# **USC** Dornsife

**Economics 587: Urban Economics** 

Units: 4 Spring 2023

Syllabus Version January 6<sup>th</sup> 2023

Location: CPA 258 (Center for International and

**Public Affairs**)

Schedule: MW 10am-1130am

**Instructor: Matthew E. Kahn Office:** 3<sup>rd</sup> floor of Kaprelian

Zoom Link: https://usc.zoom.us/j/2593307639

Office Hours: ON Zoom on Wednesday at 4pm-

5pm.

Contact Info: kahnme@usc.edu

### **Course Description**

This Masters Level course will introduce students to the major ideas in urban economics.

This course explores the theoretical foundations, empirical methods, data collection efforts and research techniques used in empirical urban economics. The course aims to provide students with the knowledge and skills necessary to investigate socioeconomic problems that take place in space.

Students will gain an in-depth understanding and hands-on experience to explore a variety of applications through a combination of lectures, discussions, and projects. Students will learn how economists use Spatial "Big Data" to test various hypotheses related to firm locational choice, urban growth, residential location patterns and pollution challenges.

Urban economic ideas will be applied to understand economic growth in cities in the developed world and the developing world. This framework is useful both for understanding emerging business opportunities and for designing public policies that seek to reduce the social cost of urban economic growth (i.e pollution, infectious disease and congestion).

Students will learn how to apply microeconomic concepts to understand economic geographic patterns. They will learn how to measure trends in economic vibrancy and to study the correlates of differential economic growth rates. We will study the shared commonalities and differences in urban economic growth patterns across the continents.

The course will be taught in person but during some classes during the Semester we will **switch to zoom** to accommodate Professor Kahn's family responsibilities in New York City.

#### **Learning Objectives**

When you have completed this course, you will be able to:

- Articulate the key theoretical concepts of urban economics and understand how spatial concepts can be used to produce new and better inferences in economics
- Collect urban spatial data and test urban economics hypotheses using basic statistical tools.
- Enhance written and oral communication skills that are essential for today's workforce. Integrate empirical research findings into research presentations.
- Use the tools of urban economics to form informed predictions about the possible unintended consequences of new public policies that influence the locational choices of firms and people both across cities and within cities.

#### The Course Format

In a typical week, students should go to the Blackboard webpage and watch the videos for that week, do the class readings, attend office hour when you have questions, and work on the relevant assignments.

Professor Kahn will post the relevant videos before a face to face class. He will assume that students have watched the relevant videos before the class. During a class, Professor Kahn will review key ideas from the readings and then will talk about relevant issues. Class Meetings will NOT be zoom recorded.

Some classes will take place on Zoom. Professor Kahn will announce this before class and will provide the zoom link. This zoom link can be found on our class webpage at Zoom Pro Meeting on the left side of the Blackboard page.

https://blackboard.usc.edu/webapps/blackboard/execute/announcement?method=search&context=course&course\_id=\_308870\_1&handle=cp\_announcements&mode=cpview

# **Professor Biography**

Matthew E. Kahn is the Provost Professor of Economics and Spatial Sciences at USC. He is the author of Green Cities: Urban Growth and the Environment (Brookings Institution Press 2006) and the co-author of Heroes and Cowards: The Social Face of War (Princeton University Press 2008). He is the author of Climatopolis: How Our Cities Will Thrive in the Hotter World (Basic Books 2010). In 2013, he published Fundamentals of Environmental and Urban Economics (Amazon Books). His research areas include; environmental, urban, energy and real estate economics.

Research Webpage: mek1966.googlepages.com

**Prerequisite(s):** Microeconomics, some preparation in statistics.

## **Course Grading Breakdown**

- One Course Paper worth 25%
- Six Course Homeworks worth 10% each
- Final exam 15%

#### **Course Paper:**

The paper will be ten pages long double spaced. The paper title should reveal the student's core question. The introduction should briefly explain why the question is relevant. The next second should provide a literature review of at least two peer reviewed papers. Students should use Google Scholar to find these papers. Footnotes should be used to reference these papers. The next section of the paper should list out the core hypotheses that will be tested. The main section of the paper should either use microeconomic theory and/or basic statistics and data to discuss the paper's main hypotheses. The final section should be called "Future Research" describing what would be the next steps the student would want to take to make progress.

The paper will be due during the 10<sup>th</sup> week. Professor Kahn will provide more advice about the paper early in the semester.

#### **Homeworks:**

Homeworks will combine ideas from urban economics. Students can work in groups of up to 4 and should submit 1 homework with your names on the first page.

All Course Materials will be posted to the course Blackboard page.

Text: An Introduction to Urban Economics by Matthew E. Kahn

A free copy is loaded to our class blackboard page

Textbook #2: Fundamentals of Environmental and Urban Economics by Matthew E Kahn

A Free copy of Professor Kahn's book will be posted to Blackboard.

https://www.amazon.com/Fundamentals-Environmental-Urban-Economics-Matthewebook/dp/B00E1U992U

Every student will receive a free copy of my 2016 book;

Kahn, Matthew E., and Siqi Zheng. "Blue Skies Over Beijing." In *Blue Skies over Beijing*. Princeton University Press, 2016.

# Additional Reading will be posted to our Blackboard Page.

Our Class blackboard page is:

https://blackboard.usc.edu/webapps/blackboard/execute/announcement?method=search&context=course&course\_id=\_308870\_1&handle=cp\_announcements&mode=cpview

Content will be organized by Week

All Course Zoom Videos will be archived at USC Zoom Pro Meeting

# Course Schedule: A Lecture -wise Breakdown

	Topics/Daily Activities	Readings and Homework	Deliverable/ Due Dates
Lecture 1	Course Overview & Introduction	Kahn, Chapter 1	
Lecture 2	Key Concepts of Urban Economics	Kahn, Chapter 2	
Lecture 3	Urban Data and Hypothesis Testing	Kahn, Chapter 3	
Lecture 4	Cities and Trade	Kahn, Chapter 4	Homework #1 Due
Lecture 5	An Introduction to Matthew Kahn's research on China's Cities		
Lecture 6	The Birth of a City	Kahn, Chapter 5	
Lecture 7	Firm Locational Choice	Kahn, Chapter 6	Homework #2 Due
Lecture 8	Agglomeration in cities	Kahn, Chapter 7	
Lecture 9	China's Cities Part II		
Lecture 10	Household Locational Choice	Kahn, Chapter 8	Homework #3 Due
Lecture 11	China's Cities Part III		
Lecture 12	The Quality of Life of the Urban Poor	Kahn, Chapter 9	
Lecture 13	Poverty in Cities	Kahn, Chapter 10	
Lecture 14	China's Cities Part IV		
Lecture 15	The Consumer City	Kahn, Chapter 11	Homework #4 Due
Lecture 16	Transport in Cities I	Kahn, Chapter 12	
Lecture 17	Transport in Cities II		
Lecture 18	Real Estate Prices	Kahn, Chapter 13	Homework #5 Due
Lecture 20	Real Estate Prices in China		
Lecture 21	The Causes and Consequences of Sprawl	Chapter 14	
Lecture 22	Negative Externalities I	Chapter 15	
Lecture 23	Negative Externalities II	Chapter 16	Paper Due

Lecture 24	Urban Governance in the U.S and in China	Chapter 18	
Lecture 25	Cities and Climate Change	Chapter 19	Homework #6 due
Lecture 26	Cities in the Developing World	Chapter 20	
Lecture 27	Course Summary and the Future of Cities	Chapter 21	
Final Exam	Final Exam		

#### Additional Reading (these will be posted to our Blackboard Page)

Bassi et. al. Avoiding Pollution or Adapting to it? Managerial Quality and Worker Exposure to PM2.5 in Urban Uganda

Baum-Snow N. Did highways cause suburbanization?. The quarterly journal of economics. 2007 May 1;122(2):775-805.

Baum-Snow, Nate. and Fernando Ferreira Causal inference in urban economics, Handbook of Urban Economics, Volume #5

Black, Sandra E. "Do better schools matter? Parental valuation of elementary education." *Quarterly journal of economics* (1999): 577-599.

Bryan G, Glaeser E, Tsivanidis N. Evidence paper. Cities, IGC paper. https://www.theigc.org/wp-content/uploads/2019/12/IGC-Cities-evidence-paper-December-2019\_web.pdf

Bryan G, Chowdhury S, Mobarak AM. Underinvestment in a profitable technology: The case of seasonal migration in Bangladesh. Econometrica. 2014 Sep;82(5):1671-748.

Duranton G, Turner MA. The fundamental law of road congestion: Evidence from US cities. The American Economic Review. 2011 Oct 1;101(6):2616-52

Gibson, John & Olivia, Susan & Boe-Gibson, Geua & Li, Chao, 2021. "Which night lights data should we use in economics, and where?," Journal of Development Economics, Elsevier, vol. 149(C).

Giuliano, G. and K. Small, <u>"Subcenters in the Los Angeles Region,"</u> Regional Science and Urban Economics, July 1991.

Gibson, John & Olivia, Susan & Boe-Gibson, Geua & Li, Chao, 2021. "Which night lights data should we use in economics, and where?," Journal of Development Economics, Elsevier, vol. 149(C).

Gollin D, Kirchberger M, Lagakos D. Do urban wage premia reflect lower amenities? Evidence from Africa. Journal of Urban Economics. 2021 Jan 1;121:103301.

Glaeser, Edward Jed Kolko, and Albert Saiz, 2001. "Consumer City." Journal of Economic Geography, Oxford University Press,

Glaeser, Edward L. "Are cities dying?." *The Journal of Economic Perspectives*(1998): 139-160.

Glaeser EL, Kahn ME, Rappaport J. Why do the poor live in cities? The role of public transportation. Journal of urban Economics. 2008 Jan 1;63(1):1-24.

Glaeser, E., J. Gyourko and R. Saks, "Why is Manhattan So Expensive: Regulation and the Rise in Housing Prices," *Journal of Law and Economics*, October 2005.

Glaeser, Edward Jed Kolko, and Albert Saiz, 2001. "Consumer City." Journal of Economic Geography, Oxford University Press,

Kahn ME. Climate change adaptation: lessons from urban economics. National Bureau of Economic Research; 2014 Nov 26.

Kahn ME. Urban growth and climate change. Annu. Rev. Resour. Econ.. 2009 Jun;1(1):333-50.

https://voxeu.org/article/climatopolis-how-will-climate-change-impact-urbanites-and-their-cities

Kahn ME, Li P. Air pollution lowers high skill public sector worker productivity in China. Environmental Research Letters. 2020 Jul 15;15(8):084003.

Kahn ME, McComas M. Unlocking the Potential of Post-Industrial Cities. Johns Hopkins University Press; 2021 Feb 23.

Kahn, M.E and Walsh, Randall "Cities and the Environment, Handbook Volume #5

Lall, Somik Vinay, J. Vernon Henderson, and Anthony J. Venables. *Africa's cities: Opening doors to the world.* World Bank Publications, 2017.

McMillen, D., "Nonparametric Employment Subcenter Identification," Journal of Urban Economics, November 2001.

Moretti E. Cities and growth. International Growth Center. 2014 Apr 11.

Rosenthal SS, Strange WC. Evidence on the nature and sources of agglomeration economies. Handbook of regional and urban economics. 2004 Dec 31;4:2119-71.

Zheng, Siqi, and Matthew E. Kahn. "Land and residential property markets in a booming economy: New evidence from Beijing." *Journal of Urban Economics*63, no. 2 (2008): 743-757.

Zheng S, Kahn ME. A new era of pollution progress in urban China?. Journal of Economic Perspectives. 2017 Feb;31(1):71-92.

Zheng S, Sun C, Qi Y, Kahn ME. The evolving geography of China's industrial production: Implications for pollution dynamics and urban quality of life. Journal of Economic Surveys. 2014 Sep;28(4):709-24.

Zheng S, Wang J, Sun C, Zhang X, Kahn ME. Air pollution lowers Chinese urbanites' expressed happiness on social media. Nature Human Behaviour. 2019 Mar;3(3):237-43.

Zheng S, Kahn ME. Understanding China's urban pollution dynamics. Journal of Economic Literature. 2013 Sep 1;51(3):731-72.

Zheng S, Sun W, Wu J, Kahn ME. The birth of edge cities in China: Measuring the effects of industrial parks policy. Journal of Urban Economics. 2017 Jul 1;100:80-103.

Zheng S, Wang J, Sun C, Zhang X, Kahn ME. Air pollution lowers Chinese urbanites' expressed happiness on social media. Nature Human Behaviour. 2019 Mar;3(3):237-43.

Zheng, Siqi, and Matthew E. Kahn. "Land and residential property markets in a booming economy: New evidence from Beijing." *Journal of Urban Economics*63, no. 2 (2008): 743-757.

#### **Statement on Academic Conduct and Support Systems**

#### **Academic Conduct**

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards*<a href="https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/">https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/</a>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <a href="http://policy.usc.edu/scientific-misconduct/">http://policy.usc.edu/scientific-misconduct/</a>.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <a href="http://equity.usc.edu/">http://equity.usc.edu/</a> or to the *Department of Public Safety* <a href="http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us">http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us</a>. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* <a href="http://www.usc.edu/student-affairs/cwm/">http://www.usc.edu/student-affairs/cwm/</a> provides 24/7 confidential support, and the sexual assault resource center webpage <a href="mailto:sarc@usc.edu">sarc@usc.edu</a> describes reporting options and other resources.

#### **Support Systems**

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the American Language Institute http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs http://sait.usc.edu/academicsupport/centerprograms/dsp/home\_index.htmlprovides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible. USC **Emergency** Information http://emergency.usc.edu/will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.