

FBE 391: Real Estate Finance and Investments

Fall 2024

Professor: Selale Tuzel Office: HOH 717

Email: selale.tuzel@marshall.usc.edu

Class Meetings: Monday/Wednesday,

10am class: 10-11:50am, JFF 241, 12pm class: 12-1:50pm, JFF 241.

Office Hours:

Monday/Wednesday, 3:00-4:00pm (by appointment).

Course Description

Real estate is a cornerstone of the economy and a key driver of wealth accumulation. This course offers an in-depth examination of real estate investment and finance, grounded in modern finance theory. In the first half, we focus on investment analysis, property valuation, and financing at the individual property level. The second half covers mortgages and provides an introduction to real estate capital markets. By the end of the course, you will be equipped with essential tools to understand real estate pricing and investments, skills that are indispensable for a wide range of careers in real estate. This course is particularly beneficial for students majoring in real estate or finance, preparing for roles in investment, advisory, sales, development, or capital provision within the real estate sector.

Learning Objectives

Students successfully completing this course will be able to:

- Interpret current event articles and case studies through the lens of the formal finance, real estate, economics concepts learned in the course
- Perform a qualitative and quantitative evaluation of income-producing properties, which includes:
 - Using industry-standard terminology and techniques for valuing income producing real estate
 - Making cash flow projections and preparing proforma statements using spreadsheets
 - o Evaluating risk of investments and developing expected return measures
- Explain the roles of debt and equity in the structure of real estate transactions
- Understand the mechanics, pros and cons of different types of mortgages. Calculate the APR, payments of mortgages, understand how debt financing affects the risk of the investment
- Navigate the loan underwriting process
- Develop a basic cash flow model using ARGUS Enterprise.

Required Materials

There is **no required textbook** for the class. The **recommended textbook** is Geltner, Miller, Clayton and Eichholtz, *Commercial Real Estate Analysis & Investments*, South-Western Educational Publishing; 3rd edition (February, 2013). It is available from all major online booksellers and at the USC bookstore. You can use any edition of the textbook. Most of the lectures will be based on Geltner et al.

There will be **supplemental readings and cases**, which will be made available at the Bright-space website. The Harvard Business Publishing cases (required) can be purchased online from Harvard Business Online. To purchase the cases, you need to go to: https://hbsp.harvard.edu/import/1201349 and register/sign in. The website will allow you to purchase a digital copy of each case for \$4.95 using your credit card. The remaining course materials will be posted on the Brightspace.

Case/project submissions will be made through **ForClass**. Each student should sign up for ForClass using the link provided on Brightspace. Please make sure that the name you use on ForClass matches your name on Brightspace and you upload a photo. It costs \$12 per student to register for the site. For each case/project there will be several questions posted on this site. Make sure to complete your submission by the due date and time announced on Brightspace.

Prerequisites and Recommended Preparation

BUAD 215, BUAD 306 or BUAD 308. Individuals should have a solid grasp of basic financial concepts and techniques, including cash flow discounting and risk and return. While a background in real estate is not expected or required, a strong foundation in finance is crucial. Basic proficiency in Microsoft Excel is also highly recommended. The use of a financial calculator capable of computing annuities, present values, and IRRs, such as the HP 10B II or 17B II+, is permitted but not necessary or encouraged. If you choose to use one, you will be responsible for learning how to operate it, as no tutorial will be provided in class.

Course Notes and Communication

Most of the communication outside of class time will take place on Brightspace. I will post all class related information, including the syllabus, lecture notes, most of the readings and cases on the Brightspace. Please check the Brightspace site regularly for class materials and announcements. If you have any class related questions or comments outside of the class time, please use the **Brightspace Discussion Board** to communicate with me and your classmates. Please check the previous postings before creating a posting to see whether you can find answers to your questions there. My answers will be visible to the entire class, which hopefully will create a wealth of information for the class. This system will replace e-mail communication about class related matters.

If you would like to meet me for a class related or personal matter, please try to follow my office hours listed above. In order to give you one-on-one attention at the office hours, **please make an appointment for office hours using the Google Sheets link posted on Brightspace.** You will have the option to meet me in my office (HOH 717) or on Zoom.

Grading Policies

This is a very "applied" course. In order to gain hands-on practice, you will be working on several projects, case studies, and assignments, which will account for the majority of your grade in this class. Your grade will be determined by assignments, four project/cases (through ForClass), a midterm exam, a final exam, a final project, and class participation. The grade breakdown will be as follows:

Class participation	10%
Assignments	10%
Four project / case write-ups	20%
Final project	20%
Midterm exam	20%
Final exam	20%

Midterm and Final exam: There will be one midterm exam and one final exam. Exams will cover all materials examined in class or the class notes. The two tests will jointly account for 50% of your grade. When calculating your course grade, I will choose the larger score based on the following weights: (i) 10% on the midterm and 30% on the final exam; and (ii) 20% on both exams. Both test scores will be standardized to make them comparable ($\frac{score-mean}{standard\ deviation}$). The midterm will test material covered up to the exam. In the final exam, emphasis will be placed on material covered after the midterm. However, remember that the latter material builds heavily on the earlier material. Exams will be **open book/notes.**

Assignments: There will be homework assignments and exercises which are aimed towards giving you the opportunity to use the techniques we learn in class and prepare you for the exams. These assignments are marked with "A" in the course outline below, and will be posted on Brightspace. Total homework grade (which accounts for 10% of your grade in this course) will be based on the best three out of four individual homework grades. Therefore, one assignment may be missed without a grading penalty. Assignments should be turned in using the Bright-space assignments module. I encourage you to discuss the assignments with your classmates; but each student is responsible for preparing and uploading his/her solution independently.

ForClass submissions for cases / projects: Answers to four case/project questions (marked with "C" in the outline below) are to be submitted through ForClass. Each student is required to make a separate submission, but you are encouraged to work on the cases in groups. ForClass submissions for case and projects are due at 9am on the day they are discussed in class. ForClass submissions will account for 20% of your grade.

Final project: The group project will serve as the culmination of the class. The goal of this project is to search for a potential real estate investment, and to present your group's investment proposal to the rest of the class during the last week of the semester. You are expected to attend all of the presentations and provide constructive feedback to your classmates. The potential investment will be the acquisition of an existing development. The source of your development can be CoStar, the local broker community, the Internet, the Wall Street Journal, or your own contacts. The project analysis and presentation will account for 20% of your grade in the course.

Class participation: Class participation accounts for 10% of your course grade. Since participation requires attendance, attendance will be an input into your participation grade. I encourage

you to ask your questions to gain clarity, enrich discussion or bring a different perspective. Attendance will be taken, and absences and late arrivals will be considered as a factor in class participation. I expect everybody to prepare for and attend the classes, participate in case/project discussions and offer answers to my questions. In-class participation is a critical part of this course's learning experience. Cold calling may take place to encourage active participation and to gain multiple perspectives and points of view, thus lending itself to the richness of the learning experience. In-class participation grading will be based on students' demonstrated willingness to participate and the quality of the comments expressed, rather than quantity. While some students are far more comfortable than others with class participation, *all* students should make an effort to contribute meaningfully.

Re-grading: All requests for re-grades must be submitted in writing within a week of my returning the graded assignment or exam. You must submit the entire assignment or exam along with your detailed description of what you think was scored incorrectly. Re-grading may potentially lead to a lower grade.

ADDITIONAL INFORMATION

Technology Policy

Laptop/tablet usage during class sessions is strictly limited to class materials. I reserve the right to ask the students to shut down laptops/tablets. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during sessions. I am planning to have class sessions recorded using classroom technology and post a link to the daily recordings on Brightspace. However, these recordings should not be considered as a substitute for class attendance. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

Policy on the Use of Artificial Inteligence

In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with assignments that indicate the permitted use of AI. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus they are not yet prepared to produce text that meets the standards of this course. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions.

Open Expression and Respect for All

An important goal of the educational experience at USC Marshall is to be exposed to and discuss diverse, thought-provoking, and sometimes controversial ideas that challenge one's beliefs. In this course we will support the values articulated in the USC Marshall "Open Expression Statement" (https://www.marshall.usc.edu/open-expression-statement).

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the <u>USC Student Handbook</u>. All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

Academic dishonesty has a far-reaching impact and is considered a serious offense against the university. Violations will result in a grade penalty, such as a failing grade on the assignment or in the course, and disciplinary action from the university itself, such as suspension or even expulsion.

For more information about academic integrity see the <u>student handbook</u> or the <u>Office of Academic Integrity's website</u>, and university policies on <u>Research and Scholarship Misconduct</u>.

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment or what information requires citation and/or attribution.

STATEMENT ON UNIVERSITY ACADEMIC AND SUPPORT SYSTEMS

Students and Disability Accommodations

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Student Financial Aid and Satisfactory Academic Progress

To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the <u>Financial Aid Office</u> webpage for <u>undergraduate</u>- and <u>graduate-level</u> SAP eligibility requirements and the appeals process.

Support Systems

Counseling and Mental Health - (213) 740-9355 - 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to genderand power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-2500

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 - 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call Non-emergency assistance or information.

<u>Office of the Ombuds</u> - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

<u>Occupational Therapy Faculty Practice</u> - (323) 442-2850 or <a href="https://occupational.com/occupational.c

TENTATIVE COURSE OUTLINE*

Week #1 (8/26, 8/28)

Module 0

Course overview

Emerging trends in real estate 2024

Bonus Assignment Part 1: HW 0 part 1 (Emerging trends), ForClass submission is due on 8/28.

Week #2 (9/4)

No class on 9/2 (Labor day).

Bonus Assignment Part 2: HW 0 part 2 (Recent articles), ForClass submission is due on 9/4.

Recent WSJ articles on real estate markets

Asynchronous material: Basic discounting review

Week #3 (9/9, 9/11)

No class on 9/4 (Labor day).

Module 1

Space and asset markets (GM[†] Ch 1)

Real estate investments - background (GM Ch 7)

Warm-up project: House valuation, ForClass submission is due on 9/11. (C)

Week #4 (9/16, 9/18)

Module 1, cont'd.

Module 2

Real estate investments - risk and return (GM Ch 8,9,10)

Refreshener reading: RWJ[‡] Ch 9,12.

Case Study: Pinckney Street, ForClass submission is due on 9/18. (C)

Week #5 (9/23, 9/25)

Module 2, cont'd.

Module 3

Real estate valuation - Cash flow proformas (GM Ch 11, 12)

HW 1 (valuation), Brightspace submission is due on 9/25. (A)

Week #6 (9/30, 10/2)

Module 3, cont'd.

Reviewing Discounted Cash Flow Analyses

Midterm review on 10/2.

HW 2 (Rentleg proforma), Brightspace submission is due on 10/2. (A)

^{*} You should expect some deviations from the outline. Significant changes will be announced on Brightspace and/or in class.

[†] Geltner, Miller, Clayton & Eichholtz.

[‡] Ross, Westerfield & Jordan, main textbook for BUAD 306.

Week #7 (10/7, 10/9)

Midterm exam on 10/7 during class.

2050 Tubeway Avenue, in-class case study.

Week #8 (10/14, 10/16)

Module 4

Leverage and valuation (GM Ch 13)

Sale-Leaseback Investments

Case Study: Golden Opportunity, ForClass submission is due on 10/16. (C)

Week #9 (10/21, 10/23)

Module 5

After-tax valuation (GM Ch 14)

TCJA 2017 and real estate

Asynchronous material: Argus tutorial

HW 3 (Argus HW, Tubeway Avenue), Brightspace submission is due on 10/23. (A)

Week #10 (10/28, 10/30)

Module 6

Mortgages (GM Ch 17, 19)

Refreshener reading: RWJ Ch 7 (Bonds)

Week #11 (11/4, 11/6)

3-minute final project progress presentations are due on 11/4.

Module 6, cont'd.

Underwriting

Week #12 (11/11, 11/13)

Case Study: Angus Cartwright IV, ForClass submission is due on 11/11. (C)

Guest speaker on 11/13.

Mark Loewen, Managing Director, Commercial Real Estate

Wells Fargo Corporate & Investment Banking

Week #13 (11/18, 11/20)

Emerging trends in real estate 2025

Outlook of CRE markets

Tentative - Guest speaker on 11/20.

Robert Hanasab, President, Robhana Group, Inc.

HW 4 (mortgages), Brightspace submission is due on 11/20. (A)

Week #14 (11/25)

No class on 11/27 (Thanksgiving holiday).

Final exam review on 11/25.

Week #15 (12/2, 12/4)

Final project executive summary is due on Sunday, December 1, at 11:59pm (upload on Brightspace).

Final project presentations. Project reports are due on the day of the presentation (in print).

<u>Final Exam Schedule</u> 10am class: December 16, 8-10am; 12pm class: December 13, 11am-1pm.