

## Real Estate Finance

REAL 4000 and REAL 5440, BLB245  
Tuesday 2:00pm-4:50pm  
Office Hours Tuesday 10:30-12:30  
(940)5654281

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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 William B. Brueggeman Jeffrey Fisher, 15<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. You are responsible for all material covered during class, including changes to the syllabus, course schedule and course materials. If you miss a class it is your responsibility to obtain any handouts or notes from other students in class.

I will take attendance. You are expected to arrive on time and stay till end of the class. I will give bonus points up to 2 for attendance and class participation

### **Grading**

No make-up exam will be given. Plan your schedule accordingly. Your grade will be determined by your performance on project and exams.

For REAL4000 Students:

Grading	
Homework	10%
3 Midterms	45%
Final	45%
Total	100%

For REAL5440 Students:

Presentation*	5%
Homework	5%
3 Midterms	45%
Final	45%
Total	100%

The final grading scale is:

A:  $\geq 90\%$   
B: 80% - 89%  
C: 70% - 79%  
D: 60% - 69%  
F:  $\leq 59\%$

### 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 question

You will have 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 want 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 exams – so it is important that you understand how to work problems **by yourself**.

### Exams

There will be three midterms and a final exam. Your lowest scored midterm exam will be dropped. Midterm Exams will cover the new material. If you miss an exam, the exam will be dropped. Final exam is cumulative. The final exam can NOT be dropped. No make-up exams. You may bring one page of cheat sheet to all the exams.

### 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. For additional information, please visit the spot website at [www.spot.unt.edu](http://www.spot.unt.edu) or email [spot@unt.edu](mailto:spot@unt.edu).

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

### **Course Schedule (Tentative)**

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**

Week 7

MORTGAGES: EXTENSION

Reference: Chapter 6

Week8

RESIDENTIAL MORTGAGE CHOICE

Reference: Chapter 7

Week9

UNDERWRITING AND FINANCING RESIDENTIAL PROPERTIES

Reference: Chapter 8

#### **Week10: Exam II**

Week11

COMMERCIAL MORTGAGE (Notes)

Week12

VALUATION OF MORTGAGE-BACKED SECURITIES: PASS-THROUGH

Reference: Chapter 19

#### **Week13: Exam III**

Week14:

VALUATION OF MORTGAGE-BACKED SECURITIES: CMOS

Reference: Chapter 20

And Presentation by REAL5440 students

**Week 15: Review**

**Week16: Final Exam, 5/9 1:30pm-3:30pm**