## Real Estate Finance, Fall 2020

REAL4000 and REAL5440, **Remote** Tuesday 6:30pm-9:20pm Office Hours Tu 11:30am-12:00pm And by appointment Instructor: Yingchun Liu yingchun.liu@unt.edu
Office: BLB 365F
(940)5654281

#### **Overview**

This course exposes students to the fundamentals of real estate finance. The primary objective is to examine real estate capital markets, both debt and equity. We will begin by looking at the primary residential mortgage market and the mathematics and finance of residential mortgage cash flows and pricing, understanding the pro and cons of various mortgage products. We will move into commercial real estate market. The last part of this class will study the secondary market for mortgage funds with a study of simple pass-through residential mortgage pass-through securities.

**Course Objectives:** 

After completing this course successfully, the student should be able to:

- understand the structure of the mortgage market
- understand the pros and cons of various types of mortgages
- perform basic calculations of various mortgage instruments
- understand the need and structure of secondary mortgage market
- understand common types of mortgage-backed securities

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### **Text Book and Calculator:**

Real Estate Finance & Investments, by <u>William B. Brueggeman Jeffrey Fisher</u>, 16<sup>th</sup> Edition. My lectures will follow the book loosely in most sessions and I will have supplement materials during some sessions. You will also need a **calculator**. I strongly recommend a financial calculator. I will use Texas Instruments' BA II Plus during class.

This course will require considerable study outside of class. The course will be structured as a combination of lectures, discussion and accompanied by related reading assignments and problem sets. The best way to prepare for exams is to work the assigned problems. It is very important that you keep up with the assigned work so that you will not be overwhelmed at exam time.

## E-mail

I will reply the emails in timely fashion. Sometimes your questions are important enough that they are worth bringing to the attention to the whole class, I will address it in our class.

### **Grading**

No make-up exam. Plan your schedule accordingly.

Homework	10%
Quiz	15%
2 Midterms	45%
Final	30%
Total	100%

# For REAL5440, there is a project and presentation requirement of 5%.

The final grading scale is:

A: >=90%

B: 80% - 89%

C: 70% - 79%

D: 60% - 69%

F: =<59%

### Grade Appeals

All grade appeals must be done within three days after the grade is posted. I will not look into grades appeal after three days past the date of grade posting for any exam, homework and quiz.

#### Homework, Quiz and Guest Speaker

You will have weekly homework questions from the book and supplementary questions throughout the semester. It is very important that you work on them. The goal of these questions is to help you understand the material and prepare for the exams. **All homework is by group of 4 students**. Submit one copy of homework per group (in Canvas) with all group members names. Note that questions similar to these questions may appear on quiz/exam — so it is important that you understand how to work problems **by yourself**. There will be weekly quiz given throughout the semester. These quizzes will be on the material that we just covered. Each quiz will take about 20 minutes. Students who miss a quiz will receive a zero on the quiz. No make-up quizzes.

We will have 2 guest speakers during the semester after each midterm. In lieu of homework for that week, you are required to write a report on the guest presentation. Details will follow. Attendance is required for both guest speakers.

## Exams

There will be 2 midterms and a final exam. Midterm Exams will cover the new material. Final exam is cumulative. No make-up exams. You may have one page of cheat sheet to all the exams.

## Required equipment

A web camera or a laptop with integrated camera is required for all remote exams. It is your responsibility to obtain a properly functioning camera for remote exams. Your test score will be invalid without a functioning camera. All remote exams will be administered through Canvas using Respondus Lockdown Browser with Camera option. Respondus Lockdown browser can be downloaded through your Canvas account.

### **Tutoring Service:**

Students can access the Finance Tutor Lab remotely via Zoom starting on August 31<sup>st</sup>. Students will need to sign up to reserve a time at this link: <a href="https://firellab.as.me/">https://firellab.as.me/</a> Current lab hours are posted on the Tutor Labs website at this link: <a href="https://cob.unt.edu/students/tutor-labs">https://cob.unt.edu/students/tutor-labs</a>

Zoom Meeting Information

Join Zoom Meeting: <a href="https://unt.zoom.us/j/97294686250">https://unt.zoom.us/j/97294686250</a>

Meeting ID: 972 9468 6250

## COVID-19 and Attendance

While attendance is expected, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent as to what may be preventing you from coming to class so I may make a decision about accommodating your request to be excused from class.

If you are experiencing cough, shortness of breath or difficulty breathing, fever, or any of the other possible symptoms of COVID-19 (<a href="https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html">https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html</a>) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or <a href="mailto:askSHWC@unt.edu">askSHWC@unt.edu</a>) or your health care provider. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important.

# Student Perceptions of Teaching (SPOT)

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available late in the semester to provide you with an opportunity to evaluate how this course is taught. You will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Please look for the email in your UNT email inbox. Simply click on the link and complete

your survey. Once you complete the survey you will receive a confirmation email that the survey has been submitted.

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA Accommodation Statement. UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website at disability.unt.edu.

# This schedule is tentative depend on how we progress in the class.

# Course Schedule (Tentative, we will have some flexibilities with guest lecture/speaker)

Week1

INTRODUCTION TO REAL ESTATE FINANCE

Reference: Chapter 1, 2

Week 2, 3, 4, 5 MORTGAGE

Reference: Chapters 3, 4 and 5

Week 6: Exam I, September 29

Week 7: Guest Lecture, October 6, Crystal Parkinson from Academy Mortgage (tentative)

Week 8

**MORTGAGES: EXTENSION** 

Reference: Chapter 6

Week 9

RESIDENTIAL MORTGAGE CHOICE

Reference: Chapter 7

Week10

UNDERWRITING AND FINANCING RESIDENTIAL PROPERTIES

Reference: Chapter 8

Week11: Exam II, November 3

**Week 12: Guest Lecture, November 10 (tentative)** 

Week13

COMMERCIAL MORTGAGE

Reference: Chapter 12

Week14

VALUATION OF MORTGAGE-BACKED SECURITIES

Reference: Chapter 19 and 20

Week 15: Review Week 16: Final Exam.