ECON 455: Economics of Poverty Alleviation in Developing Countries
Monday and Wednesday 12:30 pm – 1:50 pm
333 Armory (Sometimes Zoom)

Instructor: Prof. Adam Osman
Office: Osman: 109 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

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 four sectors: microfinance, health, agriculture and education.

Course Format: Combined lecture and discussion every Monday and Wednesday 11:00 am – 12:20 pm

Learning Resources:

Most of the material for the course can be found on the lecture slides that will be made available on compass. 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:

<table>
<thead>
<tr>
<th>Assessment Activity</th>
<th>Activity Value</th>
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<tbody>
<tr>
<td>Dream Policy Changes</td>
<td>3 Points</td>
</tr>
<tr>
<td>NGO Critique</td>
<td>4 Points</td>
</tr>
<tr>
<td>Problem Set</td>
<td>7 Points</td>
</tr>
<tr>
<td>3 Academic Paper Summaries</td>
<td>3x2=6 Points</td>
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<tr>
<td>3 Data Replication Exercises</td>
<td>3x5=15 Points</td>
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<tr>
<td>Midterm Exam</td>
<td>15 Points</td>
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<tr>
<td>Dream Policy Critique</td>
<td>5 Points</td>
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<tr>
<td>Presentation</td>
<td>10 Points</td>
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<td>Final Exam</td>
<td>25 Points</td>
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<td>Class Participation</td>
<td>10 Points</td>
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<td><strong>Total</strong></td>
<td><strong>100 Points</strong></td>
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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? In particular, focus on either a specific government policy (e.g. 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. (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 (2-4 pages):**
- An analysis of any evaluation (or statements about supposed impact) of an intervention you find on the website of an NGO or social enterprise. Explain the intervention, the evaluation approach and results (including any information or data they use to support the claims of impact), the strengths and weaknesses of the evaluation, and how you would improve their evaluation process if you had an unconstrained evaluation budget/sample.

Make sure to include a link to the NGO’s website.

Examples of the types of websites/reports that could be used for the assignment (you may not use one of the following however):
- One Acre Fund: https://www.oneacrefund.org/results/impact
- FINCA International: http://www.finca.org/our-impact/

**Problem Set:**
- Standard problem set walking through the basic econometrics and statistics techniques used in rigorous program evaluation.
**Academic Paper Summaries:**

- Academic Paper Summary (2-3 Pages): A review of an academic paper that estimates the impact of a development program or policy. The review should clearly explain the program or policy being evaluated, the market failure that it is addressing, the method of evaluation and basic details about the data being used, the impacts that were found, and what an NGO or government that is considering doing something similar should learn from this paper and what limitations the study has.

  The first two summaries should be from the list of eligible papers below. The second two summaries can be any paper we don’t cover in class but the paper must have been published in one of the following journals after the year 2015:
  - American Economic Review
  - Quarterly Journal of Economics
  - Journal of Political Economy
  - Econometrica
  - Review of Economic Studies
  - Review of Economics and Statistics
  - Journal of the European Economic Association
  - Economic Journal
  - Journal of Development Economics
  - Economic Development and Cultural Change
  - World Bank Economic Review
  - Recent Working Paper (at least 2015) from the National Bureau of Economic Research

**Eligible Papers:**

Data Replications:

Assignment 1:
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 includes those with preparatory, primary, literacy certificate and illiterate levels of education), (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. Control for the baseline value of the two outcome variables listed in part “d” as well as dummies for each cohort and cluster the standard errors at the cohort level.

• Print out your tables in a clean looking way, join them together with your R code and your name and submit on canvas

Assignment 2:

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. Control for the baseline value of the two outcome variables listed in part “d” as well as dummies for each cohort and cluster the standard errors at the cohort level.

Assignment 3:

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. Redo the previous regression (separated by a baseline characteristic), but as one regression with an interaction effect. (Interaction is treatment*the baseline characteristic)

Data Analysis Resources:

• https://cran.r-project.org/doc/contrib/Paradis-rdebuts_en.pdf
• https://www.youtube.com/watch?v=1VKMsawju8w
• https://www.youtube.com/watch?v=_V8eKsto3Ug
**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 the different market failures that could have led to the problem you described and which market failures the policy you proposed addressed. If you still believe that your proposed policy change is the best way to improve societal outcomes in the realm of your original topic, describe how you would design an evaluation to test the effectiveness of the policy change you described (2-4 pages). If, on the other hand, you no longer believe that the policy change you described would be the best thing to do, describe what has changed in your understanding of this topic (1-3 pages) and what you would now suggest to do to improve policy around your original topic and why (1-2 pages), as well as how you would evaluate the new policy or program you are suggesting (1-2 pages).

**Presentation:**

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.

**Assessment Policies**

**Assignment Policy:**

All assignments are to be turned in in physical copy or on Compass/Canvas (depending on professor instructions) 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.

**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
# Semester Schedule

**Econ 455: Economics of Poverty Alleviation**  
*Fall 2022, Monday and Wednesday 12:30pm-1:50pm*

<table>
<thead>
<tr>
<th>Week</th>
<th>Day</th>
<th>Date</th>
<th>Lecture #</th>
<th>Lecture Title</th>
<th>Slide Deck</th>
<th>Assignment Due</th>
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<tr>
<td>1</td>
<td>Mon</td>
<td>22-Aug</td>
<td>1</td>
<td>Introduction</td>
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<tr>
<td></td>
<td>Wed</td>
<td>24-Aug</td>
<td>2</td>
<td>Market Failures</td>
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<td>2</td>
<td>Mon</td>
<td>29-Aug</td>
<td>3</td>
<td>Causality &amp; Evaluation</td>
<td>3</td>
<td>Dream Policy Changes</td>
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<td></td>
<td>Wed</td>
<td>31-Aug</td>
<td>4</td>
<td>Identification Strategies in Social Sciences</td>
<td>3</td>
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<tr>
<td>3</td>
<td>Mon</td>
<td>5-Sep</td>
<td>LABOR DAY</td>
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<tr>
<td></td>
<td>Wed</td>
<td>7-Sep</td>
<td>5</td>
<td>Experimental Designs and Threats</td>
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<td>4</td>
<td>Mon</td>
<td>12-Sep</td>
<td>6</td>
<td>Theory of Change</td>
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<td>NGO Critique</td>
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<td>Wed</td>
<td>14-Sep</td>
<td>7</td>
<td>Probability and Statistics</td>
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<td>5</td>
<td>Mon</td>
<td>19-Sep</td>
<td>8</td>
<td>Power and Standard Errors</td>
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<td>Academic Paper Summary 1</td>
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<td></td>
<td>Wed</td>
<td>21-Sep</td>
<td>9</td>
<td>Tables, Regressions and Interaction Effects</td>
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<td>6</td>
<td>Mon</td>
<td>26-Sep</td>
<td>10</td>
<td>Savings: Market Failures</td>
<td>7</td>
<td>Problem Set</td>
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<td></td>
<td>Wed</td>
<td>28-Sep</td>
<td>11</td>
<td>Savings: Impact</td>
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<td>7</td>
<td>Mon</td>
<td>3-Oct</td>
<td>12</td>
<td>Data Analysis and Statistical Coding</td>
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<td>Wed</td>
<td>5-Oct</td>
<td>13</td>
<td>Behavioral Economics</td>
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<td>8</td>
<td>Mon</td>
<td>10-Oct</td>
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<td>Midterm review and Q&amp;A</td>
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<td>Wed</td>
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<td>MIDTERM EXAM</td>
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<td>Mon</td>
<td>17-Oct</td>
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<td>Credit: Market Failures</td>
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<td>Wed</td>
<td>19-Oct</td>
<td>15</td>
<td>Credit: Impacts</td>
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<td>Mon</td>
<td>24-Oct</td>
<td>16</td>
<td>Scarcity &amp; Fairness</td>
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<td>Data Analysis and Statistical Coding II</td>
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<td>Labor Markets</td>
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<td>12</td>
<td>Mon</td>
<td>7-Nov</td>
<td>20</td>
<td>Management</td>
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<td>Wed</td>
<td>9-Nov</td>
<td>21</td>
<td>International Trade</td>
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<td>13</td>
<td>Mon</td>
<td>14-Nov</td>
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<td>Technology Adoption</td>
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<td>16-Nov</td>
<td>23</td>
<td>Education</td>
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<td>Presentations</td>
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<td>16</td>
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<td></td>
<td>Wed</td>
<td>7-Dec</td>
<td>24</td>
<td>Review for Final</td>
<td>19</td>
<td>Dream Policy Critique</td>
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<td>Finals Week</td>
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<td>Final Exam</td>
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## Reading List

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>READING</th>
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| Introduction: Why Do We Act; Market Failures | 1. *MTGI, Chapter 1  
2. *PE, Chapter 1  
| | 10. *MTGI, Chapter 2, To Work Against Poverty  
11. *RRE, Chapter 2, Why Randomize  
12. *RRE, Chapter 4, Randomizing |
| Causality & Evaluation | 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 |
| Theory of Change, Outcomes and Threats | 17. *MTGI, Chapter 3, To Buy  
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  


31. *MTGI Chapter 7, To Save


35. *PE Chapter 8, “Saving Brick by Brick”


40. *PE, Chapter 9, Reluctant Entrepreneurs
| 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 |
| **Agricultural Technology & Markets** | 50. | *MTGI Chapter 8, “To Farm” |
| **Health** | 53. | *PE Chapter 3 “Low-Hanging Fruit for Better (Global) Health?” |
| 54. | *MTGI Chapter 10, “To Stay Health” |
| 58. | Bjorkman, Martina and Jakob Svensson, “Power to the People: Evidence from a Randomized Field Experiment of Community-

**Education**

59. *MTGI, Chapter 9, To Learn

60. *PE, Chapter 4, Top of the Class


**Holistic Approaches: Graduation Model**


**Conclusion**

67. *RRE, Chapter 9 (particular 9.2, 9.3 & 9.4)