short segments (8-10 minutes on average), followed by finger exercises. You will also have access to the lecture notes and presentation slides.

The minimum commitment will be approximately 12 hours per week for watching the lectures, doing the readings, and completing the assignments.

## **edX Honor Code Pledge:**

By enrolling in a course on edX, you are joining a special worldwide community of learners. The aspiration of edX is to provide anyone with an internet connection access to courses from the best universities and institutions in the world and to provide our learners the best educational experience internet technology enables. You are a part of the community that will help edX achieve this goal. edX depends upon your motivation to learn the material and to do so with honesty and academic integrity. By enrolling in an edX course, you have agreed to the edX Honor Code, which means that you will:

- Complete all graded material (graded assignments and exams) with your own work and only your own work. You will not submit the work of any other person or have anyone else submit work under your name.
- Maintain only one user account and not let anyone else use your username and/or password. Having two user accounts registered in this course will constitute cheating.
- Not return to a previous semester of the course in order to utilize assignment or exam answers for the current semester.
- Not engage in any activity that would dishonestly improve your results, or improve or hurt the results of others.
- Not collaborate with anyone other than staff on the graded assignment or exam questions. This means comparing answers, working as teams, or sharing answers in any way. The Practice Problems and Quick Questions are designed for collaboration - not the Graded Assignments, midterms or final exams.
- Not post answers to problems that are being used to assess student performance.
- Always be polite and respectful when communicating across the platform (with other learners and the staff).

We will strictly enforce the honor code pledge. Students found violating this pledge will be dealt with directly. **If we become aware of any suspicious activity we reserve the right to remove credit, not award a certificate, revoke a certificate, ban from any and all DEDP courses as well as notify edX for other actions.** We take academic honesty very seriously at MIT. With the introduction of the MicroMasters Credential, the importance of honesty in work has been elevated to a higher level than before and we will diligently monitor this.

## Course Syllabus and Reading Assignments:

The textbook for the class is Abhijit Banerjee's and Esther Duflo's *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. The publishers have graciously agreed to make the book available in PDF format through the course platform. We also encourage you to purchase a copy of the book here. We will also refer to Debraj Ray's *Development Economics* for

some material, although you are not required to buy the book. We will also rely heavily on articles. You are not expected to read every single article in detail, but you are expected to understand the methods used by the authors to reach their conclusions. Two general references for everything we will do, which you should read during the first couple of weeks and refer regularly to, are "Economics Lives of the Poor" (Banerjee and Duflo, 2007) and "What is Middle Class about the Middle Classes?" (Banerjee and Duflo, 2008).

*\*Note: Required readings are starred.*

### **Week One: Introduction** (Professor Duflo)

- Introduction I: Introduction to 14.740x
- Introduction II: Poverty and undernutrition
- Reading Assignments
  - *World Development Report*
  - *\*Poor Economics*: Foreword and Chapter 1
  - Theoretical model: Ray, pp. 272-279; Ray, pp. 489-504

### **Week Two: Nutrition and Productivity** (Professor Duflo)

- Nutrition I: The capacity curve
  - *Methodological theme: The Causality Problem*
- Nutrition II: Elasticity of Nutrition
  - *Methodological theme: Randomization Design*
- Reading Assignments
  - *\*Poor Economics*: Chapter 2
  - Evaluation of "Give Directly": Haushofer and Shapiro (2013)
  - Giffen Behavior and Subsistence Consumption: Jensen and Miller (2008).
  - Iron supplements: Thomas et al. (2006)
  - Children nutrition: Deworming - Baird, Hicks, Kremer, and Miguel (2012)

- Iron supplement for adolescents: Chong et al. (2014)
- (Optional) Documentary Video: "The Name of the Disease"
  - Available online: <https://www.youtube.com/watch?v=rOenEuclS30>
- (Optional) Reading Assignments for Health
  - Health Status in Rajasthan: Banerjee, Deaton, and Duflo (2003)  
A case study (and a movie) that looks at various aspects of health delivery and health status
  - The demand for health: *Poor Economics*: Chapter 3

### **Week Three: Education**(Professor Duflo)

- Education I: Benefits of Education
  - An overview of the problems: Do parents care about education? Can they afford it? What is education good for?
  - What are the benefits of education? The Ghana Secondary School study
  - *Methodological theme: Experiments as an Instrumental Variable*
- Education II: Schooling Decisions
  - The determinants of education decisions: The benefits of education, perceptions, information, etc.
  - *Methodological theme: Data Collection*
- Reading Assignments
  - *\*Poor Economics*: Chapter 4
  - Dizon-Ross (2014)
  - Jensen (2010), Nguyen (2008)

### **Week Four: Gender** (Professor Duflo)

- Gender I: Human subjects
  - *Methodological theme: Human subject protections*
- Gender II: Household bargaining and gender

- Reading Assignments
  - The returns to girls: Jensen (2010)
  - Norms and perception: Beaman et al. (2012)
  - The possible backlash of economic growth and development: Jayachandran (2015)

**Week Five: Insurance** (Professor Banerjee)

- Insurance I: How the poor deal with risk
  - Agricultural incomes fluctuate enormously during the year and from year to year. Do consumption and investments fluctuate as well, or are households protected from these fluctuations? How costly is risk for poor households?
- Insurance II: Mutual insurance in the village economy
- Reading Assignments
  - *Poor Economics*: Chapter 6
  - Ray, Chapter 15
  - Insurance is only partial: the consumption of household members in Cote d'Ivoire is linked to their income: Deaton (1997), pp 372-383
  - \*In West Africa, villagers lend to each other and achieve a certain degree of insurance: Udry (1990)
  - Mutual insurance in the village does not happen in the void. It depends on the strength of local institutions: Townsend (1995).

**Week Six: Land** (Professor Banerjee)

- Land I: Incentives and efforts
- Land II: Limited liability, risk aversion, and property rights
- Reading Assignments
  - \*Why land reform? Banerjee (1999)
  - \*A successful tenancy reform in India: Banerjee, Gertler, and Ghatak (2002)

### **Week Seven: Credit** (Professor Banerjee)

- Credit I: Modeling the credit market
- Credit II: Understanding credit constraints
- Credit III: The classic microcredit model
- Why does formal credit fail to reach the poor? Why has targeted lending organized by the government not worked? Why do the poor borrow from local moneylenders at very high rates?
- Reading Assignments
  - *\*Poor Economics*: Chapter 7 and Chapter 9
  - *\*Why do informal moneylenders charge interest rates that are so high?*
- Aleem (1990)
- The miracle of microfinance? Banerjee, Duflo, Glennerster, and Kinnan (2015)

### **Week Eight: Savings** (Professor Banerjee)

- Savings: Behavioral barriers to savings
- Reading Assignments
  - *\*Poor Economics*: Chapter 8
  - *\*Do poor people save in good times in anticipation of bad times? Savings by rice farmers in Thailand: Paxson (1992)*
  - *The psychological difficulty to save: Ashraf, Karlan, and Yin (2006)*
  - *\*Duflo, Kremer, and Robinson (2011)*

### **Week Nine: Public Finance** (Professor Olken)

- Public Finance I: Taxation
- Public Finance II: Targeting
- Public Finance III: Transparency

- Reading Assignments
  - \*Khan, Khwaja, and Olken (2014). Pomeranz (2013)
  - \*Alatas et al (2012). Alatas et al (2014)
  - Banerjee et al (2014)
  - *Methodological theme: multi-faceted experimental design*

**Week Ten: Political Economy** (Professor Olken)

- Political Economy I: Deep Determinants of Development: Macro Evidence
- Political Economy II: Deep Determinants of Development: Micro Evidence
- Reading Assignments
  - Institutions: The big picture: \*Acemoglu, Johnson, and Robinson (2001). Nunn (2008). Jones and Olken (2005, 200)
  - *Methodological theme: Instrumental variables in a non-experimental setting*
  - Institutions: Micro evidence \*Dell (2010), Michalopoulos and Papaioannou (2013)
  - *Methodological theme: regression discontinuity*

**Week Eleven: Corruption** (Professor Olken)

- Corruption I: Measuring and Modeling Corruption
- Corruption II: Combating Corruption
- Reading Assignments
  - The costs of corruption: \*Bertrand, Djankov, Hanna, and Mullainathan (2007). Olken and Barron (2009)
  - Controlling corruption: \*Olken (2007)

**\*Week Eleven: Final Online Exam**