

Economics 457: Public Economics Research Seminar
Preliminary Syllabus and Schedule
Spring 2010

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Class meets: 11:00AM-12:15PM M, W
Office hours:
Tues. 1:30-3:30PM
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. Because a major goal of the course is to help you produce an original research project, the specific topics to be covered and emphasis in rest of the course will depend partly on the interests of the students in the class. I will offer you a menu of general topics from across the spectrum of the field of public economics, including such issues as: income inequality and the costs and benefits of redistributive taxation; education; the environment; crime; political economy; corruption; social security; health care; behavioral public economics; and aid to the poor. Partly based on responses to a student survey on the first day of class, I will assemble a final syllabus including some subset of those topics. 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

The first four class meetings (not counting today's organizational meeting) during September 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. In each of the next 16 class meetings after that, we will typically discuss one or

two empirical journal articles on a public economics topic that address interesting policy questions and illustrate various clever methods of gleaning relatively credible evidence from the “natural experiments” that the world gives us (there may be another Stata lab thrown in there as well). The final 4 class meetings are tentatively reserved for student presentations of research projects.

Course requirements

Class participation [20% of grade]. 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 constructively to the discussion in each class. You can expect that I will sometimes ask questions of specific students rather than relying entirely on volunteers. My purpose is to encourage broad participation in the discussion and to maintain an incentive to do the reading on time. Both attendance and constructive contributions to discussion will play critical roles in your participation grade.

Empirical exercises [5% of grade] In the early part of the course, there will be 2 or 3 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.

2 long (approximately 6 page) and 2 short (approximately 3 page) response papers. [25% of grade] Response papers are due by the beginning of the class in which we discuss the article. You will be asked to write response papers of different types – at least one that makes the case for why a study is relatively convincing, at least one that focuses on critiquing the original article, and at least one that comes up with a follow-up research idea or that discusses another article that challenges or corroborates the one you are writing about. Detailed guidelines for the response papers will be distributed in an upcoming class. You will have a choice regarding which papers to write about, but must write at least one long and one short response paper before spring break.

One original empirical research paper / proposal. [50% of grade] You will write a final research paper on a public economics topic of your choosing. The final product should be approximately 20 pages, double spaced, and must involve at least some original analysis of data. **You may either write a paper on your own, or you may co-author the paper with one other student.** In the case of co-authorship, both students will receive that exact same grade on the project,

and I expect the paper to be more in depth (i.e., probably more pages). The paper will be built up in stages over the course of the term. The stages include:

- You must submit 2 or 3 tentative ideas for research questions to me by Friday March 5th by 4pm.
- A detailed proposal and annotated bibliography is due to me by Friday March 19 at 4pm. Clearly state your research question, explain why it is interesting, and describe how you plan to go about investigating the question. What data set will you use? What empirical specification do you have in mind? You should meet with me during office hours prior to submitting this proposal
- A table illustrating descriptive statistics from your data is required by Friday April 23.
- An optional rough draft may be submitted by Friday May 7.
- A revised final draft of the research paper, responding to my comments on the December 1 draft, will be due on Friday May 21.

All of the required steps in the research project will count towards the final grade on your project, and failure to submit any of them will adversely affect the grade. 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 a regular semester course 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.
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.

Course readings

There is no textbook for this course. All assigned readings will be posted on Blackboard, and will be distributed in printed course packets at various points in the semester. The readings for the first four class meetings are available now on Blackboard and in a printed course packet available from the course packet room (North Academic Building Room 026).

Honor code guidelines

All of the normal Williams Honor Code guidelines regarding proper use of citations and quotations will apply in this course. All writing submitted for this course must be your own, original, new writing. If you wish to build on a paper written for another course taken for credit, you must get my prior approval. Students should use the University of Chicago Author – Date method of citation. For further information, please see the tutorial available at:

<http://www.williams.edu/resources/acad_resources/survival_guide/CitingDoc/CitingContents.php>

Teaching assistant

The teaching assistant for this course is Daniel Kenefick <Daniel.W.Kenefick@williams.edu>. Daniel is enrolled concurrently in the course, and will not be doing any grading. His role will be to help you with computer programming and Stata problems. I'll provide further details regarding how that will work at a later date.

Preliminary schedule

1	Fri Feb 5	Introduction	<ul style="list-style-type: none"> No required reading.
2	Mon Feb 8	Quasi-experiments in public economics	<ul style="list-style-type: none"> Gruber, Jonathan. 2010. "Empirical Tools of Public Finance," Ch. 3 from <i>Public Finance and Public Policy</i>, 3rd edition, New York: Worth Publishers, pp. 63-90. Eissa, Nada, and Jeffrey B. Liebman. 1996. "Labor Supply Response to the Earned Income Tax Credit." <i>Quarterly Journal of Economics</i>. Vol. 111, no. 2. Excerpt, pp. 605-618.
3	Wed Feb 10	Fixed effects	<ul style="list-style-type: none"> Stock, James and Mark Watson. 2007. "Regression with Panel Data." Ch. 10 from <i>Introduction to Econometrics</i>, 2nd ed. Boston: Pearson Education, pp. 349-382.
4	Mon Feb 15	Instrumental variables	<ul style="list-style-type: none"> Stock, James and Mark Watson. 2007. "Instrumental Variables Regression." Ch. 12 from <i>Introduction to Econometrics</i>, 2nd ed. Boston: Pearson Education, pp. 421-467.
5	Wed Feb 17	Stata lab -- Class will meet in Jessup 205	
6	Mon Feb 22	Regular class meeting	
7	Wed Feb 24	Regular class meeting	
8	Mon Mar 01	Regular class meeting	
9	Wed Mar 03	Regular class meeting	
	Fri Mar 5	Tentative research question ideas due	
10	Mon Mar 08	Regular class meeting	
11	Wed Mar 10	Regular class meeting	
12	Mon Mar 15	Regular class meeting	
13	Wed Mar 17	Regular class meeting	
	Fri Mar 19	Research proposal due	
Spring break			
14	Mon Apr 5	Regular class meeting	
15	Wed Apr 7	Regular class meeting	
16	Mon Apr 12	Regular class meeting	
17	Wed Apr 14	Regular class meeting	
18	Mon Apr 19	Regular class meeting	
19	Wed Apr 21	Regular class meeting	
20	Mon Apr 26	Regular class meeting	
21	Wed Apr 28	Regular class meeting	
22	Mon May 3	Research presentations	
23	Wed May 5	Research presentations	
	Fri May 7	Optional rough draft of research project	
24	Mon May 10	Research presentations	
25	Wed May 12	Research presentations	
	Fri May 21	Final research paper due	

Some potential topics

Income inequality and the costs and benefits of redistributive taxation

- Why do Europeans work so much less than Americans?
- What are the causes of increasing income inequality, especially at the top?
- Evidence on the efficiency costs of taxation
- Can state governments redistribute income?

Education: evidence on...

- School choice and competition
- Teacher incentives
- School finance reform

The Environment

- Quasi-experimental approaches to estimating externalities and the costs and benefits of environmental policies.

Crime

- Evidence on the effects of public policy on crime

Political economy

- Evidence on the role of money in politics

Corruption

- Evidence on what works in fighting corruption in developing countries

Behavioral public economics

- Evidence on public policies affecting behavior where self-control is a problem, e.g., smoking, obesity, drinking, saving

Aid to the poor

Social security

Health care

Economics 457: Public Economics Research Seminar
Schedule of topics and readings, Feb. 22 – end of semester
Prof. Bakija, Spring 2010

Below are listed the set of topics and reading assignments for classes between Feb. 22 and the end of the semester. All students are expected to attend all classes up to and including Wednesday March 3rd. Classes between Monday March 8th and Wednesday April 28th will be divided into six “modules” each lasting one week and each addressing a different general topic. Each student should select four of these six modules to attend; the other two weeks should be used to work on your original empirical research project. (You’re welcome to attend more than 4 modules if you’d like, of course). **Please tell me by e-mail which 4 modules you would like to participate in by 4:00pm Friday March 5th.**

Readings marked with an asterisk (*) are original econometric analyses; at least 3 of your 4 response papers should focus mainly on responding to or considering follow-up research ideas that are somehow related to those original econometric analyses, although often it will make sense to consider the implications of the other readings for the econometric paper in question as well.

ENVIRONMENT

Mon Feb 22 -- Environment 1: measuring the benefits and costs of environmental policies [All attend]

* Chay, Kenneth Y., and Michael Greenstone. 2003. "Air Quality, Infant Mortality, and the Clean Air Act of 1970." NBER Working Paper 10053 (October).

Wed Feb 24 -- Environment 2: measuring the benefits and costs of environmental policies [All attend]

* Greenstone, Michael, and Justin Gallagher. 2008. "Does Hazardous Waste Matter? Evidence from the Housing Market and the Superfund Program." *Quarterly Journal of Economics* 123, no. 3: 951-1003.

Mon Mar 01 -- Environment 3: the economic effects of climate change [All attend]

* Dell, Melissa, Benjamin Jones, and Benjamin Olken. 2009. "Temperature Shocks and Economic Growth: Evidence from the Last Half Century." Working Paper (December).

Tol, Richard S. J. 2009. "The Economic Effects of Climate Change." *Journal of Economic Perspectives* 23, no. 2: 29-51.

DeLong, Brad. 2006. "The Stern Review on Global Climate Change Once Again." Dec. 30. <http://delong.typepad.com/sdj/2006/12/the_stern_revie.html>

EDUCATION: INTRODUCTION

Wed Mar 03 -- Education in the U.S., part 1: "Tiebout Competition" – Do People Vote with Their Feet? [All attend]

Gruber, Jonathan. 2010. "Optimal Fiscal Federalism." From *Public Finance and Public Policy*, 3rd edition, New York: Worth Publishers, pp. 267-275.

Hoxby, Caroline. 1998. "What Do America's 'Traditional' Forms of School Choice Teach Us about School Choice Reforms?" *Federal Reserve Board of New York Economic Policy Review*, March 1998 [Excerpt, p. 48 and pp. 51-53]

* Sandra Black, "Do Better Schools Matter? Parental Valuation of Elementary Education." *Quarterly Journal of Economics*, May 1999.

MODULE 1 – EDUCATION REFORM IN THE U.S.

Mon Mar 08 -- Education in the U.S., part 2: School Choice

* Abdulkadiroglu, Atila, Joshua Angrist, Susan Dynarski, Thomas J. Kane, and Parag Pathak. 2009. "Accountability and Flexibility in Public Schools: Evidence from Boston's Charters and Pilots." NBER Working Paper No. 15549 (November).

Caroline Hoxby. 2005. "School Choice: The Three Essential Elements and Several Policy Options." Keynote speech delivered June 30th to the New Zealand Association of Economists 46th Annual Conference 2005, Christchurch, New Zealand.

Wed Mar 10 – Education in the U.S., part 3: School Choice Continued; School Finance Reform

* Rothstein, Jesse M. 2006. "Good Principals or Good Peers? Parental Valuation of School Characteristics, Tiebout Equilibrium, and the Incentive Effects of Competition among Jurisdictions." *American Economic Review*. 96, no. 4: 1333.

Gruber, Jonathan. 2010. "Redistribution across Communities." From *Public Finance and Public Policy*, 3rd edition, New York: Worth Publishers, pp. 267-275.

MODULE 2 – EDUCATION IN DEVELOPING COUNTRIES

Mon Mar 15 – Education in Developing Countries, Part 1: Getting Students (and Teachers!) to Come to School

* Duflo, Esther, Rema Hanna, and Stephen Ryan. 2009. "Incentives Work: Getting Teachers to Come to School." Working Paper, Nov. 16th.

* Coady, David P., and Susan W. Parker. 2004. "Cost-Effectiveness Analysis of Demand- and Supply-Side Education Interventions: The Case of PROGRESA in Mexico." *Review of Development Economics* 8, no. 3: 440-451.

Wed Mar 17 – Education in Developing Countries, Part 2: The Impact of HIV / AIDS

* Fortson, Jane G. 2009. "Mortality Risk and Human Capital Investment: The Impact of Hiv/Aids in Sub-Saharan Africa." Forthcoming, *Review of Economics and Statistics*.

Fri Mar 19, 4pm -- Research proposal due

MODULE 3 – TAXATION, INEQUALITY, AND REDISTRIBUTION

Mon Apr 5 -- Taxation and Labor Supply: Why do Americans Work So Much more than Europeans?

Clement, Douglas. 2003. "European Vacation." *Federal Reserve Bank of Minneapolis: The Region*. December 2003.

* Alesina, Alberto, Edward Glaeser, and Bruce Sacerdote. 2005. "Work and Leisure In The U.S. and Europe: Why So Different?" *NBER Macroeconomics Annual*, Vol. 20 Issue 1.

Wed Apr 7 – Why Has Income Inequality Increased So Much?

Bakija, Jon and Brad Heim. 2009. "Jobs and Income Growth of Top Earners and the Causes of Changing Income Inequality: Evidence from U.S. Tax Return Data" Working Paper.

* Roine, Jesper, Jonas Vlachos, and Daniel Waldenstrom. 2009. "The Long-Run Determinants of Inequality: What Can We Learn from Top Income Data?" *Journal of Public Economics* 93, no. 7-8: 974-988.

MODULE 4 -- CRIME

Mon Apr 12 -- Effects of Imprisonment on Crime Rates, and Why did Crime Fall So Much in the 1990s?

* Steven D. Levitt. 1996. "The Effects of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Legislation." *Quarterly Journal of Economics*, v. 111, iss. 2 (May) pp. 319-51.

Levitt, Steven D. 2004. "Understanding Why Crime Fell in the 1990s: Four Factors that Explain the Decline and Six that Do Not." *Journal of Economic Perspectives*, v. 18, iss. 1 (Winter) pp. 163-90.

Wed Apr 14 -- How Does Crime Respond to Incentives? / Ideas for Reform.

* Lee, David S., and Justin McCrary. 2005. "Crime, Punishment, and Myopia." NBER Working Paper No. 11491.

Kleiman, Mark. 2009. *When Brute Force Fails: How to Have Less Crime and Less Punishment*. Princeton: Princeton University Press. [Excerpt, Chapters 1, 5, and 6.]

MODULE 5 – CORRUPTION IN DEVELOPING COUNTRIES

Mon Apr 19 – Corruption in Developing Countries, Part I

Fisman, Raymond and Edward Miguel. 2008. *Economic Gangsters: Corruption, Violence, and the Poverty of Nations*. Princeton, NJ: Princeton University Press, [Excerpt, pp. 1-21, 53-63 and 66-75]

* Mishra, Prachi, Arvind Subramanian, and Petia Topalova. 2008. "Tariffs, Enforcement, and Customs Evasion: Evidence from India." *Journal of Public Economics* 92, no. 10-11: 1907-1925.

Wed Apr 21 – Corruption in Developing Countries, Part II

* Fisman, Raymond. 2001. "Estimating the Value of Political Connections." *American Economic Review* 91, no. 4: 1095-1102.

* Reinikka, Ritva, and Jakob Svensson. 2009. "The Power of Information in Public Services: Evidence from Education in Uganda." Forthcoming, *Journal of Public Economics*.

MODULE 6 – BEHAVIORAL PUBLIC ECONOMICS AND HEALTH

Mon Apr 26 – Why has Obesity Increased so Much?

Cutler, David M., Edward L. Glaeser, and Jesse M. Shapiro. 2003. "Why Have Americans Become More Obese?" *Journal of Economic Perspectives* 17, no. 3: 93-118.

* Zhao, Zhenxiang, and Robert Kaestner. 2009. "Effects of Urban Sprawl on Obesity." NBER Working Paper No. 15436.

Taubes, Gary. 2002. "What if it's all been a Big Fat Lie?" *New York Times Magazine*, July 7.

Wed Apr 28 – Do Cigarette Taxes Make Smokers Happier? / Should Public Policy Respond to Behavioral Biases?

Gruber, Jonathan H., and Sendhil Mullainathan. 2005. "Do Cigarette Taxes Make Smokers Happier?." *B.E. Journal of Economic Analysis and Policy: Advances in Economic Analysis and Policy* 5, no. 1: 1-43.

Gruber, Jonathan. 2010. "The Economics of Smoking" and "The Economics of Other Addictive Behaviors." From *Public Finance and Public Policy*, 3rd edition, New York: Worth Publishers, pp. 165-177.

- Mon May 3 Research presentations
- Wed May 5 Research presentations
- Fri May 7 Optional rough draft of research project
- Mon May 10 Research presentations
- Wed May 12 Research presentations
- Fri May 21 Final research paper due