

The Wharton School, University of Pennsylvania
Real Estate Finance: Investment and Analysis
Fall 2004

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Office Hours: Wednesday: 2:30-4, or by appointment
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Bulk packs:

Two bulk packs will be available from Wharton Reprographics. The first bulk pack will contain class notes and readings for all lectures through the first midterm. The second bulk pack will contain the remaining class notes and readings and will be available later in the semester. *The class notes in your bulk pack do not contain all the materials I will present in class.* In the past, Reprographics has not always properly cross-listed the packet so be sure to look under both the finance and real estate listings to find it.

Web Café:

I strongly encourage you to become familiar with the course web page on Wharton's Web Café. All class notes, homework sets, and homework solutions will be posted on the page, as will the latest class announcements. *I also strongly encourage students to post and respond to questions in the Course Discussions section.* I will respond regularly to questions posted on the Web Café.

Non-Wharton students will need to apply for a Wharton account in order to get access to the Web Café. Check out: https://accounts.wharton.upenn.edu/account_user/

Text:

I will assign chapters from Peter Linneman's textbook as *optional* reading. The book is a good introduction to the Real Estate topics that we will see in class and provides background for other topics that we will not cover. Linneman's practical, down-to-earth approach and wide coverage make the book an extremely useful resource. Note, however, that *attendance to the class, the class notes, assigned reading, homework, and case discussions will suffice for the preparation of the exams.*

Financial Calculator:

You must have a financial or programmable calculator that can compute annuities/present values. You are responsible for knowing how to use these functions. You will need the calculator to take the exams.

Grading:

Your grade will be determined by 4 cases and the exams.

Exams

Two midterm exams count for 50% of the course grade (25% each). The second midterm will not be inclusive of the materials in the first midterm, but you are expected to be familiar with the basic concepts. You are responsible for the materials discussed in class, class notes, class handouts, and assigned readings. *Exams must be taken at the assigned time. **Exams must be passed in order to receive a passing grade for the course.** Make-ups are not given unless you have your Wharton Division's Office-approved excuse.*

Cases:

The class will have four cases, which will be worth a total of 50% of your grade. Cases are group projects. Cases will be handed out in class. All cases are due at the beginning of class prior to the case discussion. You can choose your own group, with a recommended size of 3-4 members, but you must work with the same group on all cases. Under no circumstances may you have more than 4 members in a group, but groups of 2 people are acceptable. While it is preferable to form groups within your section, group members may come from other sections if absolutely necessary, but the case must be handed-in for the earliest section of all group members. I will set up a folder on the Web Café for people looking to find a group or for groups looking to add members. You are ultimately responsible for finding your own group. Do not wait until the last minute. *Each case will also have a strict page limit. Any pages that exceed the page limit will be removed and returned, unread. Collaboration between groups is not allowed. Late cases will not be accepted nor will extensions be given without approval from your Wharton Division's Office.*

Case #1- this is a short (1 page) assignment. (5% of your grade)

Case #2- will count for 20% of your grade.

Case #3- will count for 15% of your grade

Case #4- will count for 10% of your grade

Homework:

Homework sets will be posted on the Web Café periodically during the semester, but will not be handed-in or graded. Solutions will be posted on the Web Café.

Re-grading:

All requests for re-grades must be submitted, in-writing, within 2 weeks of the return of a case/exam. You must submit the entire case/exam, along with a point-by-point analysis of what you think was scored incorrectly. Please look at the solution set prior to requesting a re-grade. If you would like to meet to go over a case/exam and want to talk about the grade, please submit the case in advance of the meeting so I can be prepared to talk about the case/exam.

Course Outline

A number of sessions will be held outside of regular class hours to accommodate outside speakers. These sessions will be videotaped and posted on the Wharton Video Network. You are responsible for the material and concepts presented in these lectures. Reading denoted with † are optional.

1. Sept. 9: Course requirements, class overview, and overview of real estate markets

Bulk pack #1: *Emerging Trends in Real Estate 2004*, chapters 1-3. [This article provides a nice overview on the current state of the real estate industry. There are lots of concepts that we will cover later in the course]
Linneman: ch.1 and ch.2

2. Sept. 14: Real Estate Markets: the Fundamentals

3. Sept. 16: Basic Pro Forma Tools: Income and Expense Analysis: calculating effective rent and office leases

Bulk pack #2: Martin: *Nine Abuses Common in Pro Forma Cash Flow Projections*
Linneman: ch.4

† [Optional: see example of lease at:
<http://www.ucop.edu/facil/resg/lease-manual/1100.html>]

4. Sept. 21: Lease Analysis and Cash Flows: incentives for landlords and tenants and strategic use by mall owners

Bulk pack #3: "Is the Industrial Sector Facing Imminent Doom?" Real Estate Journal, July 28, 2004

Bulk pack #4: "Left for dead." The Philadelphia Inquirer, Sun, Nov. 23, 2003

Bulk pack #5: Lineman and Moy, "The Evolution of Retailing in the United States"

Linneman: ch.3

5. Sept.23 : Property Valuation Techniques. Should you buy or sell?

Linneman: ch.7

- 6.: Sept. 28: Mortgages and Mortgage Mechanics: obtaining a mortgage and borrowing capacity.

Linneman: ch.13

† [Optional Brealey and Myers, *Principles of Corporate Finance*, chapter 3: “How to Calculate Present Values.”]

7. Sept. 30: **Case #1 Due:** short discussion. Debt Structures: types of debt and the refinancing decision; Risk and Real Estate Investing

Bulk pack #6: Arnold and Oharenko: *Guide to Real Estate Capital Markets: Participating Debt and Equity*. [Do your best to wade through. Don't worry about the “Parameters” sections.]

Linneman: ch12

- 8.: Oct.5 Taxes and Real Estate Valuation; taxes in the pro forma; income and disposition taxes

- 9.: Oct. 7 Making Money from Taxation? Sweet 80s.
Scenic Vista: a Pro Forma Example.

Read Scenic Vista Pro Forma and come to class prepared to discuss

10. Oct.12 Corporate Real Estate Issues: Ownership and Deal Structuring;

† [Optional: “Partnerships.” Internal Revenue Service. Available at:
<http://www.irs.gov/pub/irs-pdf/p541.pdf>]

11. Oct. 14: **Case #2 due.** Case discussion

12. October 19: Why Do Corporations Own Real Estate: the corporate rent-own decision

Bulk pack #7: Deng and Gyourko: *Real Estate Ownership by Non-Real Estate Firms*

13. October 21: Exam Midterm #1

14. October 28: Real Estate Cycles: Pricing and Vacancies in Commercial Markets

Bulk Pack 2 #1: Zhu “The Case of the Missing Commercial real Estate Cycle,”

15. November 2 (tentative): Introduction to Real Estate Capital Markets

Robert Lieber, *Managing Director, Lehman Brothers., special guest lecture, (6 pm - 7:30 pm), venue TBA****

Bulk pack2 #2: Han: *To Securitize or Not To Securitize: The Future of Commercial Real Estate Debt Markets*

16. November 4: REIT Finances: How to Build Your Own REIT

Linneman: ch.18

Bulk pack2 #3: Deutsche Banc Alex. Brown. "REITs for Rookies"

Bulk pack2 #4: Cushman & Wakefield, Inc. and Apogee Associates, LLC. "UPREITs: A Vehicle for Tax Deferral and Growth"

17. Nov. 9: **Case #3 due:** Discussion and answers

18. Nov. 11: Growth of Public Equity Markets; REIT Structuring

19. Nov. 16: Debt Securitization, Part I: CMBS Markets and Structures

Linneman: ch.14

Bulk pack2 #5: Gordon: *How to Build a Bond*

Bulk pack2 #6: Etter, Price, and Rhodes "Conduits. A Source of Funds for Commercial and Multifamily Borrowers"

20. Nov. 18 (tentative): **John Weaver**, *Executive Vice President, GMAC Commercial Mortgage Corp., special guest lecture, (6 pm - 7:30 pm), venue TBA*

21. Nov. 23: **Case #4 due:** discussion and answers

22. Nov. 30*: Debt Securitization, Part II: CMBS Risks and Pricing

Linneman: Supplemental ch.II

23. Dec. 2: Housing Markets, Cycles, and Real Estate in the Investment Portfolio

24. Dec. 7: To Buy or Not To Buy: The Rent/Own Decision for Individuals

25. Dec. 9: Second Midterm