

RE420: URBAN AND REGIONAL ECONOMICS, FALL 2024

(Real Estate/Economics/Urban and Regional Planning)

RE420 Lectures 004

Course Canvas website (<https://canvas.wisc.edu/courses/429265>)

GENERAL INFORMATION

Instructor: Heejin Yoon

Lectures: RE420 (004): Grainger 2190, Mon/Wed 4:00 pm – 5:15 pm

Office hours: Grainger 5298B, Tue/Thu 3:00 pm – 4:30 pm, or by appointment

Email: heejin.yoon@wisc.edu

COURSE CREDITS

This is a 3-credit course. This class meets for two 75-minute class periods each week over the semester. It carries the expectation that students will work on course learning activities (reading, writing, homework assignments, group meetings, etc.) for about 3 hours out of the classroom for every class period.

COURSE PREREQUISITE

Required: Econ 101 or 111.

COURSE DESIGNATIONS AND ATTRIBUTES

Course Designation: Breadth - Social Science; Level - Advanced; L.S. Credit - Counts as Liberal Arts and Science credit in L.S.

INSTRUCTIONAL MODALITY

In-person.

COURSE DESCRIPTION

Economics is the study of the allocation of scarce resources. Urban and regional economics focuses on the allocation of resources across space. This course uses economic methods to analyze urban real estate. Topics covered include the determinants of real estate values, the location decisions of households and firms, land use, urban growth and agglomeration, real estate pricing, cycles, development, housing market and policies, and sustainable development.

COURSE OVERVIEW

Urban economics is the study of cities, economic activities therein, and the determinants of those activities. Development in the urban and real estate sector can often be a reflection or manifestation of broader societal issues. For instance, rising house prices can trigger debates about housing affordability and wealth inequality. Digital technological innovation and big data analytics are now reshaping urban development and the residential and commercial real estate markets. The real estate-related financial capital markets nurture entrepreneurship and economic gains in the region and globally. In addition, green technology fosters healthy urban lifestyles and sustainable urban environments.

Urban economics brings together tools developed in the broader fields of economics such as micro- and macro-economics, financial economics, econometrics and statistics, labor economics, public economics, economic policy studies, etc. By utilizing these tools, we can analyze social issues relating to urban society, such as housing price and affordability, urbanization and migration, demographic shifts and aging, education, labor participation, crime, segregation, congestion and pollution, smart and innovative cities, environmental sustainability and socially responsible development.

This semester, our goal is to guide the students to take a holistic view of urban and housing economics, understand the social-economic challenges we face through the dynamic interaction between the real estate markets and urban space, and learn how to tackle these problems.

Students are expected to learn how to apply economic principles and tools to analyze urban phenomena and find solutions to urban problems.

LEARNING OUTCOMES

- Students will understand the relevance of economic analysis to real estate decisions.
- Students will understand why cities exist and what drives urban growth.
- Students will be able to explain how the location decisions of households and firms are made and how these decisions impact housing prices, land use, labor market, and many other aspects of cities.
- Students will study spatial equilibrium concepts and understand their implications for urban development and real estate decisions.
- Students will be able to understand statistical models to assess residential and commercial real

estate and perform sensible business and policy analysis.

- Students will learn how real estate developers approach their decisions.
- Students will understand cycles, risks, and bubbles in residential and commercial real estate markets.
- Students will learn why socially responsible and environmentally sustainable urban development is a big challenge in the U.S. and around the world.
- Students will work on a project that applies urban and regional economics to real estate decisions and policy analysis.

READINGS AND MATERIALS

There is no textbook required for this course. Instead, I will post detailed lecture notes for each lecture on the Canvas course website.

I recommend the following books for those interested in getting more depth on the material seen in class.

- Arthur O'Sullivan, *Urban Economics*, 9th ed. ISBN: 978-0-078-02178-7 (Recommended but not required)
- Jan K. Brueckner, *Lectures on Urban Economics*. ISBN: 978-0262016360 (Recommended but not required)
- Edward Glaeser, *Triumph of the City*. ISBN: 978-0-14-312054-4 (Recommended but not required)

Additional reading materials will be available on the course website.

SESSION SCHEDULE

Note: The topics and dates for the class may change throughout the semester – please refer to the course calendar on Canvas for the most up-to-date timeline and materials.

No.	Date	Topics
1	Sep. 4	Introduction
2	Sep. 9	Agglomeration
3	Sep. 11	Demand and supply for housing Housing elasticity
4	Sep. 16	Dynamic and durable housing Compounding challenges in shrinking cities
5	Sep. 18	Spatial equilibrium within a city: Monocentric city model (Alonso-Mills-Muth model)
6	Sep. 23	In-class debate: The Future of Detroit • “Why Do Cities Decline?” Chapter 2 of <i>Triumph of the City</i> by Edward Glaeser Housing valuation: The user cost model
7	Sep. 25	Housing valuation: Hedonic approach Data analysis tutorial • Assignment #1 will be posted (due by Oct. 1)
8	Sep. 30	Introduction to Sustainable Development and the U.N. 17 SDGs. The group project planning
9	Oct. 2	Guest lecture on the Sustainable Development Goals (SDGs) • Guest speaker: Lori DiPrete Brown, Director and Distinguished Faculty Associate, School of Human Ecology, UW-Madison. TED Talk Speaker (2015). • Classroom: Grainger 1175
10	Oct. 7	Guest lecture on the city of Madison’s results on the SGD and sustainable development strategies for the city of Madison • Guest speaker: Karalyn (Kara) Kratowicz, UniverCity Alliance, Performance Excellence Specialist, City of Madison • Guest speaker: Jessica Price, Sustainability & Resilience Manager, Mayor’s Office, City of Madison • Classroom: Grainger 1195
11	Oct. 9	House price indexes Material review for in-class exam 1
12	Oct. 14	In-class exam 1
13	Oct. 16	Constructing HPIs • Assignment #2 will be posted (due by Oct. 25) Spatial equilibrium across cities: Rosen-Roback model

14	Oct. 21	Spatial equilibrium across cities: Rosen-Roback model
15	Oct. 23	Introducing the CoStar commercial real estate database <ul style="list-style-type: none"> • Guest speaker: Brian Hiemer, Senior Executive, CoStar Group • Classroom: Grainger 1175
16	Oct. 28	Neighborhood choice and segregation <ul style="list-style-type: none"> • Assignment #3 will be posted (due by Nov. 5)
17	Oct. 30	Guest lecture on the affordable housing plan in Wisconsin and the green sustainable building projects in Milwaukee <ul style="list-style-type: none"> • Guest speaker: Christopher Adams, Chief Technical Officer, Principal, Dominion Properties • Guest speaker: Shreedhar Ranabhat, Director of Commercial Lending, Wisconsin Housing and Economic Development Authority (WHEDA) • Classroom: Grainger 1175
18	Nov. 4	Neighborhood choice and segregation Data analysis using CoStar
19	Nov. 6	Neighborhood Effects
20	Nov. 11	Housing Cycles and Bubbles Real estate investment decisions and Four-Quadrant Model
21	Nov. 13	Real estate investment decisions and Four-Quadrant Model Material review for in-class exam 2
22	Nov. 18	Guest lecture on the outlook of the global real estate markets <ul style="list-style-type: none"> • Guest speaker: Jacques Gordon, Senior Executive, MIT Center for Real Estate. Formerly Global Strategist at LaSalle Investment Management. • Classroom: Grainger 1195
23	Nov. 20	In-class exam 2
24	Nov. 25	Guest lecture on housing affordability: general observations and U.S. perspectives <ul style="list-style-type: none"> • Guest speaker: Professor Emeritus Steve Malpezzi, UW-Madison, Graaskamp Center for Real Estate. Dean of the Weimer School of the Homer Hoyt Institute.
25	Nov. 27	Local Government and Public Goods
26	Dec. 2	Group project presentation (I)
27	Dec. 4	Group project presentation (II)
28	Dec. 9	Group project presentation (III) Course evaluation survey
29	Dec. 11 (2:00 pm - 4:30 pm)	Student group projects poster session @The Madison Municipal Building (215 Martin Luther King Jr Blvd), 2nd Floor, Room 215

GROUP PROJECTS

Students will be formed into small groups (of four to five students) to work on a group project. The group project will focus on sustainable city and neighborhood development: the case of the City of Madison. There will be lectures, guest speakers, reading materials, online video materials, and case studies to help students get familiar with the issues. For students to develop their leadership, communication, and skills, this course requires students to write a group project report on sustainable city and neighborhood development: the case of the City of Madison. The student groups will present their main findings in class, as well as during a poster session with guests from the Mayor's Office of the City of Madison, the neighboring cities, and other schools and institutes on campus.

GROUP PROJECT REPORT: I will divide students into small groups and expect them to produce a report of about fifteen pages. The final draft style is New Times Roman, 12 points font size, and double spacing (align text to both left and right margins!). The title page of the draft should contain a) the title of the report and b) the names and email addresses of students in the group.

The group project report should also include a one-page executive summary. The executive summary should be written using language the intended audience can understand and read independently from the report. It should describe the data and methodology used and highlight the key results.

Tables and figures should be numbered consecutively and labeled clearly. Symbols and abbreviations in the tables and figures should be defined clearly. Each table and figure should include an explanatory paragraph that fully explains the table or figure so that the reader does not need to refer to the text.

Citations of other works in the text should include the author and the date, for example, Cox (2000). A reference page should be placed at the end of the article under the heading **Reference**. The conforming format of the reference examples is:

- **Book:** Merrill, S. R. *Hedonic Indices as a Measure of Housing Quality*. Abt Associates: Cambridge, MA, (1980).
- **Journal article:** Rea, L. M., and D. K. Gupta, 1982. The Rent Control Controversy: A Consideration of the California Experience. *Glendale Law Review*, 4, 47-58.
- **Article in a book edited by another:** Walker, M. A. An Income Supplement Program, in *Rent Control: A Popular Paradox*, ed. By M. A. Walker. The Fraser Institute: Cambridge, MA, (1975).

PRESENTATION: During the presentation, the students will briefly summarize their main findings, explain what they have learned and found most interesting, and formulate one question for their classmates. This question will be part of the material that all students must study for the final exam. The person/group presenting a paper is responsible for answering all questions from their classmates during their presentation and at any time during the semester.

The first and final drafts of the group project report and presentation must be posted on our course website before the corresponding deadlines (announced in class). Failure to follow any of these rules will result in a loss of at least 30 points.

The grades of the group project report and presentation will also reflect the group

peer evaluations.

CLASS PARTICIPATION AND SURVEY

Class attendance is mandatory.

In addition to the lectures, there will be student presentations and discussions. I expect all students to attend every class at the scheduled time. If you cannot participate in some classes, you should write to the instructor in advance for approval.

I also expect students to be actively engaged in learning throughout the course, and to be proactive in seeking any assistance that may be necessary. This means that students should take full advantage of office hours, class discussions, and other activities throughout the course. The student should also participate in class with questions during the lectures, debates, and other students' presentations.

STRUCTURE OF MIDTERM EXAMS

There will be multiple-choice questions and long questions about the materials covered in classes in the exams. For the long questions, a good answer must have the following four elements: 1) Assumptions (and model if it is relevant); 2) Economic intuition; 3) Numerical example or graphics; 4) Support theoretical arguments with empirical facts. This type of exam will help students in their future professional careers by giving them some experience in writing reports and summarizing the main economic ideas and facts. This type of exam (and the preparation for the exam) will also improve students' writing skills. Many employers tell the faculty that writing skills are essential in their hiring decisions.

GRADING

The grade will be determined based on your participation, homework, term project, and exams. I will grade students using a scale of 0-100. Conversion of the final grade to letter grades will follow the School of Business's guidelines: "For all [...] undergraduate courses with a class number below 600 and 15 or more students enrolled, the mean grade should be no higher than 3.3, and the maximum percentage of A's is 30%."

The final grade is computed using the following weights:

- 5% active participation
- 20% homework assignments
- 20% first in-class midterm
- 20% second in-class midterm
- 35% group project on sustainable development, of which:
 - 10% presentation
 - 20% quality of the group project report

- 5% group peers' evaluation

WEB RESOURCES

There are a few separate websites that you'll want to know if you're taking real estate courses.

1. The Real Estate Department's home page (<https://business.wisc.edu/faculty-research/real-estate/>) contains basic information about the program, links to data sources, etc.
2. The U.W. Writing Center (<https://writing.wisc.edu/>). The Writing Center, on the 6th floor of Helen C. White Hall, offers free short courses to help you improve your writing skills. Many employers tell the faculty that writing skills are an important consideration in their hiring decisions, and a writing course can help you with your writing. Stop by the Center or check out their website.
3. The UW-Madison Real Estate Club (<http://www.realestateclub.org/>). I advise all of you to consider joining the club seriously. Or, go to a meeting and see what it is all about. I think early exposure to your colleagues (junior and senior) and potential business partners is potentially an enormous benefit to your future career and enjoyment of real estate study and practice.

DIGITAL COURSE EVALUATION

UW-Madison uses a [digital course evaluation](#) survey tool. In most instances, students receive an official email two weeks prior to the end of the semester, notifying them that course evaluations are available. Students receive an email with a link to log into the course evaluation with their NetID. Evaluations are anonymous. Student participation is an integral component of course development, and feedback is important. UW-Madison strongly encourages student participation in course evaluations.

STUDENTS' RULES, RIGHTS & RESPONSIBILITIES

Diversity & Inclusion Statement

[Diversity](#) is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who, as students, faculty, and staff, serve Wisconsin and the world.

Academic Integrity Statement

By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct that may result in disciplinary action. Examples of disciplinary sanctions include, but are not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.

Lecture Materials and Recordings

Lecture materials and recordings for RE420, Urban and Regional Economics, are protected intellectual property at UW-Madison. Students in courses may use the materials and recordings for their personal use related to participation in class. Students may also take notes solely for their personal use. If a lecture is not already recorded, students are not authorized to record lectures without permission unless they are considered by the university to be a qualified student with a disability who has an approved accommodation that includes the recording. [Regent Policy Document 4-1] Students may not copy or have lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities, with the exception of sharing copies of personal notes as a notetaker through the McBurney Disability Resource Center. Students are otherwise prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

Accommodations for Students with Disabilities Statement

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy ([UW-855](#)) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities are a shared faculty and student responsibility. Faculty and students share responsibility in the accommodation process. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester or as soon as possible after a disability has been incurred or recognized. Faculty will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. (See: [McBurney Disability Resource Center](#))