USC Marshall School of Business FBE 391: Real Estate Finance and Investments, Fall 2017 Professor Selale Tuzel selale.tuzel@marshall.usc.edu, HOH 717

Class Meeting: Monday/Wednesday, 10am class: 10:00am-11:50am, JFF 236, 12pm class: 12:00pm-1:50pm, JFF 236. Office Hours:

Monday/Wednesday, 2:20-3:20pm, or by appointment.

Required and Recommended Materials: There is no required textbook for the class. The main recommended textbook is Geltner, Miller, Clayton and Eichholtz, *Commercial Real Estate Analysis & Investments*, South-Western Educational Publishing; 3^{rd} 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. As an alternative reference you may use Breggeman and Fisher, *Real Estate Finance and Investments*, which is adapted in several other real estate finance courses at Marshall.

There will be supplemental readings and cases, which will be made available at the Blackboard website. The Harvard Business School cases (required) can be purchased online from Harvard Business Online. To purchase the case, you need to go to: http://cb.hbsp.harvard.edu/cbmp/access/66215398 and register / sign in. The website will allow you to purchase a digital copy of each case for \$4.25 using your credit card. The remaining course materials will be posted on the Blackboard.

Prerequisites: BUAD 215x or BUAD 306. Individuals should have a good understanding of basic financial concepts and techniques such as cash flow discounting, risk and return. A profound background in real estate is neither expected nor necessary, a solid background in finance is much more critical. A basic knowledge of Microsoft Excel is also highly recommended. The use of a financial calculator which can compute annuities/present values and IRRs, such as HP 10B II or 17B II+ is allowed, but is neither necessary nor encouraged. If you elect to use it, you will need to learn how to operate the calculator, no tutorial will be given in class.

Description and Learning Objectives: Real estate is a critical part of the economy and aggregate wealth. The primary goal of this course is to develop an understanding of the principle issues involved in real estate investment and finance. Our treatment of real estate will be rigorously based on the modern finance theory. In the first half of the course, we will cover real estate investment analysis, valuation and financing at the "micro" (individual property) level. In the second half, we will cover mortgages, and briefly discuss real estate capital markets. This course is designed to provide the student with essential tools to understand how real estate value is determined, created, and influenced. We will cover a critical set of analytic concepts and techniques essential for students planning careers in almost any aspect of real estate. It is also a valuable course for finance majors who may become involved with real estate at the corporate level or alternatively as investors, investment advisors, or providers of capital.

Communication: Most of the communication outside of class time will take place on Blackboard. I will post all class related information, including the syllabus, lecture notes, most of the readings and cases on the Blackboard. Please check the Blackboard site regularly for class materials and announcements. If you have any class related questions or comments outside of the class time, please use the Blackboard 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.

Grading: Your grade will be determined by assignments (10%), four project / case writeups (20%), two midterm exams (40%), a final project (20%) and class attendance / participation (10%).

Midterm exams: There will be two midterm exams. Exams will cover all materials examined in class or the class notes. The two tests will jointly account for 40% of your grade. When calculating your course grade, I will choose the larger score based on the following weights: (i) 10% on the first midterm and 30% on the second midterm; and (ii) 20% on both midterm exams. Both test scores will be standardized to make them comparable $\left(\frac{\text{score-mean}}{\text{st} \text{ dev}}\right)$. The midterms will test material covered up to the exam. No st. dev. makeup midterm exams will be given. If you miss the test for a medical reason that can be documented and verified, then the weight of the missed midterm exam will be added to the other midterm exam. Otherwise, a grade of zero will be assigned. In the second midterm, emphasis will be placed on material covered after the first midterm. However, remember that the latter material builds heavily on the earlier material. In the extremely rare event that you miss both midterm exams due to medical emergencies, only one makeup exam will be given, which will carry the weight of both midterms. All exams will be closed book, notes and computer. You will be allowed to have one formula page and a financial calculator with you.

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 (*) in the course outline below, and will be posted on Blackboard. 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 Blackboard assignments module, hard copies or late assignments will not be accepted. I encourage you to discuss the assignments with your classmates; but each student is responsible for preparing and uploading his/her solution independently.

Written cases / projects: Four case / project writeups (marked with "†" in the outline

below) are to be prepared in groups of 5 - 6 people, except for the House Valuation project due in week 3, which will be prepared individually. I will create the teams (from class lists, following alphabetical order) and announce them to the class at the end of week 3. The case writeups should be similar to executive summary in nature and should answer the questions and issues raised in the case assignments. The writeups should clearly indicate the assumptions made in the analysis, and should be 2-3 pages in length, exclusive of any exhibits deemed necessary. The case and project writeups are due at the beginning of class they are discussed. They should be turned in using the Blackboard assignments module, hard copies or late assignments will not be accepted under any circumstances. Each team will make one case presentation, details will be discussed in class. The written cases / projects 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 the local broker community, the Internet (most brokerage firms have their listings posted on their websites; in addition, <u>www.loopnet.com</u> is where many brokers also place their listings), the Wall Street Journal (each Friday the Journal has a "Real Estate Corner" section), or your own contacts. The project writeup and presentation will account for 20% of your grade in the course.

Class attendance / participation: Attendance and participation account for 10% of your course 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.

Technology policy: Laptop/iPad usage during class sessions is strictly limited to class materials. I reserve the right to ask the students to shut down laptops/iPads. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during sessions. Please turn your cell phones off before entering the class.

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.

Notice on Academic Integrity: The use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tensions accompanying examinations. Where a clear violation has occurred, however, the instructor may disqualify the student's work as unacceptable and assign a failing mark on the paper. For Students with Disabilities: Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. The phone number for DSP is (213) 740-0776. For more information visit www.usc.edu/disability. Students requesting test-related accommodations will need to share and discuss their DSP recommended accommodation letter/s with me <u>at least three weeks</u> before the date the accommodations will be needed.

This syllabus is an invitation to you as a student to engage in an exciting and interactive study of real estate finance and investments. My instruction will focus on real-world engagement with real estate investments; it will provide you with information, offer practice with skills, and enhance your preliminary understanding of real estate concepts. It is my intention to provide a collaborative and supportive learning environment where students learn form one another both in and out of the classroom. To that end, modifications to this syllabus might be warranted as determined by the instructor as I assess the learning needs of this particular class of students.

Tentative Course Outline¹

Week #1 (8/21, 8/23)

Course overview Space and asset markets (GM² Ch 1) Real estate investments - background (GM Ch 7) Running in cycles, *FRBB Regional Review*, Q2/Q3 2004. Emerging Trends in Real Estate 2017 Recent WSJ articles on real estate markets **Bonus Assignment: HW 0 (week 1 article punchlines) is due on 8/23.**

 $\frac{\text{Week } \#2 \ (8/28, 8/30)}{\text{Real estate investments - risk and return (GM Ch 8,9,10)}}$ Refreshener reading: RWJ³ Ch 9,12.

Week #3 (9/6) No class on 9/4 (Labor day).
Warm-up project: House valuation, writeup is due on 9/6.[†]
Additional articles on housing: Home prices must fall far to be in sync with rents, Wall Street Journal, 1/3/2008. Your home by the numbers, Business Week, 6/14/2004. Some new math on homes, New York Times, 4/1/2006.

 $\frac{\text{Week } \#4 \ (9/11, \ 9/13)}{\text{Real estate valuation} - \text{Cash flow proformas (GM Ch 11, 12)}}$ Case Study: Pinckney Street, case writeup is due on 9/13.[†]

Week #5 (9/18, 9/20) Real estate valuation II (GM Ch 12) Reviewing Discounted Cash Flow Analyses, *The Appraisal Journal*, Jan 1990. HW 1 (valuation) is due on 9/20.*

 $\frac{\text{Week } \#6 \ (9/25, \ 9/27)}{\text{Leverage and valuation (GM Ch 13)}}$ HW 2 (Rentleg proforma) is due on 9/27.*

 $\frac{\text{Week }\#7\ (10/2,\ 10/4)}{\text{Case Study: }2050 \text{ Tubeway Avenue, part I, case writeup is due on }10/2.^{\dagger}}$ Midterm review on 10/4.

¹You should expect some deviations from the outline. Significant changes will be announced on the Blackboard and/or in class.

²Geltner, Miller, Clayton & Eichholtz.

³Ross, Westerfield & Jordan, main textbook for BUAD 306.

 $\frac{\text{Week }\#8\ (10/9,\ 10/11)}{\text{Midterm exam on }10/9} \text{ during class.}$ Argus tutorial on 10/11, bring a laptop to the classroom.

 $\frac{\text{Week } \#9 \ (10/16, \ 10/18)}{\text{Taxes and valuation (GM Ch 14)}}$ HW 3 (Argus HW, Tubeway Avenue) is due on 10/18.*

Week #10 (10/23, 10/25) Mortgages (GM Ch 17,19) Refreshener reading: RWJ Ch 7 (Bonds) Case Study: Angus Cartwright IV, case writeup due on 10/25.[†]

Week $\#11 \ (10/30, \ 11/1)$

Mortgages cont'd.
2050 Tubeway Avenue, part II, to be prepared in class.
Earlier articles:

Nightmare mortgages, Business Week, 9/11/06.
'Recourse' sequel: For developers, loans get personal, WSJ, 6/18/08.
The United States of subprime, WSJ, 10/11/07.

Underwriting
REITs (GM Ch 23)
Portfolio diversification through REITs, Ibbotson - NAREIT, 2006.
REITs for Rookies, Deutche Banc Alex. Brown, 1/4/2002.
UPREITs and DownREITs Gain Popularity, CIRE Magazine, Mar-Apr 1998.
HW 4 (mortgages) is due on 11/1.*

Week #12 (11/6, 11/8) Emerging Trends in Real Estate 2018 Final project progress report is due on 11/6. 3-minute final project update presentation on 11/6. Midterm review on 11/8.

Week #13 (11/13, 11/15)
Midterm exam on 11/13 during class.
Guest speaker on 11/15.
Mark Loewen, Senior Vice President and Team Leader
Chris Chapman, Vice President and Relationship Manager
Wells Fargo Commercial Real Estate

Week #14 (11/20) No class on 11/22 (Thanksgiving holiday). Guest speaker on 11/20. Reza Etedali, CEO & Founder, REZA Investment Group Inc. Week #15 (11/27, 11/29)

Final project executive summary is due on Sunday, November 26, at 11:59pm (upload on Blackboard).

Final project presentations

Project reports are due on the day of the presentation (in print); revised project reports are due on Dec 8 for the 12pm, Dec 11 for the 10am class (upload on Blackboard).