Public Policy 712/Education 712
Causal Inference in Education Policy Research I:
Early Childhood through High School
Fall 2017 M/W: 10-11:30 pm
Weill Hall 1110

Professor Susan Dynarski
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Professor Christina Weiland
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School of Education 4049

Anna Shapiro
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Office hours
Dynarski: Vary by week, to allow for differing schedules. Sign up: http://goo.gl/XczlB
Weiland: 12-1:30 Mondays (email for a slot)
Shapiro 11:45-1:15 Wednesdays (email for a slot)

Overview and objectives
This course examines several key policy areas in the realm of early learning and K-12 education. The two primary goals of the course are (1) to familiarize students with the arguments and evidence relating to important policies and/or interventions and (2) to provide students with the analytic framework and skills necessary to evaluate education (or other public) policies in general. Specific policy topics include early learning experiences, parental involvement in early childhood learning, preschool, school choice, research partnerships, and high schools. Specific methodological techniques include randomized-control trials (RCT), regression discontinuity analysis (RD), descriptive research, and natural experiments.

Prerequisites
Knowledge of introductory statistics (e.g., Stats 250, PP 529, SOE 793, or equivalent) and regression analysis (e.g., Stats 413, PP 639, SOE 794 or 795, or equivalent) are required for this course.
Course Requirements and Grading

Data Analysis Exercises (2) 30%
You will replicate and extend analyses that use the quantitative methods of the course. You will work singly or with one classmate; if you work with a classmate you will submit a single product.

Take-Home Final Exam OR Research Project 40%
A take-home exam is due on the day of the scheduled final (Monday, Dec 18 at 10 AM) and provided 72 hours earlier. Doctoral students can (and IES fellows are required to) instead complete a research product that will be defined in consultation with faculty. Drafts of this research product will be due on specified dates.

Reading Questions 20%
We will post questions about some of the readings, which you will complete before class.

Class Participation 10%
We expect active questioning in class. To further widespread participation we will randomly call on students. The randomness is intended not to intimidate but to keep participation evenly distributed.

Readings
You are expected to complete the assigned reading before class. There will typically be one or two articles assigned for each class.

You must read these closely in order to understand what is going on. Read actively: circle what is unclear, highlight what you find most interesting, peruse the bibliography for useful sources, read the footnotes and tables especially closely. It is very useful to write a summary of the paper for your own files.

Course Material
One required book is available for free download from the UM Library:


There is no course packet. All articles are available online or on the CANVAS site. Assignments will be listed under the relevant lecture at least a week in advance. We provide links and/or PDFs but you are ultimately responsible for obtaining the readings. If a link is broken or a file corrupted, find the article yourself.
**Laptop Policy/Taking Notes**
To keep us focused on the class and on each other, we will keep laptops and other devices put away. Please bring copies of the relevant papers to class.

We will distribute handouts of our lecture material for you to take notes on. If you want to store all class material on your laptop, transcribing your handwritten notes after lecture is a great way to nail the material. We will post PDFs of the handouts after lecture to facilitate this process.

**Software**
We will program in Stata, a software program used widely by researchers and policy analysts.

You can get a Stata license for just this semester. Order through the Stata website ([http://www.stata.com/order/new/edu/gradplans/us-pickup/](http://www.stata.com/order/new/edu/gradplans/us-pickup/)) and then pick up at Computer Showcase. You will need Intercooled Stata to use the large datasets we will work with.
### Assignment Schedule

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<tr>
<th>Masters Students</th>
<th>Doctoral Student Option</th>
<th>Due</th>
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<tbody>
<tr>
<td>Research product proposal: ½ page</td>
<td>9/18</td>
<td></td>
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<tr>
<td>Meet to discuss proposal</td>
<td>10/2</td>
<td></td>
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<tr>
<td>Revised proposal (1 p)</td>
<td>10/4</td>
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<tr>
<td>Problem set #1 (posted 9/27)</td>
<td>10/11</td>
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<tr>
<td>Progress Memo</td>
<td>11/6</td>
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<tr>
<td>Problem set #2 (posted 10/25)</td>
<td>11/8</td>
<td></td>
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<tr>
<td>Take-home final</td>
<td>Research Product</td>
<td>12/18</td>
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Academic Expectations & Resources
Members of the Ford School community represent a rich variety of backgrounds and perspectives. We are committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:

· share their unique experiences, values and beliefs
· be open to the views of others
· honor the uniqueness of their colleagues
· appreciate the opportunity that we have to learn from each other in this community
· value one another’s opinions and communicate in a respectful manner
· keep confidential discussions that the community has of a personal (or professional) nature
· use this opportunity together to discuss ways in which we can create an inclusive environment in Ford classes and across the UM community

Accommodations for Students with Disabilities
If you believe you need an accommodation for a disability, please let your instructor know at your earliest convenience. Some aspects of courses may be modified to facilitate your participation and progress. As soon as you make your instructor aware of your needs, they can work with the Services for Students with Disabilities (SSD) office to help determine appropriate academic accommodations. Any information you provide will be treated as private and confidential.

Student Mental Health and Well-Being Resources
The University of Michigan is committed to advancing the mental health and wellbeing of its students. We acknowledge that a variety of issues, such as strained relationships, increased anxiety, alcohol/drug problems, and depression, directly impacts students’ academic performance. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) and/or University Health Service (UHS). For a listing of other mental health resources available on and off campus, visit: http://umich.edu/~mhealth/

Please review additional information and policies regarding academic expectations, academic integrity, and resources at the Ford School of Public Policy at this link: http://fordschool.umich.edu/academics/expectations

We expect students to be familiar with all of the expectations and resources described therein.
READING LIST

Introduction

Wednesday, September 6: Overview


*Optional:*

Monday, September 11: Research partnerships (Carrie Conaway, MA DOE, guest speaker)


Murnane & Willett, Chapter 3
Module 1: Early Childhood and Randomized Trials

Wednesday, September 13: Early childhood policy context


Wednesday, September 18: Introduction to randomized controlled trials
Murnane & Willett, Chapter 4


Wednesday, September 20: Imperfect compliance
Murnane & Willett, Chapter 5


Monday, September 25: Fixed vs. random effects (part 1) and Preschool policy context (part 2)
Murnane & Willett, Chapter 7, pp. 107-120 & 128-134.


Optional:
**Wednesday, September 27: How do we improve preschool quality?**


**Monday, October 2: What about parenting interventions in early childhood?**


Watch the Vroom! video ([https://www.youtube.com/watch?v=trm38G2e5NE](https://www.youtube.com/watch?v=trm38G2e5NE)) and then download the Vroom! app here to your smart phone: [http://www.joinvroom.org/](http://www.joinvroom.org/). Enter a profile for your child (real or imagined – pick the child age (0-5) of your choice). For four days, check the app daily for a tip for interacting with your child. If you have a young child and like the tip, try it out.

Come to class prepared to discuss at least one of these tips – Did it sound like fun? What skill was it trying to build? (No smart phone? Complete the activity using examples of activities here: [http://www.joinvroom.org/tools-and-activities](http://www.joinvroom.org/tools-and-activities))

**Wednesday, October 4: Fidelity of implementation**


Module 2: Descriptive Analysis in Research Partnerships

Monday, October 9


Wednesday, October 11


Monday, October 16: Fall break
Module 3: Natural Experiments and School Finance Reform

Wednesday, October 18: Introduction to Natural Experiments
Murnane & Willett, Chapter 8.

Monday, October 23: Panel data and natural experiments

Wednesday, October 25: Effects of School Finance Reforms

Module 4: School Choice and Lotteries as Identification

Monday, October 30: Overview


Wednesday, November 1: Charter Lotteries

Monday, November 6: Vouchers

Wednesday, November 8: District Choice
Monday, November 13: Small High Schools of Choice
Guest speaker: Rebecca Unterman, MDRC


Wednesday, November 15: Catch-Up and Wrap-Up

**Module 5: High Schools and Regression Discontinuity**

Monday, November 20: Trends in High School Graduation

Wednesday, November 22: No class (Thanksgiving)

Monday, November 27: Regression Discontinuity
Murnane, & Willett, Chapter 9.

Wednesday, November 29: High Stakes Graduation Tests

Monday, December 4: TBA

Wednesday, December 6: TBA

Monday, December 11: Catch-Up and Wrap-Up