

NOTE The full course syllabus, schedule, and all course materials are available online at . This PDF is a draft and should be updated with your institution's policies, dates, and links before distribution.

Urban Economics

ECON 414 • Spring 2026

Urban
Economics

⚠ Warning

This syllabus is based on the UrbanEconomics template. Update the dates, weights, links, and all institution-specific policy language before sharing with students.

| Instructor | Course details | Contacting me |
|--|---|---|
| <ul style="list-style-type: none">• Dr. Hussain Hadah• TBD• hussain.hadah@university.edu• Bluesky | <ul style="list-style-type: none">• TBD• TBD• TBD• TBD | <ul style="list-style-type: none">• Schedule an appointment• Course chat <p>E-mail is the best way to reach me. I will respond to course-related messages within 24–48 hours during the work week.</p> |

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

Class readings are subject to change as we progress. Check the course website for updates.

| 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 | — |
| 6 | Spatial equilibrium across cities; Mapping data with tmap and Leaflet | — | Homework 2 |
| 7 | Midterm week | — | Midterm exam |

| Week | Topics | Readings / Notes | Due |
|------|--|--------------------------------|--------------------------|
| 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

Academic assistance

Seek help early and often. The department and university offer tutoring, writing support, and other services. Replace this section with your institution's official links and contacts.

Academic integrity

Students are responsible for understanding and complying with academic integrity policies. Academic dishonesty may result in a failing grade and additional sanctions. Replace this section with your institution's official policy language.

Students with disabilities

Students who need accommodations should contact the instructor and the campus accessibility office as early as possible. Replace this section with your institution's accessibility office contact information.

Emergency response recommendations

Replace this section with your institution's emergency response guidance and building safety information.

Family Educational Rights and Privacy Act (FERPA)

Students with suppressed directory information should self-identify to the instructor to protect privacy. Replace this section with your institution's FERPA statement and links.

Sexual misconduct reporting obligation

Faculty and staff are required to report sexual misconduct to the university's Title IX office. Replace this section with your institution's official Title IX policy and reporting resources.

Student support

Replace this section with counseling, wellness, and crisis support resources for your campus.

Academic dates and deadlines

Consult the university academic calendar for add/drop, withdrawal, and other key dates. Replace this section with the official calendar link.