

Economics 457: Public Economics Research Seminar
Final Syllabus (Revised)
Fall 2006

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Class meets: 11:00AM-12:15PM
Office hours:
Tues. 1:00-4:00PM
and by appointment

Course Description

This course is a research seminar in *public economics*, which is the study of the role of government in the economy. The goal of this course is to help you learn how to read, critically evaluate, and begin to produce economic research on important and interesting public policy questions, with a particular emphasis on empirical evidence. The beginning part of the course will present a small number of important tools of empirical analysis that are widely used in modern economic research, and will consider some interesting applications of these tools. The remainder of the course will build on this foundation by discussing empirical economic journal articles that address a variety of public policy questions in interesting and clever ways. Readings will be drawn from across the spectrum of the field of public economics, including such issues as: taxation; crime; education; social security; health care; aid to the poor; income inequality; the environment; and corruption.

The course will culminate in the production of an original empirical research project of your own, which will also be described in greater detail below.

Structure of the Course

Part one of the course will consist of eight class periods (not counting today's organizational meeting) during September. These classes are designed to help you develop a sound conceptual framework for thinking about empirical evidence in economics, and to give you some hands-on practice with a few particularly useful econometric tools. This part of the course will include a mixture of lecture, discussion, and computer labs where you will do some hands-on work with data and Stata programming. The econometric principles will be illustrated using research articles presenting evidence on, for example, the economic costs of progressive taxation, the employment effects of the minimum wage, the relative merits of private production vs. government production, and the effects of school choice and competition among schools on student achievement. Note that during the last two weeks of September only, the class

will meet three times per week, with the Friday class each week being devoted to a computer lab. In exchange, there will be several weeks later in the term where you will attend less than two classes per week (see below for an explanation).

For the second part of the course, I will break the class up into 18 smaller discussion group meetings, and each student will be required to attend 8 of these meetings. The discussion groups will be arranged into two “tracks,” track A and track B, but a student is free to attend classes from either track. Each of the discussion group meetings will focus on discussing empirical economic research articles on public policy questions.

Because of the discussion group element of the course, in some weeks all three time slots (Monday, Wednesday, and Friday, 11:00AM-12:15PM), will be used, but you will typically only attend class on one or two of those days, at most, in any given week during the second part of the course. I will let you know which classes you will be scheduled to attend well in advance.

In total, each student will attend class 17 times during the semester, rather than the standard 24 or 25 (although note that I will be meeting with students a total of 27 times). The reduction from the standard number of class meetings is meant to facilitate the small-group discussion format, and to free up time for you to work on your original empirical research project (which will involve a substantial time commitment and individual meetings with me as well).

Course requirements

Class participation. The first requirement of the course is to do all of the assigned reading carefully *before* the class where we discuss it, and to come prepared to contribute usefully to the discussion in each class. Class participation will count for 20% of your grade, and you can expect that I will sometimes ask questions of specific students rather than relying entirely on volunteers. My purpose is never to embarrass anyone, but rather to encourage broad participation in the discussion and to maintain an incentive to do the reading on time. I will strive to keep the quantity of reading in each class manageable for you. Both attendance and constructive contributions to discussion will play critical roles in your participation grade.

3 short empirical exercises. In the first part of the course, there will be three short empirical exercises. These will include a small number of problem-set type questions to help you think through some econometric ideas, and some simple

exercises to get you comfortable working with data and with programming in Stata.

3 short (5-page double-spaced) commentaries on the reading. In three out of the nine discussion group meetings in the second part of the class, you will write a 5-page paper on (one or more) of the day's readings, to be handed in at the beginning of the class when we discuss it. I will do some coordination to ensure that a sufficient number of people are writing on each topic, and will try to match people with the topics they find most interesting. More details on how to write these papers will be provided later.

One original empirical research paper. The final product should be approximately 20-25 pages, double spaced, and must involve at least some original analysis of data. The paper will be built up in stages over the course of the term. The stages include:

- An initial proposal will be due on Friday October 20. This will include about 5 written pages explaining the question you plan to address, why the question is interesting, and how you plan to go about it. It will also include a proposed reading list.
- A progress report will be due on Friday November 17 that includes 5 written pages describing progress in refining the research question and in finding and using appropriate data. In addition, the progress report will include an outline of the proposed final paper and an updated, annotated reading list.
- On Friday December 1, you will be required to hand in tables describing the data used in your analysis and presenting preliminary empirical estimates.
- A complete final draft of the research paper will be due on Friday December 15.

Writing done for earlier stages of the project may be included in later stages of the project.

I recognize that completing a major empirical research paper in half a semester is quite a challenge, and requires the good luck of finding the combination of a good idea and good data. To make this feasible, the following two formats would be acceptable for the final research paper.

1. A detailed research proposal, similar to a grant proposal. The proposal should present an original, convincing, and feasible strategy for answering an interesting empirical question, and should show some preliminary analysis of the data that will be used to address it. This approach would be good, for example, if you would like to turn your paper into a proposal to write an honors thesis or independent study paper for spring semester.
2. A replication and extension of an existing empirical paper. This would involve the following steps. First, you would need to select an article that you are interested in replicating, and make sure that you can obtain either the original data set used in the paper, or another data set that is similar enough that you can effectively test the same hypothesis. For articles that are already published, authors are often happy to share their data; in many other cases you can construct an identical data set yourself using publicly available sources. Second, you would obtain the data and follow the original authors' empirical procedures as closely as possible. Ideally, your estimates would be similar to those in the original article, and if not, you need to figure out why. Third, you would make some meaningful change to the empirical specification, or extend the analysis in some way, and be able to make a case for why we learn something interesting from this exercise.

Of course, a self-contained and complete original empirical research paper would be great and is certainly acceptable. But I recognize that this may not be possible for some people in the time span available. If well done, either of the above options can be an acceptable substitute.

In all cases, the paper would include a review and evaluation of the relevant economics literature, and a discussion of how the research you are focusing on fits into that broader literature.

As the semester progresses, I will provide a list of ideas for feasible research papers for people who are having trouble coming up with one, and I also plan to make several data sets available that could serve as the basis of an empirical analysis. I will also provide further guidance on how to replicate a paper and how to undertake an original empirical project. I encourage you to meet with me early on to discuss potential research ideas.

Grades

Grades will be assigned on the following basis:

- Class participation: 20%
- 3 empirical exercises: 10%
- 3 5-page papers commenting on the reading: 25%
- Research paper
 - Initial proposal, due October 13: 5%
 - Progress report, due October 27: 5%
 - Tables, due December 1: 5%
 - Final complete draft, due December 15: 30%

Course readings

There is no textbook for this course. Most of the course readings will be economics journal articles and working papers which present the results of original empirical research on public policy questions. Assigned readings will also include a few excerpts from econometrics textbooks that cover some essential tools used widely in economic research, as well as an occasional background reading giving an overview of a policy issue. All readings for the course will be posted in electronic format on the course Blackboard page, and will also be provided to you in printed form at various points in the semester.

Honor code guidelines

All of the normal Williams Honor Code guidelines regarding proper use of citations and quotations will apply in this course. I will provide further information on the details later.

Class Schedule for Part I: Essential Econometric Tools, and How to Think about Empirical Evidence in Economics

Fri 9/8	Organizational Meeting	
Mon 9/11	Identification Strategies in Economics <ul style="list-style-type: none"> • “Empirical Tools of Public Finance,” Ch. 3 from <i>Public Finance and Public Policy</i>, by Jonathan Gruber, New York: Worth Publishers, 2005, pp. 59-85. 	
Wed 9/13	Examples of “Difference-In-Differences” Analysis <ul style="list-style-type: none"> • “The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act” by Martin Feldstein, <i>Journal of Political Economy</i>, June 1995, v. 103, iss. 3, pp. 551-72. • “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania,” by David Card and Alan B. Krueger, <i>American Economic Review</i>, September 1994, v. 84, iss. 4, pp. 772-93. 	
Fri 9/15	Optional computer lab: making effective graphs and tables with Microsoft Excel. Class meets in Jessup 205.	
Mon 9/18	Fixed Effects “Regression with Panel Data.” Ch. 8 from <i>Introduction to Econometrics</i> by James Stock and Mark Watson, Addison Wesley, 2002, pp. 271-290.	
Wed 9/20	Example of Fixed Effects Analysis <ul style="list-style-type: none"> • “Water for Life: The Impact of the Privatization of Water Services on Child Mortality” by Sebastian Galiani, Paul Gertler, and Ernesto Schargrotsky, <i>Journal of Political Economy</i>, February 2005, v. 113, iss. 1, pp. 83-120. 	
Fri 9/22	Computer Lab: Stata, Difference-in-Differences, and Fixed Effects Class meets in Jessup 205.	Empirical exercise #1 due
Mon 9/25	Instrumental Variables <ul style="list-style-type: none"> • “Instrumental Variables Regression,” Ch. 8 from <i>Introduction to Econometrics</i>, by James H. Stock and Mark W. Watson, Boston: Addison Wesley, 2003, pp. 271-295. 	

Wed 9/27	Examples of Instrumental Variable Analysis	
	<ul style="list-style-type: none"> • “Does Competition among Public Schools Benefit Students and Taxpayers?” by Caroline M. Hoxby, <i>American Economic Review</i>, December 2000, v. 90, iss. 5, pp. 1209-38. • “The Effects of Generalized School Choice on Achievement and Stratification: Evidence from Chile’s Voucher Program,” by Chang-Tai Hsieh and Miguel Urquiola, forthcoming, <i>Journal of Public Economics</i>. 	
Fri Sept 29	Computer Lab: Instrumental Variables Class meets in Jessup 205.	Empirical exercise #2 due
Part II: Topics in Empirical Public Economics		
Topics and readings to be announced – will depend on responses to survey		
Mon 10/2	<i>Discussion group A, meeting 1</i>	
Wed 10/4	<i>Discussion group B, meeting 1</i>	
Fri 10/6	No class: Empirical exercise #3 due	
Mon 10/9	No class: Fall Reading Period	

Class Schedule for Part II: Discussion Group Meetings	
Discussion Track A	Discussion Track B
<p>Mon 10/2: <i>Discussion group A, meeting 1</i> <u>Does greater school choice improve student outcomes?</u></p> <ul style="list-style-type: none"> • Caroline Hoxby. "School Choice: The Three Essential Elements and Several Policy Options." Keynote speech delivered 30 June 2005 to the New Zealand Association of Economists 46th Annual Conference 2005, Christchurch, New Zealand. • Julie Berry Cullen, Brian A. Jacob, and Steven Levitt. "The Effect of School Choice on Participants: Evidence from Randomized Lotteries." <i>Econometrica</i>, September 2006. 	<p>Wed 10/4: <i>Discussion group B, meeting 1</i> <u>Health in Developing Countries</u></p> <ul style="list-style-type: none"> • Edward Miguel and Michael Kremer. "Worms: Identifying Impacts On Education And Health In The Presence Of Treatment Externalities" <i>Econometrica</i>, January 2004. • Esther Duflo, Pascaline Dupas, Michael Kremer, and Samuel Sinei. "Education and HIV/AIDS Prevention: Evidence from a randomized evaluation in Western Kenya" BREAD Working Paper, August 2006.
Fri 10/6: No class: Empirical exercise #3 due, 4:00PM	
Mon 10/9: No class: Fall Reading Period	
Wed 10/11: No class	
<p>Before this date, you should read the two articles listed below, which will help you learn how to come up with a good idea for an empirical research project, and how to execute the project successfully. These are available already in the first bound course packet I already handed out, and on Blackboard.</p> <ul style="list-style-type: none"> • "Carrying Out an Empirical Project," Chapter 19 from <i>Introductory Econometrics: A Modern Approach</i>, by Jeffrey Wooldridge, 3rd edition, Mason OH; Thomson South-Western, 2006. • "Publication, Publication," by Gary King, <i>PS: Political Science and Politics</i>, January 2006, pp. 119-125. 	

Discussion Track A	Discussion Track B
<p>Mon 10/16: <i>Discussion group A, meeting 2</i> <u>Does spending more on public schools improve student outcomes?</u></p> <ul style="list-style-type: none"> Eric A. Hanushek, "Conclusions and Controversies about the Effectiveness of School Resources" <i>Federal Reserve Board of New York Economic Policy Review</i>, March 1998. Alan B. Krueger. "Experimental Estimates of Education Production Functions" <i>Quarterly Journal of Economics</i>, May 1999. 	<p>Wed 10/18: <i>Discussion group B, meeting 2</i> <u>Corruption in Developing Countries I</u></p> <ul style="list-style-type: none"> * Andrei Shleifer and Robert Vishny. "Corruption." <i>Quarterly Journal of Economics</i>, August 1993. Raymond Fisman and Roberta Gatti, "Decentralization and Corruption." <i>Journal of Public Economics</i>, 2002.
Fri 10/20: No class; Research Proposal Due, 4:00PM	
<p>Mon 10/23: <i>Discussion group A, meeting 3</i> <u>Schools, property values, and the pros and cons of local school finance</u></p> <ul style="list-style-type: none"> Sandra Black, "Do Better Schools Matter? Parental Valuation of Elementary Education." <i>Quarterly Journal of Economics</i>, May 1999. Caroline M. Hoxby. "All School Finance Equalizations are Not Created Equal." <i>Quarterly Journal of Economics</i>, November 2001. 	<p>Wed 10/25: No class</p>
<p>Fri 10/27: No class; Progress report on research paper due</p>	<p>Mon 10/30: <i>Discussion group B, meeting 3</i> <u>Corruption in Developing Countries II</u></p> <ul style="list-style-type: none"> Ritva Reinikka and Jakob Svensson, "Local Capture: Evidence from A Central Government Transfer Program In Uganda" <i>Quarterly Journal of Economics</i>, May 2004. Benjamin Olken, "Monitoring Corruption: Evidence from a Field Experiment in Indonesia." NBER Working Paper No. 11753, November 2005.

Discussion Track A	Discussion Track B
<p>Wed 11/1: <i>Discussion group A, meeting 4</i> <u>Externalities from education</u></p> <ul style="list-style-type: none"> • Lance Lochner and Enrico Moretti. "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports." <i>American Economic Review</i>, March 2004. • Thomas Dee. "Are there Civic Returns to Education?" <i>Journal of Public Economics</i>, 2004. 	<p>Fri 11/3: <i>Discussion group B, meeting 4</i> <u>Social Security I: Institutional Details and Theory</u></p> <ul style="list-style-type: none"> • # Jonathan Gruber. "Social Security." Chapter 13 of <i>Public Finance and Public Policy</i>, Worth Publishers, 2005. • * John Geanakoplos, Olivia S. Mitchell, and Stephen P. Zeldes. "Would a Privatized Social Security System Really Pay a Higher Rate of Return?" From <i>Framing the Social Security Debate: Values, Politics, and Economics</i>, edited by R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell, Brookings Institution Press, 1998. • # Andrew Eschtruth And Robert Triest, "National Saving And Social Security Reform," <i>Just the Facts on Retirement Issues</i>, Center for Retirement Research at Boston College, April 2005.
<p>Mon 11/6: <i>Discussion group A, meeting 5</i> <u>Education in developing countries</u></p> <ul style="list-style-type: none"> • Esther Duflo and Rema Henna, "Monitoring Works: Getting Teachers to Come to School." NBER Working Paper No. 11880, December 2005. • David P. Coady and Susan W. Parker. "Cost Effectiveness Analysis of Demand and Supply-Side Education Interventions: the Case of Progresa in Mexico." <i>Review of Development Economics</i>, 2004. 	<p>Wed 11/8: <i>Discussion group B, meeting 5</i> <u>Social Security II : Empirical Evidence and Simulation Analysis</u></p> <ul style="list-style-type: none"> • Barry Bosworth and Gary Burtless. "Pension Reform and Saving." <i>National Tax Journal</i>, September 2004. • * Martin Feldstein and Elena Rangeulova. "Individual Risk in an Investment-Based Social Security System." <i>American Economic Review</i>, September 2001.

Discussion Track A	Discussion Track B
<p>Fri 11/10: <i>Discussion group A, meeting 6</i> <u>Income Inequality</u></p> <ul style="list-style-type: none"> • # Harvey Rosen. "Income Redistribution: Conceptual Issues." from Public Finance, 7th edition, McGraw-Hill 2005. • # "The Leaky Bucket Experiment" from Equality and Efficiency: The Big Tradeoff by Arthur Okun. Washington: The Brookings Institution, 1975. pp. 91-100. • Emmanuel Saez. "Income and Wealth Concentration in Historical and International Perspective." Working Paper, UC Berkeley, 2004. 	<p>Mon 11/13: <i>Discussion group B, meeting 6</i> <u>Environment</u></p> <ul style="list-style-type: none"> • Kenneth Chay and Michael Greenstone. "Does Air Quality Matter? Evidence from the Housing Market." <i>Journal of Political Economy</i>, 2005. • Kenneth Chay and Michael Greenstone. "The Impact Of Air Pollution On Infant Mortality: Evidence From Geographic Variation In Pollution Shocks Induced By A Recession." <i>Quarterly Journal of Economics</i>, August 2003.
<p>Wed 11/15: <i>Discussion group A, meeting 7</i> <u>Taxes and Labor Supply in the U.S.</u></p> <ul style="list-style-type: none"> • Nada Eissa. "Taxation and Labor Supply of Married Women: The Tax Reform Act of 1986 as a Natural Experiment." NBER Working Paper No. 5023, February 1995. • Austan Goolsbee. "What Happens When You Tax the Rich? Evidence from Executive Compensation." <i>Journal of Political Economy</i>, April 2000. 	<p>Fri 11/17: No class, research paper progress report due, 4:00PM.</p> <hr/> <p>Mon 11/20: <i>Discussion group B, meeting 7</i> <u>Poverty, Housing, and Neighborhood Effects in the U.S.</u></p> <ul style="list-style-type: none"> • Jeffrey R. Kling, Jeffrey B. Liebman, and Lawrence F. Katz. "Experimental Analysis Of Neighborhood Effects." NBER Working Paper 11577, August 2005. • Brian A. Jacob, "Public Housing, Housing Vouchers, and Student Achievement: Evidence from Public Housing Demolitions in Chicago" <i>American Economic Review</i>, March 2004.
<p>Wed 11/22: No class: Thanksgiving Break</p>	<p>Fri 11/24: No class: Thanksgiving Break</p>

Discussion Track A	Discussion Track B
<p>Mon 11/27: <i>Discussion group A, meeting 8</i> <u>Cross-Country Evidence on the Economic Effects of Taxes</u></p> <ul style="list-style-type: none"> • Alberto Alesina, Edward Glaeser, and Bruce Sacerdote. "Work and Leisure In The U.S. and Europe: Why So Different?" NBER Working Paper No. 11278, April 2005. • Young Lee and Roger Gordon. "Tax Structure and Economic Growth," <i>Journal of Public Economics</i>, 2005. 	<p>Wed 11/29: No class</p>
<p>Fri 12/1: No class. Research paper tables due, 4:00 PM.</p>	<p>Mon 12/4: <i>Discussion group B, meeting 8</i> <u>Crime in the U.S.</u></p> <ul style="list-style-type: none"> • Steven D. Levitt. "Understanding Why Crime Fell in the 1990s: Four Factors that Explain the Decline and Six that Do Not." <i>Journal of Economic Perspectives</i>, Winter 2004. • Steven D. Levitt. "The Effects of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Legislation." <i>Quarterly Journal of Economics</i>, May 1996.
<p>Wed 12/6: <i>Discussion group A, meeting 9</i> <u>Tax Evasion in Developing and Transition Economies</u></p> <ul style="list-style-type: none"> • # Jonathan Gruber, "Tax Evasion," from Ch. 25 of <i>Public Finance and Public Policy</i>, Worth Publishers, 2005, pp. 691-696. • Raymond Fisman and Shang-Jin Wei. "Tax Rates and Tax Evasion: Evidence from 'Missing Imports' in China." <i>Journal of Political Economy</i>, 2004. • Anna Ivanova, Michael Keen and Alexander Klemm, "The Russian Flat Tax Reform." <i>Economic Policy</i>, July 2005. 	<p>Fri 12/8: <i>Discussion group B, meeting 9</i> <u>Political Economy: Money and Politics in the U.S.</u></p> <ul style="list-style-type: none"> • Steven Levitt. "Using Repeat Challengers to Estimate the Effect of Campaign Spending on Election Outcomes in the U.S. House." <i>Journal of Political Economy</i>, August 1994. • Steven Levitt and James M. Snyder. "The Impact of Federal Spending on House Election Outcomes." <i>Journal of Political Economy</i>, February 1997.