

University of Pennsylvania  
The Wharton School  
**REAL & FNCE 721**  
**REAL ESTATE FINANCE: INVESTMENT & ANALYSIS**  
**FALL 2004**  
Monday and Wednesday  
12-1:20 p.m.  
3-4:20 p.m.  
Lauder-Fischer Auditorium

Prof. Peter Linneman (call me Peter)  
Office Hours: Sign up sheets at Zell/Lurie Center  
1470 Steinberg-Dietrich Hall  
linnemap@wharton.upenn.edu

Your grade in the course is determined by your aggregate performance with assignment points as follows:

- Midterm exam (50 pts)
- End term exam (50 pts)
- Westwood Plaza Case (50 pts)
- Build to Suit Case (50 pts)
- China Case (50 pts)
- Welcome to the Big Leagues Case (50 pts).

There is no opportunity for “extra credit,” “make up assignments,” etc.

The dates and times for all assignments are final, and must be strictly adhered to. No changes will be permitted for any reason. Failure to complete any exam or hand in any case on time will result in zero points for that exercise. Any case handed in after the designated due time will absolutely not be read, and zero points will be given for the assignment. All cases are due (physically, not via email) at 11 a.m. on case day at my office.

**Incompletes are not given without written permission of the Wharton Dean’s Office.**

The material presented by guest lecturers is an integral part of the course and you are responsible for the material and concepts presented in these lectures. Several sessions will be jointly held and videotaped. Videos can be accessed through Wharton AV. You are responsible for the material covered in these sessions.

Your bulkpack contains supplemental reading materials and is available from Wharton Reprographics. The text for the class is my book, *Real Estate Finance and Investments: Risks and Opportunities*. If you cannot surmise that I think that the text material is important, you deserve what you get. While I will not “teach the text”, you are responsible for the material covered in the text. The bulkpack articles are readings that

give you a better understanding of the major issues and trends in the industry. These articles will not “be taught” but provide valuable context. Bulkpack readings are noted in quotation marks (“”), while text readings are noted as “Chapter X”.

If you have questions on any assigned readings, it is your responsibility to ask them in class. I will frequently ask, “Any questions?” Use this opportunity to ask any questions you have, either on material covered in the assigned readings or previous lectures. When you have a question about the class or class materials, ask it then (not one minute later as I try to get to my next class, dealing with the 15 students who one minute earlier had no questions). My experience is that if you have a question, you are never alone. Be brave. Remember that since your classmates are already convinced that you are an idiot, your question will not lower their opinions of you.

Mastery of a financial calculator and basic computer financial modeling is required. You are responsible for mastering these tools on your own. You are also responsible for generating understandable computer financial models. **If you do not know how to use these tools, it is your responsibility to obtain these skills.**

A few words are in order about the cases. All cases will be done in assigned groups. Groups will be randomly assigned. Do not ask me if you can form your own team. To do so will simply tell me either: 1) you cannot read; 2) you are an idiot; or 3) you are absurdly arrogant. None of these reflects well on you. New groups will be randomly assigned for each case. The comments above apply equally to requests to keep the same group together for all cases.

You are responsible to make the team work. If you feel that a teammate has not dealt with the group in good faith, or has not “carried their load”, you must try hard to work it out within the group. If you still feel aggrieved or taken advantage of, you should email me, after the case is handed in, indicating:

- your name
- the case
- all group member names
- the offending group member
- the nature of the offense.

If, at the end of the term, multiple complaints have been registered against you which I deem serious, points will be deducted from your case performance. Specifically, if serious complaints are registered against you:

- on 2 cases, 10 points will be deducted
- on 3 cases, 20 points will be deducted
- on 4 cases, 40 points will be deducted.

On case days, attendance is absolutely mandatory. Absences are your problem, not mine. You better be dead, dying, or present. If you are absent, you will automatically lose 10 points on that case.

At the start of class on case days, I will randomly select 10 students to (quickly and professionally) come to the front of the room to take part in a 30-minute “management meeting” discussion of the case. I will chair this management meeting. If you are not present when your name is called, 20 points will be deducted from your score (being present and on time for management meetings is a good lesson to learn while in B-school).

I strongly urge you to be prepared to participate in the management meetings. Since names are selected randomly, you may be selected several times during the term. As a professional, it is assumed that you are well prepared for participation in management meetings. I expect crisp, clear, concise, well-articulated answers to the questions posed during these sessions. Your lack of preparation or execution during these meetings will not only cause embarrassment in front of your peers, but will also result in a loss of points at my discretion.

Note that your lack of attendance and preparation can quickly lead to disastrous point totals. Understand that while it is not my objective to fail students, if your point total “distinguishes” you from your peers, I have no hesitancy in failing you (not just a QC).

### **COURSE SCHEDULE**

- 9/8 Introduction: Balancing risks and opportunities  
Readings: Chapter 1  
“Marshall Bennett Classic 2004”  
Richard Georgi “The Past and Future for Real Estate”  
Zell “Real Estate: Past, Present, and Future”  
Michael Milken “On Reflection”  
NAI 2004 Global Market Report (to be distributed in class)
- 9/13 What is Real Estate?  
Readings: Chapter 2  
Conway “The Equitable Chronicles”  
Kohn “Advancements in Technology”  
Downs “REIT Share Prices and the Declining Relative Importance of Commercial Real Estate”  
Vandell and Green “The Impact of Technology on Commercial Real Estate”
- 9/15 Leases Matter  
Readings: Chapter 3  
Taubman “Mall Myths”  
Rybczynski “The Changing Design of Shopping Places”  
Linneman and Moy “The Evolution of Retailing in the United States”
- 9/20 Pro Forma Creation  
Readings: Chapter 4  
Jeffrey Fisher et al “How Reliable Are Commercial Appraisals? Another Look”  
Vernon Martin III “Nine Abuses in Pro Forma Cash Flow Projections”

- 9/22 Financial Analysis  
Readings: Chapter 5 and Prerequisites I and II
- 9/27 Real Estate Cycles  
Readings: Herring and Wachter “Real Estate Booms and Banking Busts”  
Linneman, “Real Estate Cycles”
- 9/29 No class at 3:00  
Combined class at 12:00  
Guest Lecture – Stuart Askot & Gerry Ronon  
Due Diligence  
Readings: Chapter 6  
Due Diligence List  
Stephan Roulac “Institutional Real Estate Investing Processes, Due Diligence Practices and Market Conditions”
- 10/4 Cap Rates  
Readings: Chapter 7
- 10/6 Westwood Plaza Case
- 10/11 Development Risk and Returns  
Readings: Chapters 8 & 9  
Volk and Zimmerman “Development Dynamics”  
Terwilliger “Developer: Villain or Hero”  
Linneman “Will We Need More Office Space?”  
Ambrose, Linneman, Wachter “The Wharton Real Estate Index”  
Gyourko and Rybczynski “Financing New Urbanism”  
Joseph A. Brown “Saving Historic Treasures”  
Rybczynski “Godfathers of Sprawl”  
Rybczynski “Living Downtown”
- 10/13 No class at 12:00  
Combined class at 3:00  
Guest Lecture – Sam Zell
- 10/18 Fall Break
- 10/20 Development Analysis
- 10/25 Midterm
- 10/27 No class – Students are encouraged to attend The Zell-Lurie Real Estate Center’s Fall meeting during the day.

- 11/1 Two class sessions on this day  
 Combined class at 12:00 – Real Estate Companies  
 Readings: Chapter 10  
 Norma Cohen “Depreciation is a word the property industry doesn’t recognize”  
 Jon Hammer “The Entrepreneurial Mind”  
 Jennifer Lyons “NAV: What Are REIT Shares Worth?”  
 FBR Report on EOP
- Combined class at 3:00 – Debt and Mortgages  
 Readings: Chapters 11 & 12
- 11/3 More on Debt  
 Readings: Chapters 13 & 15 and Prerequisite III  
 Riddough “Determinants of Commercial Mortgage Choice”  
 Lynn Zuckerman Gray “Credit Tenant Lending”  
 Kerry Vandell “The Mortgage REITs: Dynamos or Duds?”  
 Easki et al “Commercial Mortgage Defaults”
- 11/8 CMBS  
 Readings: Chapter 14, Supplemental II  
 Poindexter “Defaults in Securitized Real Estate Loans”  
 Arlene Isaacs-Lowe “Five Key Factors Help Determine Credit Ratings”  
 “Lehman Brothers CMBS Surveillance”
- 11/10 Build to Suit Case
- 11/15 No class at 3:00  
 Combined class at 12:00 - Guest Lecture – Douglas Crocker on REITs  
 Readings: Chapter 18  
 Linneman “(When) Will We Do It Again?”  
 Downs “The Pressures on Public REITs to Grow Larger”  
 Zell “Liquid Real Estate”  
 Crocker “Inside the Revolution”  
 Anderson and Rosen “Equity REIT Strategies”  
 Ambrose and Linneman “The Linkage Between Public and Private Pricing”  
 Mikulich and Kaplan “Evolution in the Real Estate Capital Markets”
- 11/17 CMBS
- 11/22 Welcome to the Big Leagues Case
- 11/24 No class due to Thanksgiving

- 11/29 Two class sessions on this day  
Combined class at 12:00 - REITs  
Readings: Ambrose and Grigsby "Mixing Income Groups in Public Housing"  
Gyourko and Sinai "REITs and Taxes"  
Linneman "Should Commercial Real Estate Be Included in the S&P 500"  
Linneman "The Forces Changing Real Estate Forever: Five Years Later"  
Winograd "The Five Overlooked Features of the Real Estate Capital Markets"  
Rosen "REITs as an Alternative Investment in Volatile Financial Markets"  
Falzon "Stock Market Rotations and REIT Valuation"
- Combined class at 3:00 - Exit Strategies  
Readings: Chapter 16  
David Marcus "Like-Kind Exchanges"
- 12/1 Real Estate Private Equity  
Readings: Chapter 17  
Linneman and Ross "Real Estate Private Equity Funds"  
Reiss et al "Opportunistic Investing and Real Estate Private Equity Funds"  
Linneman "Immobilie als Asset: Real Estate Private Equity Funds"  
Linneman and Moy "Understanding the Return Profiles of Real Estate Investment Vehicles"  
Ernst & Young "Value Added and Opportunity Funds"
- 12/6 Decision Making in the Face of Reality  
Readings: Chapter 20  
McCoy "Real Estate Ethics"
- 12/8 End term exam  
China Case due