



Cornell University

**HADM 4200: Principles of Real Estate, Spring 2024**

**Section 001 (Class #8467): Tuesdays and Thursdays 8:40AM @ Statler Hall 398**

**Section 002 (Class #8554): Tuesdays and Thursdays 11:40AM @ Statler Hall 196**

**Instructor:**

Dr. Lauri Kytömaa

Office location: Statler Hall 465D

Office hours: Tuesdays and Thursdays 2:00PM-3:00PM

E-mail: [lvk7@cornell.edu](mailto:lvk7@cornell.edu)

**Faculty support:**

Doug Biondi

E-mail: [drb342@cornell.edu](mailto:drb342@cornell.edu)

**Teaching Assistants:**

Reese Dolfman

E-mail: [rdd74@cornell.edu](mailto:rdd74@cornell.edu)

Jack McCutchan

Email: [jlm574@cornell.edu](mailto:jlm574@cornell.edu)

***Teaching assistant office hours will be announced on the course Canvas***

Prerequisites: HADM 2230 or equivalent and HADM 2250 or equivalent

**Overview and Objectives**

*Course description:* This course focuses on an introduction to real estate finance and investment, emphasizing valuation and decision-making skills. As a part of the course, students will also be exposed to some of the core principles of urban economics and gain an understanding for how economic forces drive property valuation. The course introduces students to the business of real estate, including major roles, activities and players, terminology, and how the relevant financial tools, institutional concepts, and economic models are used for sound investment decision-making in real estate.

*Course objectives:* The two simultaneous objectives of this course are: (1) to develop a set of rigorous quantitative skills necessary for conducting real estate valuation and understanding real estate financing; and (2) to develop a thorough understanding of the institutions involved in primary real estate markets and real estate finance markets. We will rely heavily on Excel for in-class examples and problem sets. Students that complete the course will gain valuable skills for quantitative analysis.

## Course Materials

### Required textbooks:

1. Ling, David and Wayne Archer. Real Estate Principles: A Value Approach, 7th Edition. MH Publishing. ISBN10: 1264500181
2. Brueggeman, William and Jeffrey Fisher. Real Estate Finance and Investments, 17th edition. MH Publishing. ISBN10: 1260734307

### Optional textbooks:

3. Brueckner, Jan. Lectures on Urban Economics. MIT Press. ISBN 9780262016360

**Calculator:** A calculator is highly recommended. A financial calculator, such as the TI BA II Plus, or financial calculator emulator is helpful but not necessary. Smartphone use will not be permitted during exams.

**Canvas:** The syllabus, lecture slides/notes, practice problems and solutions, graded assignments, links, handouts, and assorted documents will be posted via our course page on Canvas. I will use this system to send out course e-mails and those e-mails and other announcements will be archived at the page. Please check the Canvas site daily for any updates, new materials or announcements. I recommend setting up Canvas e-mail alerts for the course.

## Assessment

Final course grades will be based on the following assessments. Unsubmitted or blank homeworks, case studies and exams will be awarded a 0% score.

Assessment	Count	Course weight
Homework assignments	4	20% total (5% each)*
Case studies	2	30% total (15% each)
Prelim Exam	1	25%
Final Exam	1	25%

\* Students are allowed to drop their lowest homework grade.

**Homework assignments:** There will be four homework assignments throughout the semester that relate to the course material. Most of these assignments will be completed in Excel. All homework must be submitted through the course Gradescope page. Further guidelines and grading policies for assignments will be discussed on each individual assignment. Students are not allowed to submit homework in groups. Each student must have their own submission.

**Homework deadlines:** Homework 1 (February 1, 2024), Homework 2 (February 13, 2024), Homework 3 (March 21, 2024), Homework 4 (April 25, 2024)

**Case studies:** There will be two case studies during the semester that offer a more comprehensive, and realistic assessment of course materials. Students are allowed to work in groups of two for case study projects. Groups must be clearly documented in all submissions. Single-student submissions are also permitted.

**Case study deadlines:** Case Study 1 (March 5, 2024), Case Study 2 Part 1 (April 16, 2024), Case Study 2 Part 2 (May 7, 2024)

**Late homework and case study policy:** Late assignment submissions are heavily discouraged.

A) Unexcused late homework assignments will not be accepted because solutions will be shared promptly after the turn-in deadline has passed. B) Overdue case study submissions will be penalized 5 points per day, including weekends. Case studies that are turned in more than one week (7 days) late will earn zero points because solutions will be posted to the course Canvas page, and we will generally discuss assignments as a part of lecture.

**Exams:** There will be one in-class prelim exam and a final exam during the Cornell exam period. The University sets the final exam date. The final exam is scheduled TBD. Make-up exams will be given only in the event of medical problems or other extraordinary circumstances. When reasonably possible, the instructor should receive prior notice of the pending absence in order for the student to qualify for a make-up. Documentation will be required.

**Examination dates:** Prelim Exam (March 12, 2023), Final Exam (TBD during exam week)

**Missed examination policy:** No make-up examinations will be given.

Grades will be awarded on the following scale according to the total number of points.

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Points	100-94	93-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-63	62-60	< 59

**Schedule:** Please note that I have attached a preliminary schedule at the end of the syllabus. The schedule of material will undoubtedly change as the course progresses.

**Attendance policy:** There is no formal grade for attendance, however in class participation is an important part of learning in this course. I will ask for contributions from every student during the lectures. I may also consider student participation for borderline student grade cases. If you are going to be very late for class, I ask that you do not attend that day out of respect for your fellow students. Students entering the room after the class is a disruption for others. Please use technology respectfully, laptop and tablets can be distracting to other students around you.

## **General Policies**

**Academic Integrity:** Each student in this course is expected to abide by the [Cornell University Code of Academic Integrity](#). Any work submitted by a student in this course for academic credit will be exclusively the student's own work. If you become aware of a violation, please bring it to my attention. Violations of the Code of Academic Integrity will be handled in strict accordance with the provisions of Code adopted by the School of Hotel Administration. Students will receive no credit for assignments, cases, or exams in which they did not do their own work.

**Role of teaching assistants:** Teaching Assistants (TAs) will play an important support role in the learning experience of this course. TAs will be available for weekly office hours to offer personalized guidance and support. Students are encouraged to respect the TAs' time by communicating with them exclusively during regular business hours, and to predominantly utilize office hours for detailed discussions and queries.

**Diversity and Inclusion:** We understand that our students represent a rich variety of backgrounds and perspectives. The Hotel School is committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all students to:

- Share their unique experiences, values and beliefs
- Be open to the views of others
- Honor the uniqueness of their colleagues
- Appreciate the opportunity that we have to learn from each other in this community
- Value each other's opinions and communicate in a respectful manner

**Accommodations for Students with Disabilities:** Your access to appropriate accommodations in this course is important. Please request your accommodation letter as early as possible in the semester so that we have adequate time to arrange your approved academic accommodations. In practice, I expect this to take place within the first four weeks of the relevant term. Delayed communication of accommodations can cause delays or other challenges with providing appropriate accommodations.

Once SDS approves your accommodation letter, it will be emailed to both you and me. It is your responsibility to also email your accommodation letter to Doug Biondi ([drb342@cornell.edu](mailto:drb342@cornell.edu)). Please follow up with me or Doug to discuss the necessary logistics of your accommodation.

If you are approved for exam accommodations, please consult with Doug Biondi at least two weeks before the scheduled exam date to confirm the testing arrangements. If you experience any access barriers in this course, such as with printed content, graphics, online materials, or any communication barriers; reach out to me or SDS right away. If you need an immediate accommodation, please speak with me after class or send an email message to me and SDS at [sds\\_cu@cornell.edu](mailto:sds_cu@cornell.edu).

If you have, or think you may have a disability, please contact Student Disability Services for a confidential discussion: [sds\\_cu@cornell.edu](mailto:sds_cu@cornell.edu), 607-254-4545, [sds.cornell.edu](http://sds.cornell.edu).

**Mental Health and Stress Management Resources:** If you are feeling overwhelmed, or worried about a friend, please reach out to one of your instructors or your academic advisor. We can try to help or we can put you in touch with someone who can help. Cornell has trained counselors available to listen and help: [Empathy, Assistance, and Referral Service](#) (213 Willard Straight Hall, 607-255-3277), [Cornell Health's Counseling and Psychological Services](#) (CAPS, 607-255-5155), and [Let's Talk](#).

Notably, Cornell has recently invested a great deal of time and effort to offer more comprehensive support for our campus community. Please go to [mentalhealth.cornell.edu](https://mentalhealth.cornell.edu) to learn more.

## Tentative course schedule

### Tentative Course Outline

Lecture	Date	Topic	Reading	Assignment tracker
1	Tuesday, January 23, 2024	Intro	LA Chp 1, BF Chp 9	
2	Thursday, January 25, 2024	Determinants of value and urban considerations	LA Chp 5-6, BF 11 (p341-352), Brueckner text	HW1 assigned
3	Tuesday, January 30, 2024			
4	Thursday, February 1, 2024	Asynchronous lecture - Valuation of commercial real estate	LA Chp 7-8, BF Chp 10	HW1 due (1 week)
5	Tuesday, February 6, 2024	Valuation of commercial real estate		HW2 assigned
6	Thursday, February 8, 2024			
7	Tuesday, February 13, 2024			
8	Thursday, February 15, 2024	Residential mortgage financing, standard fixed rate	LA Chp 9, 10, 11, 15; BF Chp 4	HW2 due Case Study I (Rent vs Buy) assigned
9	Tuesday, February 20, 2024			
10	Thursday, February 22, 2024			
-	Tuesday, February 27, 2024	No class - February Break		
11	Thursday, February 29, 2024	Residential mortgage financing, standard fixed rate	LA Chp 9, BF 1	
12	Tuesday, March 5, 2024		LA Chp 9 (p224-229), BF Chp 2 (p26-39)	Case Study I (Rent vs Buy) due
13	Thursday, March 7, 2024	Residential mortgage financing, complications and funding	LA Chp 10 (p246 onwards), BF Chp 5-7	
-	Tuesday, March 12, 2024	Prelim		
14	Thursday, March 14, 2024	Residential mortgage financing, complications and funding	LA Chp 10 (p246 onwards), BF Chp 5-7	HW3 assigned
15	Tuesday, March 19, 2024	Residential mortgage wrap-up		
16	Thursday, March 21, 2024	Commercial mortgage loan financing	LA Chp 16, BF Chp 12 p402-end	HW3 Due (1 week)
17	Tuesday, March 26, 2024			Angus Cartwright Part 1 assigned
18	Thursday, March 28, 2024			
-	Tuesday, April 2, 2024	No class - Spring Break		
-	Thursday, April 4, 2024			
19	Tuesday, April 9, 2024	Commercial investment decisions	LA Chp 18, BF Chp 10	
20	Thursday, April 11, 2024		LA Chp 19, BF Chp 11	
21	Tuesday, April 16, 2024			Angus Cartwright Part 1 Due
22	Thursday, April 18, 2024		LA Chp 17, BF Chp 18	HW4 assigned
23	Tuesday, April 23, 2024			
24	Thursday, April 25, 2024	Commercial real estate agreements and management	LA Chp 21, 22, BF Chp 9	HW4 Due (1 week)
25	Tuesday, April 30, 2024			Angus Cartwright Part 2 assigned
26	Thursday, May 2, 2024	Securitized mortgages	BF Chp 19-20	
27	Tuesday, May 7, 2024	Course wrap-up		Angus Cartwright Part 2 due
-	Exam Week	Final Exam		

Where LA = Ling &amp; Archer, BF = Brueggeman and Fisher

## **Tentative lecture topics overview**

### **1. Determinants of value and urban considerations**

- Formation of cities
- Economies of scale and agglomeration
- Transportation costs and firm location
- Bid-rent curves and rent-gradients
- Market analysis

### **2. Valuation of commercial real estate**

- Sales comparison
- Cost approach
- Income approach
- Discounted cash flow analysis (DCF)

### **3. Residential mortgage financing, standard fixed rate**

- Overview of mortgage loan contracts and terminology
- Market players
- Laws and contracts relating to residential mortgages
- Amortization tables and understanding financial calculations

### **4. Residential mortgage financing, complications and funding**

- Loan termination – default, prepayment, and foreclosure
- Adjustable-rate mortgages
- Reverse mortgages
- Partial amortization or interest-only loans

### **5. Commercial mortgage loan financing**

- Overview of commercial mortgage contracts and terminology
- Complexities in commercial financing – floating-rate, syndication, bridge loans, and mezzanine financing

### **6. Commercial investment decisions**

- Investment decision calculations – break-even analysis and other financial ratios
- Computing net-present-value and internal rate of return
- Role of leverage on returns and risk

### **7. Commercial real estate agreements and management**

- Role of property managers and property management agreements
- Negotiated lease provisions

### **8. Securitized mortgages**

- Mortgage-backed securities, residential and commercial
- Revisiting role of government-sponsored enterprises (GSEs)
- Collateralized debt obligations (CDOs) and Collateralized Loan Obligation (CLOs)