UP 509: ECONOMICS FOR PLANNERS

Spring 2025, Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign

CLASS MEETINGS: Mondays and Wednesday, 11:00 am-12:20 pm, Room TBH 223

INSTRUCTOR: Bumsoo Lee, <u>bumsoo@illinois.edu</u>

OFFICE HOURS: 10:00 am-10:50 am on Wednesdays and by appointment, TBH

M206,

COURSE OVERVIEW

Cities are the "engines of growth" because they serve as hubs for creative and innovative activities. However, cities are also the focal points for many modern societal challenges, including poverty, pollution, congestion, crime, and housing shortages. This course adopts an economic approach to examining diverse urban problems and planning issues. Through the application of economic theories and models, we aim to understand how cities and regions function, analyze urban problems, and evaluate urban policies. Additionally, we will compare the strengths and weaknesses of economic and planning approaches, exploring how these approaches can complement each other.

UP 509 is designed to equip students with foundational knowledge and practical tools in microeconomics, public sector economics, and urban economics. These skills are applicable to a wide range of many urban problems and planning issues. Topics covered in the course include:

- 1. Review of tools in intermediate microeconomics
- 2. Market failures and the rationales for planning
- 3. Cost-benefit analysis
- 4. Agglomeration economies and urban growth
- 5. Economics of urban spatial structure and sprawl
- 6. Economics of land use regulation
- 7. Economics of traffic congestion
- 8. Public choice and local governments
- 9. Economics of housing subsidies

COURSE AT A GLANCE

Week	Dates	Topic	Assignment Due
1	Jan 22	Course overview	
2	Jan 27, 29	Market and price, Demand theory	
3	Feb 3, 5	Demand theory; Supply theory	
4	Feb 10, 12	Welfare analysis; Externalities	
5	Feb 17, 19	Public goods; Natural monopoly	
6	Feb 24, 26	Economics of pollution control; Exam	Microecon Exam (Feb 26)
7	Mar 3, 5	Cost-benefit analysis	1-page study plan (Mar 5)
8	Mar 10, 12	Non-market valuation	Assignment #1 (Mar 12)
	Spring Break		

Mar 24, 26	Rationales for cities; Agglomeration economies	
Mar 31, Apr 2	Urban and regional growth	Assignment #2 (Mar 31)
Apr 7, 9	Economics of urban spatial structure	
Apr 14, 16	Public choice and local government	3-page progress report (Apr 14)
Apr 21, 23	Economics of sprawl and land use control	Assignment #3 (Apr 21)
Apr 28, 30	Economics of transportation	
May 5, 7	Economics of housing	
		Term paper due (May 14, Noon)
	Mar 31, Apr 2 Apr 7, 9 Apr 14, 16 Apr 21, 23 Apr 28, 30	Mar 31, Apr 2 Urban and regional growth Apr 7, 9 Economics of urban spatial structure Apr 14, 16 Public choice and local government Apr 21, 23 Economics of sprawl and land use control Apr 28, 30 Economics of transportation

TEXTBOOK

Arthur O'Sullivan. 2012. Urban Economics 8th Edition. Boston, MA: McGraw-Hill/Irwin. Required. 9th edition of the book can be a substitute.

Any *Intermediate level Microeconomics* textbook. If you do not already own any, the recommended textbook is: Anne C. Steinemann. 2011. Microeconomics for Public Decisions, *2nd edition*. Askmar Publishing. This book is not required, but <u>highly recommended</u>.

Additional reading materials (journal and magazine articles) or the links to them will be posted to Canvas (<u>Canvas.illinois.edu</u>). Students should read required reading assignments before class and active participation in class discussions will be credited in the final grade.

All the lecture notes will also be posted to Canvas, which will reduce the time needed for note taking in class. Check Canvas frequently for lecture notes, assignments and other materials.

EVALUATION

Microeconomics exam	25 %	
Three homework assignments	30 %	
Policy memo (or research paper)	25 %	
Student led discussion		
Class participation	10 %	

All assignments are due at **11am** on the specified due date unless noted otherwise. **Late submissions** will incur a penalty of 10% deduction per day, up to a maximum of 50%.

Each student is required to present and lead the discussion on one research article selected from the assigned readings. These papers are marked as **[SLD]** in the course schedule. No written report is required for this assignment. Detailed guidelines and a sign-up Google Sheet will be provided.

POLICIES

ACADEMIC INTEGRITY

This course follows the guidelines set forth by the University student code. See https://studentcode.illinois.edu/article1/part4/1-401/ for specific

guidelines, examples, and punishment associated with academic dishonesty.

PLAGIARISM

Plagiarism in this class is unacceptable. Any accidental or willful use of words, work, or ideas of another without appropriate quotation and citation will be penalized by a failing grade on the paper and/or a failing grade in the course. Please see the definition of plagiarism here:

https://studentcode.illinois.edu/article1/part4/1-402/. Be reminded that all your submissions to the Canvas will go through plagiarism checking.

USE OF GENERATIVE AI TECHNOLOGY

The use of Generative AI tools, including ChatGPT and Bard, is **permitted** for these limited activities:

- Brainstorming and refining your ideas
- Finding information on your topic
- Identifying r coding examples
- Checking grammar and style

Activities for which the use of generative AI is **not permitted** include:

- Writing a draft of a writing assignment
- Writing entire sentences, paragraphs or papers to complete class assignments
- Completing group work that your group has assigned to you
- Generating tables and figures to include in class assignments

You are responsible for the information you submit based on an Al query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of Al tools must be **properly documented and cited** in order to stay within university policies on academic honesty mentioned above. Any use outside of this permission will be considered academic dishonesty.

ATTENDANCE POLICY

Regular attendance at all scheduled classes (lectures and labs) is crucial for success in the course. If you must miss class for a religious observance or an approved reason, you need to contact the instructor at least one week prior to the absence to discuss arrangements and provide a proper absence documentation (e.g. Request for Accommodation for Religious Observances). In case of serious illness or family emergencies, inform the instructor via email as soon as possible.

SPECIAL ACCOMMODATIONS

This course will accommodate students with documented disabilities. Please refer to https://www.disability.illinois.edu/academic-accommodations for more information and provide the appropriate documentation at the beginning of the semester.

CLASS CLIMATE

The Department of Urban and Regional Planning (DURP) is committed to creating an environment of inclusion and opportunity that is rooted in the very goals and responsibilities of practicing planners. Conduct that

interferes with the rights of another or creates an atmosphere of intimidation or disrespect is inconsistent with the environment of learning and cooperation that the program requires. By enrolling a course in the Department of Urban and Regional Planning, students agree to be responsible for maintaining a respectful environment in all DURP activities, including lectures, discussions, labs, projects, and extracurricular programs. We will be governed by the University Student Code. See Student Code Article 1—Student Rights and Responsibilities, Part 1. Student Rights: §1-102 In the Classroom.

EMERGENCY RESPONSE RECOMMENDATIONS

The Department of Homeland Security and the University of Illinois at Urbana-Champaign Office of Campus Emergency Planning recommend the following three responses to any emergency on campus: RUN > HIDE > FIGHT

For more information, https://police.illinois.edu/em/run-hide-fight/.

COUNSELING CENER

The Counseling Center is committed to providing a range of services intended to help students develop improved coping skills in order to address emotional, interpersonal, and academic concerns. The Counseling Center provides individual, couples, and group counseling. All of these services are paid for through the health services fee. The Counseling Center offers primarily short term counseling, but they do also provide referrals to the community when students could benefit from longer term services.

https://counselingcenter.illinois.edu/

READING ASSIGNMENTS

O'Sullivan (2012)= Arthur O'Sullivan. 2012. *Urban Economics 8th Edition*. Boston, MA: McGraw-Hill/Irwin. **Steinemann (2011)**= Anne C. Steinemann. 2011. *Microeconomics for Public Decisions, 2nd edition*. Askmar Publishing.

[SLD] Research papers selected for student led presentation & discussion.

Week 1

Introduction and course overview Syllabus.

Week 2

Market and price

The basics of supply and demand, the market mechanism, elasticities

Steinemann et al. (2011) Ch2. Demand and supply & Ch3. Market dynamics and interventions (or Corresponding chapters of your own microeconomics text)

O'Sullivan (2012) Appendix 1. The marginal principle & 2. Product market interventions (or Ch 2.2 Marginal principle and Ch 2.4. Comparative statics in 9th edition)

Demand theory

Consumer choice, indifference curve, individual and market demand curves

Steinemann et al. (2011) Ch4. Choice and demand O'Sullivan (2012) Appendix 4. Consumer choice

Week 3

Demand theory, continued Supply theory

Production and costs, economies and diseconomies of scale, average and marginal cost, supply curve

Steinemann et al. (2011) Ch5. Costs and supply O'Sullivan (2012) Appendix 5. Input choice O'Sullivan (2012) Ch. 1 Axiom 4 & Axiom 5

Week 4

Competition, efficiency, and welfare

Analysis of competitive markets, consumer and supply surplus, efficiency, welfare

Steinemann et al. (2011) Ch6. Efficiency and equity & Ch7. Welfare economics

Externalities

Externalities and inefficiency, correcting externalities

Steinemann et al. (2011) Ch9. Externalities O'Sullivan (2012) Ch. 1 Axiom 3

Week 5

Public goods

Types of public goods, demand for public goods, public goods provision

Steinemann et al. (2011) Ch10. Public goods

Natural monopoly

Steinemann et al. (2011) Ch8. Monopoly

Gupta. (2011). *Analyzing Public Policy: Concepts, Tools, and Techniques*. Washington, D.C.: CQ Press. Chapter 3 Government and the market. pp. 47-74.

Week 6

Economics of pollution control

Pindyck, R. S. and D. Rubinfeld. 2009. *Microeconomics 7th ed*. Upper Saddle River, NJ: Pearson. 18.2 Ways of correcting market failure, pp. 651-660.

[SLD] Metcalf, G. 2019. On the economics of a carbon tax for the United States. *Brookings Papers on Economic Activity*, Spring: pp. 405-458.

Microeconomics Exam (Feb 26)

Week 7

Cost-benefit analysis: Tools of cost-benefit analysis

Time value of money, NPV, B/C ratio, IRR

Steinemann et al. (2011) Ch12. Intertemporal costs and benefits, Ch13. Cost-benefit analysis, and Ch14. Cost-benefit applications.

[Optional] TCRP 78= ECO Northwest, and Parsons Brinckerhoff Quade & Douglas. 2002. Estimating the benefits and costs of public transit projects: a guidebook for practitioners. Edited by N. R. C. Transportation Research Board. Vol. 78, Transit Cooperative Research Program. Washington, D.C.: National Academy Press.

Week 8

Non-market valuation

Contingent valuation, case studies of cost-benefit analysis

OECD. 2006. Cost-benefit analysis and the environment: Recent developments. Ch 7. Revealed preference methods for valuing non-market impacts, Ch 8. Stated preference approaches I: Contingent valuation method: pp. 91-124.

[SLD] Hanemann, W. M. (1994) Valuing the environment through contingent valuation. *Journal of Economic Perspectives* 8 (4): 19-43.

Week 9

Rationales for cities

Definition of cities. Why do cities exist?

O'Sullivan (2012) Ch2. Why do cities exist?

OMB (2021) 2020 Standards for delineating Core Based Statistical Areas. Federal Register 86 (134).

Agglomeration economies and clusters

Urbanization & localization economies, technological development and cities O'Sullivan (2012) Ch3. Why do firms cluster?

[SLD] Fang, L. & J. Drucker (2021) "How spatially concentrated are industrial clusters? A meta-analysis" *Journal of Planning Literature* 36(4): 526-542.

[Optional] Rosenthal, Stuart and William Stranger (2003) Evidence on the nature and sources of agglomeration economies. Henderson, Vernon and J. Thisse (eds.) *Handbook of Regional and Urban Economics 4: Cities and Geography.* Elsevier.

Week 10

Urban and regional growth

Urban growth theories, costs and benefits of growth O'Sullivan (2012) Ch4. City size and Ch5. Urban growth

- **[SLD]** Mellander, C. and R. Florida. (2021). The rise of skills: Human capital, the creative class, and regional development. in Fischer & Nijkamp eds. *Handbook of Regional Science*. Springer.
- [SLD] Glaeser, E. (2022). Urban resilience. Urban Studies 59 (1): 3-35.
- [Optional] Dawkins, C. 2003. Regional development theory: Conceptual foundations, classic works, and recent developments. *Journal of Planning Literature* 18 (2): 131-172.

Week 11

Economics of urban spatial structure

O'Sullivan (2012) Ch6. Urban land rent and Ch7. Land-use patterns.

- **[SLD]** Glaeser, E., M. kahn, and J. Rappaport. 2008. Why do the poor live in cities? The role of public transportation. *Journal of Urban Economics* 63: 1-24.
- **[SLD]** Lee, H. (2020). Are millennials coming to town? Residential location choice of young adults. *Urban Affairs Review*, 56(2).
- **[SLD]** Florida, Richard, Andres Rodriguez-Pose & Michael Storper. 2021. Cities in a post-COVID World. Papers in *Evolutionary Economic Geography* #20.41.

Week 12

Public choice and local government

O'Sullivan (2012) Ch8. Neighborhood choice, Ch15. The role of government, and Ch16. Local government revenue

- **[SLD]** Kim, J. et al. 2013. Local and regional governance structures: Fiscal, economic, equity, and environmental outcomes. *Journal of Planning Literature* 28 (2): 111-123.
- **[SLD]** Mitchell-Weaver, C., D. Miller, and R. Deal. 2000. Multilevel governance and metropolitan regionalism in the USA. *Urban Studies* 37 (5-6):851-876.

Week 13

Economics of urban sprawl and land use control

O'Sullivan (2012) Ch7. Land use patterns and Ch9. Zoning and growth controls

- **[SLD]** Brueckner, J. K. 2000. Urban sprawl: Diagnosis and remedies. *International Regional Science Review* 23 (2):160-171.
- **[SLD]** Knaap, Gerrit-Jan. 2008. The sprawl of economics: A response to Jan Brueckner. In Toward a Vision of Land in 2015: International Perspectives, edited by G. C. Cornia and J. Riddell. Cambridge, MA: Lincoln Institute of Land Policy.

[Optional] Wassmer, R. W. 2006. The influence of local urban containment policies and statewide growth management on the size of united states urban areas. *Journal of Regional Science* 46 (1):25-65. [Optional] Kim, JH and J. Won. 2024. Exploring variations in local land use regulations in the U.S.: What matters and at what level? *The Annals of Regional Science* 73: 1071-1095.

Week 14

Economics of transportation

O'Sullivan (2012) Ch10. Externalities from autos and Ch11. Mass transit

[SLD] Levinson, D. 2010. Equity effects of road pricing: A review. Transport Reviews 30 (1): 33-57.

[SLD] Hosford, K., C. Firth, M. Brauer, and M. Winters. 2021. The effects of road pricing on transportation and health equity: A scoping review. *Transport Reviews* 41 (6): 766-787.

Week 15

Economics of housing

O'Sullivan (2012) Ch13. Why is housing different? and Ch14. Housing policy

[SLD] Galster, George and Kwan Ok Lee. 2021. Housing affordability: A framing, synthesis of research and policy, and future directions. *International Journal of Urban Sciences*, 25 (1). 7-58.