

**Housing Markets (REAL/BEPP 2080/7080)**  
JMHH F55, TT 8:30-10:00am; 12N-1:30pm  
Tentative as of December 12, 2023

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This course is designed for students interested in the economics and operations of housing markets. It is primarily a U.S.-focused course, but does include material devoted to Chinese housing markets for comparative purposes. The class is divided into five sections: (1) economic analysis of housing market fundamentals (supply and demand); (2) a policy analysis section on housing affordability issues in the U.S.; (3) operations of homebuilders and rental landlords, as well as the single family rental sector; this section includes a series of guest lecturers from industry executives; (4) the nature of housing cycles; and (5) a comparative analysis of Chinese housing markets.

This course presumes knowledge of intermediate microeconomics. For Wharton students, this means you must have passed BEPP 2500 (undergrads) or MGEC 6110 (MBAs). Non-Wharton students should have taken the equivalent course in the College. The class is primarily lecture based, although we will have one flipped class, as well as a number of guest lecturers from industry. There are two in-class midterms and a term paper. The course grade will be determined as follows:

Midterm #1: 30%  
Midterm #2: 30%  
Term Paper: 30%  
Class Participation: 10%

The two midterms will be taken in class, with the second one not being cumulative in nature. Both dates are listed below on the syllabus. The term paper is to be done in groups of two. You do not need to worry about that assignment until after Spring Break, when I will discuss it in detail in class. Essentially, you and a partner will have six weeks to work on this assignment. Class participation is the final component of your course grade. It will be based on attendance at the guest lectures and your contributions to discussion in class.

All assignments are due on the day listed in the syllabus, and exams must be taken at the assigned time and date. Late assignments will not be accepted. The readings come from a series of articles and book chapters available in a bulk pack for purchase from Study.Net. A handful of the readings are technical in nature, and these are explicitly noted in the syllabus. You should read these articles for general understanding, and not get bogged down in modeling details or complex estimation strategies. We will go over this material in more detail in class.

I will post extra material for undergraduates at various times during the semester, but will make it available to all students. Details on that content will be announced later.

Overhead sets have been posted on our class web site. I encourage you to download them and bring them to class, as they will save you much note taking. Electronic devices other than flat IPad-type devices are not permitted in class (i.e., no phones and no laptops).

Finally, I expect attendance at regularly scheduled lectures and a major part of the Class Participation component of your grade is based on your classroom contributions. However, I do not require a formal sign-in at the beginning of class. The sections tend to be small enough for me to track attendance myself. If we have more enrollment than expected, this policy could change. Access to videotapes of class lectures is by permission only, and permission will be given only to those who attended class or have a valid excuse for missing a session. We will discuss those excuses on the first day of the course. Everyone gets two free skips—that is, you do not need an excuse to view the tapes of two lectures. Finally, we have three guest lectures from executives who run major firms in the housing sector. Those lectures will occur from 6-7pm. There will be a sign-in sheet for those sessions, and non-attendance will be counted against you in the class participation part of the class (i.e., you need to have a valid excuse for missing those sessions).

## I. Understanding Homeownership: The Rent-Own Decision, Demand and Supply

*Class #1: Tuesday, January 16*

Course Overview

Housing Market Data: Price, Quantities, and Cycles (Overhead Set #1)  
The Rent-Own Decision (Overhead Set #2)

Readings: none, but bring Overhead Sets #1 & #2 from your bulk pack to class

*Class #2: Thursday, January 18*

The Rent-Own Decision: The Costs and Benefits of Homeownership Versus Renting  
(cont'd.)

Readings: Himmelberg, Mayer & Sinai (2005); Poterba (1984)-technical

*Class #3: Tuesday, January 23*

The 2017 Tax Act and User Cost; Subsidy and Distributional Issues

Readings: Sinai & Gyourko (2003)

*Class #4: Thursday, January 25*

Financing Homeownership: Mortgage Products—The Basics (Overhead Set #3)

Readings: Brueggeman & Fisher (2014, Chapters 3,4,5)

**Note: Flipped Class; View Video and Prepare Question Answers from Slide Deck for Regular Class**

*Class #5: Tuesday, January 30*

The Demand Side of Housing Markets: Interest Rates and the Tax Code (Overhead Set #4)

Readings: Glaeser & Shapiro (2003); Gruber, et. al. (2021); Glaeser, Gottlieb & Gyourko (2013; Sections 7.1, 7.2.1, 7.2.3, 7.3)

*Class #6: Thursday, February 1*

Demographics and Housing Demand (and Supply) (Overhead Set #5)  
A Brief Look at Other Factors—Student Debt and Work from Home (Overhead Set #6)

Readings: State of the Nation’s Housing (2023); McCue (2023); Duranton & Handbury (2023)—technical; Barrero, Bloom & Davis (2023); McKinsey Global Institute (2023)

*Class #7: Tuesday, February 6*

Just How Risky Is Owning vs. Renting? (Overhead Set #7)

Readings: Sinai and Souleles (2005)-technical

*Class #8: Thursday, February 8*

The Supply Side of Housing Markets: What Does It Cost to Construct Housing?  
(Overhead Set #8)

Readings: Saiz and Gyourko (2006)

*Class #9: Tuesday, February 13*

The Supply Side of Housing Markets: The Role of Regulation (Overhead Set #9)

Readings: Glaeser & Gyourko (2018); Glaeser, Gyourko and Saks (2005); Gyourko, Hartley and Krimmel (2021a); Gyourko & Krimmel (2021b)

*Class #10: Thursday, February 15*

The Supply Side of Housing Markets: The Role of Regulation (cont’d.)

Readings: Same as for February 13

*Class #11: Tuesday, February 20*

Housing Affordability for the Poor and Public Policy (Overhead Set #10)

Readings: Glaeser & Gyourko (2008, Ch. 1, 2, 4, 5); Sinai & Waldfogel (2005); Kneebone & Reid (2021); Diamond, McQuade & Qian (2019); Kneebone & Reid (2021); Housing New York—undated summary of Mandatory Inclusionary Zoning

Program; NYC Planning (September 2015); Furman Center (March 2015-Research Brief); Furman Center (March 26, 2015—White Paper);

*Class #12: Thursday, February 22*

**Midterm #1—in class**

→No class for the weeks of February 26-March 1 and March 4-March 8, (MBA Core Exams, Opportunity Week & Spring Break. Undergraduates will receive extra material for review. This will be in the form of taped video sessions and handouts.

**II. The Location of Housing and Its Price Across Markets: Where Do We Live and Why?**

*Class #13: Tuesday, March 12*

Midterm #1 Handed Back

Term Paper Discussion and Group Formation

Housing Affordability for the Poor and Public Policy (cont'd., time permitting)

Readings: Same as for February 20

*Class #14: Thursday, March 14*

Why Don't We All Live in San Francisco? Spatial Arbitrage (Overhead Set #11)

Readings: Gyourko & Tracy (1991)--technical

*Class #15: Tuesday, March 19*

Why Does Anyone Still Live in Detroit (or Dayton)? What Happens to Declining Markets? (Overhead Set #12)

And

The Growing Price Dispersion Across Markets: The Rise of 'Superstar' Cities (Overhead Set #13)

Readings: Glaeser & Gyourko (2005)-technical; Gyourko, Mayer & Sinai (2013--technical

### **III. Operating Businesses in Residential: Single Family, Multifamily and Single-Family Rental: Risks and Opportunities**

*Class #16: Thursday, March 21*

Guest Speaker #1: Martin Connor, CFO, Toll Brothers, “Homebuilders Across the Business Cycle” (confirmed)  
Evening Class, 6-7pm; room TBA.

*Class #17: Tuesday, March 26*

Guest Speaker #2: Mark Parrell, CEO, Equity Residential, “Investing and Operations in the Multifamily Sector” (confirmed)  
Evening Class, 6-7pm; room TBA.

*Class #18: Thursday, March 28*

Guest Speaker #3: Andrew Jonas, Managing Director and Co-Head of Real Estate, Goldman Sachs & Company, “The Economics of the Single-Family Rental Business” (confirmed)  
Evening Class, 6-7pm; room TBA.

### **IV. Housing Cycles: Why Are Prices So Volatile?**

*Class #19: Tuesday, April 2*

Housing Market Cycles: Data and History (Overhead Set #14)

Case & Shiller (1994); Glaeser (2014)

*Class #20: Thursday, April 4*

Why Was the Last Cycle So Hard to Anticipate?

Readings: Himmelberg, Mayer & Sinai (2005), Case & Shiller (2003); Shiller (2005, Chapter 2, 2<sup>nd</sup> Edition)

### **V. A Brief International Comparison: China’s Housing Markets**

*Class #21: Tuesday, April 9*

Overview of the Chinese Housing Market (Overhead Set #15)

Readings: Deng, Gyourko and Wu (2012, 2016)

*Class #22: Thursday, April 11*

Evaluating the Risk of China's Housing Markets

Readings: same as for April 9

*Class #23: Tuesday, April 16*

Finish Chinese Housing Material

Midterm #2 Exam Review

*Class #24: Thursday, April 18*

**Midterm #2--in class**