## SYLLABUS Economics 4880, Spring 2024 Seminar in Policy Analysis

Professor Leora Friedberg Monday-Wednesday 5:00-6:15, Wilson 244 <u>lfriedberg@virginia.edu</u> Office Hours: by appointment

## **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 policy. To this end, each student will present in class the empirical studies of other authors, conduct a study independently, 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 professor and student presentations of published papers. This will give students 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. Since this restricts the number of policy areas that will be covered, students are encouraged to investigate on their own other policies of interest. In the second and third classes, I will present some examples of policy analysis. After that, students will take over the task of presenting published papers. Each lecture will cover 2-3 papers that students must read in advance.

**Developing your own policy analysis project:** Also during the early weeks of the semester, each student will submit initial 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 those early weeks, we will shift from meeting as a class to individual updates and weekly meetings with me to discuss progress and plans for each week. In late 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-February	15%
class participation	10%
completion of intermediate work	10%
presentation of your research, late April	25%
final paper, submitted by email by May 6, 5 PM	40%

#### **COURSE SCHEDULE**

Presentation by professor (LF)
Presentations by students (Sts)
Discussion of student research topics (All)
Assignment is due (A)

Wedsnesday, Jan 17 (LF)

Overview of course Introduction to the Earned Income Tax Credit



\* Friedberg, Leora, and Elliott Isaac. "Same-Sex Marriage Recognition and

	<ul> <li>Taxes: New Evidence About the Impact of Household Taxation."</li> <li>Forthcoming, <i>Review of Economics and Statistics</i>.</li> <li>Methodology: differences-in-differences &amp; instrumental variables (but focus on DID)</li> <li>Policy: same-sex marriage recognition</li> </ul>		
	Data sources		
Wednesday, Jan 24 (LF)	<ul> <li>* Aizer, Anna 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. Methodology: instrumental variables Policy: Justice system</li> </ul>		
	<ul> <li>* Card, David, Carlos Dobkin and Nicole Maestas. 2009. "Does Medicare Save Lives?" <i>Quarterly Journal of Economics</i> 124(2), 597-636. Methodology: regression discontinuity Policy: Medicare</li> </ul>		
Monday, Jan 29 (Sts)	Presentation of published papers by students (2 presentations per class)		
	Discussion of econometric methods		
Tuesday, Jan 30, 5:00 PM (A	)		
	Submit 1+ paragraphs about 2+ ideas for your policy analysis paper; post these on Canvas		
Wednesday, Feb 1 (All)	Discussion of student ideas in class		
Monday, Feb 5 (Sts)	Presentation of published papers by students (2 presentations per class)		
	Discussion of econometric methods		
Tuesday, Feb 6, 5:00 PM (A)	Submit a written update of your idea(s); post these on Canvas		
Wednesday, Feb 7 (All)	Discussion of student ideas in class		
Monday, Feb 12 (Sts)	Presentation of published papers by students (2 presentations per class)		
	Discussion of econometric methods		
Wednesday, Feb 14 (Sts)	Presentation of published papers by students (2 presentations per class)		
	Discussion of econometric methods		
February-April	Weekly individual meetings with each student		
Wednesday, April 17 (Sts)	Presentation of policy analysis project (2 presentations per class)		

Monday, April 22 (Sts)Presentation of policy analysis project (2 presentations per class)Wednesday, April 24 (Sts)Presentation of policy analysis project (2 presentations per class)Monday, April 29 (Sts)Presentation of policy analysis project (2 presentations per class)Friday, May 3, 5:00 PM (A)Final paper is due; submit on Canvas

READINGS

The required readings for the class will be available in electronic form on Canvas. The required readings are those currently listed below in the Course Schedule and noted with an asterisk (\*), as well as the published papers that students choose for their presentations in the early weeks of class.

# **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 applied microeconometric policy evaluation – you will run regressions to determine the impact of a microeconomic policy on some outcome, and you will describe your motivation, methods, and results in a final paper.<sup>1</sup>

<u>The following three criteria are necessary for defining a successful research question</u>: (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, it must be novel to some extent; while some students begin by replicating a scholarly article, students must then 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.

<u>A further requirement for a successful paper is clear and careful writing</u> describing your research question. So, 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. The reason is that there is no way to know until you undertake the analysis what results you will find!

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

**Presentation of a published paper**, January-February (15% of grade). Either choose a paper from the list posted on Canvas or consult with the professor 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 poor writing, rather than a deficiency in your

<sup>&</sup>lt;sup>1</sup> While the focus of the class is on microeconomic policy, some questions arising from macroeconomics, international trade, and industrial organization may be considered if they lend themselves to the methods that we will focus on.

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 30 minutes, including time for questions. 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.

**Class participation**, 10% of grade. The requirements are attending class, reading the papers that are listed in the Course Schedule and that students choose for their presentations in the early weeks of class, and engaging in discussion during lectures and student presentations. If you miss a class when students are presenting published papers, I would like you to write a two-paragraph summary of the papers that you miss, one paragraph describing the key methods and results and one paragraph offering your evaluation of the paper. You will be graded on your summary.

**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 give you 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			
Research steps	Timing	What goes in the paper draft	
Finalize your research question	Early February	Write a few paragraphs to motivate your research question and highlight your advancements on the literature	
Develop your identification strategy Acquire your data	Late February	Acquiring data goes hand in hand with developing an identification strategy to answer your research question. Begin to write institutional background and literature discussion sections.	
Organize, clean, and trouble-shoot your data Write down your regression model	Mid March	You are ready to begin defining your sample and analyzing raw data. Examine means, standard deviations, and other distributional statistics of key data elements. Assemble these into tables that will be in your paper. Begin to write data section of your paper.	
Run regressions. Explore robustness.	Late March	Start testing your hypotheses. Analyze the estimates: Do they make sense? Do they suggest that key variables might be omitted? What are different ways that you can prod your results to understand how robust they are? Begin to write the empirical strategy section of your paper.	
Finalize empirical analysis.	Early April	Are there placebo checks you can run? What sub-group analysis is interesting? Begin to write the results section of your paper. Figure out visualizations that convey the key analysis and results. Assemble regression tables.	
Put on the finishing touches.	Mid April	Prepare your presentation. Polish your draft; exchange drafts with a classmate.	

**Presentation of your research**, late April, 25% of grade. Presentation skills are critical and need to be practiced, and 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 3, 5:00 PM, submitted on Canvas, 40% 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 (have you clearly and carefully described your research question and analysis).

The paper should be between 20-35 pages (<u>1.5-spaced</u>, <u>1-inch margins</u>) and include the following sections: Introduction, Policy Background, Econometric Model, Data, Results, and Conclusions. You should also include a title page and a list of cited references. See Chapter 19 in Wooldridge (2002) or Chapter 19 in Hill, Griffiths and Judge (2001) for further guidance on these sections.

<u>Please be aware of plagiarism guidelines</u>. 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.