Advanced Real Estate Investment and Analysis
REAL 240/840, Spring 2020

(*As of January 12, 2020)*

Professor Todd Sinai
429 Vance Hall
email: sinai@wharton.upenn.edu

Office Hours: Tuesday, 12:00-1:30 p.m.
(sign up on Canvas) and by appointment
phone: 215-898-5390

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.

There are two main goals of this class. The first is to prepare you with the full set of tools you will need to start your career in real estate investments. The second is to help you gain a more sophisticated and agile understanding of the real estate investing landscape. To achieve these goals, this class combines analysis of individual investments, big-picture sector or macro analysis, and academic research. The course focuses on commercial or income-producing real estate. Topics covered will span the real estate equity and debt markets, both public and private. The course is comprised of a mix of lectures, guest speakers, and case discussions.

Your likely future employer will expect you to be facile with real estate financial modeling, capable of analyzing real estate markets, adept at assessing risk, and able to write clearly and concisely. This class aims to give you the opportunity to refine those skills and get feedback while you are in school, rather than during your first year of employment. In addition, the class aims to help prepare you to be adaptable to changes in real estate investment. Hence, the class material spans both practical and more conceptual topics.

<u>Cases:</u> Over the course of the semester, you will complete five cases, in teams of two. The intent of the cases is to give you assignments comparable to ones you would receive on the job. Hence, you can expect the degree of modeling and analytic difficulty of these cases to be significantly higher than in 209/721. Your team will be expected to be "on call" to present one of these cases to the class. The case presentations will be randomly assigned, but I will tell you your assignment at the beginning of the semester, once the shopping period is done.

<u>Participation and attendance:</u> You are expected to attend and participate. This is especially true for guest speakers, who are volunteering their time to talk to you. Attendance is <u>mandatory</u> for guest speakers and case discussions. Your participation grade will be based on:

- Attendance at and attention to guest speakers.
- Coming to class prepared to discuss and critique material in lectures and presentations.
- Class participation.

- Case discussion presentation.

Class attendance for guest speakers and case discussions will be marked and will count toward your participation grade. Attendance for the remainder of the lectures is recommended – otherwise, why take the class? – but will not be verified. However, you cannot participate if you are not present, so undoubtedly there will be an effect on your participation score if you do not attend class.

Readings: 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. You can expect that some readings may be added over the course of the semester.

Slides: Will be posted on Canvas prior to each class. Bringing copies to class will save you much note taking.

Electronics: Research shows that using electronic devices in the classroom distracts you and, more importantly, your fellow classmates. Hence, no electronic devices are allowed – no computers, tablets, phones, etc. The one exception will be when we analyze financial models in class or during case discussions – then you may use your laptop to follow along.

Grading: The five cases collectively will constitute 85% of your final grade, 17% each. The remaining 15% of your grade will be determined by class participation.

You get a 0 for the class if you do not get a 100% on the "I read the syllabus" quiz on Canvas. That quiz has just one question, "Did you read and understand the syllabus?" The correct answer is "Yes." I allow retakes.

Each assignment is curved to the same mean and standard deviation. The curved scores are totaled for each student when assigning final grades.

Due dates: Cases will be due in advance of being discussed in class. Generally, you will have two weeks to do cases, with the financial modeling portion being due before the two week window is up and the case discussion/analysis being due at the two-week mark. Late submissions will not be accepted because all assignments will be discussed in class on the day they are due. **Late cases will not be accepted nor will extensions be given.**

Regrades: My policy on regrades is appended to the syllabus.

Honor code: It is your responsibility to make sure your entire team prepares the cases independently. Violations by any team member will result in the entire team getting a zero on the assignment. Here are the rules: You may verbally discuss the cases, including ideas, approaches, and solution methods, with other students who are currently enrolled in REAL 240/840. Each group must separately prepare their own case materials and write-ups without reference to anyone else's case materials or write-ups.

You may not obtain assistance, or solicit advice, from former students, current or past employees of firms involved with the cases, or anyone else involved in the real estate investment industry. You also may not provide such assistance or advice once you are no longer enrolled in this class. You may not share your written materials or Excel with anyone at any point.

Violations of these rules will be treated as violations of Penn's Code of Academic Integrity. I do not distinguish between the plagiarizer – the team using other's materials – and the provider of the materials. Do not circulate your solutions to the cases. If I find your case to be the source of plagiarized material, I will report the violation and do my best to retroactively change your grade.

Class schedule: The class is a work-in-progress. I reserve the right to change the content, timing, or sequencing of the material. Conversely, if you want more (or less!) of a topic, let me know.

Guest speaker dinners: Many of the guest speakers will be available for dinners with students. I will post sign-ups on Canvas and will randomly choose from students who express an interest in attending. Priority at any given dinner will be given to students who have not previously gone to one.

Other recommended preparation: Your future employer will expect you to be really good at Excel modeling (and may give you an Excel test as part of the interviewing process). Use this class to practice your Excel skills and, if you need more preparation, avail yourself of an Excel modeling class *before* getting too far into this course. Real Estate employers also often expect you to know Argus. Take advantage of the Argus course offered by the Zell/Lurie Real Estate Center and use your access to student Argus licenses to learn-by-doing.

Class topics	**Required readings**
*Class #1: **Wednesday,** January 15*	
Course Overview Real Estate Market Overview Macro risks State of the market	1. Urban Land Institute, "Emerging Trends in Real Estate 2020".
Monday, January 20	
No class, University holiday	
Class #2: Monday, January 27	
Valuing redevelopment. Pro Forma best practices. Case #1 (Mixed-use development) handed out The Private Equity Markets in Real Estate: Institutional Investors, Private Equity Firms, and Hedge Funds	**Take and complete the "Yes I read the syllabus!" quiz on Canvas.** 1. Peter Linneman and Stan Ross, "Real Estate Private Equity Funds", *Wharton Real Estate Review*, Spring 2002. 2. Dale Ann Reiss, Deborah Levinson, and Sanford Presant, "Opportunistic Investing and Real Estate Private Equity Funds", *Wharton Real Estate Review*, Spring 2002. 3. Joanne Douvas, "Adjusting Opportunity Fund Fees", *Wharton Real Estate Review*, Fall 2006. 4. Seth Chertak and Addison Braendel, "Fund Economics, *PREA Quarterly*, Fall 2009, pp. 40-47. 5. Hodes Weill & Associated, "A New, New Paradigm" October 2009.
Class #3: Monday, February 3	
The Private Equity Markets in Real Estate: Institutional Investors, Private Equity Firms,	

and Hedge Funds (cont'd) Guest Speaker: Ed Chaglassian, Principal and Executive Vice President, JBG Smith, and Kai Reynolds, Chief Development Officer, JBG Smith.	
Class #4: Monday, February 10	
"Incidence," property values, and overdevelopment Guest Speaker: Craig Spencer, CEO, Arden Group. "Opportunity Zones"	
Class #5: Monday, February 17	
Case #1 discussion. Waterfall structures Case #2 (Waterfall exercise) handed out.	
Class #6: Monday, February 24	
Waterfall structures, continued The Public Equity Markets in Real Estate: Advanced REIT Analysis—REIT Structures and Valuation	1. Peter Linneman, "The Equitization of Real Estate", *Wharton Real Estate Review*, Fall 2006. 2. Tony M. Edwards, "REITs Modernized", December 1999. 3. Joseph Gyourko & Todd Sinai, "The REIT Vehicle: Its Value Today and in the Future", *Journal of Real Estate Research*, 1999. 4. 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. 5. Lynne Sagalyn, "Conflicts of Interest in the Structure of REITs", *Real Estate Finance*, 1996.
Class #7: Monday, March 2	
The Public Equity Markets in Real Estate: Advanced REIT Analysis—REIT Structures and Valuation (cont'd.)	
Monday, March 9	
No class (Spring Break)	
Class #8: Monday, March 16	
Case #2 discussion. Case #3 (REIT merger) handed out Linkages Between the Public and Private Real Estate Markets	1. Plazzi et al, "Expected Returns and Expected Growth in Rents of Commercial Real Estate," *Review of Financial Studies*, 2010. 2. Joseph Gyourko and Donald Keim, "What Does the Stock Market Tell Us About Real Estate Returns?", *Real Estate Economics*, 1992. 3. Roger Ibbotson and Lawrence Siegel, "Real Estate Returns: A Comparison With Other Investments", *Real Estate Economics*, 1984. 4. Joseph Gyourko and Jeremy Siegel, "Long-Term Return Characteristics of Income-Producing Real Estate", *Real Estate Finance*, 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. 7. Chapters 10 & 11 in Berk and DeMarzo, *Corporate Finance* (You should already own this) Chapter 6 in Copeland & Weston, *Financial Theory and Corporate Policy*
Class #9: Monday, March 23	
Real Estate in a Portfolio Guest Speaker: David O'Connor, Senior Managing Partner, High Rise Capital Partners.	
Class #10: Monday, March 30	
Commercial Real Estate Debt Markets: Mortgages, CMBS, and Structuring Case #3 discussion. Discussion led by: Guest speaker: Andy Jonas, Managing Director, Goldman Sachs Case #4 (Industrial open-ended fund) handed out.	1. Howard Esaka and Masumi Goldman, "Commercial Mortgage Defaults: 30 Years of History", *CMBS World*, 2005. 2. Brian Lancaster, "CMBS 2.0 : Public Offerings and Super Senior "AAA" Bonds", RBS, August 12, 2011. 3. Brian Lancaster, "Lower 3.0 CMBS Issuance Not Likely to Impact Refinancing Rate", RBS, October 13, 2011.
Class #11: Monday, April 6	
Commercial Real Estate Debt Markets: Mortgages, CMBS, and Structuring, continued Guest speaker: Todd Briddell, CEO, CenterSquare	

Class #12: Monday, April 13	
Commercial Real Estate Debt Markets: Mortgages, CMBS, and Structuring, continued Case #5 (CMBS) handed out. Case #4 discussion. Discussion to be led by <u>Guest Speakers</u>: Jacob Albana and Paola Gamarra, Madison International	
Class #13: Monday, April 20	
What makes a "location"? Case #5 Q+A	
Class #14: Monday, April 27	
Case #5 discussion. Catch-up	

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 Vance.

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 Vance. 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 <u>not</u> 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 Vance. 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.