

RE420: URBAN AND REGIONAL ECONOMICS

(Real Estate/Economics/Urban and Regional Planning)

Lectures 2, and 3

Spring 2020

GENERAL INFORMATION

Instructor: Yongheng Deng
Lectures: Lecture 2: M, W 1:00 pm – 2:15 pm, Grainger 1190
Lecture 3: M, W 2:30 pm – 3:45 pm, Grainger 1270
Office: Grainger 4110
Office hours: M, W 3:45 pm – 4:30 pm or by appointment
Email: yongheng.deng@wisc.edu

TA: Shengwei Guo
TA Office: Grainger 2167
TA office hours: Thursday 9:30 am – 10:45 am or by appointment
TA Email: sguo88@wisc.edu

COURSE PREREQUISITE

Economics 101

COURSE DESCRIPTION

Urban economics is the study of cities, of the 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 wealth inequality, and the same sort of technological innovation now reshaping the world of urban development and real estate market. The real estate-related financial capital markets are nurturing entrepreneurship and economic gains in the region and across the globe. The green technology is fostering healthy urban lifestyles and sustainable urban environments.

The urban economics brings together tools developed in the broader fields of economics such as micro- and macro-economics, econometrics and statistics, labor economics, financial economics, public economics, and 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.

In this semester, our goal is to guide the students to take a holistic view of the urban and housing economics, and to understand why there are many problems in urban areas, and how we may try to fix 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

In this course, students will:

- Learn stylized facts about cities, their sizes and locations, and their contributions to economic and social development
- Understand the demand and supply for housing and urban space
- Understand why space and location matter
- Understand the role of agglomeration and the city growth
- Understand the determinants and measurement of housing and land prices
- Understand the housing market speculation and bubbles
- Understand the impact of government regulations on urban development and welfare
- Learn why socially responsible and environmentally sustainable urban development is a big challenge in the US and around the world
- Learn challenges and opportunities in international housing and real estate markets

TEACHING AND LEARNING

The goal of a college education is to encourage students in critical thinking. Therefore our goal is to create an active learning environment in class instead of teaching as telling. Students learn more when instructors engage them and give them opportunities to think about the materials in class. If the students connect the dots on their own, they will remember it.

COURSE MATERIALS

There is no textbook for this course.

One homework assignment is to write an essay based on chapter 2 "Why Do Cities Decline?" of *Triumph of the City*

- Edward Glaeser, *Triumph of the City*. ISBN: 978-0-14-312054-4 (Required. Available at Amazon.com, paperback \$11.59, Kindle \$14.99)

I also recommend the following books for those who are interested in getting a little more depth on the material seen in class.

- John McDonald & Daniel McMillen, *Urban Economics and Real Estate: Theory and Policy*, 2nd ed. ISBN: 978-0-470-59148-2 (Recommended but not required)
- Arthur O'Sullivan, *Urban Economics*, 9th ed. ISBN: 978-0-078-02178-7 (Recommended but not required)

For selected modules students will be instructed to download relevant cases (with a fee) from Harvard Business Cases Store (<https://hbsp.harvard.edu/import/699776>)

- Singapore -City in a Garden: A Vision for Environmental Sustainability (Required) \$4.25
- Financial and Environmental Impact Analysis of Sustainable Retrofitting (Required) \$4.25

COURSE WEBSITE

All class material will be available on the Canvas website (<https://canvas.wisc.edu/courses/128782>). I will also put a PDF copy of the lecture note on the Canvas website after each class. Students are expected to be familiar with the functioning of this website. Every student must update her/his information and upload a picture as soon as possible.

MAIN TOPICS AND GROUP PROJECTS

1. Introduction to Urban Economics

- The demand and supply for housing and urban space
- The elasticity of supply and demand for housing and land
- Urban real estate market and the macro-economy

2. Housing Market and Policy

- Determinants of housing and land prices
- House price measurement: hedonic and repeated-sales house price indexes
- Housing investment, speculation, and bubbles

3. Sustainable Development for Real Estate and Urban Cities

- Introduction to the Sustainable Development Goals
- Case study: Singapore – City in a Garden
- Case study: Financial and environmental impact analysis of sustainable development

4. International Real Estate Market

- Evaluating the risk of Chinese housing markets: what we know and what we need to know
- The public housing in Singapore: the housing and development board (HDB)
- The government intervention and its impacts on the housing market

SESSION SCHEDULE

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

No.	Date	Topics
1	01.22.2020	Introduction
2	01.27.2020	The demand and supply for housing and urban space
3	01.29.2020	The elasticity of supply and demand for housing and land
4	02.03.2020	Agglomeration economies & supply and demand
5	02.05.2020	Urban real estate market and the macro-economy
6	02.10.2020	Introducing DiPasquale and Wheaton' four-quadrant (4Q) model of real estate markets
7	02.12.2020	Determinants of housing and land prices (I): The Kain and Quigley model
8	02.17.2020	Determinants of housing and land prices (II): The Rosen-Roback model
9	02.19.2020	House price measurement (I): average and median house price index
10	02.24.2020	House price measurement (II): hedonic house price index
11	02.26.2020	House price measurement (II): hedonic house price index
12	03.02.2020	House price measurement (III): repeated-sales house price index
13	03.04.2020	Guest lecture on the CoStar database Guest speaker: • Brian Hiemer, Senior Executive, CoStar Group
14	03.09.2020	• House price measurement (III): repeated-sales house price index • Midterm Review
15	03.11.2020	Midterm
	03.14-03.22	Spring Recess, No Classes

	03.23.2020	Starting virtual classroom online teaching for the rest of the semester
16	03.23.2020	• Introduction to Blackboard Collaborate Ultra • Housing investment, speculation, and bubbles (I)
17	03.25.2020	Housing investment, speculation, and bubbles (II)
18	03.30.2020	Guest lecture on green building and sustainable development Guest speakers: • Farshad Maltes, Director of Economic Development, Wisconsin Housing and Economic Development Authority (WHEDA) • Christopher Adams, Chief Technical Officer, Principal, Dominion Properties
19	04.01.2020	Introduction to sustainable development (I)
20	04.06.2020	Guest lecture on the outlook for the global real estate markets in 2020-21 Guest speakers: • Jacques Gordon, Global Strategist, LaSalle Investment Management
21	04.08.2020	Introduction to sustainable development (II)
22	04.13.2020	Evaluating the risk of Chinese housing markets: what we know and what we need to know (I)
23	04.15.2020	• Evaluating the risk of Chinese housing markets: what we know and what we need to know (II) • The public housing in Singapore: the housing and development board (HDB) (I)
24	04.20.2020	The public housing in Singapore: the housing and development board (HDB) (II)
25	04.22.2020	Final Review
26	04.27.2020	Student group project presentation (I)
27	04.29.2020	Student group project presentation (II)
	04.30.2020	<u>Group project PPT and Final reports due</u>
	05.05.2020	Final Exam (10:05 am – 12:05 pm)

GROUP PROJECT

During the second half of the semester (right after the spring recess), students will be formed into small groups (of five students) to work on a group project. The group project will focus on the topic of sustainable development in commercial or residential real estate industry or urban city development. There will be lectures, guest speakers, reading materials, online video materials, and case studies, helping students to get familiar with the issues.

For students to develop their leadership, communication, and skills, I require students to write a group project report on sustainable development in commercial or residential real estate industry or urban city development, and then present in front of their classmates their main findings.

GROUP PROJECT REPORT: I will sort students in small groups and expect them to produce a report of seven to ten pages. The style for the final draft is **New Times Roman, 12 points font size, and double space (align text to both left and right margins!)**. The head of the draft should contain: a) Title of the paper, and b) Name of students in the group.

The group project report should also include a 100-word or less abstract that is readable by the layperson. The abstract should be understandable and independent of the rest of the paper. It should describe the data and methodology used and highlight the key results.

Tables and figures should number consecutively and label clearly. Symbols and abbreviations in the tables and figures should be defined clearly. Each table and figure should include an explanatory paragraph which should fully explain the table or figure so that the reader need not refer to the text.

Citation of other works in the text should include both author and date, for example, Cox (2000). A reference page should be placed at the end of the article under the heading Reference. Conforming format of the reference examples are:

- **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: In the presentation, the students have to briefly summarize their main findings, explain what they have learned and found most interesting, and formulate one question to their classmates. This question will be part of the material that all students must study for the final exam. The person/group that presents a paper is responsible for answering all questions from their classmates not only during their presentation but also 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 classmate evaluations and

group peer evaluations. A student who is in class but does not submit their *classmate evaluation form* (or submits the evaluation but is incomplete) will suffer a penalty that will affect their participation grade. In the case that you present the paper with other students, you must also submit your *group peer evaluation form* no later than the day of your presentation. Otherwise, you will suffer a penalty.

STRUCTURE OF MIDTERM AND FINAL EXAMS

In the exams, there will be questions about the research papers presented in class and also long and short/multiple-choice questions about the material seen in class. 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 intuitive figures; 4) Supports of theoretical arguments with empirical facts. I believe that this type of exam will help students in their future professional careers by giving them some experience on how to write reports by summarizing the main economic ideas and facts. Also, this type of exam (and the preparation for the exam) will improve students' writing skills. Many employers tell the faculty that writing skills are an important consideration in their hiring decisions.

CLASS ATTENDANCE AND PARTICIPATION

Class attendance is mandatory, and more than five absences will count against you.

In addition to the lectures, there will be student presentations and discussions. I expect all students to be present in every class and participate with questions during their peer presentations.

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. Also, the student should participate in class, with questions during the lectures, debates, and other students' presentations. To encourage active participation, I will give 5 points (out of 100) to those outstanding students that actively participate in class.

GRADING

I will grade students using scale 0-100. Conversion of final grading to letter grades will follow the School of Business' guidelines: "For all [...] undergraduate courses with class numbers 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
- 15% assignments
- 15% midterm
- 30% final exam
- 35% group project on sustainable development, of which:
 - 10% presentation (classmates' evaluation)
 - 20% quality of the group project report
 - 5% jury and group peers' evaluation

SPECIAL PASS/FAIL POLICY for Spring 2020

UW-Madison is in an unprecedented situation, faced with decisions that we have not navigated before. As a result, we are announcing a **special Pass/Fail (P/F) grading option** for students during the Spring 2020 semester.

Maintaining instruction and the quality of academics is and has been our most important campus goal, short of preserving the health and safety of our community. Recognizing that our lives have been significantly impacted by COVID-19, our grading and credit policies must adapt.

We are planning to extend the time for **students to elect a special P/F grade for a qualified course until May 22, 8 days after the final grade deadline**. This approach is similar to those taken by several of our peer institutions. It will require adjustments to pass/fail rules and possibly other academic policies. Enacting these changes is complex.

Under our new policies, just as before, students will receive a grade for any class they take, but also have the option to replace that grade with an alternative COVID-19 P/F grade for courses where this is allowable. We seek to extend this opportunity to most courses, undergraduate and graduate, but there will be exceptions, such as when strict program degree requirements or accreditor rules prohibit it. We will work to minimize these exceptions.

We will provide information on policy details within the next few weeks, but we can share one detail now. P/F grades for this semester will be specially designated due to the COVID-19 crisis in a way that differentiates them from normal P/F grading.

Our instructional staff and faculty have remarkably, in a 12-day period, adapted nearly 9,000 sections and courses to an alternative format that allows us to complete the Spring 2019-20 semester. Advisors and those providing other support services have made herculean efforts to bring their services fully online. Labs and other hands-on courses have had to radically shift their approach in this short window. Students are scattered around the nation and world, across time zones and with disparate access to high speed internet and other learning resources. To students, who are being asked to learn in new ways,

and to all our students, staff, and faculty, we recognize the challenges the curtailment of economic activity and the variability of technology has on our lives.

We care deeply about the well-being and learning of our students. We are inspired by our instructional staff and faculty and our advisors and other colleagues who support the academic enterprise. Please stay safe, stay healthy and thank you for your adaptability, your understanding and for all that you do.

Karl Scholz
Provost, University of Wisconsin–Madison

WEB RESOURCES

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

1. The Library's Electronic Reserves Page. This site is only accessible from your UW student account at DOIT (<http://my.wisc.edu>). Go to your "Academics" page for a connection to library resources for your registered courses. This is where you'll find many of the course readings, downloadable in Adobe Acrobat's PDF format.
2. The Real Estate Department's home page (<http://www.bus.wisc.edu/realestate>) contains basic information about the program, links to data sources, etc.
3. The UW Writing Center (<http://www.wisc.edu/writing>). 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 web site.
4. 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 the study and practice of real estate.

RULES, RIGHTS & RESPONSIBILITIES

ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited

to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to studentconduct.wiscweb.wisc.edu/academic-integrity/.

LECTURE MATERIALS AND RECORDINGS

Lecture materials and recordings for RE420, Urban and Regional Economics, are protected intellectual property at UW-Madison. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also 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

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 (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. 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 [I], 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.

<http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>

DIVERSITY & INCLUSION

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. (<https://diversity.wisc.edu/>)