I. Course Description
Despite the high returns to education, children across the world – and especially in low-income settings – are not achieving critical basic skills. This course covers three main topics on the economics of education in developing countries.

1 – Investing in Education: What are the private and social returns to education? What works for increasing enrollment?

2 – The Learning Crisis: How is learning measured? What is the state of learning outcomes in developing countries? What are the challenges to providing quality education?

3 – Promising Approaches: What is the existing evidence on what works for improving education? How is effectiveness measured and how do we assess the quality of evidence? How do we use the body of evidence for policy? What are the major gaps in knowledge?

The course is designed to develop the skills required to critically analyze policy issues and problems, articulate relevant policy options and bring research skills and data to help frame evidence-based decision-making. One emphasis throughout the course is on real world data analysis using the Stata statistical software package. Another objective is to develop writing skills to translate research to policy-makers.
II. **Course Goals and Objectives**

- Students will acquire a comprehensive knowledge of the evidence on the impact of various interventions to improve access to, and quality of, education in developing countries.
- Students will gain an understanding of the strengths and weaknesses of different methodological approaches to impact evaluation.
- Students will develop the following skills as consumers of research:
  - Understanding and summarizing academic research
  - Critiquing and assessing research for quality and relevance
  - Replicating empirical analyses
  - Synthesizing evidence across multiple sources
  - Planning research to answer policy-relevant questions
  - Designing tools for evaluation
  - Writing clear, concise and effective summaries, reviews, memos, and briefs to effectively communicate to policy makers

III. **Methods of Instruction and Expectations**

This course meets every Tuesday and Thursday for one hour and fifty minutes. Class time will consist of lectures, discussion, computer work, presentations, and in-class exercises. Students are required to complete assigned readings and make comments on the course website prior to class. Students will be engaged in peer-review of each other’s work in an effort to improve communication skills in both directions – presenting ideas and effectively and positively critiquing others.

IV. **Course Text and Readings**

We will rely heavily on the following textbooks:

3. Field Experiments and Their Critics. Edited by Dawn Langan Teele.

Other readings will be available on the course site.
V. **Course Outline/Weekly Schedule**

<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 29</td>
<td>Overview and motivation: goals vs. evaluation movement</td>
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<td></td>
<td>Aug 31</td>
<td>Lab: Stata intro</td>
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<tr>
<td>2</td>
<td>Sept 5</td>
<td>Returns to education: theory</td>
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<td></td>
<td>Sept 7</td>
<td>Enrollment + lab: describing data, existing evidence</td>
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<tr>
<td>3</td>
<td>Sept 12</td>
<td>Lab: graphing and summarizing data</td>
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<td></td>
<td>Sept 14</td>
<td>No class</td>
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<tr>
<td>4</td>
<td>Sept 19</td>
<td>The learning crisis: statistics</td>
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<td></td>
<td>Sept 21</td>
<td>Measuring learning outcomes</td>
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<td>5</td>
<td>Sept 26</td>
<td>Teachers and school quality</td>
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<td></td>
<td>Sept 28</td>
<td>More on teachers</td>
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<tr>
<td>6</td>
<td>Oct 3</td>
<td>GUEST LECTURE</td>
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<td></td>
<td>Oct 5</td>
<td>In class work</td>
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<tr>
<td>7</td>
<td>Oct 10</td>
<td>Group presentations and discussion</td>
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<tr>
<td></td>
<td>Oct 12</td>
<td>More group presentations and discussion</td>
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<tr>
<td>8</td>
<td>Oct 17</td>
<td>Theories of change</td>
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<tr>
<td></td>
<td>Oct 19</td>
<td>What works? Meta-analysis</td>
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<tr>
<td>9</td>
<td>Oct 24</td>
<td>More meta-analysis</td>
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<td></td>
<td>Oct 26</td>
<td>Presentations: theory of change</td>
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<tr>
<td>10</td>
<td>Oct 31</td>
<td>Causality</td>
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<td></td>
<td>Nov 2</td>
<td>Lab: Flip charts</td>
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<tr>
<td>11</td>
<td>Nov 7</td>
<td>Threats to validity: attrition</td>
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<td></td>
<td>Nov 9</td>
<td>Further discussion – what works, why no evaluation?</td>
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<tr>
<td>12</td>
<td>Nov 14</td>
<td>Spillovers</td>
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<td></td>
<td>Nov 16</td>
<td>Lab: worms</td>
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<tr>
<td>13</td>
<td>Nov 21</td>
<td>Thanksgiving Break</td>
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<td></td>
<td>Nov 23</td>
<td>Thanksgiving Break</td>
</tr>
<tr>
<td>14</td>
<td>Nov 28</td>
<td>Sampling, over sampling, random assignment</td>
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<td></td>
<td>Nov 30</td>
<td>Power and sample size</td>
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<tr>
<td>15</td>
<td>Dec 5</td>
<td>Costs</td>
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<td></td>
<td>Dec 7</td>
<td>What next? How much can we generalize?</td>
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<tr>
<td>16</td>
<td>Dec 12</td>
<td>Final thoughts</td>
</tr>
</tbody>
</table>
VI. Evaluation and Grading

Grades consist of the following assessments:

<table>
<thead>
<tr>
<th>#</th>
<th>Date due</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>9/7</td>
<td>Describing data</td>
<td>2.5</td>
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<tr>
<td>Assignment 2</td>
<td>10/3</td>
<td>Synthesis of existing literature</td>
<td>10</td>
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<tr>
<td>Assignment 3</td>
<td>9/26</td>
<td>Replicate and extend</td>
<td>5</td>
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<tr>
<td>Assignment 4</td>
<td>10/10 &amp; 10/12</td>
<td>Quality rubric (Group)</td>
<td>10</td>
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<tr>
<td>Assignment 5</td>
<td>10/26</td>
<td>Theory of change (Group)</td>
<td>10</td>
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<tr>
<td>Assignment 6</td>
<td>11/9</td>
<td>Research brief</td>
<td>10</td>
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<tr>
<td>Assignment 7</td>
<td>11/16</td>
<td>In-class TOT vs. ITT</td>
<td>2.5</td>
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<tr>
<td>Assignment 8</td>
<td>12/7</td>
<td>Sample size</td>
<td>2.5</td>
</tr>
<tr>
<td>Assignment 9</td>
<td>12/5</td>
<td>In class cost-effectiveness</td>
<td>2.5</td>
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<td>10</td>
<td>TBA</td>
<td>Final exam</td>
<td>15</td>
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<tr>
<td>11</td>
<td>On-going</td>
<td>Assignment: Blog</td>
<td>10</td>
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<tr>
<td>12</td>
<td>On-going</td>
<td>Reaction sentences</td>
<td>5</td>
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<tr>
<td>13</td>
<td>On-going</td>
<td>Peer Assessments</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>On-going</td>
<td>Class participation</td>
<td>10</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
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<td><strong>100</strong></td>
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- For each class meeting, I expect you to read the assigned paper or papers in detail and to participate in class discussion.
- Reaction sentences: by 12am on the day of each class I expect you to post on the class forum a question or comment (just 1-3 sentences is appropriate) on any of the assigned readings.
- Peer feedback will be assigned throughout the course to critique and evaluate your peers. The quality of your feedback will be assessed with penalties for large deviations from the average/my score.
- Individual problem sets may be worked on with others, but you must turn in your own work. To be graded on a scale from 0-3: not completed/late, check–, check, check+. These will not be evaluated or shared with peers.
- Individual writing assignments/small projects: these will often also involve data analysis and will be assessed by the instructor and peers.
- Group assignments and presentations: groups will be assigned. Assessments made by instructor and peers (within and outside of each group). Individual members of the
group may receive higher or lower marks than the group average, depending on level of contribution and effort.

- A blog involving original data analysis related to a topic in the education of education in developing countries.
  
  - Each student will be assigned a specific date to post their blog. Students may trade dates with a classmate if both students agree and email the instructor.
  
  - There are two parts to the submission. First, a Word or PDF document must be uploaded. Second, the entry must be posted to the class blog. It is the student's responsibility to ensure that the post displays correctly, including links and other formatting. Students should post directly to the blog, using the link and login details on the course website. Deliberate misuse of the login information, including deleting or editing another student’s entry, is a serious case of academic misconduct.
  
  - Students are required to comment on others’ posts (at least twice in the semester). Comments are due one week after the deadline for the blog is posted, and should be posted directly to the blog and submitted in a Word or PDF document to the course website with a reference to the date and title of the blog you are commenting on.
  
  - The blog should be based on an analysis of an article (not a blog post or letter to the editor; an editorial is acceptable) from a newspaper in a developing country, using ideas discussed during class. Students must link to the motivating article, briefly summarize its content and describe tie the ideas into the themes discussed in class. Please choose a newspaper article published recently. Students who choose articles that are not originally written in English are responsible for providing a complete translation at the end of your blog entry.
  
  - The blog should be approximately 800 and 1200 words, contains links to source material and includes graphs, illustrations, or charts. While you may discuss other's work, you must produce original results from data analyses. The blog should not be an opinion piece but should present and discuss empirical evidence. The content should be appropriate for a lay reader who is interested in education in developing countries.
  
  - Assessment will be based on accuracy of the analyses, ideas presented, and creativity.

VII. Other Course Information and Policies

- If you cannot perform assignments at their scheduled dates and times, you should not elect this course.

- I do not allow electronic note-taking. It is distracting for others, for me, and less-effective for learning.
• All assignments are to be turned in as hard copy and submitted electronically at the beginning of the class in which they are due. Students who submit problem sets or the paper assignments late, without prior authorization, are penalized.
• 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

• Special Needs

Contact me if you will require accommodation for special learning needs. To obtain disability-related academic adjustments and/or auxiliary aids, contact 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.

• 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/
WEEK 1: INTRODUCTION

8/29 Course overview

2. The F-Word: Failure in International Development. Creating space for Learning and Innovation. Michael Eddy (*)
5. RMP Chapter 1

8/31 Lab: Introduction to Stata

1. The data revolution in education information Paper N. 39 March 2017

Assignment #1: Problem set
WEEK 2: RETURNS TO EDUCATION

9/5 Theory

2. “Returns to Education in Developing Countries,” EE, pp. 44-51.
   “Schooling and Labor Market Consequences of School Construction in Indonesia.” (*)

9/7 Enrollment – current status and interventions


Assignment #1 due Thursday 9/7: Read: RMP Chapter 8, 15, Problem set

Assignment #2: Synthesis of existing literature
WEEK 3: RETURNS TO EDUCATION

9/12 Lab – Graphing, summarizing data

Assignment #3: Data exercise and replication

9/14 No Class
WEEK 4: THE LEARNING CRISIS & MEASUREMENT

9/19 Statistics – metrics and data


9/21 Measurement

1. RMP Chapter 4
2. Assessments and Numeracy With Reference to Early Grade Numeracy in Low Income Countries GIZ
WEEK 5: MEASUREMENT AND TEACHER QUALITY

9/26 More on measurement

1. How USAID’s Demographic and Health Surveys Overestimate Literacy around the World—and How to Fix That, 5/24/17 Justin Sandefur. (*)
2. How (well) is Education Measured in Household Surveys? A Comparative Analysis of the Education Modules in 30 Household Surveys from 1996–2005 Education Policy and Data Center. (*)

Assignment #3 due Tuesday 9/26: Data exercise and replication

Assignment #4 Group Work: Quality rubric

9/28 Teachers and school quality

2. Enrollment Without Learning: Teacher Effort, Knowledge, and Skill in Primary Schools in Africa Tessa Bold, Deon Filmer, Gayle Martin, Ezequiel Molina, Brian Stacy, Christophe Rockmore, Jakob Svensson, and Waly Wane Journal of Economic Perspectives (forthcoming) (*)
3. Can Value Added Add Value to Teacher Evaluation? Linda Darling-Hammond (*)
   https://doi.org/10.3102/0013189X15575345 (*)
WEEK 6: GUEST LECTURE AND GROUP WORK

10/3 Guest Lecture

1. TBD (*)

Assignment #2 due 10/3: Synthesis of existing literature

Summarize what researchers have to say about a particular educational issue. In your review, explain the general theory, importance/motivation, describe the body of evidence, general findings, strengths, and weaknesses of the studies. At least 8 peer-reviewed articles should be reviewed. The format should be similar to the articles in our main textbook (Brewer and McEwan, 2010). Lengthwise, your paper should be about 10 double-spaced pages. You may use the approximate section/double-spaced page guidelines as follows: Introduction (1 page), Conceptual Framework/ Theory (1 page), Background(s) of Region(s) and Education System(s) (1 page), Critical Literature Review of Existing Research (6 pages that cite at least 8 articles), Conclusion and Research Gaps (1 page). Possible topics:

- Higher Education
- Early Childhood Education
- Parent involvement
- Vocational Training
- Special Populations: Disabilities, Indigenous, Migrants/Refugees

10/5 TBD: More on teachers and in-class work on rubrics
WEEK 7: GROUP PRESENTATIONS

10/10 presentations and discussion

Assignment #4 Group Work due Thursday 10/5: Using data from a study in Northern Uganda, create metrics to determine your best prediction of quality teachers. See “Making the Grade” Rebecca Thornton and Jason Kerwin working paper for background information. Write a summary of your methods and predictions (5-10 pages) and prepare approximately 10 power-point slides to present your findings.

10/12 Additional Results and Discussion
WEEK 8: CONSTRAINTS AND THEORY OF CHANGE

10/17 Education production functions, challenges, and theories of change

1. RMP Chapter 2
2. EFA Global Education Monitoring Report 2015 (Summary Report)
4. Methodological Briefs Impact Evaluation No. 2 Theory of Change Patricia Rogers (*)

Assignment #5 Group Work: Theory of change

10/19 Overview – what works and what have we learned?

3. Improving Learning in Primary Schools of Developing Countries: A Meta-Analysis of Randomized Experiments, by McEwan (2014) (*)

Each student will be assigned one of the following articles to read and respond to:

1. Identifying Effective Education Interventions in Sub-Saharan Africa: A Meta-Analysis of Rigorous Impact Evaluations, Conn (2014)
2. Improving School Education Outcomes in Developing Countries: Evidence, Knowledge Gaps, and Policy Implications, Glewee & Muralidharan (2015)
4. Quality Education for All Children? What Works in Education in Developing Countries, Krishnaratne et al. (2013)
5. What Works to Improve the Quality of Student Learning in Developing Countries?, Masino & Niño-Zarazúa (2015)
6. Field Experiments in Education in Developing Countries, Muralidharan (2016)
7. Improving Educational Outcomes in Developing Countries: Lessons from Rigorous Evaluations, Murnane & Ganimian (2014)
8. Interventions for Improving Learning Outcomes and Access to Education in Low- and Middle-Income Countries: A Systematic Review, Snilstveit et al. (2015)
WEEK 9: PROMISING APPROACHES – meta-analyses

10/24 Meta-analyses, continued

10/26 Presentations and discussion of theories of change

Assignment #5 In-Class to discuss Tuesday 10/17: Create a theory of change for a specific education intervention. Possible topics include:

1. Parent involvement
2. Teacher motivation
3. Bullying/Harassment
4. Classrooms with range of ages and abilities
5. Some topic from Assignment #2

Please prepare approximately 5-6 power-point slides, a theory of change diagram, and any supporting written material (2-3 pages).
WEEK 10: CAUSALITY

10/31 Causality and Inference, Inputs

1. Glewwe et al. (2004)."Retrospective vs. Prospective Analyses of School Inputs." (*)
2. RMP Chapters 10, 11, 12

Assignment #6: Research Brief

11/2 Lab
WEEK 11: CRITIQUES OF RCTS AND THREATS TO VALIDITY

11/7 Threats to validity (External and Internal)


11/9 Further discussion – what works, why no evaluation?

2. Field Experiments and Their Critics. Edited by Dawn Langan Teele. (*)

Assignment #6 due Tuesday 11/7: Research Brief

Research brief on a randomized experiment (ie. Translation of an academic paper for a policy audience). Write a 3-4 page (single-spaced) summary and critical discussion of the randomized experiment paying particular attention to explaining the methodology and (if relevant) the expected or actual findings of the evaluation. Also discuss the bigger “development” picture that the RCT is attempting to address. Was the RCT successful in shedding light on this broader development issue? What are the limitations?

WEEK 12: ITT VS. TOT

11/14 Spillovers


11/16 Lab

In-Class Assignment #7: Problem set

Assignment #7 In-Class Problem Set
WEEK 13: Thanksgiving Break

11/21

11/23
WEEK 14: SAMPLING, SAMPLE SIZE, RANDOMIZATION

11/28 Sampling, over sampling, random assignment

1. TBD

11/30 Power and sample size

1. TBD

Assignment #8: Sample size
WEEK 15: What Next?

12/5 Cost-Effectiveness

1. Why don’t economists do cost analysis in their impact evaluations? David Evans 05/10/2016 (*)

In-Class Assignment #9: Cost-effectiveness

Assignment #9 In-Class Problem Set

12/7 How much can we generalize?

1. Vivalt, Eva. "How Much Can We Generalize from Impact Evaluations" (*)

Assignment #8: Sample Size
WEEK 16: Summing up

12/12 Final discussion

Final Exam

The comprehensive Fall 2017 Final Exam Schedule, including locations, will be available by course via the Course Explorer on October 4.