Advanced Real Estate Investment and Analysis REAL 240/840, Spring 2017 JMHH F65 (As of January 4, 2017)

Professor Todd Sinai 1465 SH-DH sinai@wharton.upenn.edu Office Hours: Tuesday, 12n-1:30pm and by appointment

This course is designed for majors in Real Estate, both undergraduate and MBA, but also is open to finance-oriented students who wish a deeper analysis of real estate investment than is offered in REAL/FNCE 209 or 721. The course presumes knowledge of real estate finance at a level taught in REAL/FNCE 209 and 721.

The class will contain a mixture of lectures, guest speakers, and case discussions. Topics covered will span the real estate equity and debt markets, both public and private. The course focuses on commercial or income-producing real estate.

Grading will be based on five assignments that will constitute 90% of your final grade. There are four longer cases and one shorter case. Case #3 constitutes 10% of your grade. The other four cases each constitute 20% of your grade. The remaining 10% of your grade will be determined by class participation. All assignment due dates are listed in the syllabus. Late submissions will not be accepted because all assignments will be discussed in class on the day they are due. In addition, students are expected to come to class prepared to discuss and critique material in lectures and presentations. Hence, the 10% weighting for class participation in grading.

Readings for the course are available from Study.net. The volume of material is not overly burdensome for a course of this type, but some of the material is difficult. All readings should be done prior to the class for which they are assigned. In general, I have tried to pair academic papers with recent industry reports, with the goal of marrying sound theory and empirical analysis with relevant current events and practices. Class sessions are organized with the same goal in mind. I will deliver a number of lectures outlining what economics and finance tells us about a number of topics. Generally, these will be followed by guest lectures from industry professionals who will focus on a specific application of the principles introduced in the lectures.

Slide decks will be posted on Canvas. Please bring them to class, as they will save you much note taking.

Class topics	Required readings	
Class #1: Wednesday, January 11		
Course Overview Economic Overview and Framework for Evaluating Pricing and Risk in Commercial Real Estate Markets	 Urban Land Institute, "Emerging Trends in Real Estate 2017". UBS, "U.S. REITs: 2017 Outlook— Getting Later in the Cycle" 	
Monday, January 16		
No class, University holiday		
Class #2:Monday, January 23		
The Public Equity Markets in Real Estate: Advanced REIT Analysis—REIT Structures and Valuation Case #1 handed out	 Peter Linneman, "The Equitization of Real Estate", Wharton Real Estate Review, Fall 2006. Tony M. Edwards, "REITs Modernized", December 1999. UBS Global Research, "The Weekly REIT Appraisal: What Exactly is "Real Estate"?", June 26, 2014. Joseph Gyourko & Todd Sinai, "The REIT Vehicle: Its Value Today and in the Future", Journal of Real Estate Research, 1999. Todd Sinai & Joseph Gyourko, "The Asset Price Incidence of Capital Gains Taxes: Evidence from the Taxpayer Relief Act of 1997 and Publicly-Traded Real Estate Firms", Journal of Public Economics, 2004. Lynne Sagalyn, "Conflicts of Interest in the Structure of REITs", Real Estate Finance, 1996. 	

Class #3:Monday, January 30		
The Public Equity Markets in Real Estate: Advanced REIT Analysis—REIT Structures and Valuation (cont'd.) Guest Speaker: Todd Briddell, CEO, CenterSquare Investment Management, "Investing in Publicly-Traded Real Estate Companies Globally" (confirmed)	Same as for January 23.	
Class #4:Monday, February 6		
Case #1 due in class; class will start with case discussion The Public Markets in Real Estate: Advanced REIT Analysis—REIT Structures and Valuation (finish any remaining material) The Private Equity Markets in Real Estate: Institutional Investors, Private Equity Firms, and Hedge Funds	 Peter Linneman and Stan Ross, "Real Estate Private Equity Funds", Wharton Real Estate Review, Spring 2002. Dale Ann Reiss, Deborah Levinson, and Sanford Presant, "Opportunistic Investing and Real Estate Private Equity Funds", Wharton Real Estate Review, Spring 2002. Joanne Douvas, "Adjusting Opportunity Fund Fees", Wharton Real Estate Review, Fall 2006. Seth Chertak and Addison Braendel, "Fund Economics, PREA Quarterly, Fall 2009, pp. 40-47. Hodes Weill & Associated, "A New, New Paradigm" October 2009. 	
Class #5: Monday, February 13		
The Private Equity Markets in Real Estate: Institutional Investors, Private Equity Firms, and Hedge Funds (cont'd.; finish any remaining material) Guest Speaker: Reid Liffmann, Angelo- Gordon, "Private Equity Investing in Real Estate" (confirmed)	Same as for February 6	

Case #2 handed out	
Class #6: Monday, February 20	
The Private Equity Markets in Real Estate: Institutional Investors, Private Equity Firms and Hedge Funds (cont'd.)	1. Plazzi et al, "Expected Returns and Expected Growth in Rents of Commercial Real Estate," Review of Financial Studies, 2010.
Linkages Between the Public and Private Real Estate Markets	2. Joseph Gyourko and Donald Keim, "What Does the Stock Market Tell Us About Real Estate Returns?", <i>Real Estate Economics</i> , 1992.
	3. Roger Ibbotson and Lawrence Siegel, "Real Estate Returns: A Comparison With Other Investments", <i>Real Estate</i> <i>Economics</i> , 1984.
	4. Joseph Gyourko and Jeremy Siegel, "Long-Term Return Characteristics of Income-Producing Real Estate", <i>Real Estate Finance</i> , Spring 1994.
	5. Joseph Gyourko, "Real Estate Returns in the Public and Private Markets" A Reexamination Following the Rise of Equity REITs", Zell/Lurie Real Estate Center at Wharton working paper, January
	 2004. 6. William Gentry, Charles Jones, and Chris Mayer, "Do Stock Prices Really Reflect Fundamental Values" NBER Working Paper 10850, October 2004.
Class #7: Monday, February 27	
Case #2 due in class; class will begin with the case discussion.	
Guest Speaker: Craig Spencer, Arden Realty, "Where to be in the Capital Stack" (confirmed)	

Monday, March 6		
No class (Spring Break)		
Class #8: Monday, March 13		
Linkages Between the Public and Private Real Estate Markets (cont'd.) Real Estate in a Portfolio	 Chapters 10 & 11 in Berk and DeMarzo, <i>Corporate Finance</i> (You should already own this) Chapter 6 in Copeland & Weston, <i>Financial Theory and Corporate Policy</i> 	
Case #3 handed out	, r	
Class #9: Monday, March 20		
Case #3 due in class; review and discussion Commercial Real Estate Debt Markets: Mortgages, CMBS and Structuring	 Howard Esaka and Masumi Goldman, "Commercial Mortgage Defaults: 30 Years of History", CMBS World, 2005. Brian Lancaster, "CMBS 2.0: Public Offerings and Super Senior "AAA" Bonds", RBS, August 12, 2011. Brian Lancaster, "Lower 3.0 CMBS Issuance Not Likely to Impact Refinancing Rate", RBS, October 13, 2011. Other TBA 	
Class #10: Monday, March 27		
Commercial Real Estate Debt Markets: Mortgages, CMBS and Structuring (cont'd.)	Same as for March 20	
Case #4 handed out		
Class #11: Monday, April 3		
Guest Speaker: Spencer Haber, Chairman and CEO, H2 Capital Partners, "Risks and Opportunities in the Commercial Debt	Same as for March 20	

Markets" (confirmed) Commercial Real Estate Debt Markets: Mortgages, CMBS, and Structuring (cont'd.) Case #4 Q&A	
Class #12: Monday, April 10	
Case #4 DUE APRIL 9 (We will not discuss Case #4 today due to Passover holiday.)	Same as for March 20
Case #5 handed out	
Commercial Real Estate Debt Markets (cont'd.)	
Class #13: Monday, April 17	
Will take questions on capstone case	
Case #4 discussion and review with Maury Apple, H/2 Capital Partners	
Class #14: Monday, April 24	
Case #5 due in class; review and discussion	

Regrade Policy

I strive for accuracy and equity in the grading for this class. However, despite my best efforts, grading is sometimes imperfect. The following set of rules provides a mechanism for requesting regrades to correct grading errors. If you do not follow these rules, you will forfeit your right to a regrade. The rules are designed to maintain fairness by not rewarding gratuitous regrade requests while also not penalizing students for bringing errors to my attention.

The onus for bringing any errors to my attention falls upon you. Pick up your assignments promptly so you can check the grading and make sure that your grade on Canvas matches the grade on your assignment.

- 1) If we made an error in adding up your points to obtain your total score, all you need to do is *type* up a short explanation describing the points we failed to add, attach it to your assignment, and place both in my mailbox in SHDH.
- 2) My intent is that you only lose points *once* for a mistake. Sometimes, an error in one part of an assignment creates incorrect answers in another part of the assignment. In that case, we look for internal consistency. If your answer would have been correct had you not made your earlier mistake, we will note the mistake but not deduct further points for it. Similarly, if in a case you repeat the same calculation in a number of circumstances, we will deduct points only once for a calculation error but we will try to note it every time.

If you believe that we inadvertently deducted points multiple times for the same error, please *type* up a *detailed* explanation and submit it along with the assignment to my mailbox in SHDH. Be sure to take the time to make sure you understand the errors you made before submitting the regrade request. Also, if an error is circled but no point deduction is noted, we did not take off points for it.

- 3) To aid your understanding of the material and of the grading philosophy, I typically provide an explanation of how the points were allocated. If you believe your grading was not consistent with the stated guidelines, please *type* up a *detailed* explanation and submit it along with the assignment to my mailbox in SHDH. Be sure to take the time to make sure you understand the errors you made before submitting the regrade request. If not, you run the risk that you actually did worse than you thought and were too generous with the points given. In addition, under no circumstances will I consider regrade requests that allege that the grading guidelines are unfair. The guidelines are applied equally to everyone, thus are equitable. Rather, the regrade request is intended to correct errors in adhering to the rubric.
- 4) If you merely would like an explanation of the grading on an assignment, submit your assignment with a typed cover letter letting me know what you would like me to explain. We will set up a time to meet and I will explain it to you. Under no circumstances will I go over the grading of your assignment in "real time," with no forewarning.

General policies:

- 1) I personally do all the regrades, in conference with the graders.
- 2) If you request a regrade, the entire assignment will be reviewed. Errors tend to be random and offset each other. It would be unfair to the rest of the class to correct only the grading errors that went against you but not the ones in your favor.

- 3) Regrade requests will be accepted for *three weeks* following the *return* of an assignment. If an assignment has multiple parts, the deadline for a regrade request for *any* part of the assignment is three weeks after the return of the *last* part of the assignment.
- 4) The acceptable margin of error on a 100-point assignment is +/- 2 points. Please do not submit regrade requests for one or two points total. The exception is if we totaled up your points incorrectly: In that case I will correct any size error.
- 5) Do not submit regrade requests by email.