Provisonal Syllabus for RE358 Introduction to Real Estate and Urban Land Development

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Office Hours: Tuesdays and Thursdays 9:30-10:30 AM, or by appointment.

Course Website: Blackboard.

Class meetings: Tuesday and Thursday 3:30-5:00PM, UTC 1.104. Prerequisite: Upper-division standing, and FINANCE 357 or 357H.

Note: This syllabus is subject to revision and modification.

1 Course Description

This is a rigorous undergraduate survey course in real estate. The aim of the course is to give you broad exposure to the landscape of real estate markets, from single-family housing all the way to large-scale commercial property, while at the same time introducing you to issues in these markets and teaching you to think about them in a rigorous way, from a finance perspective. The course is part of the core Real Estate curriculum at UT.

After a review of discounting and a discussion of the relationship between property prices and rents, the first part of the course is focused on the large-scale dynamics of urban and regional property markets, acquainting you with how space is traded within a city, the cyclicality of property, and the mechanics of housing and commercial real estate markets. We then discuss property-level analysis of real estate equity as an investment, as well as the fundamentals of real estate debt (mortgages). The final part of the course treats real estate capital markets, namely secondary (securitized) markets for property assets, first equity (with a focus on Real Estate Investment Trusts, REITs), then debt (with a focus on mortgage-backed securities).

Material taught in lectures will be complemented by an introduction to ARGUS, the industry standard application for property valuation, which will then enable you to do a case study on property investment analysis based on real data from an office building here in Austin. We will also have at least one guest speaker who works in the real estate industry, to share a practitioner's perspective on the topics we cover in class.

2 Textbook

Commercial Real Estate Analysis and Investments, by David Geltner, Norman Miller, Jim Clayton, and Piet Eichholtz (ISBN 978-0324305487); I will be referring to this text as *GMCE* in reading assignments, which will be posted at the beginning of every set of lecture slides. This book constitutes the required text for the

course, and is also a handy reference on many real estate topics, in addition to some basic finance theory. It should be a book you will appreciate having on your shelves for a while if you are working in real estate.

Readings are generally meant to supplement what is taught in lectures and to deepen your understanding of the material. Unless otherwise stated, you will not be responsible for material covered only in the textbook and not in class. Caveat: the material covered in class is of course not limited to the content of the slides, but also includes things that are discussed without being on any slides, and any implications thereof.

I do not expect readings to be done by the time a topic is covered in class. The textbook should be your source for deepening your understanding of the material after I have treated it.

3 Other Course Materials

Lecture slides will generally be made available shortly before class. Packets containing case materials will be made available in class.

All electronic materials will be available on Blackboard. Use Blackboard as your primary resource for all electronic materials for the course.

4 Course Requirements and Grading

Each element of the course has the following points value:

Class Participation and Attendance 5%. ARGUS Case 10%.

Other three homeworks 5% each (i.e. 15% combined).

Midterm examinations (2) 17.5% each.

Final examination 35%.

Furthermore, for students who receive a curved score of B+ or higher on the final exam, I will drop the lowest midterm grade, and simply count the higher midterm score for both midterms. The final-exam score will not be affected.

There is no opportunity to do *extra credit work* in this course. Your score for the course will be determined only by the requirements above. If you are taking the course pass/fail you must complete all projects and exams in order to pass the course.

Your final grade will be determined by where your overall score for the course lies in relation to that of your classmates. The final cutoffs between letter grades will be determined by the shape and position of the course distribution.

Exams The two midterm exams will be given during class time on the following dates:

- Midterm 1: Thursday, October 1.
- Midterm 2: Thursday, November 5.

The final exam will take place on the date scheduled by the registrar's office. Most likely, this will be Thursday, December 10, from 7 to 10 PM. However, as you know this is subject to change.

Please bring a photo ID (preferably your student ID) to each exam.

The first midterm covers the material studied up to that point. The second midterm covers the material studied between the first and the second midterm. The final exam is cumulative, covering the material from the entire course.

The exams will test your critical understanding and your ability to apply the material. Rote-level memorization will in most cases be unnecessary, and will certainly not get you very far in solving questions. The latter can also be said for the use of a calculator.

The position of the exams in the course outline are approximate indications of where within the material, exams will fall. However, final determination of the scope of each exam will be made before each exam, based on our progress.

Important! You must take all exams at the date, time, and location for which they are scheduled. No alternative exam dates or make-up exams will be given, except in family or medical emergencies. In such cases hard evidence is required, and I must be informed of your circumstances by the start of the exam at the latest.

Do not schedule job interviews during exams. Should it be unavoidable to do this, however, the following will apply:

- You must submit evidence from the firm (on the firm's letterhead) with which you are interviewing that you have an interview scheduled for the time of the exam, and that no other interview time was available. This must be done at least 24 hours before the start of the exam.
- You will *not* be given a make-up test. Instead the average score of your other two exams will be used for the missed exam.

All deadlines are final.

Homework You may work on cases and problem sets in groups of no more than three. Should you elect to work on homework in such a group, you may hand in a single sheet for the entire group (with up to three names on it), rather than three identical pieces of work. On the other hand, if two identical or extremely similar sheets are submitted and illegal cooperation is thus suspected, this will be treated as scholastic dishonesty.

All homework is due at the beginning of class on the due date. Homework submitted after this time will be considered late.

Participation and Attendance Note that a part of your grade is based on participation so participation is definitely an integral part of the course. While class attendance will not be taken, it should be clear that you must be present to participate... I will keep a record of who makes meaningful contributions during each class meeting. If you make such a contribution, please be sure to stop by at the end of class to ensure you are on my list.

If you must miss a class it is your sole responsibility to find out what was done that day, including administrative announcements. I will not catch you up!

The only exception to the attendance policy is when we have a guest speaker in class. On those days, you will need to sign a register in class, and failing to do so will result in an automatic one-percentage-point deduction from your final course grade, unless I have received (and agreed to) a written explanation for your absence in advance. Remember that something like this could, under certain circumstances, bump your final course grade down to a lower letter grade. I will announce dates for guest speaker presentations in advance.

If you must leave a class early, please let me know before the beginning of class. Leaving in the middle of class without having advised me of your need to do this will undo any positive standing you may have worked for hard throughout the rest of the semester by actively participating.

Calculator A financial calculator capable of computing present value and rates of return of unequal cashflow series will be required for class meetings and exams. I will be using a Texas Instruments BA-II Plus but it is not necessary for you to have the same calculator. It is your sole responsibility to understand how to make the correct calculator inputs. Please bring your calculator to each class, as this way you will be able to work through in-class examples. Also note that as used in this class, your calculator will not be a replacement for reasoning and problem solving skills.

5 More Terms and Conditions

Laptop computers are allowed in class but may only be used for activities related to the course (mainly note taking). Your laptop must be disconnected from the network during class. Performing unrelated activities during class disrupts everyone around you, will weigh negatively on your participation grade, and may result in expulsion from a particular lecture. Mobile phones should be switched off and put away while in class.

You are always expected to behave in accordance with UT's rules on academic integrity and with UT's honor code. Scholastic dishonesty will be dealt with harshly. Please refer to the Student Judicial Services website

(http://deanofstudents.utexas.edu/)

for more information.

The university of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259.

6 Course Outline

- 1. Review of Basic Time-Value of money.
 - Review of discounting.
 - The relationship between rents and prices. The GGM and Cap Rates.
- 2. What determines Rents and Prices?
 - General Supply/Demand arguments and the Four-Quadrant Model.
 - Central Cities and Economic Base Theory.
 - The Monocentric Model.
 - Market Analysis: Residential and Commercial Property.
 - Homework on the material in this unit.
 - Class Speaker?

Midterm 1

- 3. Financial Analysis (Equity Side).
 - More DCF (risk, discount factors).
 - Determining Cap Rates, comps.
 - Proformas.
 - ARGUS.
 - Case study on property financial analysis.
- 4. Mortgages.
 - The effects of leverage on property investments.
 - Basic mechanics and terms, mortgage types, commercial versus residential.
 - Mortgage calculations: financial calculator and spreadsheets.
 - Convertible Mortgages and Participation Mortgages.
 - Problem set on mortgages.

Midterm 2

- 5. Real Estate Capital Markets and Securitized Real Estate.
 - Forms of Property Ownership.
 - REITs.
 - Secondary Mortgage Markets.
 - Homework on Real Estate Capital Markets.

Final Exam: cumulative, with slight overweight in the material covered after the second midterm.