

TENTATIVE SYLLABUS
Economics 4880
Seminar in Policy Analysis

Professor Christopher Ruhm
Spring 2020
MW, 2:00-3:15, Memorial Gymnasium 213

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Office Hours: Monday TBA

COURSE CONTENT

An understanding of what constitutes credible policy analysis is more important than ever. This course is designed to develop a student's capacity to understand and conduct **empirical studies of the effects of government and non-government policies**. To this end, each student will present in class the empirical studies of other authors, act as a potential reviewer for papers presented by others, conduct independent research, present their analysis in class, and write a paper describing their analysis.

Learning how to do policy analysis: The early weeks of the semester will be devoted to lectures and student presentations of published papers. This provides a chance to learn about policies, data sets, and methodologies that students can use in their work. The limited time given to lectures is designed to allow the maximum time possible for conducting independent analysis, but it severely restricts the number of policy areas that will be covered; students need to investigate on their own other policies of interest. In the second and third classes, I will present some examples of policy analysis. For several classes after that, students will take over the task of presenting and acting as reviewers for published papers. Each lecture will cover two papers that students must read in advance and be prepared to discuss. Economic papers now often contain an enormous number of robustness and sensitivity checks. When reading these articles, you can move through these fairly quickly, understanding the main ideas but not worrying about the details. (However when using a paper as a basis of your empirical project, you will want to fully understand them.)

Developing your own policy analysis project: Also during the early weeks of the semester, each student will submit their ideas for potential research projects. These projects will be refined within the first month of class so that students arrive at a topic that is consistent with the purpose of the course and feasible to complete within a semester. After that, we will stop meeting as a class; instead, students will meet weekly with me to discuss progress in the previous week and plans for the next week. Starting in mid-April, we will meet again as a class so that students can present their research. Final papers must be turned in at the end of the semester.

GRADING

presentation of a published paper , January-early February	10%
class participation	10%
completion of intermediate work	10%
presentation of your research , mid-to-late April	20%
final paper , submitted by email by May 1, 5 PM	50%

READINGS

Required readings for the class will be available in electronic form on Collab. The required readings are those currently listed below in the Course Schedule, as well as the published papers that students choose for their presentations in the early weeks of class.

COURSE SCHEDULE

Monday, Jan 13	Overview of course Writing an Empirical Economics Paper
Wednesday, Jan 15	Lecture – Econometric Approaches Eissa, Nada and Jeffrey Leibman. “Labor Supply Responses to the Earned Income Tax Credit.” <i>Quarterly Journal of Economics</i> , 1996, 111(2), 391-430.
Monday, Jan 20	MLK Holiday, No Class
Wednesday, Jan 22	Lecture – incarceration policy; health care; instrumental variables; regression discontinuity Anna Aizer and Joseph J. Doyle Jr. 2015. “Juvenile Incarceration, Human Capital, and Future Crime: Evidence from Randomly Assigned Judges.” <i>Quarterly Journal of Economics</i> 130(2), 759-803. Card, David, Carlos Dobkin and Nicole Maestas. 2009. “Does Medicare Save Lives?” <i>Quarterly Journal of Economics</i> 124(2), 597-636. (skip sections V.E and VI) Remember, focus your reading on the “big picture” not all the robustness checks
Monday, Jan 27	Presentation of published papers by students (2 presentations per class) Choose a paper from the list posted on Collab. Prepare an electronic presentation and plan to present for 20 minutes. All students must be prepared to act as paper “discussants”.
Wednesday, Jan 29	Presentation of published papers by students (2 presentations per class)
Monday, Feb 3	Presentation of published papers by students (2 presentations per class)
Tuesday, Feb 4, 12:00 PM	Submit 1+ paragraphs about 2+ ideas for your policy analysis paper; post these on Collab
Wednesday, Feb 5	Discussion of student ideas in class
Monday, Feb 10	Presentation of published papers by students (2 presentations per class)
Tuesday, Feb 11, 12:00 PM	Submit a written update of your idea(s); post these on Collab
Wednesday, Feb 12	Discussion of student ideas in class
Monday, Feb 17	Presentation of published papers by students (2 presentations per class)
Wednesday, Feb 19	Presentation of published papers by students (2 presentations per class)

February-April	Weekly meetings with each student
Wednesday, April 15	Presentation of policy analysis project (3 presentations per class)
Monday, April 20	Presentation of policy analysis project (3 presentations per class)
Wednesday, April 22	Presentation of policy analysis project (3 presentations per class)
Monday, April 27	Presentation of policy analysis project (3 presentations per class)
Thursday, May 7, 5:00 PM	Final paper is due; send these as email attachments

DETAILED REQUIREMENTS

Economics 4880 requires a paper that will be due at the end of the semester. Working on this paper will introduce you to the steps involved in conducting a formal microeconomic policy analysis – you will run regressions to determine the impact of a microeconomic policy on some outcome. (Because the focus of the class is on microeconomic policy, we will not consider the analysis of fiscal, monetary, exchange rate, or trade policy.)

The following three criteria are necessary for defining a successful research question: (1) an interesting policy, (2) data on the policy and the outcome, and (3) a credible econometric strategy to identify the causal effect of the policy on the outcome. To be interesting, the topic must be novel to some extent; while some students begin by replicating a scholarly article, students must add something new to the analysis (a new data set, more years of data, a more recent policy change, etc.). Data requirements include being able to measure the impact of the policy, the outcomes the policy may be affecting, and control variables that may otherwise confound analysis of the policy impact. Causal identification for the purposes of this class usually means finding some policy change to analyze and thinking carefully about what other factors may cause omitted variable or simultaneity bias.

A further requirement for a successful paper is clear and careful writing describing your research question. You will be graded on the quality of your research question and the quality of your paper. You will NOT be graded on whether you obtain statistically significant estimates of the policy impact, since there is no way to know until you undertake the analysis what results you will find.

Lastly, remember that most of you have no idea how to define a successful research question at this point! You will learn how to do this by reading and presenting published research by economists; sharing your ideas in their early stages with the class; and meeting one-on-one with me for most of the semester.

Presentation of a published paper, February, 10% of grade. Either choose a paper from the list posted on Collab, or consult with me about presenting another paper that is of interest to you and is appropriate for the class. Please don't be alarmed when you read a paper and can't understand some parts of it! In some cases, it simply reflects a poor explanation, rather than a deficiency in your knowledge. Focus on making sense of the policy setting, general empirical strategy, data choices, and key results, even if you cannot understand some of the details.

Prepare slides to accompany your presentation (using PowerPoint or another application) and plan to present for around 20 minutes. This is not much time, so while you must read and understand the entire paper, you can only present the most important parts. This includes an explanation of the policy, data, empirical strategy, and most important results. Finish up with your evaluation of the strengths and weaknesses of the paper. In addition, one other student will be randomly chosen to present 5 minutes of

discussion on the paper. When constructing your discussion comments, assume that the primary presenter will cover the main aspects of the paper (e.g. data, methods and results) and so focus your discussion on evaluating the success of paper in answering the question posed, as well as potential problems with the analysis. Since the discussant will be chosen at random (with replacement), all students should come to class prepared to do this, with presentation slides. We will then open the floor to a group discussion for the remaining time.

Class participation, 10% of grade. The requirements are attending class, reading the papers listed in the Course Schedule and that students choose for their presentations in the early weeks of class, engaging in discussion during lectures and student presentations, and acting as a paper commenter if chosen to do so. If you miss a class when students are presenting published papers, you should email me your discussant presentation prior to the class meeting. You will be graded on that presentation.

Completion of intermediate work, 10% of grade. You will not get a good grade if you leave all your work for the last month of the semester. Therefore, you will be given weekly tasks during your meetings with me, and you are expected to make timely and satisfactory progress. To provide a general idea of timely progress during the semester, below is a possible timeline. Actual timelines will be determined on an individual basis, depending on the work required at each stage for each particular project.

Sample Timeline

Preproposal I	2/4	Two topic ideas, 1-2 paragraphs each
Preproposal II	2/11	Expanded Topic Idea, 1-2 pages
Formal Proposal	2/20	Topic, citation for the article(s) being used as starting point, specification of the main relationship, statement of the substantive hypothesis of interest, a concise description of the data (3-4 pages)
Data Description	3/7	Size of sample, descriptive statistics (mean, std dev, min, max) of data elements, definition of each variable, construction rules, explanation of strange values
Methodology Outline	3/11	Model to estimate and method of estimation
First Draft (optional)	4/11	To get early comments from me

Presentation of your research, mid-to-late April, 20% of grade. Presentation skills are critical and need to be practiced. Your presentation will be evaluated on its clarity and thoughtfulness. Prepare slides to accompany your presentation (using PowerPoint or another application) and plan to present for 25 minutes, including time for questions. Focus your presentation on the most important parts of your analysis – explanation of the policy and what we know about it from the literature, data, empirical strategy, most important results. Finish up with implications for policy design and/or future research.

Final paper, due May 7, 5 PM in an email attachment, 50% of grade. Late work will not be accepted. Your paper will be evaluated on the quality of your research question (see the three criteria above) and the quality of your paper (e.g. have you clearly and carefully described your research question and analysis).

The paper should be between 20-40 pages (1.5-spaced). A sample organizational structure is: Introduction, Policy Background, Econometric Methods, Data/Descriptive analysis, Econometric Results, and Discussion. This is just a general guideline, specific papers may differ on some dimensions. For example, the data/descriptive analysis section may sometimes come before presentation of the

econometric methods and the introduction and policy background sections may sometimes be combined. All papers should also include a title page, abstract and a list of cited references. See Chapter 19 in Wooldridge (2002), available on collab, for further guidance on these sections.

Please be aware of plagiarism guidelines. All of us base some of our work on the ideas of others, but you must use your own words and also cite the ideas and words of others carefully and appropriately. For example, do not copy text from other work, and do not copy regression specifications without an immediate acknowledgement and citation to the work it comes from.

Let me know if you would like to use some of your work in this class for a similar paper in another course.

Additional Review of Econometrics

Your empirical paper will involve substantial applied econometric analysis. We will briefly be reviewing key methods in class but you are encouraged to further refresh your skills and learn new ones as needed. There are a variety of good texts to help you with this that are available in paperback (and so relatively cheap). I particularly like:

Bailey, Michael A. *Real Stats: Using Econometrics for Political Science and Public Policy*, Oxford University Press, 2016.

(Bailey also has a text *Real Econometrics: The Right Tools to Answer Important Questions* that appears to be almost identical, but I haven't used it.)

Many people also find either of the following to be helpful:

Angrist, Joshua D. and Jörn-Steffan Pischke. *Mastering Metrics: The Path from Cause to Effect*, Princeton University Press, 2015.

Angrist, Joshua D. and Jörn-Steffan Pischke. *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, 2009.

Econometric Software

You are welcome to use any econometric software that you prefer for conducting the analysis for your empirical project. However, the only one that I will provide you help with is STATA, which is by far the most commonly used by economists. You can access STATA on the UVa Hive (<http://its.virginia.edu/hive/>) or purchase a discounted student version at: <https://www.stata.com/order/new/edu/gradplans/campus-gradplan/> or <https://www.stata.com/order/new/edu/gradplans/student-pricing/>. The other major software economists are using these days is R. R is a free powerful program that has many nice features. However, note that I will not be able to provide you help with R, so you should only use it if you feel very confident of your ability to use the software, or are able to obtain help elsewhere for any problems that you run into.