Real Estate Finance

REAL 4000, BLB040 Tuesday 6:30pm-9:20pm Office Hours Tu 10:30am-12:30pm (940)5654281 Instructor: Yingchun Liu yingchun.liu@unt.edu
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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

Text Book and Calculator:

Real Estate Finance & Investments, by <u>William B. Brueggeman Jeffrey Fisher</u>, 16th 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. Attendance: I take attendance by circulating a sign-up sheet at the beginning of each class. It is your responsibility to sign it. If you forget, I will count that as an absence. Attendance is required. I will award up to two bonus points for attendance and class participation.

Grading

No make-up exam. Plan your schedule accordingly.

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

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 of the posted grade. I will not look into grades appealed after three days past the date of grade postings for any exam.

Homework, Quiz and Guest Speaker

You will have weekly homework questions from the book and supplementary questions throughout the semester. I will collect those questions, 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. I suggest you to work in groups of 2-3 students. Hand in one copy of homework per group 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 in class. These quizzes will be on the material that we covered the prior week. Each quiz will take about 10-15 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 quiz the week after, you are required to write a report on the guest presentation. 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 bring one page of cheat sheet to all the exams.

Emergency Evacuation Procedures for Business Leadership Building:

- Severe Weather In the event of severe weather, all building occupants should immediately seek shelter in the designated shelter-in-place area in the building. If unable to safely move to the designated shelter-in-place area, seek shelter in a windowless interior room or hallway on the lowest floor of the building. All building occupants should take shelter in rooms 055, 070, 090, and the restrooms on the basement level or in rooms 170, 155, and restrooms 122, 182 or 183 on the first floor.
- Bomb Threat/Fire In the event of a bomb threat or fire in the building, all building occupants should immediately evacuate the building using the nearest exit. Once outside, proceed to the designated assembly area. If unable to safely move to the designated assembly area, contact one or more members of your department or unit to let them know you are safe and inform them of your whereabouts. Persons with mobility impairments who are unable to safely exit the building should move to a designated area of refuge and await assistance from emergency responders. All building occupants should immediately

evacuate the building and proceed to the south side of Crumley Hall in the grassy area, west of parking lot 24.

E-mail

I will reply the emails in timely fashion. However, some questions may not be easily answered via email, and then I may ask you to stop by my office. 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.

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, October 1

Week 7: Guest Lecture, October 8, Crystal Parkinson from Academy Mortgage (tentative)

Week 8

MORTGAGES: EXTENSION

Reference: Chapter 6

Week9

RESIDENTIAL MORTGAGE CHOICE

Reference: Chapter 7

Week10

UNDERWRITING AND FINANCING RESIDENTIAL PROPERTIES

Reference: Chapter 8

Week11: Exam II, November 5

Week 12: Guest Lecture, November 12 (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.