Econ 414: Urban Economics

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University: Your University (Department of Economics)
Course website: https://urban-econ.classes.hussainhadah.com
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Office hours: TBD
Class time/location: TBD

> **Draft note:** This R Markdown document recreates the UrbanEconomics template syllabus. Update all placeholders, dates, and policy language before sharing with students.

Course description

This course introduces core issues and recent advances in urban economics. We develop canonical models to explain spatial regularities within and across cities and analyze the market forces that cause cities to grow. We then study housing, neighborhood effects, congestion, local government, segregation, violence, and disease. Along with lectures, lab sessions expose you to practical tools in data science such as data cleaning, visualization, and mapping using R. By the end of the semester, you will understand the economic approach to cities and be comfortable using R for urban data.

Materials

Required reading

You must be willing to spend time reading and thinking about the material. Lecture notes, articles, and code will be posted on the course website.

Additional reading

There is no required textbook. However, class topics draw on chapters and papers from the following books. Reading is strongly recommended.

- Brueckner, J. K. (2011). *Lectures on Urban Economics*. MIT Press.
- Glaeser, E. (2011). *Triumph of the City*. Penguin Books.
- Moretti, E. (2012). *The New Geography of Jobs*. Houghton Mifflin Harcourt.

- O'Sullivan, A. (2007). *Urban Economics*. McGraw-Hill/Irwin.
- Sampson, R. J. (2012). *Great American City: Chicago and the Enduring Neighborhood Effect*. University of Chicago Press.

Required materials

You must have access to a computer where you can install up-to-date versions of R and RStudio. Prior programming experience is helpful but not required.

Course Q&A

We will use a course discussion platform (TBD) to ask questions about course content and assignments. Participating regularly and helping classmates will be recognized as extra credit where appropriate.

Prerequisites

Students must have completed intermediate microeconomics and regression analysis. An introductory course in applied econometrics is recommended but not required.

Evaluation

Grade determination

Task	Weight
Homework (5 assignments)	40%
Midterm exam	20%
Lab quiz	20%
Final group project	20%
Attendance, extra assignments, course participation	Up to 5% (extra credit)

Homework

Homework should be submitted online through the learning management system. Late assignments receive a daily penalty of 5% and may be submitted up to 3 days after the original deadline. After that, assignments receive no credit. Submit both the `.Rmd` and `.pdf` files. Points may be deducted for lack of organization in your report.

Students are encouraged to work together on homework. However, sharing, copying, or providing any part of a solution or code is an infraction of academic integrity policies and will be handled according to university rules.

Midterm exam and lab quiz

The midterm exam and lab quiz are open book. Any interaction between students during the exam is an infraction of academic integrity policies. Exams must be completed during regular class time through the learning management system.

Final project

There will be a final group project. Details will be posted on the course website.

Conflicts and missed exams

Students must provide documentation for excused absences. In the event that a student misses the midterm exam, its weight will be redistributed to other tasks. There are no make-up exams.

Grading scale

Grade	Range	Grade	Range
A+	97–100%	C+	77–79.99%
A	93–96.99%	C	73–76.99%
A-	90–92.99%	C-	70–72.99%
B+	87–89.99%	D+	67–69.99%
B	83–86.99%	D	63–66.99%
B-	80–82.99%	D-	60–62.99%
F	<59.99%		

Predicted outline

Week	Topics	Readings / Notes	Due
1	Syllabus day; Intro to R; Stylized facts of cities	—	—
2	Market forces in the development of cities; Agglomeration; Data cleaning with tidyverse	Moretti (2012) ch. 4; O'Sullivan (2007) ch. 2–3	—
3	Monocentric city model I (Alonso–Muth–Mills)	Brueckner (2011) ch. 2	—
4	Monocentric city model II; Urban sprawl and land-use controls	Brueckner (2011) ch. 3–4	Homework 1
5	Urban growth and decline; The Great Divergence	Glaeser (2011) ch. 2 & 9; Moretti (2012) ch. 3	—

Week	Topics	Readings / Notes	Due
6	Spatial equilibrium across cities; Mapping data with tmap and Leaflet	—	Homework 2
7	Midterm week	—	Midterm exam
8	Urban transportation; Congestion pricing	Brueckner (2011) ch. 5	Homework 3
9	Housing demand; Housing policies	Brueckner (2011) ch. 6–7	—
10	Local government; Tiebout model	Brueckner (2011) ch. 8	Homework 4
11	Lab quiz week	—	Lab quiz
12	Neighborhood choice; Segregation trends; Tipping model	—	—
13	Neighborhood effects; Moving to Opportunity experiment	Sampson (2012) (lecture notes)	—
14	Exploratory spatial data analysis (ESDA); Moran's I and LISA	—	Homework 5
15	Violence & disease; Broad Street cholera outbreak; COVID-19 spatial distribution	—	Final project discussion
16	Final project week	—	Final project due

Academic support and policies

Replace the text in this section with your institution's official policy language and links.

- Academic assistance and tutoring resources
- Academic integrity policy
- Disability accommodations
- Emergency response recommendations
- FERPA statement

- Title IX reporting and resources
- Counseling and student support services
- Academic calendar and important deadlines