Economics 414: Urban Economics

University of Illinois, Urbana-Champaign

Fall 2024

Professor David Albouy

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Lecture: Tuesday and Thursday, 11:00 – 12:20 pm 123 DKH

Office Hours: Wednesday, 11:00 to 11:50 and Thursday, 2:00 to 2:50pm, 225A DKH

Pedagogical Goals:

- How to apply scientific principles and economic logic to complicated social issues relevant to urban environments, including location choices, housing, crime, and transportation.
- Improve familiarity with economic conditions & history relevant to U.S. regions and cities.
- Better understand how to interpret statistical and econometric analyses, and how to find reliable information.
- Deepen understanding of how decentralized individual behavior in markets affects economic outcomes, through the lenses of optimization and equilibrium.
- See how spatial differences in prices serve as signals for where firms, workers, and households want to locate, and the supply of those locations.
- Consider the welfare effects of different policies, or lack thereof, around issues such as housing assistance, rent control, transportation policy, policing etc.

Prerequisites: Intermediate Micro-economic Theory (e.g., ECON 302), Economic Statistics II (e.g., ECON 203).

Evaluation:

- **70%** Weekly EITHER homework/activity OR quiz: 5 points/week x 14 weeks
 - a. Homework assignments assigned at end of the week (Thursday) due one week later.
 o Short questions related to lecture, reading, or viewing.
 - b. In class quiz, usually Thursday, on material from the week before
 - Cover previous lecture, reading or assigned viewing.
 - May use ONE PAGE of notes (front and back) in OWN HANDWRITING *Absences for guizzes count as zeroes

**Your <u>two lowest</u> weekly grades can be converted from as low as 0 to 5 by attending office hours to discuss material, readings, or *previous* homework.

- **30%** Final exam (Dec 13, 8am): roughly equal parts multiple choice, short answer & long answer questions
- +5% Attendance and Participation
 - Attendance will be taken *randomly* (not every day)
 - Participation for asking questions/stimulating discussion in class or office hours.
 - Pronouncing my last name correctly (in English, rhymes with "Illinois")

<u>Reading is a *complement, not a substitute* for lecture</u>. This course is not "taught out of a book." **Class attendance and taking detailed notetaking is essential**. Material not on the slides, either from the book or presented verbally, may be on quizzes, homework, and exams. In fact, these will stress subjects most discussed in class (not necessarily what is in the slides or book). *Master's Students: 1) find an economic article related to urban economics and receive my approval; 2) come to my office for an oral exam for 15 minutes on Reading Day (Dec 12)

Assignments, deadlines, and grades posted on the course website (Canvas). Greater information will also be provided in class, so be sure to attend.

Laptop computers are **not** to be used in class. Please take notes on paper/notebook or a tablet.

Please contact me during the **first three weeks of class** by email to work out arrangements if you have any special needs. Except for documented illnesses and emergencies, **no special arrangements for examinations will be made after the third week of class**. Bring a picture ID to all examinations.

This class sometimes covers sensitive topics on inequality, race, gender, and other issues. Please let me know if you have needs or requests regarding family or health needs, pronouns, or anything else important to you. You are respected and valued in this class and will not be graded for political, religious, or moral beliefs – viewpoint diversity is welcome and encouraged. Personal attacks, harassment, and bullying are not. You are welcome to come to office hours to chat not only about class, but your aspirations in academia, career, life, and intellectual journey.

Unlike many of the instructors you have had thus far, I am a tenured research-oriented professor. Much of my time is spent engaging in research activities including publishing, peer-review, academic conferences, advising doctoral students, and mentoring junior faculty. This means that I may share with you some of my own published findings, as well as what is currently being discussed. Also, I can provide you with more of an insiders' view of the research in urban economics. If you are interested in pursuing economics to a higher level, I can advise you on graduate programs or research assistantship when you graduate – do not delay.

Required Reading – notes, book chapters, journal articles – **posted online.** Arthur O'Sullivan, *Urban Economics (currently 9th edition)* – **you should buy (sorry)**

I reserve the right to stop posting slides if attendance falls – not attending class exerts a negative externality on other students so show up.

Additional References (Some book chapters will be taken from these.) John McDonald and Daniel McMillen, Urban Economics and Real Estate: Theory and Policy Brueckner, Jan K. Lectures on Urban Economics Richard Green and Stephen Malpezzi, A Primer on U.S. Housing Markets and Housing Policy. *De Groot, Henri, L.F. Cities and the Urban Land Premium *Edward Glaeser, Triumph of the City (recommended) *Edward Glaeser and David Cutler Survival of the City **Nicholson, Walter Microeconomic Theory: Basic Principles and Extensions. **O'Flaherty, Brendan The Economics of Race in the United States **Cunningham, Scott Causal Inference

Edward Glaeser: CitiesX on YouTube, especially "Urban Economics 101"

COURSE OUTLINE (29 lectures + final exam)

Attend all classes! All lecture times are approximate. Topics by week are more precise than topics by day. Some topics may be dropped if time is short.

Week 1: Introduction

- 8/27: Introduction and review of syllabus. Defining urban economics. Social science vs planning.
- 8/29: Six key concepts in urban economics. What is urban? Defining cities statistically and economically with U.S., esp. Illinois examples. Zipf's Law.

Reading: O'Sullivan Ch 1 & 2

Videos: Our Urban Age | Edward Glaeser | TEDxBeaconStreet; CitiesX: Agglomeration Economies & Supply and Demand; Utopian Cities

Week 2: Economic Methodology, Schools of Thought, Urban Experiments

- 9/3: Economic methodology and philosophy. Economic explanations. Social psychology and the "Fundamental attribution error." Scientific ethics & pitfalls. Real experiments: MTO (Moving to Opportunity) and BAM (Becoming a Man). Housing projects and choice programs. Reducing violent crime and improving academic achievement.
- 9/5 : Cognitive psychology in economics. Getting through confirmation and publication bias. Heterodox perspectives: Marxism, Post-modernism, Conservatism. The "Law" of unintended consequences.

Videos: Chicago Booth Review: How slow thinking can help at-risk youth; CitiesX: Moving to Opportunity; Joshua Angrist "Nobel Lecture 2021"; Veritasium: "Is Most Published Research Wrong"; Freakonomics Radio: "John List: Why Most Ideas Fail to Scale" **Reading:** Gruber Ch 3; McDonald & McMillen Ch 3

Week 3: Normative Economics in an Urban Context

- 9/10: Normative Economics: Utilitarianism, efficiency, social welfare. Equality of outcome vs. opportunity. Bentham, Rawls, and egalitarianism. The categorical imperative and the harm principle.
- 9/12: Equity-efficiency tradeoffs. First and second welfare theorems. Lump-sum vs. in-kind transfers. Opportunity costs and valuation of non-market resources.

Reading: Gruber Ch 2; Stiglitz and Rosengard Ch 7 (extra)

Week 4: Agglomeration Economies and Diseconomies

- 9/17: Wages and city size. A simple model of agglomeration economies. False externalities in prices ("pricing out") vs. true externalities. Sharing and the division of labor.
- 9/19: Matching in work and consumption. Learning and innovation. Diseconomies of scale from crowding, pollution. Tolerance, principles of social interaction, and social capital. Optimal city size with two or more locations.

Reading: O'Sullivan Ch 3,4,5,6, & 7; McDonald & McMillen Ch 4 **Videos:** CitiesX: Agglomeration Economies and Urban Instability

Week 5: Urban Economics in the History of Cities

- 9/24: A world history of urban economic processes from pre-history through postindustrialization. Agriculture, surplus, and extensive growth. Urban public goods.
- 9/26: Urbanization in modern era. the U.S., Illinois, and Chicago. Intensive growth and improvement in economic welfare. The economic geography of North America. Urban rise and decline in the manufacturing belt. The rebirth of cities and current challenges post-Covid.

Reading: O'Sullivan Ch 8 & 9; Todaro and Smith Ch 7.1 to 7.3

Videos: Marginal Revolution University: The Hockey Stick of Prosperity; CitiesX: Buenos Aires and Chicago; The Rise of Detroit; The Fall of Detroit; The Rebirth of New York; The Great Migration; Shenzhen; New York a Documentary, episode 7, The City and the World: 1945-2000.

Week 6: Understanding Price and Wage Differentials across Space (and other Dimensions)

- 10/1: Hedonic model of housing rents, and worker wages. Data sources and omitted variable bias. Prices and wages across cities and suburbs. Wage differentials by location, gender, race, and education; human capital. Included variable ("collider") bias. Challenges in creating a truly causal model of human development.
- 10/3: Taste and statistical theories of discrimination. Stereotypes and the ability of government policy (e.g. affirmative action) to change them. Audit and correspondence studies.

Reading: Smith Book 1, Ch 10 (*The Wealth of Nations: Wages and Profits.*) Cunningham Ch 3 **Videos:** PBS NewsHour: How Disadvantaged Neighborhoods Amplify Racial Inequality

Week 7: Segregation Measures, Theories and Consequences.

- 10/8: Segregation measures. Segregation by race, income and politics. Spatial mismatch hypothesis. School quality and the black-white wage gap over generations.
- 10/10: Collective action racism. A decentralized model of neighborhood segregation: the tipping model.

Reading: O'Sullivan Ch 15; John Yinger, "Evidence of Discrimination in Housing Markets" **Videos:** CitiesX: Race and Tipping Models

Week 8: Transportation

- 10/15: Transit facts; the private and social costs of driving. Highways and transportation demand; congestion costs and pricing.
- 10/17: Mass transit, mode choice, and cost; alternative transportation.

Reading O'Sullivan Ch 18 & 19 **Videos:** CitiesX: The Rise of suburbs

Week 9: Housing Demand

10/22: Theory of housing demand: uncompensated and compensated. Price and income elasticities; substitution and necessities. Indirect utility and expenditure functions. Ideal vs. actual cost-of-living indices.

10/24: Housing vouchers (in-kind benefits); rent control.

Reading: McDonald & McMillen Ch 10; O'Sullivan Ch 12; Nicholson: Utility and Demand Theory

Videos: CitiesX: The Demand for Cities; Unpacking the Demand for the City; Rent Control

Week 10: Housing Production

- 10/29: Housing production and supply. Cost functions, land, and construction inputs. Housing productivity, geography, and land-use restrictions.
- 10/31: Housing durability and filtering, regular and "reverse."

Reading: O'Sullivan Ch 16 & 17; Nicholson: Production and Cost Theory; Gruen: Ch 1 & 2 **Videos:** CitiesX: The Supply of Urban Space; Dynamics and Durable Housing; Public Housing

Week 11: Economic Location and Spatial Equilibrium

- 11/5: Why households live where they do. Spatial Equilibrium across cities. Quality-of-life measurement and climate. The value of local amenities and non-market goods.
- 11/7: Spatial Equilibrium inside cities. The monocentric city, land-value and housing rent gradients; Skyscraper heights

Reading: O'Sullivan Ch 10, 11 & 13

Videos: CitiesX: The Spatial Equilibrium Concept; The Within-City Equilibrium Model; Urbanization and Openness

Week 12: Frictions to Spatial Equilibrium, urban Growth and Place-Based Policy

- 11/12: Mobility costs and other frictions. Urban labor markets. Deindustrialization, changes in economic geography, and the China shock
- 11/24: Place-based policy; Opportunity Zones. Sports teams and stadiums.

Reading: O'Sullivan, chapter 8. Institute for Fiscal Studies: David Autor "Lessons from the China Shock"

Videos: CitiesX: Agglomeration Economies and Urban Instability; The Welfare Consequences of City Bigness

Week 13: Taxation and Local Government, Suburbanization

- 11/19: Fiscal federalism and decentralization. Property and land-value taxation: efficiency and equity considerations.
- 11/21: Efficient local taxation and the Tiebout model. The geographic distortions of federal income taxes.

Reading: O'Sullivan Ch 14, 20 & 21

THANKSGIVING BREAK

Week 14: Crime

- 12/3: Facts about death and crime in the U.S. Estimated costs of crime, Chicago theory of the rational criminal and how to deter crime.
- 12/5: Policing, biases, and its alternatives; incarceration, punishment, and effects of protests.

Reading: O'Sullivan Ch 23 **Videos:** CitiesX: The Safe City; The Economics of Crime and Riots

Week 15: Conclusion

12/10: Review and Final Remarks

FINAL EXAM on Friday, December 13, 8:00 to 11:00am.