Syllabus for Graduate Urban Economics (updated 2/20/2018)

Course Info:

- Class Location, Time, Contact Info: 四教, room 201, Thursdays, 13:20-16:10; nschiff@gmail.com
- Office Hours: Monday/Wednesday 11:00-12:00, room 304 (or by appointment)
- Teaching Assistant:
- Text: no textbook, lectures and readings on my webpage: https://nathanschiff.com

Course Description: In this course we focus on canonical theories of urban economics and recent empirical evidence in support of these theories.

- *Topics*: We start by considering land use and residential location in a single city and the role of transportation costs. Next we study an individual's location choice across cities and neighborhood choice within cities. We then examine reasons for the existence of cities, focusing on geographic concentration of industry and why concentration can lead to higher productivity. We follow this with measurement of the geographic concentration of industries and explore empirical methods for working with spatial data. Next we consider ideas from Trade in explaining the spatial distribution of economic activity (New Economic Geography) and read recent empirical papers based on these ideas. We finish the course by considering the role of consumer amenities in location choice and the use of website-based datasets in amenity measurement. Throughout the course we will look at empirical evidence for the theories we read, alternating theory classes with empirical classes and often focusing on evidence from China.
- *Focus on China*: China is undergoing a period of massive urbanization and is the country with the largest number of cities with a population above 1 million. Many of the classical topics in urban economics, such as the tradeoff between agglomeration economies and congestion externalities, are particularly salient in China. Further, specific characteristics of Chinese institutions and policies, such as the hukou (户口) system, make some aspects of its urban development differ from those of North America and Europe. This makes China a fruitful subject for urban economic research.

Course Objectives: An important overall objective of this course is to help prepare students for research and therefore there will be an emphasis on developing each student's own research idea (see evaluation). After completing this course the student will have an understanding of how economic theory guides research on cities and how current researchers approach empirical urban economics questions, including some of the specific issues and methods of working with spatial data.

Course Prerequisites: This course will cover both applied theory and empirical applications and should be suitable for any PhD students and advanced masters students. The urban economics theory models we cover are straightforward and simpler than material discussed in a first year microeconomic theory PhD class. The empirical papers we discuss will use a range of techniques to deal with endogeneity and therefore students should be familiar with the most common identification strategies, such as instrumental variables or regression discontinuity design.

Course Assessment (*tentative*): Research Proposal (40%), Midterm Research Outline (20%), Referee Reports and Homework (30%), Class Attendance and Participation (10%)

- ***Research Proposal and Midterm Outline***: Since this course aims to encourage student research, students are required to hand in a well-developed research proposal, complete with a literature review and preliminary analysis, at the end of the class. Topics should be related to subjects covered in this course but do not have to be exclusively urban economics questions; for example, Labor Economics students can propose research projects on labor topics that utilize spatial data or deal with cross-city issues. In the middle of the semester students must submit an outline of their research idea; I will grade this as the midterm and provide feedback and suggestions.
- ***Homework***: There will be two mock referee reports, problem set(s) on theory or estimation topics, and possibly a brief presentation of a recent paper in Urban Economics.

Tentative Schedule by Week (16 weeks)

Date	Week	Topic	Reading 1	Reading 2
3/1/2018	1	Introduction; Urbanization	Chauvin, Juan Pablo, Glaeser, Edward, Ma, Yueran, and Tobio, Kristina, "What is Different about Urbanization in Rich and Poor Countries? Cities in Brazil, China, India, and the United States." *Journal of Urban Economics*, 2016	Optional: J. Vernon Henderson, "Urbanization in China: Policy Issues and Options," Recommendation to China Economic Research and Advisory Program, 2009
3/8/2018	2	Monocentric City Model	Brueckner, Jan K., "The Structure of Urban Equilibria: A Unified Treatment of the Muth-Mills Model", Ch. 20, *Handbook of Regional Science and Urban Economics*, Vol 2, 1987	*Optional* reference: Duranton, Gilles and Puga, Diego, "Urban Land Use", *Handbook of Regional Science and Urban Economics*, Vol 5, 2015
3/15/2018	3	Monocentric City Model continued	LeRoy, Stephen F. and Sonstelie, Jon, "Paradise Lost and Regained: Transportation Innovation, Income, and Residential Location", *Journal of Urban Economics*, 1983	
3/22/2018	4	Empirical work on Monocentric City and Land Use	Baum-Snow, Brandt, Henderson, Turner, Zhang. "Roads, Railroads and Decentralization of Chinese Cities," *Review of Economics and Statistics*, forthcoming	*Optional* reference: Redding, Stephen J. and Turner, Matthew A., "Transportation Costs and the Spatial Organization of Economic Activity", *Handbook of Regional Science and Urban Economics*, Vol 5, 2015
3/29/2018	5	Equilibrium across Cities	Roback, Jennifer. "Wages, Rents, and the Quality of Life," JPE 1982.	Glaeser, Edward, and Gottlieb, Joshua, "The Wealth of Cities: Agglomeration Economies and Spatial Equilibrium in the United States," *Journal of Economic Literature*, 2009
4/5/2018	6	清明节--no class		
4/12/2018	7	Sorting within Cities	Bayer, Patrick, Ferreira, Fernando, and McMillan, Robert. "A Unified Framework for Measuring Preferences for Schools and Neighborhoods," *Journal of Political Economy*, 2007	Bayer, Patrick, McMillan, Robert, and Rueben, Kim. "An Equilibrium Model of Sorting in an Urban Housing Market," *NBER WP* 10865
4/19/2018	8	To Be Announced (TBA)	To Be Announced (TBA)	
4/26/2018	9	Microfoundations of Agglomeration and Existence of Cities	Duranton, Gilles and Puga, Diego, "The Micro-Foundations of Urban Agglomeration Economies," *Handbook of Regional and Urban Economics*, Vol 4, 2004	*Optional*: Au, Chun-Chung and Henderson, J. Vernon, "Are Chinese Cities Too Small?", *Review of Economic Studies*, 2006
5/3/2018	10	Agglomeration and Firm Concentration	Ellison, Glenn and Glaeser, Edward, "Geographic Concentration in U.S. Manufacturing Industries: A Dartboard Approach," *Journal of Political Economy*, 1997	Guimaraes, Paulo, Figueiredo, Octavio, and Woodward, Douglas, "Measuring the Localization of Economic Activity: A Parametric Approach." *Journal of Regional Science*, 2007.
5/10/2018	11	Spatial Methods in R	*Lecture notes and class exercise*	
5/17/2018	12	New Economic Geography	Krugman, Paul, "Increasing Returns and Economic Geography," *Journal of Political Economy*, 1991	Krugman, Paul, "Scale Economies, Product Differentiation, and the Pattern of Trade," *American Economic Review*, 1980
5/24/2018	13	Agglomeration and Increasing Returns: Evidence from China	Faber, Ben. "Trade Integration, Market Size, and Industrialization: Evidence from China's National Trunk Highway System," *Review of Economic Studies*.	*Optional:* Baum-Snow, Henderson, Turner, Zhang, Brandt, "Does Investment in National Highways Help or Hurt Hinterland City Growth?" WP 2017
5/31/2018	14	Consumer Cities	To Be Announced (TBA)	*Possibilities*: 1) Glaeser, Edward, Kolko, Jed, and Saiz, Albert, "Consumer City", *Journal of Economic Geography*, 2001 2) Schiff, Nathan, "Cities and Product Variety: Evidence from Restaurants," *Journal of Economic Geography*, 2015 3) Handbury, Jessie and Couture, Victor, "Urban Revival in America, 2000 to 2010", WP 2016
6/7/2018	15	Website-based Datasets in Economics Research	1) Cosman, Jacob and Schiff, Nathan, "Welcome! We Have a New Menu: Measuring Product Responses to Competition", *WP* 2018 2) lecture notes, class exercise on web-scraping in Python	
6/14/2018	16	Student presentations and final discussion		