

ECON 3580
SPECIAL TOPICS: UNDERGRADUATE URBAN ECONOMICS
SPRING 2022

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Course Description: This course introduces students to the concepts, methods and the core models used by economists to study cities and regions and their relationships with each other. The course will shed light on questions like: why do slums often develop in many large cities close to the city center? why are buildings usually tallest at the city center? Why are most jewelry stores located at the vicinity of 9th and Sansom, rather than spread across the city like grocery stores or movie theaters? Students will gain intuition behind the economics of real estate markets, firm innovation, government tax policy, and land-use regulation. An important component of this course will include in-class discussion on how current issues related to transportation, housing, education, social justice and poverty, are closely intertwined with governance and the spatial decisions of households and firms.

Learning objectives:

This course emphasizes both the learning of key concepts and the development of analytical problem-solving skills. **Quantitative and qualitative methods** will be used to help us model urban and regional spatial structure and spatial decision-making. Students will gain experience using **empirical, data-driven methods as well as theoretical methods** to understand urban spatial structure and decisions of households and firms. At least one problem set will require students to obtain original economic data and to analyze these data using their statistical software of choice. By the end of the course, the student should have a basic familiarity with the stylized facts of cities and urban land and real estate markets, and should understand the theoretical and empirical tools used to analyze urban land markets and public policy issues.

Class Materials:

Textbook:

O'Sullivan, Arthur (2019) *Urban Economics*, McGraw-Hill Irwin, 9th edition.

(An earlier edition is probably fine. But please be sure to check chapter numbers as they may not match those listed on the syllabus.)

Supplemental Online Videos from Ed Glaeser:

CitiesX channel <https://www.youtube.com/channel/UCcywB2dtNXGxWtExGIEMJkg>

Other Supplemental Readings will be sourced from:

- Glaeser, Edward (2011) *Triumph of the City*
- McDonald, John and Daniel McMillen (2011) *Urban Economics and Real Estate*
- Brooks, Nancy, et. al., (2012) *Oxford Handbook of Urban Economics and Planning*
- Brueckner, Jan (2011) *Lectures on Urban Economics*
- Krugman, Paul (1991) *Geography and Trade*
- McCann, Philip (2013) *Modern Urban and Regional Economics*
- O'Flaherty, Brendan (2005) *City Economics*
- Academic papers from urban economics journals

Prerequisites: ECON 1102 Microeconomic Principles.

Grading Criteria:

- Problem Sets 25% (5 out of 6 at x 5% each): Problem sets will be assigned roughly every 2 weeks and are due at the beginning of class in hard copy form. Homework sent over email will not be accepted. Homework will be graded as “check+”/“check”/“check—”/“no credit” which, respectively corresponds to: “attempted all problems with most correct” / “attempted all problems with some correct” / “little effort with some problems correct” / “not turned in or very little effort”. I will distribute 6 problem sets. Late assignments will not be accepted, however **students will be allowed to skip one assignment without penalty** – this includes assignments that cannot be turned in on time due to illness. For students who complete all assignments, I will drop their lowest grade. **I encourage students to work in small groups** and discuss problem sets. Every student is, however, responsible for their own write-up, and must turn in an individual version of the homework (no copies). Even if you and your friend came up with an answer together, you are expected to take a moment to write up this answer by yourself, and to justify that answer and explain the reasoning in your own words.
- Philadelphia Exploration Study 10%: This assignment will require you to explore the city, take notes, and observe what you see. This is due by the end of the second week of class. Details below.
- Midterm (30%): A take-home midterm exam will be posted to Canvas after Week 7 material and will be due by the following class. The exam is open book.
- Final Exam (35%): The final exam will also be take-home. You will have a week to complete it, depending on the designated university final exam date for this class.
- Participation (5%): I hope that all students will come to class and participate in discussion. *Class participation can only help a student's grade, not hurt it.* If you come to class regularly **and contribute to the discussion**, you will receive a participation grade (worth an additional 5%) and this will be incorporated into your final grade. If you do not, you will not be penalized - participation will not be part of your final grade.

Contacting Me & Email Policy.

You can expect me to respond to emails within 24 hours after you send it. **Please include the course name and number (“ECON 3580”) in the subject of all emails** and please **include your full name at the end of the email**. If I do not know who the email is from or what course it relates to, I will not answer the email. Emails should be restricted to short questions that can be answered in a sentence or two. For questions related to course content that require a more thoughtful response, please come to my online office hours or set up a time to meet with me online.

I will always be available during my office hours. If you would like to meet with me outside of office hours, please send me an email and we can set up a separate time to meet.

Canvas.

Class announcements, homework, lectures, and supplemental reading assignments will be posted on the course website on Canvas. It is your responsibility to check the site regularly – at least every day the class is held. All important announcements will be posted there.

Lecture Slides and Notetaking.

I highly recommend taking notes during lecture. I will use projected slides as well as the blackboard during lecture. Lecture slides will be posted on Canvas before class (usually the day before the lecture). However, I will not always post lecture material written on the blackboard or communicated verbally in class. Lecture slides do not contain all the class material, and, hence, are a bad substitute for class attendance and notes.

Problem Set Deadlines.

Due dates will be specified for each of the problem sets, as they are assigned. You will always have at least a week to complete a problem set. You are expected to turn in your homework by the deadline. You should make arrangements to turn in your work *early* if you expect a conflict to arise at the time the homework is due.

Exam Taking & Materials.

All exams, including prelims, and the final, are open book. You must complete exams individually and not use the help of peers. Exam questions may cover everything discussed in class, in the problem sets, or on the Canvas discussion board, as well as everything in the relevant chapters of the textbook (we will not cover all the chapters of the book; relevant chapters of the textbook are listed in the tentative lecture schedule at the end of the syllabus), and supplemental documents I may distribute. Problem set questions, as well as questions I will ask in class to guide our discussion, are designed to be representative of what you may expect during the exams.

Valid excuses for missing an exam:

- 3 exams scheduled within one calendar day (for final exams ONLY!)
- Observance of a university-recognized religious holiday
- An illness/health emergency
- A death in your family

Examples of reasons that are *not* valid for missing an exam are:

- Job internships/interviews
- Beginning fall or spring break early or returning after a scheduled exam
- End of semester early flights
- Take home exams in other classes
- Any other reason you would prefer not to be at the university when the exam is scheduled

Missed exams and incomplete grades.

No makeup midterms or finals will be given for any reason (excused or unexcused). If a student misses a midterm exam and submits a valid excuse, your final exam grade will be used as a replacement for the missed midterm grade, on top of counting as the final exam grade. That is, if you miss a midterm because of one of the valid excuses listed above, the final will make up 65% of your grade for the course. If a student misses the final exam and submits a valid excuse, the share of the grade assigned to the final will be redistributed across the midterm. That is, if you miss the final because of one of the valid excuses listed above, the midterm will collectively account for 65% of your grade. If you miss a midterm or the final without one of the valid excuses listed above, you will get a 0 on that midterm or final.

Grade Appeal Policy.

Students that disagree with their exam grade may submit a written request of a *full* exam grade review within the first 48 hours of receiving their graded exam. This request should consist of a written letter and

should be given to me in person. The grade review will consist of a careful reassessment of all graded questions and may result in no change, or an overall higher or lower grade than the original contested grade.

Students Requiring Disability Resources

Student responsibility primarily rests on informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels. Any student who has a need for accommodations based on the impact of a documented disability or medical condition should contact Disability Resources and Services (DRS) in 100 Ritter Annex (drs@temple.edu; 215-204-1280) to request accommodations and learn more about the resources available to you. If you have a DRS accommodation letter to share with me, or you would like to discuss your accommodations, please contact me as soon as practical. I will work with you and with DRS to coordinate reasonable accommodations for all students with documented disabilities. All discussions related to your accommodations will be confidential.

Academic Integrity.

I do not tolerate academic misconduct. I will not hesitate to assign failing grades to students who do not fully comply with the University's academic misconduct policy. If you find yourself contemplating cheating, plagiarism, or other forms of academic misconduct, please come see me first. Help is available if you are struggling. I want everyone in the class to try their best and to do their own work. Please be advised that I reserve the right to utilize anti-plagiarism resources such as *TurnItIn* when grading assignments.

Classroom etiquette.

I value your presence in my class, and I want your classmates to feel the same way. You are welcome to eat/drink during class as long as food/drink is permitted in the classroom and you do not disrupt or distract others by doing so. Please silence your cell phones and other electronic devices during class, and do not use them in the classroom. If you need to respond to a text message or make a phone call, please leave the classroom before doing so.

Course Schedule

1. Week 1: Intro to Urban Economics

- Why do cities exist? Trade, transportation costs, returns to scale, agglomeration
- Readings: O'Sullivan Ch. 1 (Introduction), 2 (Why do Cities Exist?) and 3 (Why do Firms Cluster?); Krugman, Paul (2008) "The Increasing Returns Revolution in Geography and Trade." Nobel Prize Speech; Strange, William (2005) "Urban Agglomeration" entry prepared for the *New Palgrave Dictionary of Economics*.
- *Optional:* Glaeser, Edward (2005) "Urban Colossus: Why Is New York America's Largest City?"; Cronon, William (1991) *Nature's Metropolis*, W.W. Norton; Bleakley and Lin (2012), "Portage & Path Dependence" *QJE*; Strange, William (2005) "Urban Agglomeration"

2. Week 2: Spatial equilibrium across cities: Determinants of City size and location

- Readings: O'Sullivan Ch 4 (City Size); Krugman, Paul (1993) *Geography and Trade*, Chapters 1 and 2
- *Optional:* MIT Press; Krugman, Paul (2011) "New Economic Geography, Now Middle Aged" *Regional Science*

3. Week 3: How cities of different sizes and locations related & Zipf's Law

- Readings: Lafourcade & Thisse (2011) “New Economic Geography: A Guide to Transport Analysis”; Ades & Glaeser “Trade and Circuses: Explaining Urban Giants” *QJE*
 - *Optional*: Duranton & Puga (2014) “The growth of cities” in *Handbook of Economic Growth vol 2B*; Harari “Cities in Bad Shape: Urban Geometry in India 2019” *AER*
4. **Week 4: Cities and national growth: defining and understanding “growth”**
- Readings: O’Sullivan Ch. 5 (Urban Growth); Glaeser (2011) chapter 2 of *Triumph of the City*
 - *Optional*: Glaeser (2007) “Economic Approach to Cities” NBER WP; Moretti (2012) *The New Geography of Jobs*
5. **Week 5: Place-based policies. Do local economic development programs benefit locals?: Local labor supply and amenities; (dis)advantages of urbanization**
- Readings: NYTimes (2019) “Watch 4 Decades of Inequality Drive American Cities Apart”; “Why Are Some Places SO much More Unequal than Others?” Jason R. Abel and Richard Deitz (NYTimes review here: <https://www.nytimes.com/2019/12/02/upshot/wealth-poverty-divide-american-cities.html>)
 - *Optional*: Albouy (2012) “Are big cities really bad places to live?”; Lee & Lin (2017) “Natural Amenities, neighborhood dynamics, and persistence in the spatial distribution of income” *ReSTUD*; Hornbeck, Keniston (2017) “Creative destruction: barriers to urban growth and the Great Boston Fire of 1972” *AER*
6. **Week 6: Spatial equilibrium *within a city*: land rent, housing prices and land-use patterns: Monocentric city model, bid-rent functions**
- Readings: O’Sullivan Ch. 6 (Urban Land Rent), 7 (Land-Use Patterns) and 9 (Zoning and Growth Controls); Harford, Tim (2006) “Who Pays for your Coffee” ch. 1 of the *The Undercover Economist*
7. **Week 7: Spatial equilibrium *within a city part II*: monocentric city model – theory & empirics: What are the spatial equilibrium tradeoffs within a city?**
- Readings: Brueckner (2011) ch. 2 of *Lectures on Urban Economics*; McCann (2013) “The Spatial Structure of the Urban Economy”; Nivola, Pietro 1998 “Fat City”: Understanding American Urban Form from a Transatlantic Perspective” *Brookings Review*, 16, 17-20
 - *Optional*: Anas, Arnott & Small (1998) “Urban Spatial Structure” *JEL*; (Empirics:) McMillen, Daniel (2006) “Testing for Monocentricity”; Jerch et al “Road Rationing & Housing Markets”

*****Midterm*****

8. **Week 8: Transportation & Congestion: Commuting patterns, transport modes, externalities**
- Readings: O’Sullivan Ch. 10 (Autos & Highways) & 11 (Urban Transit); Green (1999) Nine Causes of Sprawl; Glaeser, Kahn, Rappaport (2007): “Why do the Poor Live in Cities?” *JUE (intro)*
 - *Optional*: O’Flaherty (2005) Ch 4 and 5 of *City Economics*; Brueckner (2011) Ch.5 of *Lectures on Urban Economics*; Hall, Palsson, Price “Is Uber a substitute or complement for public transit” *JUE*; Brinkman & Lin (2017) “Freeway Revolt!”; Nechyba & Walsh (2004) “Urban Sprawl” *Journal of Economic Perspectives*

9. **Week 9: Local public finance and Fiscal Federalism:** The Tiebout model and neighborhood choice
- Readings: O’Sullivan Ch. 16 (The Role of Local Government) & 17 (Local Government Revenue); Fisher (2016) “Public Choice through Mobility” Ch. 5, “Organization of Subnational Government” Ch. 6 of *State and Local Public Finance*, 4th edition, Routledge;
 - *Optional:* Fischel (2001) Ch. 1 and 3 of *The Homevoter Hypothesis*; Oates, Wallace (1999) “An Essay on Fiscal Federalism” in the *JEL*
10. **Week 10: Property Taxes, Zoning, & Education**
- Readings: “Property Tax” Ch. 14 of *State and Local Public Finance*, 4th edition, Routledge; Fisher (2016) “Education” Ch. 19 of *State and Local Public Finance*; McDonald & McMillen “The Economics of Zoning” in *Oxford University Press Handbook of Urban Economics and Planning*
 - *Optional:* Chetty et al (2014) “Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States” *QJE* ; Dye & England (2010) “Assessing the Theory and Practice of Land Value Taxation”, a policy focus report by the Lincoln Institute of Land Policy
11. **Week 11: Real Estate and determinants of housing supply and demand:** What makes housing special?
- Readings: O’Sullivan Ch. 13 (Crime) & 14 (Why is Housing Different?); Glaeser, Gyourko (2005) “Urban Decline and Durable Housing” *JPE* ; Brueckner, Thisse, Zenou (1999) Why is central Paris rich and downtown Detroit poor?”
 - *Optional:* *EER* ; Green (2011) “Housing Markets, Prices and Policies” in the *Handbook of Urban Economics and Planning*, Oxford University Press;
12. **Week 12: Housing Policy**
- Glaeser & Gyourko (2008) *Rethinking Federal Housing Policy*, Ch 1 and the concluding chapter; Desmond (2016) *Evicted: Poverty and Profit in the American City*, Crown Publishers
 - *Optional:* Ellen, O’Regan, & Voicu (2008) “Siting, Spillovers, and Segregation: A Reexamination of the Low Income Housing Tax Credit Program.” In *Housing Markets and the Economy: Risk, Regulation, and Policy*; O’Flaherty (2005) ch. 13 and 14 of *City Economics*; Krimmel (2020) “Persistence of Prejudice: Estimating the Long-Term Effects of Redlining”
13. **Week 13: Income and Racial Segregation, & Gentrification:** Neighborhood effects, peer effects, broken windows, exclusionary zoning, social mobility & neighborhoods
- Readings: O’Sullivan Ch. 8 (Neighborhood Choice) & 12 (Education); Boustan (2011) “Racial Residential Segregation in American Cities” in the *Handbook of Urban Economics* (Boustan lecture on migration, race, inequality: <https://www.youtube.com/watch?v=Y5c0n6thN-s>); Ellen & O’Regan (2011) “Gentrification: The Perspectives of Economists and Planners” in the *Handbook of Urban Economics and Planning*;
 - *Optional:* Freedman (2012) “Teaching New Markets Old Tricks: The effects of subsidized investment on low-income neighborhoods” *JPubE*; Ludwig et al. (2012) “Neighborhood Effects on the Long-Term Well-Being of Low Income Adults” *Science*; Glaeser & Vigdor (2012) “The End of the Segregated Century: Racial Separation in America’s Neighborhoods, 1890-2010

14. Week 14: Environmental Justice and Health

- Readings: Banzhaf et al (2020) “The Economics of Race, Place, and Pollution” working paper; Kahn & Walsh “Cities & the Environment” in *Handbook of Regional & Urban Economics*
- *Optional*: Brooks & Sethi (1997) *JEEM* “The Distribution of Pollution”; Deryugina and Molitor (2018) “Does when you die depend on where you live?” *NBER WP*; Heblich et al (2018) “East Side Story: Historical Pollution and Persistent Neighborhood Sorting” <https://ideas.repec.org/p/san/wpecon/1613.html>

*****Final Exam *****

Philadelphia Exploration Study (10% of grade)

One of the purposes of this course is to give you a much deeper understanding of the community in which you are at least temporarily living; I also want to remove the abstractness of the course topic.

Your first assignment is simple, but time consuming: I want you to visit 5 of the 11 listed sites in Philadelphia and observe. For each one, write up notes (a paragraph on each except for one, which should be a bit more in depth – say 2-3 paragraphs) on what strikes you about the street, neighborhood or commercial area (one block in all directions of the point identified). When you observe, do so as an economist – think about how well lawns are maintained, the value of vehicles relative to structures, the density of the area, the degree of homogeneity ... and what these might imply. I encourage you to add or attach photographs. I also expect you to traverse the entire area.

This assignment should only be a total of 2-3 pages, but it will be time consuming, because you have to travel all over Philly. You can complete the assignment in one go, or in pieces. This is due by the end of the 2nd week of class. How you do it is part of the assignment. If you don't have a car or bicycle, you can rent an Indy Bike or use public transit. You should choose 5 of the 11 sites listed below, but be aware that credit will be given for diversity of selection.

The locations are:

1. Carl Park
2. Rittenhouse Square
3. Logan Square
4. Market and 12th street
5. Fairmount Park, at Brown and 22nd street
6. Francisville at Poplar and 15th street
7. Market & 17th street
8. South and 4th street
9. Federal & 9th street
10. McKean & 2nd street
11. Wynnefield & Bryn Mawr Ave

Notes:

- You should be able to do this in half a day, but you can spread it out over several days if you prefer.
- I (strongly) recommend going in daylight.
- I (strongly) recommend going with one other person and discussing what you see.
- If driving, do not park in a bad neighborhood and take notes. This makes you look like an inexperienced undercover police officer.
- International students *must* pair with an American student.
- I can tell if you do this via Google maps.
- Photos are useful: I don't want dozens from each site, but one or two used to illustrate key points would be fine.
- Be prepared to discuss (and post best pictures).

The final exam also will have questions on some of the areas listed above where I will ask you to apply specific theoretical models to explain the patterns you observe, and also will have you compare these patterns to empirical findings from other cities.