University of Illinois at Urbana-Champaign
College of Liberal Arts & Sciences
Department of Economics
Spring 2026

ECON 455: Economics of Poverty Alleviation in Developing Countries
Tuesday and Thursday 3:30 pm – 4:50 pm
119 David Kinley Hall

Instructor: Prof. Adam Osman
Office: Osman: 110 David Kinley Hall
E-mail: aosman@illinois.edu Please include "Econ 455" at the start of the email subject to make sure I don't overlook your email.
Office Hours Prof. Osman: Monday/Wednesday 3:30-5pm or by appointment
Anonymous Feedback: http://bit.do/EconFeedback

Course Description:
This class will study what works, what does not, and why, in the fight against poverty in developing countries. The course will have a strong methodological and analytical component, specifically focusing on articulating the "why" behind interventions and policies, and the "how" behind establishing evidence on the effectiveness of specific interventions and policies. The class will also discuss some fundamentals of behavioral economics, and learn how and when to apply such ideas to policy and program design. The course will focus on interventions and policies that apply to households, small firms, and farms, with particular but not exclusive focus on three sectors: microfinance, health and education. It will also build the foundation of empirical data analysis and coding skills.

Course Format: Combined lecture and discussion every Tuesday and Thursday 3:30 pm – 4:50 pm. Laptops and tablets are not permitted during regular class meetings unless explicitly stated.

Learning Resources:

Most of the material for the course can be found on the lecture slides that will be made available online. While the slides provide an outline of everything that is important, they are not exhaustive, and so it is important to come to class to hear the details regarding what the slides allude to.

All of the academic studies we will cover in class are referenced below and can be found at the corresponding links in the syllabus or, if the links are not working, through a simple search through google scholar.

Supplemental (not required) Texts:
1. *Running Randomized Evaluations: A Practical Guide* (RRE), by Glennerster and Takavarasha
2. *Good Economics for Hard Times (GEHT)*, by Banerjee and Duflo
3. *Poor Economics* (PE), by Banerjee and Duflo
4. *More Than Good Intentions* (MTGI), by Karlan and Appel

Student Assessment:

Assessment Activity	Activity Value
Dream Policy Changes	2 Points
NGO Critique	8 Points
2 Data Exercises	3+5=8 Points
In-Class Quizzes	8 Points (Drop bottom quiz)
Midterm Exam	15 Points
Dream Policy Critique	8 Points
Presentation/Oral Exam	14+4=18 Points
Final Exam	25 Points
Participation/Attendance	8 Points
Total	100 Points

Assessment Activity Details:

Dream Policy Changes (2-3 Pages):
- Generate a short document that outlines one of your main policy interests in the economics of poverty alleviation and what you think could be done to improve societal outcomes related to that topic. In other words, what do you think the world is doing wrong when it comes to helping the poor and if you had the ability to change one policy what would you change and why?
  To ensure this reflects your own unique perspective, please start by explaining exactly why this topic matters to you personally. What specific observation, personal experience, or encounter led you to believe that the world is currently doing this "wrong"? In your proposal, focus on either a specific government policy (for example: Food Stamps, Subsidizing Student Loans, Closed Borders, etc.) or a specific Non-Governmental Organization's activity (e.g., giving the poor cows, building schools in rural villages, etc.) and describe what you think is wrong with the way these things are currently being implemented and how you would fix it. Do not use any of these examples, come up with your own.
  (Note: This is a personal benchmarking assignment. Its aim is to get you to write down your current thoughts on poverty and what you would change given your current state of knowledge. There are no wrong answers.)

NGO Evaluation Critique (In class – 40 Minutes):
- You will be provided with a 2-3 page printout describing a specific NGO intervention and its reported results. You will have 40 minutes to read the material and complete a structured technical audit in a provided worksheet. You will be expected to:
  1. **Identify the Theory of Change:** Briefly map the logical path from the NGO's specific activity to its intended societal outcome.
  2. **Identify the Market Failures:** Explicitly name and describe the primary market failures (e.g., information asymmetry, credit constraints, or moral hazard) that this intervention is attempting to address, and describe how they fit.
  3. **Critique of Rigor:** Identify at least two specific logical flaws in the NGO's claims.

Assignment 1: (3 points)
Use the dataset (saved in csv format) uploaded to canvas, create an R script that accomplishes the following tasks. Note that survey round 1 is the baseline and survey round 2 is the follow up.

      a. Import the data into R.
      b. Generate a table of summary statistics for the following variables including the mean, standard deviation and number of observations for each variable at baseline. Variables: (1) Age, (2) Female, (3) Current Employment, (4) Current Income, (5) Preparatory Education or less (this variable should combine those with preparatory, primary, literacy certificate and illiterate levels of education. Technical schools do not count here.), (6) University Graduate and above
      c. Generate a table checking the statistical balance between the treatment group and control group for the variables included above in the baseline round. The table should include balance tests for each variable by itself as well as a test of all variables as a group.
      d. Generate a table that reports the treatment effect (difference between treatment and control) on employment and monthly income in the follow up round.
      e. Run a regression that includes dummies for each cohort and cluster your standard errors at the cohort level.

Generate your tables in a clean looking way, submit them along with your R code.

Assignment 2: (5 points)

This assignment uses data from this paper. There are three required datasets (you will need to merge these datasets on the unique identifier - "key"): (1) Baseline Data; (2) Treatment Assignment; (3) Uber Utilization
Create an R script that accomplishes the following tasks:

      a. Generate a baseline balance table, separately for each treatment, similar to Table B1 on page A7 of the paper. Choose a few variables from that table, but also choose a few variables that are not in that table but are in the dataset that you think could be interesting to look at. (It's probably easiest to create new dummy variables for each treatment.)
      b. Generate a table that looks at the impact of the treatment on Uber usage. The Uber usage data is provided on a weekly basis, so in one regression look at the impacts on the average week. (Separately by each treatment.) Since this is weekly data you should cluster your standard errors at the individual level. Since it's an experiment you should include cohort fixed effects.
      c. In another set of regressions separate the impacts of the first 6 weeks from the impacts in the last 6 weeks.
      d. Recreate the regressions in part "b" but separated by a particular baseline characteristic of your choosing. For example, while the paper splits by gender maybe you can split by age, or education, or car ownership or anything else you want. You should do this in two separate regressions.
      e. Optional: Redo the previous regression (separated by a baseline characteristic), but as one regression with an interaction effect. (Interaction is treatment*the baseline characteristic)

Dream Policy Change Critique (4-6 Pages):
      Return to your original "Dream Policy Change" assignment from the beginning of the semester. Review what you wrote and begin by re-writing the policy problem in the language of market failures that you learned as part of this class (1-2 page). Describe how your thinking has changed about your dream policy change proposal based on what you've learned in the class. Describe how you would design an evaluation to test the effectiveness of the policy change you described.

Presentation/Oral Exam (14+4 points):

Choose any NGO or social enterprise (but not the same one that you used for your assignments above) and focus on one intervention that they implement:

a. Describe quickly the history and activities of the NGO. What do they do and why it is interesting?

b. Choose one particular thing they are doing. Describe their theory of change behind that intervention. Why are they doing it? Summarize the theory of change of the NGO's or social enterprise's activity. Make sure to speak specifically about what the market failure is (if any) that the NGO purports to address.

c. Describe what the entity currently claims about the impact of this program and what are the drawbacks of their evaluation method.

d. Evaluation proposal: Design an evaluation of the NGO or social enterprise's activity that you want to evaluate, how would you construct the counterfactual? How can you design the evaluation to include as much learning you can about why the program works (if it does) not merely whether it works.

e. Response to concerns: Be prepared to respond to concerns the "NGO management" (in this case the professor and fellow students) might have about your evaluation. I will be asking you questions throughout the presentation to test your understanding and ability to respond in real time.

- You cannot do your presentation about any of the following organizations: BRAC, One Acre Fund, Oxfam,

- Note on how I ask questions – economists are typically very direct, and time is tight, so be prepared to be interrupted and sometimes told to skip to the next slide or next point.

The presentation is worth 14 points. After the presentation there will be a 10 minute written assignment where you will be tasked with writing out in more detail a response to some of the direct questions I asked you during the presentation.

Assignment Policy:

All assignments are to be turned in online by the deadline noted in the schedule. Late assignments receive no credit. The assignment portion of your grade will be the average of all your assignment scores weighted by the points as indicated in the syllabus above.

Generative AI Policy:

You can use Generative AI as you please to help you with your work. If you choose to use generative AI on your assignment you need to include 1 or 2 sentences at the end of your assignment describing how you used it. For example "I fed ChatGPT the assignment instructions and it did everything for me", or "I used Claude to produce a first draft and then I adjusted it". How you used generative AI will not affect your grade (if you copy and paste verbatim you can still get full credit. It means I need to improve the assignment).

Exam Policy:

No materials are allowed during exams. There are to be no books, papers other than the exam itself, calculators or cell-phones or other items that connect to the internet. Students found to be using unapproved items are in violation of the Academic Integrity policy of the University and will be subject to disciplinary action.

The University's final exam policy is available at:
http://studentcode.illinois.edu/article3_part2_3-201.html

Emergency Response Recommendations:

The university maintains guidelines for emergency responses. A list of recommendations when to evacuate and when to find shelter are available at:
http://illinois.edu/cms/2251/general_emergency_response_recommendations_8_16_13_final.docx
Floor plans for specific buildings are available at: http://police.illinois.edu/emergencyplanning/floorplans/

Statement on Accommodations:
To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak Street, Champaign, call 333-4603 (V/TTY), or email a message to disability@uiuc.edu.

Academic Integrity:
"The University has the responsibility for maintaining academic integrity so as to protect the quality of education and research on our campus and to protect those who depend upon our integrity.

Expectations of Students. It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Students have been given notice of this Part by virtue of its publication. Regardless of whether a student has actually read this Part, a student is charged with knowledge of it. Ignorance is not a defense."

The University's full academic integrity policy is available at:
http://studentcode.illinois.edu/article1_part4_1-401.html

Econ 455: Economics of Poverty Alleviation
Spring 2026, Tuesday and Thursday 3:30pm-4:50pm

Week	Day	Date	Lecture #	Lecture Title	Slide Deck	Assignment Due/ In Class Assessment
1	Tue	20-Jan	1	Introduction	1	
	Th	22-Jan	2	Market Failures	2	
2	Tue	27-Jan	3	Causality & Evaluation		Dream Policy Changes
	Th	29-Jan	4	Identification Strategies in Social Sciences	3	Quiz 1
3	Tue	3-Feb	5	Experimental Designs and Threats	4	
	Th	5-Feb	6	Theory of Change	5	Quiz 2
4	Tue	10-Feb	7	Probability and Statistics	6	
	Th	12-Feb	8	Power and Standard Errors	6	In Class NGO Critique
5	Tue	17-Feb	9	Tables, Regressions and Interaction Effects	6	
	Th	19-Feb	10	Data Analysis and Statistical Coding	7	Quiz 3
6	Tue	24-Feb	11	Savings: Market Failures	7	
	Th	26-Feb	12	Savings: Impact	8	Data Exercise 1
7	Tue	3-Mar		Midterm review and Q&A	9	
	Th	5-Mar		MIDTERM EXAM		MIDTERM EXAM
8	Tue	10-Mar	13	Credit: Market Failures		
	Th	12-Mar	14	Credit: Impacts	10	
9	Tue	17-Mar		Spring Break	10	
	Th	19-Mar		Spring Break	11	
10	Tue	24-Mar	16	Behavioral Economics	12	
	Th	26-Mar	17	Health	12	Quiz 4
11	Tue	31-Mar	18	Technology Adoption	13	
	Th	2-Apr	19	Transportation	14	Data Exercise 2
12	Tue	7-Apr	20	Entrepreneurship	15	
	Th	9-Apr	21	Labor Markets	16	Quiz 5
13	Tue	14-Apr	22	Education	17	
	Th	16-Apr	23	International Trade	18	
14	Tue	21-Apr	24	Social Protection		
	Th	23-Apr		Presentations		
15	Tue	28-Apr		Presentations		
	Th	30-Apr		Presentations		
16	Tue	5-May	25	Review for Final	19	Dream Policy Critique
	Finals Week					Final Exam

Reading List

TOPIC	READING
Introduction: Why Do We Act; Market Failures	1. *MTGI, Chapter 1 2. *PE, Chapter 1 3. Easterly, William. "The Handouts that Feed Poverty." Los Angeles Times, April 30th 2006. 4. Sachs, Jeffrey D. "Foreign Aid Skeptics Thrive on Pessimism." Los Angeles Times, May 7th 2006. 5. Karlan, Dean. "Every Which Way We Can." IMF Finance & Development, 2012. 6. Singer, Peter. "The Drowning Child and the Expanding Circle." April 1997. 7. Banerjee, Abhijit and Esther Duflo. 2007. "Economic Lives of the Poor." Journal of Economic Perspectives, 21(1): 141-167. 8. Besley, Timothy and Robin Burgess. 2003. "Halving Global Poverty." Journal of Economic Perspectives, 17(3): 3-22. 9. Anagol, Santosh, Alvin Etang and Dean Karlan Continued Existence of Cows Disproves Central Tenets of Capitalism? (2013), working paper.
Causality & Evaluation	10. *MTGI, Chapter 2, To Work Against Poverty 11. *RRE, Chapter 2, Why Randomize 12. *RRE, Chapter 4, Randomizing
Theory of Change, Outcomes and Threats	13. *RRE, Chapter 3, Asking the Right Question 14. *Goldilocks chapter 15. *RRE, Chapter 5 (in particular 5.1 and 5.3) 16. *RRE, Chapter 7
Behavioral Economics	17. *MTGI, Chapter 3, To Buy 18. Mullainathan, Sendhil. 2004. "Psychology and Development Economics." MIT and NBER. 19. Bertrand, Marianne, Sendhil Mullainathan, Eldar Shafir and Jonathan Zinman. 2009. "What's Advertising Content Worth?"
Credit: Failure Mechanisms	20. *Karlan, Dean and Morduch, Jonathan. 2010. "Access to Finance." Handbook in Development Economics Volume, Chapter 71.
Credit: Impact	21. *"The Role of Microfinance" op-ed post on Kristof's NYTimes blog: http://kristof.blogs.nytimes.com/2009/12/28/the-role-of-microfinance/ 22. *MTGI, Chapter 4 To Borrow 23. *PE, Chapter 7, The Men from Kabul and the Eunuchs of India: The (Not So) Simple Economics of Lending to the Poor 24. Banerjee, Abhijit, Esther Duflo, Rachel Glennerster and Cynthia Kinnan. 2013. "The Miracle of Microfinance? Evidence from a Randomized Evaluation.

	25.	Karlan, Dean and Jonathan Zinman. 2011. "Microcredit in Theory and Practice: Using Randomized Credit Scoring for Impact Evaluation." Science, 332(6035): 1278-1284.
	26.	Karlan, Dean and Jonathan Zinman. 2008 "Expanding Credit Access: Using Randomized Supply Decisions To Estimate the Impacts." Review of Financial Studies, 23(1): 433-464.
	27.	de Mel, Suresh, David McKenzie and Christopher Woodruff. 2008. "Returns to Capital in Microenterprises: Evidence from a Field Experiment." Quarterly Journal of Economics, 123(4): 1329-1372.
	28.	Karlan, Dean; Ryan Knight and Christopher Udry. 2012. "Hoping to Win, Expected to Lose: Theory and Lessons on Micro Enterprise Development."
Credit: Design	29.	Gine, Xavier and Dean Karlan, "Group versus Individual Liability: Short and Long Term Evidence from Philippine Microcredit Lending Groups"
	30.	Field, Erica, Rohini Pande, John Papp and Natalia Rigol. 2012. "Does the Classic Microfinance Model Discourage Entrepreneurship Among the Poor? Experimental Evidence from India."
Savings: Impact	31.	*MTGI Chapter 7, To Save
	32.	*Karlan, Dean. 2008. "The Impact of Savings." Financial Access Initiative, Framing Note No. 1.
	33.	*Karlan, Dean, Aishwarya Ratan and Jonathan Zinman. 2013. "Savings by and for the poor: A research review and agenda", forthcoming Review of Income and Wealth
	34.	Dupas, Pascaline and Jonathan Robinson "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." American Economic Journal: Applied Economics, 5(1): 163-192.
Savings: Behavioral Savings	35.	*PE Chapter 8, "Saving Brick by Brick"
	36.	*Karlan, Dean. "Helping the Poor Save More." Stanford Social Innovation Review, Winter 2010.
	37.	Brune, Lasse and Xavier Gine, Jessica Goldberg and Dean Yang. 2012. "Commitments to Save: A Field Experiment in Rural Malawi."
	38.	Karlan, Dean, Nava Ashraf and Wesley Yin. 2006. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." Quarterly Journal of Economics, 121(2): 635-672.
	39.	Karlan, Dean and Leigh L. Linden. 2013. "Loose Knots: Strong versus Weak Commitments to Save for Education in Uganda"
Entrepreneurship Training	40.	*PE, Chapter 9, Reluctant Entrepreneurs

	41. Karlan, Dean and Martin Valdivia. 2011. "Teaching Entrepreneurship." Review of Economics and Statistics, 93(2): 510-527.
	42. Beaman, Lori and Jeremy Magruder. 2013. "Minding Small Change among Small Firms in Kenya", forthcoming Journal of Development Economics
	43. Drexler, Alejandro, Greg Fischer and Antoinette Schoar. 2012. "Keeping it Simple: Financial Literacy and Rules of Thumb"
	44. Bloom, Nicholas, Benn Eifert, Aprajit Mahajan, David McKenzie, and John Roberts. 2012. "Does Management Matter: evidence from India" Quarterly Journal of Economics.
	45. Bruhn, Miriam, Dean Karlan and Antoinette Schoar, The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico
Agricultural Finance	46. *PE, Chapter 6, Barefoot Hedge-Fund Manager
	47. Karlan, Dean and Isaac Osei, Robert Osei and Christopher Udry. 2012. "Agricultural Decisions after Relaxing Credit and Risk Constraints."
	48. Giné, Xavier and Dean Yang. 2009. "Insurance, credit, and technology adoption: Field experimental evidence from Malawi." Journal of Development Economics, 89(1): 1-11.
	49. Duflo, Esther, Michael Kremer, and Jonathan Robinson. 2011. "Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya." American Economic Review, 101: 2350-2390.
Agricultural Technology & Markets	50. *MTGI Chapter 8, "To Farm"
	51. *Conley, Timothy and Christopher Udry. 2008. "Learning about a New Technology: Pineapple in Ghana." American Economic Review, Yale University.
	52. Ashraf, Nava, Xavier Gine and Dean Karlan. 2009. Finding Missing Markets (and a disturbing epilogue): Evidence from an Export Crop Adoption and Marketing Intervention in Kenya, American Journal of Agricultural Economics
Health	53. *PE Chapter 3 "Low-Hanging Fruit for Better (Global) Health?"
	54. *MTGI Chapter 10, "To Stay Health"
	55. *Cohen, Jessica and Pascaline Dupas. 2010. "Free Distribution or Cost-Sharing? Evidence from a randomized malaria prevention experiment." Quarterly Journal of Economics, 125(1): 1-45.
	56. *Kremer, Michael and Edward Miguel. 2004. "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." Econometrica, 72(1): 159-217.
	57. Gine, Xavier, Dean Karlan and Jonathan Zinman. 2010. "Put Your Money Where Your Butt Is: A Commitment Savings Account for Smoking Cessation." American Economic Journal: Applied Economics, 2(4).
	58. Bjorkman, Martina and Jakob Svensson, "Power to the People: Evidence from a Randomized Field Experiment of Community-

	Based Monitoring in Uganda", *Quarterly Journal of Economics*, 2009, 124:2.
Education	59. *MTGI, Chapter 9, To Learn
	60. *PE, Chapter 4, Top of the Class
	61. *Duflo, Esther. 2001. "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment." American Economic Review, 91(4): 795-813.
	62. *Banerjee, Abhijit V., Shawn Cole, Esther Duflo, Leigh Linden. 2007. "Remedying Education: Evidence from Two Randomized Experiments in India." Quarterly Journal of Economics, 122(3): 1235-1264.
	63. Kremer, Michael. 2003. "Randomized Evaluations of Educational Programs in Developing Countries: Some Lessons." American Economic Review Papers and Proceedings, 93(2): 102-106.
	64. Kremer, Michael, Paul Glewwe, and Sylvie Moulin. 2009. " Many Children Left Behind? Textbooks and Test Scores in Kenya." American Economic Journal: Applied Economics, 1(1): 112-135.
Holistic Approaches: Graduation Model	65. *Bandiera, Oriana et al. 2013. "Can Basic Enterpreneurship Transform the Economic Lives of the Poor?"
	66. *Banerjee, Abhijit, Esther Duflo, Raghabendra Chattopadhyah and Jeremy Shapiro. 2011. "Targeting the Hard-Core Poor: An Impact Assessment."
Conclusion	67. *RRE, Chapter 9 (particular 9.2, 9.3 & 9.4)