Real Estate Finance and Investment Analysis | REAL 209 and FNCE 209 The Wharton School of the University of Pennsylvania | Fall 2011

PRELIMINARY SYLLABUS | JULY 2011

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Office Hours: Tuesday 15:00 to 16:00 and by appointment

Course Objectives

Real estate is a multi-faceted field, encompassing both an operating industry and a broad category of investments. It has its own institutional features, jargon, and investment structures. As the survey course for the Real Estate Department, this class offers an overview of the real estate field rather than a narrow focus on any particular topic. We delve more deeply into a handful of aspects of the real estate field when I believe they are particularly relevant or when the example provides a more general insight. Higher-level classes in the Real Estate Department examine many of the topics from this class in more detail.

The presumption in this class is that you have no prior real estate experience; no pre-existing knowledge of the real estate industry is necessary to do well in this class. However, if you have prior experience in the real estate industry, some topics may be familiar to you.

Course Materials

Textbook The required textbook is Real Estate Finance and Investments, Third Edition, by Professor Peter Linneman. It is available from the Penn Bookstore. Another excellent text, Commercial Real Estate Analysis and Investments by Geltner and Miller, is optional and is available through all major online book retailers in hardcopy and ebook formats.

PowerPoint Slides Copies of PowerPoint slides used in class are posted in PDF format on webCafé.

Course Pack The class course pack is required and is available from Wharton Reprographics.

webCafé

- Copies of the PowerPoint slides used in class (in PDF format);
- Sample Excel spreadsheets from the in-class examples;
- · Practice problems, old exams, and solutions;
- Supplemental class material, such as newspaper articles;
- · Announcements, updates, and clarifications; and,
- Answers to questions that are of general interest (for example, about a case) .

Calculator You must have a financial calculator capable of computing annuities and present values. You are also responsible for knowing how to use the annuity and present value functions. You will need the calculator for the class exams.

Cases

There will be three group project cases handed out in class. You will choose your own group of **four to six** members, and must work with the same team on all three cases. If you cannot find a group, I will assign you to a team. You may form groups with members from either section. You and your teammates should register under the "team signup" section on webCafé.

The cases require a variety of skills, from financial savvy to management. You should seek to have a mix of talents and backgrounds on your team. In addition, I strongly encourage you not to take the "divide and conquer" approach of having only one or two team members work on each case. You will be much more successful if the group uses a truly collaborative process. You may discuss the cases with other groups. However, each group is responsible for preparing the case materials and write-ups independently.

Late cases will not be accepted nor will extensions be granted.

Midterm Examinations

Two midterm exams will be held in regularly scheduled class time. The second examination is not cumulative in content, but assumes proficiency in basic skills taught in the first part of the class. Exams will cover the material examined in class and during guest lectures, the class notes, the cases, the practice problems, and the required readings. The exams are closed-book, but you are allowed to bring one 8.5" x 11" page (single-sided) of notes into each exam. You will need to bring a financial calculator to the exams. You will not be allowed to use a computer. In addition, seats will be randomly assigned on exam days. Exams must be taken at the assigned time. Make-up exams are not given unless you have a Wharton Dean's Office-approved excuse.

Class Participation and Expectations

- I expect you to be prepared for class. This means: having completed the required readings in advance of the lecture and being ready to comment on or discuss the class material;
- I expect you to participate in class discussions, and to speak up if you are lost;
- · I expect you to be present for the talks by outside speakers unless you have a conflict with another class;
- I expect that you will not find every topic we cover to be of interest to you, but that you will be a good sport about it. Students who are considering a career in real estate development, for example, are interested in very different things than students who are considering a career on Wall Street. All the topics we will cover are of interest to someone in the class, but few are of interest to everyone.

Readings All readings are required. They are drawn from the textbook and the readings course pack. You should complete readings before the class for which they are listed.

Guest Speakers Guest speakers are generally scheduled outside of normal class time, and are listed on the syllabus. These sessions are required material and will be recorded in case you have a conflict with another class.

Classroom Etiquette

- Students may use a laptop or tablet in class, but only to take notes:
- Computers, Blackberries, iPhones, or other digital communication devices may not be used during class time;
- Please silence the ringer on your mobile phone; and,
- · Whatever seat you choose on the third class meeting is yours for the duration of the semester.

Grading

The course grade will be based on the two equally weighted midterm examinations and the three equally weighted cases. Each exam is 25 percent of your final grade; each case, 16.7 percent. You must pass both exams and complete all three cases in order to receive a passing grade for the course.

REAL 209 AND FNCE 209 | FALL 2011 | CHANDAN | COURSE CALENDAR

CLASS	DATE	TOPIC	MATERIAL
1	Th Sept 8	Class Overview Introduction to Real Estate Markets	Emerging Trends in Real Estate 2011, Ch 1 & 2 Linneman, C 2: What is Real Estate
2	Tu Sept 13	Topic #1: Overview of Real Estate Markets Today Topic #2: Property-Level Income: Sources, Risk, and Value	Linneman, C 4: Property Level Pro Forma Analysis Linneman, C 5: Financial Modeling Linneman, C 7: Use and Selection of Cap Rates Linneman, Prerequisite I: The Basics of Discounted Cash Flow and Net Present Value Linneman, Prerequisite II: IRR
3	Th Sept 15	Guest Speaker: Sam Zell Details to be Announced	
4	Tu Sept 20	Topic #2 Continued	
5	Th Sept 22	Topic #3: Debt Financing and Simple Mortgages	Linneman, C 4: Property Level Pro Forma Analysis Linneman, C 13: The Use of Debt and Mortgages Linneman, C 11: Real Estate Bankruptcy Basics Linneman, C 12: Should You Borrow? Linneman, Prerequisite III: Amortization Fundamentals Brealey and Myers, C 3: How to Calculate Present Values
6	Tu Sept 27	Topic #3 Continued Case 1 Distributed	
7	Th Sept 29	Topic #4: Appraisals and the Evaluation of Pro Formas	BP: Nine Abuses Common in Pro Forma Cash Flow Projections Linneman, C 8: Development Pro Forma Analysis BP: How Reliable Are Commercial Appraisals? Another Look
8	Tu Oct 4	Topic #5: Taxes and Real Estate	Linneman, C 4: Property Level Pro Forma Analysis Linneman, C 16: Real Estate Exit Strategies
9	Th Oct 6	Topic #5 Continued	
	Tu Oct 11	Fall Break	
10	Th Oct 13	Topic #6: Introduction to Leases and the Economics of Retail Malls Case 1, Part 1 Due by 10:00	Linneman, C 3: The Fundamentals of Commercial Leases BP: Mall Myths BP: The Changing Design of Shopping Places BP: The Evolution of Retailing in the US
11	Tu Oct 18	Topic #7: Debt Structures	BP: Guide to Real Estate Capital Markets: Participating Debt and Equity Linneman, C 15: Ground Leases as a Source of Finance Linneman, C 17: Real Estate Private Equity Funds BP: Real Estate Private Equity Funds
12	Th Oct 20	Topic #7 Continued Case 1, Part 2 Due by 10:00	
13	Tu Oct 25	Case 1 Discussion Midterm Review	
14	Th Oct 27	Midterm Exam I	
15	Tu Nov 1	Topic #8: Real Estate Cycles	Linneman, C 20: Real Estate Cycles Linneman, C 9: Development Feasibility Analysis BP: Superstar Cities BP: Will We Need More Office Space?

			BP: Developer: Villain or Hero? BP: (When) Will We Do It Again?
16	Th Nov 3	Topic #8 Continued Case 2 Distributed	BP: Adjustment Mechanisms in Real Estate Markets
17	Tu Nov 8	Topic #9: Securitization of Debt Interests: Commercial Mortgage- Backed Securities	BP: How to Build a Bond Linneman, C 14: Commercial Mortgage-Backed Securities Basics Linneman, Supp II: A Look at a Real CMBS Issue
18	Th Nov 10	Topic #10: Sources of Financing	BP: Defaults in Securitized Real Estate Loans BP: The Mortgage REITs: Dynamos or Duds?
19	Tu Nov 15	Topic #10 Continued	TBD
20	Th Nov 17	Case 2 Due by 10:00 Case 2 Discussion Case 3 Distributed	
21	Tu Nov 22	Topic #11: Equity Securitization and the REIT Market	BP: REITs for Rookies BP: Basic Valuation of a Real Estate Investment Trust Linneman, C 18: REITs and Liquid Real Estate BP: REIT Share Prices and the Declining Relative Importance of Commercial Real Estate BP: Liquid Real Estate BP: REITs as an Alternative Investment in Volatile Financial Markets
	Th Nov 24	Thanksgiving Break	
22	Tu Nov 29	Topic #11 Continued	Linneman, C 10: Real Estate Company Analysis BP: UPREITS: A Vehicle for Tax Deferral and Asset Growth BP: Real Estate: Past, Present, and Future BP: Inside the Revolution BP: Forces Changing the Real Estate Industry BP: The Forces Changing Real Estate: Five Years Later BP: The Five Overlooked Features of the Real Estate Capital Markets BP: The Pressure on Public REITs to Grow Larger BP: REITs and Taxes
23	Th Dec 1	Case 3 Due by 10:00 Case #3 Discussion	
24	Tu Dec 6	The Rent/Own Decision	Linneman, C 19: Corporate Real Estate Decisions
25	Th Dec 8	Midterm Exam II	