



## Urban Economics and Policy – PPHA 38720 – Syllabus

Time: MW 2.00 - 3.20

Kathryn Ierulli

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**Overview:** This course's objective is understanding the economics of cities. Applications of urban theory to policy are an integral part of the course and will be analyzed along with theoretical models.

Among the topics are: fundamental model of urban economics (where firms and workers live and work in a city and the costs of locations), pricing in urban land markets, neighborhood amenities, suburbanization, neighborhoods and segregation, urban transport history and funding, and urban agglomeration and the role of cities in economic growth. The course includes application of these concepts to major contemporary policy problems. This will be done through class lectures, class discussion, and class materials. Many of the policy applications will be seen in the student presentations at the end of the quarter.

**Contacts:** Kathryn Ierulli, [kierulli@uchicago.edu](mailto:kierulli@uchicago.edu). TAs: TBA. If you contact us by email please put PPHA 38720 in the subject line. Kathryn's office hours are 3.30 – 5pm on Wednesdays, room 2053. TA office hours are TBA.

**Grading: 30% project, 30% midterm, 40% final.** Your grade will be based on an in-class midterm in the 6<sup>th</sup> week, a final exam, and a course project. Class participation is expected, and includes reading the articles assigned for the class and being ready to discuss them.

**Course Project:** A major part of this course is a research project that will be due at the end of the course. The project will be on an urban policy topic. The group size for a team report is up to four persons. Each team will prepare a report on a topic chosen by the team that is related to urban economics. Each person on a team will receive the same grade for the team's report. **Work in groups  $\leq 4$  students**

Steps:

- choose a city and an urban policy/problem.
- find data that addresses this policy
- formulate an hypothesis
- use data to evaluate hypothesis
- reach a conclusion

Stage 1: write-up contains a *one-sentence* hypothesis, data source(s), and brief literature review, due Wednesday, October 23

Stage 2: write-up contains an empirical specification (for example, OLS, difference-in-difference, logits) with variable name descriptions and list of data source for each variable, due Wednesday, October 30

Stage 3: present research hypothesis, literature review, and empirical results in class, 9<sup>th</sup> week beginning November 25, 15-20 minutes per presentation

Stage 4: Turn in slides and final write-up (2-5 pages) by 4pm Monday, November 30

**Problem Sets:**

- 4 problem sets will be given, 2 before midterm, 2 after
- They will be ungraded but TAs will review answers in session
- Problem sets are a method to prepare for exams

**Exams**

- Exams are approximately 1/3 short-answer essay, 2/3 problems
- Midterm Wednesday, November 6, in class
- Non-graduating students – final at Harris’s scheduled time/place

**Detailed Harris Academic Dates for Autumn 2019**

|   |  |
|---|--|
| Autumn quarter begins   | Tuesday, October 1                                     |
| Add/drop deadline: Last day to change autumn course registration. In week 2 all changes must be made through advisor. | Friday, October 11 (5:00pm)<br><i>Friday of week 2</i> |
| Pass/Fail deadline autumn   | Monday, October 28 (9:00am)<br><i>Monday of week 5</i> |
| Thanksgiving (University Closed)  | Thursday-Friday, November 28-29                        |

**Regrade policy:** If you have a question about your grade, either on problem sets or exams, please make an appointment with me and have a discussion about it. If at the end of the discussion you feel you deserve more credit (or less, though I very rarely see this!) please turn in your paper to me, along with a paragraph explaining your reasoning. The only substantial differences I have ever seen in grades changing were addition errors. However, anything is possible.

**Academic integrity:** You are expected to abide by the University’s expectations regarding academic integrity. Please review this excerpt from the University’s Student Manual, <https://studentmanual.sites.uchicago.edu/Policies#Honesty>:

It is contrary to justice, academic integrity, and to the spirit of intellectual inquiry to submit another’s statements or ideas as one’s own work. To do so is plagiarism or cheating, offenses punishable under the University’s disciplinary system. Because these offenses undercut the distinctive moral and intellectual character of the University, we take them very seriously.

Proper acknowledgment of another’s ideas, whether by direct quotation or paraphrase, is expected. In particular, if any written or electronic source is consulted and material is used from that source, directly or indirectly, the source should be identified by author, title, and page number, or by website and date accessed. Any doubts about what constitutes “use” should be addressed to the instructor.

These expectations apply to papers, exams, and problem sets as well. Your submitted work represents your commitment that it is your own independent work, and that you have relied on no other individuals or resources, except as explicitly specified in the assignment instructions. If you have specific questions, contact me directly. With respect to sourcing from digital documents, read this article: <http://www.nytimes.com/2010/08/02/education/02cheat.html>

**Students with time accommodation:** Students requesting time accommodation should contact me to make arrangements. Please be prepared to share your documentation from the Dean of Students regarding appropriate accommodations.

**In-class protocol:** It is in everyone’s interest to have an engaged and participatory class. *To that end, I encourage students not to take notes on laptops during class.* I will make the slides I use available shortly before class, and if you need to, you may print them and take notes on them. However, an even better technique is to take notes by hand and go over the slides later. There is substantial neurological research that

understanding new material is greatly facilitated by actually writing material down. See, e.g.:  
<https://www.npr.org/2016/04/17/474525392/attention-students-put-your-laptops-away>  
<https://www.scientificamerican.com/article/a-learning-secret-don-t-take-notes-with-a-laptop/>

Finally, I realize that some students have strong reasons for using laptops in class. If you use one, please sit in the last row. Your screen is a distraction to everyone who sits behind you, and is a negative externality unless you are in the back.

**Required texts:**

1. *Lectures on Urban Economics*, Brueckner, Jan, MIT Press, 2011
2. *A Companion to Urban Economics*, Arnott & McMillen (eds.), Wiley, 2007
3. *Urban Economics and Real Estate, Theory and Policy*, 2<sup>nd</sup> edition, Wiley, 2007

**Policy on Readings:** I will include in lecture slides which chapters in texts and which journal or newspaper articles inform the lecture material. You are responsible for any such articles, chapters, etc. referred to in class.

**Organization:**

1. Introduction

- What is a city? Why do businesses and individuals locate there?

2. Model of a city

3. Urban amenities and residential valuation: What city characteristics do individuals value?

- The city as a consumption center and the measurement of amenities
- Hedonic valuation: How to value a house that has not been sold?
- Housing Externalities: How others affect the value of my house

4. Housing and real estate

- Real-estate trends: What determines the value of a house?
- Regulation: The impact of regulation on business and residential real estate

5. Congestion

- Transportation networks
- Commuting and the availability of workers and consumers

6. Agglomeration Forces

- Production Externalities: Firms learn from each other
- Dense labor markets: Better matching between firms and workers
- Suppliers and customers: Firms face lower overall transportation costs in cities
- The size distribution of firms and urban migration
- Industrial agglomeration and market concentration: Do industries cluster? What are the trends in concentration?

7. Urban population and skill sorting: Who lives where?

- Urban wage premium and learning: Living in a city affects your wage today and in the future
- Sorting and urban inequality

8. Urban growth and decline: Why it is easier to grow than to shrink?

- Housing and land supply
- Tiebout
- Gentrification: Up-and-coming neighborhoods and their characteristics
- Moving to opportunity and the investment component of location choices

## Background Readings

The articles listed below and others (as necessary) constitute background and supporting economic primary sources. You are not expected to read all of these articles, or even most of them. Some of these articles are difficult, but even if you do not follow all of the mathematics, skimming the articles and reading the abstract, introduction and conclusion can be valuable. You may be asked to select articles to read and review for one of the homework assignments.

## The Basic Urban Model

1. Brueckner, Jan, "The Structure of Urban Equilibria: A Unified Treatment of the Muth-Mills Model," *Handbook of Regional and Urban Economics*, Volume 2, Chapter 20, North-Holland 2000.
2. Glaeser, Edward L. and Joshua D. Gottlieb, "The Wealth of Cities: Agglomeration Economies and Spatial Equilibrium in the United States," *Journal of Economic Literature*, Vol. XLVII, No. 4 (2009) pp. 983-1028.
3. Holmes, Thomas J, "Structural, Experimentalist, And Descriptive Approaches to Empirical Work in Regional Economics," *Journal of Regional Science*, Vol. 50, No. 1, (2010) pp. 5–22.
4. Lucas, Robert and Estaban Rossi-Hansberg, "On the Internal Structure of Cities," *Econometrica*, 70 (2002) pp. 1445-1476.
5. Straszheim, Mahlon, "The Theory of Urban Residential Location" in Edwin Mills, ed. *Handbook of Regional and Urban Economics*, Volume 2, Chapter 18, North-Holland 2000.

## Sprawl

1. Burchfield, Mary; Overman, Henry G.; Puga, Diego; Turner, Matthew A., "Causes of Sprawl, a Portrait from Space," *Quarterly Journal of Economics*, Volume 121, Issue 2 (May 2006) pp. 587-633.
2. Glaeser, Edward and Matthew Kahn, "Sprawl and Urban Growth," Harvard Institute of Economic Research Working Paper #2004, 2003.
3. Lang, Robert and Jennifer LeFurgy, "Edgeless Cities: Examining the Noncentered Metropolis," *Housing Policy Debate*, 14 (2003) pp. 427-460.
4. Mieszkowski, Peter and Edwin S. Mills, "The Causes of Metropolitan Suburbanization," *Journal of Economic Perspectives*, 7 (1993) pp. 135-147.

## Amenities

1. Brueckner, Jan K.; Thisse, Jacques-Francois, and Yves Zenou, "Why is Central Paris Rich and Downtown Detroit Poor? An Amenity-Based Theory," *European Economic Review*, 43 (1999) pp. 91-107.
2. Cutler, David M.; Glaeser, Edward L; and Jacob Vigdor, "The Rise and Decline of the American Ghetto," *Journal of Political Economy*, 107 (1999) pp. 455-506.
3. Diamond, Douglas and George S. Tolley, *The Economics of Urban Amenities*. New York, NY: Academic Press, 1982.
4. Glaeser, Edward; Kahn, Matthew E. and Jordan Rappaport, "Why Do the Poor Live in Cities?," NBER Working Paper #7636, 2000.
5. Krysan, Maria and Reynolds Farley, "The Residential Preferences of Blacks: Do They Explain Persistent Segregation?," *Social Forces*, Vol. 80, No. 3 (March 2002) pp. 937-980.
6. LeRoy, Stephan, and Jon Sonstelie, "Paradise Lost and Regained: Transportation Innovation, Income, and Residential Segregation," *Journal of Urban Economics*, 13 (1983) pp. 67-89.
7. Logan, John R.; Stults, Brian J; and Reynolds Farley, "Segregation of Minorities in the Metropolis: Two Decades of Change," *Demography*, Vol. 41, No. 1 (Feb., 2004) pp. 1-22.
8. Storper, Michael and Allen J. Scott, "Rethinking Human Capital, Creativity and Urban Growth," *Journal of Economic Geography*, 9 (2009) pp. 147–167.
9. Wheaton, William, "Income and Urban Residence: An Analysis of Consumer Demand for Location," *American Economic Review*, 67 (1977) pp. 620-31.

## Housing

1. Henderson, J.V. and Y.M. Ionides, "A Model of Housing Tenure Choice," *American Economic Review*, 73 (1983) pp. 98-113.
2. Levitt, Steven and Chad Syverson, "Market Distortions when Agents are Better Informed: A Theoretical and Empirical Exploration of the Value of Information in Real Estate Transactions," Working Paper, 2002
3. Shear, William and George S. Tolley, eds. *Housing Dynamics and Neighborhood Change*. Mt. Pleasant, MI: The Blackstone Company, 1986.

## Urban Transport

1. Brownstone, David and Kenneth A. Small, "Valuing Time and Reliability: Assessing the Evidence from Road Pricing Demonstrations," *Transportation Research Part A* 39 (2005) pp. 279–293.
2. De Palma, Andre and Nathalie Picard, "Route Choice Decision under Travel Time Uncertainty," *Transportation Research Part A* 39 (2005) pp. 295–324.
3. Parry, Ian W.H., "Comparing the Efficiency of Alternative Policies for Reducing Traffic Congestion," *Journal of Public Economics*, 85 (2002) pp. 333–362.
4. Parry, Ian W.H., "Pricing Urban Congestion," *Resources for the Future*, (November 2008) pp. 8-25.
5. Small, Kenneth A, "Road Pricing and Public Transport," *Research in Transportation Economics*, 9, (2004) pp. 133–158.

## Global Urbanization

1. Gyourko, Joseph, Christopher Mayer, and Todd Sinai, "Superstar Cities," June 16, 2006. Working Paper, [http://www2.gsb.columbia.edu/faculty/cmayer/Papers/superstar\\_cities\\_final.pdf](http://www2.gsb.columbia.edu/faculty/cmayer/Papers/superstar_cities_final.pdf).
2. Irwin, Elena G; Bell, Kathleen P; Bockstael, Nancy E; Newburn, David A; Partridge, Mark D; and Junjie Wu, "The Economics of Urban-Rural Space," *Annual Review of Resource Economics*, 1 (2009) pp. 435–59.

## Regional Analysis with and without Externalities and Agglomeration

1. Chatterjee, Satyajit, "Agglomeration Economies: The Spark that Ignites a City?," *Federal Reserve Bank of Philadelphia Business Review* (2003) pp. 6-13.
2. Crihfield, John and George S. Tolley, "City Size and Place as Policy Issues," *Handbook of Regional and Urban Economics*, Volume II edited by E.S. Mills, Chapter 33. Holland: Elsevier Science Publishers, 1987.
3. Davis, Donald and David Weinstein, "Bones, Bombs, and Break Points: The Geography of Economic Activity," *American Economic Review*, 92 (2002) pp. 1269-1289.
4. Gardner, John, Philip E. Graves, and George S. Tolley, *Urban Growth Policy in a Market Economy*. New York, NY: Academic Press, 1979.
5. Henderson, Vernon, "Marshall's Scale Economies," *Journal of Urban Economics*, 53 (2003) pp. 1-28.
6. Krugman, Paul, "Increasing Returns and Economic Geography," *Journal of Political Economy*, 99 (1991) pp. 483-499.
7. Krumm, Ronald and George S. Tolley, "Regional Economics," *The New Palgrave: A Dictionary of Economics*, (1987) pp. 117-120.
8. McGregor, Rob and Gaines Liner, "Municipal Economic Growth, 1960-1990," *Quarterly Journal of Business and Economics*, 41 (2002) pp. 105-116.
9. Meijers, Evert, "Clones or Compliments? The Division of Labour between the Main Cities of the Randstad, the Flemish Diamond and the RheinRuhr Area," *Regional Studies*, Vol. 41, No. 7, (October 2007) pp. 889–900.
10. Quigley, John M., "Urban Diversity and Economic Growth," *Journal of Economic Perspectives*, 12, (1998) pp. 127-138.

11. Rudzitis, Gundars, "Amenities Increasingly Draw People to the Rural West," *Rural Development Perspectives*, 14, (1999) pp. 9–13.
12. Saito, Hisamitsu and JunJie Wu, "Agglomeration, Congestion, and U.S. Regional Disparities in Employment Growth," *Journal of Regional Science*, Vol. 56, No. 1 (2016) pp. 53-71.
13. Tolley, George S., "Welfare Economics of City Bigness," *Journal of Urban Economics*, 1 (1974) pp. 324-345.

### **Recent Influences on Urban and Regional Thinking**

1. Jacobs, Jane, Introduction, *The Death and Life of Great American Cities*, Vintage Books, 1992, (first published 1961).

### **Politics**

1. Cheshire, Paul and Stephen Sheppard "The Welfare Effects of Land Use Planning," *Journal of Urban Economics*, 52 (2002) pp. 242-269.
2. Davis, James and J. Vernon Henderson "Evidence on the Political Economy of the Urbanization Process," *Journal of Urban Economics*, 53 (2003) pp. 98-125.