# Syllabus-FINA 767 Real Estate Finance Spring 2014

#### **Instructor:**

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Office hour: 9:00-10:00 T, TH or By Appointment

#### **Textbooks:**

Required: Commercial Real Estate Analysis & Investments (3e), by Geltner, Miller, Clayton and Eichholtz

Recommended: Real Estate Finance and Investments (14e), by Bruegeman and Fisher

## **Course Description**

The course introduces basic elements of real estate Finance. It begins with a comprehensive introduction of mortgage from the perspective of capital market investors. The mortgage basics are then used in investment analysis of income producing properties. The public debt and equity are introduced in the third part of this course.

My objectives of this course are:

- \_ to give you an adequate understanding of real estate finance as it is practiced today
- \_ to help you learn how to conceptualize issues to prepare you for the unforeseen challenges of tomorrow
- \_to help you gain necessary skills for careers in real estate finance

## **Prerequisite**

- 1. A clear understanding of the time value of money concept. (**Knowing how to use a financial** calculator to solve the time value of money problem, but without a clear understanding of the underlying concepts is not sufficient for taking this course. )
- 2. Basic algebra. (Symbolic algebraic operations required)

This is a quantitative, technical and difficult course, we are going to mainly deal with numbers and computations.

#### Communication

Email will be primary communication tools I will use. Please make sure that your email address in the blackboard system is correct.

Please indicate in the subject line the course number (FINA 767) whenever you send me an email, otherwise I will very likely to ignore your email.

### **Learning Outcomes**

After completing this course, the students should be able to

- 1. Do basic mortgage computations
- 2. Do cash flow analysis of simple real estate investment project
- 3. Analyze the pros and cons of debt investment vs equity investment
- 4. Understand the basic mechanism of mortgage backed securities and to price simple structure of mortgage backed securities

#### Lectures

I will post lecture notes on the blackboard one or two days before class. You should print the lecture notes and bring it to class. Lecture notes are very important, however, reading the lecture notes without attending the lectures may be misleading and I am not responsible for that.

Please read relevant book chapters before coming to the class

Please bring a financial calculator to class (Texas Instruments or HP), you should learn how to use the financial calculator by yourself, I do not teach that.

You can ask questions during the lectures, but only with my permission.

# **Assignments**

You have to follow the following rules in preparing your assignments

- 1. On-site students must turn in hard copies; off-site students should submit their assignments to the blackboard digital drop-box. (I do not accept assignments through emails)
- 2. Please write top to bottom and left to right, and write succinctly and clearly. (Points will be taken for messy assignments)
- 3. Circle the final answers. (It is your responsibility if I cannot find the answers)

I will return your assignments in about one week, and at the same time I will post your assignment grades on Blackboard. It is your responsibility to check whether there are discrepancies of your grades, and you should let me within two weeks. (I will not make any changes on the grades two weeks after posting)

(I am expecting you to spend at least 4 hours every week outside the classroom on this course.)

#### **Exams**

There will be only one exam. The exam will be based on the book, lecture notes, assignments and discussion notes. Never tell me that some questions in the exams are not covered anywhere. If that happens, it is your responsibility to figure out what actually happened. The final exam is cumulative.

**READ THIS: DO NOT** <u>email or phone</u> the professor questions or inquiries about grades. Any questions or comments regarding grades must be done in person. Before, during, or after class and all office hours are appropriate times to discuss grades. Emails and phone calls are inappropriate venues by which to discuss such subjects. DO NOT email or phone professor regarding final grades. *Violation of this policy will result in a one letter grade deduction in the student's final grade, per incident.* 

## **Project**

You will need to complete one individual project. In this project, you will:

- 1. Identify a for-sale residential property in the Columbia area
- 2. Do a cash flow proforma for the property
- 3. Decide financing method
- 4. Calculate the investment return
- 5. Make investment suggestions

#### **Grades**

Attendance	5%
Assignments	35%
Midterms	40%
Project	20%

Α	90-100 Pts
B+	85-89 Pts
В	80-84 Pts
C+	75- 79 Pts
С	70-74 Pts
D+	65-69 Pts.
D	60-64 Pts.
F	< 60

# **Course Outlines**

(Tentative and I reserve the right to revise it as we go along)

Part I Introduction and Overview of Real Estate Capital Market

Date	Lecture	
Jan 14	Logistics and Introduction (Real Estate and the Financial Crisis) Overview of the Real Estate Capital Market (ch 7) Time Value of Money (ch 8)	

## Part II Mortgage and Mortgage-Backed Securities

Date	Lecture	
Jan 16	Mortgage Basics (ch 16)	
	Mortgage Computation (ch 17)	
	Mortgage Investment (ch 17)	
Jan 21	Mortgage Default (ch 18)	Assignment 1
	Residential mortgage refinancing	
Jan 23	Mortgage-Backed Securities (BF 19)	Assignment 1 Due
		Assignment 2

Jan 28	CMOs and In Class Exercise	Assignment 2 due
Jan 30	CMBS	
Feb 4	Midterm Exam	
Feb 6	Real Estate Investment Analysis (I)	

# Part III Real Estate Equity Investment Analysis

Date	Lecture
Feb 11	Real Estate Investment Analysis (II)
Feb 13	Real Estate Investment Analysis (III)
Feb 18	Limited Partnerships (BF 18)
	REITs (ch 23)
Feb 20	Other Topics
Feb 25	Project Presentation 1
Feb 27	Project Presentation 2

# **Policies**

<u>Academic Honesty:</u> All college and department policies on academic honesty will be strictly enforced. The <u>Student Handbook and Policy Guide</u> establishes rights to which the student is

entitled and the responsibilities, which the student must assume. Along with preparing for and attending class, each student has the responsibility of promoting high academic standards. Academic dishonesty includes: (a) cheating, (b) fabrications and falsifications, (c) multiple submissions, (d) plagiarism, (e) complicity in academic dishonesty. Inappropriate classroom behavior may result in the student being withdrawn from the class.

#### Rule of Academic Responsibility (Directly from the Student Handbook)

It is the responsibility of every student at the University of South Carolina Columbia to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in connection with any academic program. Any student who violates this rule or who knowingly assists another to violate this rule shall be subject to discipline.

This Rule is intended to prohibit all forms of academic dishonesty and should be interpreted broadly to carry out that purpose. The following examples illustrate conduct that violates this Rule, but this list is not intended to be an exhaustive compilation of conduct prohibited by the Rule.

- 1. Giving or receiving unauthorized assistance, or attempting to give or receive such assistance, in connection with the performance of any academic work.
- 2. Unauthorized use of materials or information of any type or the unauthorized use of any electronic or mechanical device in connection with the completion of any academic work.
- 3. Access to the contents of any test or examination or the purchase, sale, or theft of any test or examination prior to its administration.
- 4. Unauthorized use of another person's work without proper acknowledgment of source
- 5. Intentional misrepresentation by word or action of any situation of fact, or intentional omission of material fact, so as to mislead any person in connection with any academic work (including, without limitation, the scheduling, completion, performance, or submission of any such work).
- 6. Offering or giving any favor or thing of value for the purpose of influencing improperly a grade or other evaluation of a student in an academic program.
- 7. Conduct intended to interfere with an instructor's ability to evaluate accurately a student's competency or performance in an academic program.

An academic program includes any graduate and undergraduate course, independent study or research for academic credit, laboratory, internship, externship, clinical program, practicum, field placement, or other form of study or work offered in furtherance of the academic mission of the University. Academic work includes any work performed or assigned to be performed in connection with any academic program.

This Rule applies to all students of the University of South Carolina Columbia whether full-time or part-time.

A person's knowledge or intent may be inferred from the circumstances of an alleged violation.

Whenever a student is uncertain as to whether conduct would violate this Rule, it is the responsibility of the student to seek clarification from the appropriate faculty member or instructor prior to engaging in such conduct.

Attendance: Consistent with University Policy as stated in the <u>Student Handbook</u>. Each student is allowed three (3) unexcused absences from class period. Each absence in excess of three will result in a one-letter grade reduction in the final grade. Think of this class as your job – arrive on time and be prepared to participate. All student activities associated with university events (sports absences, student activities requiring absence from the university, etc.) are considered excused, but MUST be cleared with the professor PRIOR to their occurrence.

Americans With Disability Act: Every reasonable attempt will be made to remove any physical barrier, which may hamper the ability of an individual to learn in this classroom. Anyone who has a physical or learning limitation that would impact attendance, preparation, participation, or timely completion of assignments should feel welcome to discuss this limitation with the professor at the beginning of the semester.

<u>Dropping the Course:</u> College policies will be followed. Please consult the schedule for exact dates for dropping a course without penalty.