UNIVERSITY OF TORONTO
DEPARTMENT OF ECONOMICS

ECONOMICS 2601H1S – SPRING 2015

PUBLIC ECONOMICS II

Course Description:

This course is the second in a two-part graduate sequence in Public Economics. (The first part is not a pre-requisite.) We will focus on externalities, public goods theory, the theory and empirics of local public goods provision (especially, education), and environmental issues (air pollution, deforestation, and – not least – global warming).

The course is designed to introduce you to the (mainly) microeconomic analysis of issues in Public Economics. It has four goals: first, to familiarize you with some basic theory that students of Public Economics should know; second, to acquaint you with some relevant empirical methods, including the way that theory and empirics can be combined in something called a structural model; third, to give you experience critiquing existing research; and fourth, to introduce you to some of the interesting – fascinating, even – work in the field, with a view to identifying promising areas for future research, including research that you yourself might carry out.

For those of you who are wondering whether this might be the course for you (or not), please go to:

http://homes.chass.utoronto.ca/~mcmillan/reasons_for_taking.pdf

If you are an MA student, the following information is relevant:

http://homes.chass.utoronto.ca/~mcmillan/ma_course_selection.pdf

[In short, this course is intended to be stimulating (and even empowering) for both MA and Ph.D. students! (Money back if it isn't…)]

Instructor:

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The course web page will be used to make course-related announcements, post questions about papers we are scheduled to discuss in class, and provide some sample problems.

Lectures:

Tuesday 4:00pm – 6:00(+)pm in WW119.

Office hours will be held directly after class (or email me to fix a time).

Grading:

Final Examination	51%
Short Homework Assignments (4)	12%
Referee Reports (2)	20%
Class Participation	17%

The final examination for the course will take place sometime in early/mid April. It will be based heavily on the material we cover in the course, including the papers discussed in class (see below). In preparation for the final, I will post sample problems on the course website to give you a feel for the sorts of question that may appear.

There will be four short homework assignments, each worth 3 percent of the overall grade. I will give these out during class: they will be due back the following week. Their purpose is to get you to engage with the material being covered at that point. (There may be some purely 'bonus' assignments too.)

We will spend an increasing proportion of time as the course progresses discussing interesting or important (or both) papers in the field, listed in the Course Outline below. I will distribute a set of questions related to each paper beforehand to provide a basis for class discussion. Please read these papers carefully, and work through the corresponding questions. As incentives for doing so, some of these questions will appear on the final exam, and the "Class Participation" component of the overall grade will be based in part on your contribution to the class discussion.

It will have other parts also. These include quick micro-assignments (worth one percent of the overall grade) and mini-presentations based on the assigned questions from the readings. (When students have done the mini-presentations in the past, they have typically been *great*.) We will also design an experiment!

To ensure that your critiquing skills are on track, I will be assigning two referee reports for you to write. One of these will be handed out in mid-February; you will have a couple of weeks to work on it. The second will be assigned in March and will be due in on or before the last day of class. Together, the assignments are worth 20 percent of the total grade: 8 percent for the first and 12 percent for the second.

There is a paper (optional for MA students, not optional for Ph.D.'s) that can be substituted, in part, for the Final Examination. This is intended for students who wish to get to grips with a strand of literature in Public Economics and to think seriously about improving it. Under this option, a good research paper would identify an interesting research topic in the field, pose a clear research question, demonstrate that the question remains unanswered, and propose a sensible way of answering it. (If a theory, for example, you would set out and work through a model.) Students interested in carrying out research in Public Economics are strongly encouraged to pursue this option, and all Ph.D. students *must* pursue this. [Aside: in the past, students have produced some first-rate term papers for the class.] Any students wishing to pursue this option should make sure they speak to me about their proposed project before the end of February, but the sooner the better.

Textbooks:

For the first part of the course, I will refer to sections from

Cornes, Richard and Todd Sandler, *The Theory of Externalities, Public Goods and Club Goods*, Second Edition, Cambridge, 1996.

Laffont, Jean-Jacques, *Fundamentals of Public Economics*, MIT Press, 1988. (This is a great, concise book, by someone with a deep understanding of the fundamentals.)

Mas-Colell *et al.* Chapter 11 is also a valuable resource, as are other parts of this very comprehensive book. Budding microeconomists should read, and study, 'Mas-Colell' a lot. (Varian's *Microeconomic Analysis* book offers a concise treatment of several of the same topics. We will refer to Varian, especially at the front end.)

For econometric background,

Wooldridge, Jeffrey M., *Econometric Analysis of Cross Section and Panel Data*, MIT Press, 2002 (or more recent)

is an excellent reference. I would recommend students interested in carrying out empirical work in economics to buy a copy. (Wooldridge also has an introductory text that supplies lots of intuition, which is developed more formally in the graduate book listed above. Both books are worth owning, even though they are not cheap.)

I'd also recommend a book that covers the matter of how to write well, such as:

McCloskey, Dierdre N., *Economical Writing*, 2nd edition, Waveland Press, 2000.

Why? At some level, economics is a persuasive subject. In economics and in professional life more generally, a premium attaches to being able to write clearly and well. Thus you should practice, and pay lots of attention to, the art of writing. The McCloskey book gives some useful pointers.

And the *Economist* magazine is nothing short of essential reading for an applied microeconomist who wishes to be informed.

ECONOMICS 2601H1S – SPRING 2015

Graduate Public Economics

COURSE OUTLINE

The Lectures will cover the topics listed below. Disclaimer: We might not get right to the bottom of the list, the order is not strict (especially as we get lower down), and additional papers are likely to be added as we go along!

Starred (*) readings are recommended, providing useful background material. We will discuss readings marked with a **D** in class; please read them prior to the class discussion. For each of these, I will make a set of questions available beforehand to provide a basis for that.

All the '**D**' readings and all the starred readings can be borrowed from me. Most of the important readings listed below are also available online, especially in JSTOR, an online journal archive.

Topic 1: ***Preliminaries: Welfare Theorems***

*Cornes and Sandler, Chapter 2.

*Varian, Hal R. (1992), *Microeconomic Analysis*, 3rd Edition, Norton: Chapter 17 (and for a more general coverage including firms, see Chapter 18). (Mas-Colell *et al.* Chapters 10 and 16 are excellent also.)

Topic 2: ***Externalities - Theory***

Characterization of Externalities

*Cornes and Sandler, Chapter 3.

*Mas-Colell *et al.* Chapter 11.

Responses to Externalities

*Cornes and Sandler, Chapter 4.

*Mas-Colell *et al.* Chapter 11.

D Chu, C.Y. Cyrus and C. Wang (1998), "Economy of Specialization and Diseconomy of Externalities," *Journal of Public Economics*, **69**: 249-61.

*Farrell, Joseph (1987), "Information and the Coase Theorem," *Journal of Economic Perspectives*, **1**(2): 113-129.

D Kandel, Eugene and Edward P. Lazear (1992), "Peer Pressure and Partnerships," *Journal of Political Economy*, **100**(4): 801-817**.**

Topic 3: ***Measuring Externalities - Empirics***

Peer Effects in 'Production'

D Evans, William, Wallace Oates, and Robert Schwab (1992), "Measuring Peer Group Effects: A Study of Teenage Behavior," *Journal of Political Economy*, **100**: 966-991.

*Mas, Alexandre, and Enrico Moretti (2009), "Peers at Work," *American Economic Review*, **99**(1): 112-45.

Neighborhood Effects

D Borjas, George J. (1992), "Ethnic Capital and Intergenerational Mobility," *Quarterly Journal of Economics*, February: 123-50.

D Bertrand, Marianne, Erzo Luttmer, and Sendhil Mullainathan (2000), "Network Effects and Welfare Cultures," *Quarterly Journal of Economics*, August.

*Cutler, David and Edward Glaeser (1997), "Are Ghettos Good or Bad?" *Quarterly Journal of Economics*, August.

D Sethi, Rajiv and Rohini Somanathan (2004), "Inequality and Segregation," *Journal of Political Economy*, **112**(6), 1296-1321.

Katz, Lawrence F., Jeffrey R. Kling, and Jeffrey B. Liebman (2001), "Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment," *QJE*.

Network Effects

Lectures by Acemoglu and Jackson (2014) – these are fantastic!

Identification

*Angrist, Joshua D. and Alan B. Krueger (2001), "Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments," Princeton University Working Paper #455 (http://www.irs.princeton.edu).

D Gentzkow, Matt, and Jesse Shapiro (2014), posted at http://faculty.chicagobooth.edu/jesse.shapiro/research/transparent_identification.pdf

*Rust, John (2014)

Topic 4: ***Public Goods Theory***

*Samuelson, Paul (1954), "The Pure Theory of Public Expenditures," *Review of Economics and Statistics*, **36**: 387-9.

*Atkinson, Anthony B. and Joseph E. Stiglitz (1980), *Lectures on Public Economics*, Chapter 16, New York: McGraw-Hill.

Topic 5: ***Club Theory, Local Public Goods, and the Tiebout Hypothesis***

*Atkinson, Anthony B. and Joseph E. Stiglitz (1980), *Lectures on Public Economics*, Chapter 17, New York: McGraw-Hill.

*Rubinfeld, Daniel (1987), "The Economics of the Local Public Sector," *Handbook of Public Economics*, Vol. II, eds. by A. Auerbach and M. Feldstein, Elsevier, North Holland.

Benabou, Rolando (1993), "Workings of a City," *Quarterly Journal of Economics*, August: 619-652. (This is a brilliant paper, way ahead of its time.)

Topic 6: ***Valuing Local Public Goods***

D Black, Sandra E. (1999), "Do Better Schools Matter? Parental Valuation of Elementary Education," *Quarterly Journal of Economics*, May: 577-599.

*Bayer, Patrick, Fernando Ferreira, and Robert McMillan (2007), "A Unified Framework for Measuring Preferences for Schools and Neighborhoods," *Journal of Political Economy*, **115**(4): 588-638.

Topic 7: ***Competition and the Provision of Public Goods***

Theory

D Epple, Dennis, and Alan Zelenitz (1981), "The Implications of Competition among Jurisdictions: Does Tiebout Need Politics?" *Journal of Political Economy* **89**(6): 1197-1217.

*Henderson, J. Vernon (1985), "The Tiebout Model: Bring Back the Entrepreneurs," *Journal of Political Economy* **93**: 248-264.

Empirics

D Hoxby, Caroline Minter (2000), "Does Competition Among Public Schools Benefit Students and Taxpayers?" *American Economic Review* **90**(5): 1209-1238.

*Bayer, Patrick, and Robert McMillan (2011), "Choice and Competition in Local Education Markets," revised version of NBER Working Paper 11802.

Rothstein, Jesse (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**(4): 1333-1350.

Empirics: Estimating Equilibrium Models

Epple and Seig (1999), Bayer, McMillan and Rueben (2011).

Topic 8: ***Education***

The Technology

*Lazear, Edward P. (2001), "Educational Production," *Quarterly Journal of Economics*, August, **116**(3): 777-803.

*Todd, Petra E. and Kenneth I. Wolpin (2003), "On the Specification and Estimation of the Production Function for Cognitive Achievement," *Economic Journal*, **113**: F3-F33.

Class Size

Hanushek (1986), Krueger (1999), Krueger and Whitmore (2001), Angrist and Lavy (1999), Hoxby (2001), Jepsen and Rivkin (2009), Sims (2008), Chetty *et al.* (2011), and more…

Teacher Effects

Chetty *et al.* (2014a, b), Rivkin *et al.* (2005), and a lot more

Incentives

Barlevy and Neal (2010), Macartney (2014)

Decentralization

Clark (2009), Gilraine (2014)

Competition and Vouchers

*Nechyba, Thomas (2000), "Mobility, Targeting, and Private School Vouchers," *American Economic Review*, **90**(1): 130-146.

Topic 9: ***Environmental Issues***

Henderson (1996), Greenstone (2003), *Mueller, Mendelsohn and Nordhaus (2011), Boskovic (2015), etc.

Topic 10: ***Climate Change***

*Stern (2006), *Weitzman (2008), etc.

Topics 11+: ***Deforestation, Species Preservation, Infrastructure Investment, Choice of Social Discount Rate, (I mean, let's let democracy prevail: what do/does the majority want to cover?) etc.***