Section I: MW 9:00-10:20 am, Keller 0010
Section II: MW 10:30-11:50 am, Keller 0010
NOTE: All times are Chicago time

Instructor: Jeffrey Grogger  
jgrogger@uchicago.edu
Office hours TBA

Teaching Assistants:

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smriti Ganapathi</td>
<td><a href="mailto:sganapathi@UCHICAGO.EDU">sganapathi@UCHICAGO.EDU</a></td>
</tr>
<tr>
<td>Desiree Becerra Armada</td>
<td><a href="mailto:dbecerra@uchicago.edu">dbecerra@uchicago.edu</a></td>
</tr>
<tr>
<td>Jose Villalobos Gonzalez</td>
<td><a href="mailto:jiv2@uchicago.edu">jiv2@uchicago.edu</a></td>
</tr>
<tr>
<td>Meiru Zhu</td>
<td><a href="mailto:meiru@uchicago.edu">meiru@uchicago.edu</a></td>
</tr>
</tbody>
</table>

Discussion sections: Thursdays, 2-3:20 pm, room TBA  
Fridays, 9-10:20 am, room TBA

Web site: All materials for the class will be posted to its site on Canvas.

Course content: To introduce students to program evaluation, provide an overview of current issues and methods, and impart applied experience with several methods and datasets.

Texts: There are no required texts, but you may find it useful to refer to a standard econometrics text such as Introductory Econometrics: A Modern Approach, by Jeffrey Wooldridge. Specific readings for each topic appear below. Other useful references are:


Grading: Grades will be based on five problem sets and a final exam. The problem sets will count collectively for 80 percent of the grade and the final exam will count for 20 percent.
Problem sets: The problem sets are mostly empirical exercises that have you employ a number of evaluation techniques, using real data and writing real computer programs. Most students have found the problem sets to be quite challenging. Ideally, you will have taken, or be taking concurrently, PPHA 30535/30536 - Data and Programming for Public Policy. If you struggled with the empirical exercises during the econometrics sequence, this is not the right section for you. PP 346 is taught every quarter, and different instructors teach it differently.

Problem sets must be submitted electronically following the guidelines posted under the Assignments section of the class Canvas site. Late problem sets will not be accepted. Each assignment will receive equal weight. Only four of the five problem sets will count toward your grade; I will automatically drop the one with the lowest score. You may ask classmates or the TA’s for help with the problem sets, subject to the conditions below, but you must hand in your own work. Copying the work of another student is cheating, as is allowing another student to copy yours. Cheaters can expect no leniency.

Final exam. For the final exam, you will read a set of evaluation articles, then critique them according to a set of questions with which you will be provided. The readings and questions will be posted during the last class on Wednesday, November 30. The exam will be due on Wednesday, December 7, at 11:59 pm. The exam must be submitted through Canvas; details will be forthcoming.

Logistics. Unless something changes, all instruction will be in person. Students are expected to attend class, and recordings of class will not be generally available. There is one major exception to this rule:

If you are experiencing COVID-19 symptoms or are required to isolate, do not come to class.
Contact me or the TA if you cannot attend class for this reason, and we will seek to arrange an accommodation.

On a more minor note, the schedule this year gives us only 8.5 weeks for class, rather than the usual 9. By way of compensation, please watch the three videos labeled Topic 1 before attending the first class. You can find them on Canvas.

More general points:

Communication with TAs and other students
You can use Piazza to communicate with the TA’s and other students. TA’s will respond in a reasonable amount of time, but immediate turnaround is not a reasonable expectation.

Piazza posts will be public, for several reasons. First, it is efficient. Singleton questions are rare. If you have a question, probably someone else has the same question. Everyone can benefit from the answer. Another reason is that questions beget questions. If one
student sees others posting, he/she is more likely to post him/herself. And more questions are better. Third, part of professional education is learning to make yourself heard, even in situations you may find awkward. So grit your teeth and post your question! The sky will not fall, I promise.

**Academic Integrity.** To reiterate, you may consult with others while you work, but you must follow these procedures:

- Your problem set must be solely your authorship (written up by yourself, in your own language, including your own code.)
- Your code must have a comment at the top listing the students/TA’s/consultants with whom you consulted.
- Any part of your code that was substantially altered because of your discussion with other students/TA’s/consultants should cite others' contributions with names and descriptions in a comment at the place where it is applicable.
- Any code based on code that you found online must be documented as such. This includes single lines of code and code that you found but then modified to fit your purpose. Documentation must include the URL and the date and time of access.

Students who violate these procedures, or otherwise violate academic honesty policies, will receive a zero for the problem set or exam in question AND for a second problem set. These problem sets will **NOT** be dropped for the purpose of calculating your grade.

All University of Chicago students are expected to uphold the highest standards of academic integrity and honesty. Among other things, this means that students shall not represent another’s work as their own, use un-allowed materials during exams, or otherwise gain unfair academic advantage. All students suspected of academic dishonesty will be reported to the Harris Dean of Students for investigation and adjudication. The disciplinary process can result in sanctions up to and including suspension or expulsion from the University, in addition to the grade penalty mentioned above. The Harris policy and procedures related to academic integrity can be found at https://harris.uchicago.edu/gateways/current-students/policies. The University of Chicago Policy on Academic Honesty & Plagiarism can be found at https://studentmanual.uchicago.edu/academic-policies/academic-honesty-plagiarism/

**Topics and readings**

**I. The Evaluation and Selection Problems**


**II. Treatment Parameters**

Blundell and Dias, section II


**III. Instrumental Variables**

Blundell and Dias, section VI


**IV. Social Experiments**

Blundell and Dias, section III

James Heckman and Jeffrey Smith. “Assessing the Case for Social Experiments” *Journal*


V. Regression Discontinuity


VI. Natural Experiments/Panel Data

Blundell and Dias, section IV


VII. Matching

Blundell and Dias, section V


VIII. Permutation Inference


IX. Synthetic Control


**X. Multiple Hypothesis Testing**


