

Center for Real Estate Finance Research

Detailed Syllabus

Real Estate Primary Markets (Course #: FINC-GB.2329.30 / FINC-UB.0039.02)

Spring Semester 2018

Monday 6:00pm to 9:00pm in KMC2-80

Professor:

Mark K. Bhasin, CFA, FRM, CAIA, CMT, ERP, PRM

Email: mbhasin@stern.nyu.edu
Office Hours: By appointment

Phone: 917-821-2446

Teaching Fellow:

Bo Yuan

boyuanny@gmail.com

Class Time

The class meets once per week on Monday from 6-9pm during 12 weeks. There is a 10 minute break around 7:30pm. The first class is on 2/5/18 and the last class is on 5/7/18. There will be no class on 2/19/18 and 3/12/18.

Course Overview:

There are two primary goals of this class:

- 1. To expose you to the terms, issues, and topics in institutional-quality commercial real estate; and
- 2. To give you the basic skills and intuition you need to begin to evaluate a variety of institutional-quality commercial real estate investments

Commercial real estate is a multi-faceted field, encompassing both an operating industry and a broad category of investments. It has its own institutional features, lexicon, and investment structures. This class aims to provide a broad 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.

The presumption in this class is that you have no prior real estate experience, and no preexisting 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 might be familiar to you already. Students interested in entrepreneurial real estate deals should consider taking the Real Estate Development and Entrepreneurship (REDE) course. Although, the REDE course is not a prerequisite for the Real Estate Primary Markets course, students without a real estate background may want to consider taking the REDE course prior to taking the Real Estate Primary Markets course.

Course Materials:

- The required **textbook** is *Real Estate Finance and Investments, Fourth Edition*, by Peter Linneman. It is available in the Bookstore.
- HBS (Harvard Business School) Case Study Angus Cartwright IV
- Four case studies that will be completed in groups will be handed out in class.

Financial calculator:

A financial calculator will be required for the course and exam, to perform basic annuity and present value type calculations. Any financial calculator will do, as long as you understand how to use it. However, I will be using an HP 12C, and will sometimes refer to it in class. [Students interested in obtaining CFA certification should note that the two approved calculators for CFA exams are the TI - BA II Plus, and the Hewlett Packard: HP 12C.]

Class Preparation:

- Required readings are listed on the syllabus with an asterisk (*) and are in bold print.
 They are drawn from the textbook. You should read them before the class in which they
 are listed. I encourage you to do the recommended (but optional) readings that are
 listed on the syllabus, especially if you are a real estate major. Powerpoint
 presentations for the required and recommended readings from the textbook will be
 uploaded on NYU Classes.
- Guest speakers are listed on the syllabus. Attendance is required unless you have a valid conflict. Email me if you cannot attend the guest lecture. The guest lectures for this semester include:
 - o **2/12/18** Paul Scialla, Founder, Delos (to be held at 860 Washington Street)
 - o **3/19/18** Michael Ferry, COO, DDG Partners
 - 3/26/18 Joseph Cohen, Principal, East River Partners (Private Equity Fund Simulation)
 - 4/16/18 Mehul Patel, COO, Midwood Investment and Development
 - 4/26/18 (THURSDAY) Isaac Zion, CIO, SL Green (at 420 Lexington Avenue, 19th floor from 4pm to 5:20pm) (Optional)
 - 4/30/18 Jeff Sutton, Founder, Wharton Properties

Cases:

There will be one individual case (HBS Case Study - Angus Cartwright IV) and four group project cases handed out in class. You will choose your own group of five to six members, and must work with the same team on all four group cases (Office, Industrial, Retail, and Multifamily). There will be a total of six teams, which will be designated as follows:

- 1. Office Team A
- 2. Office Team B
- 3. Industrial Team A
- 4. Industrial Team B
- 5. Retail Team
- 6. Multifamily Team

If you cannot find a group and you email me, I will either form a group for you or assign you to different teams over the course of the semester. You are responsible to make the team work. If you think a teammate is not working with good faith, or has neglected to finish her/his share of work, you must try hard to work it out within the group. The cases require a variety of skills, from financial savvy to management. You should try 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. Cases are handed out in class. 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 given.

The four group cases require group analysis, preparation and evaluation. The goal is to have each student participate in two teams within class; a "deal team" and an "investment committee." The cases are custom written for the course and present different levels of complexity and nuances.

The Deal Team, and likely your primary study group for the semester, will evaluate the written case material provided and prepare a 30-minute presentation to be made in class to the simulated Investment Committee. The Investment Committee group will hear the presentation, ask questions and ultimately vote whether to approve the investment recommendation or not.

The student teams that are not presenting in class also evaluate the case and prepare and hand in an abbreviated group deal recommendation. So, every team completes every case.

For those students not presenting, please turn in your written case presentations at the beginning of class. For everyone, please present your recommendations in 4 sections and address the following key questions:

- 1) Executive Summary. Do you recommend the investment, if so at what price, what is your rationale?
- 2) Market Analysis. What are the key market trends and what are the key risks that support your recommendations?

- 3) Property Analysis. What are the key positive and negative attributes of the property and how did you factor these into your financial analysis? Please present the rationale for your market rental assumptions in this section.
- 4) Financial Analysis. Present your cash flow forecast, valuation consistent with your investment recommendation, and any other supporting financial analysis you wish to add.

For those presenting the case that week, please limit your written materials to support your 30-minute presentation time. For those not presenting, please limit your written work to 7-pages maximum.

Examination:

One midterm exam will be held in regularly scheduled class time, on April 2. The exam will cover the material examined in class and during guest lectures, the Harvard Business School case study, and the required readings. The exam is closed-book, but you are allowed to bring one 8.5 x 11" piece of paper (double-sided) of notes into the exam. You will need to bring a financial calculator to the exam. You will not be allowed to use a computer.

Grading:

The course grade will be based on the following weightings:

Midterm exam: 30%;

HBS individual case study: 25%;

• Four group cases: 40% (10% each); and

• Participation: 5%

Attendance will be recorded in class. I will consider superb or sub-par class participation when deciding grades. Sub-par participation includes arriving late to or missing classes. The dates and times for all assignments are final, and must be strictly adhered to. Failure to complete any exam or hand in any case on time will result in zero points for that exercise.

The Finance Department guidelines are that grades of "A" and "A-" should be awarded to approximately 35% of the students in the course.

If you would like to contest a midterm or assignment grade; I will look at them within three days of you receiving back the material. I reserve the right to regrade the entire assignment or exam if you contest a grade.

Course Expectations:

• I expect you to be prepared for class. That 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 be willing to participate in class discussions, and to speak up if you're bewildered.

Other policies:

- You may not use computers, smart phones, etc., unless medically necessary. Some lectures center around Excel spreadsheets. I will notify you in advance if you can bring a computer.
- I allow the use of tablets to take notes, but nothing else. Screens need to be flat on the table so as not to distract other students and my lecturing. Upright screens are allowed if you sit in the last row. I reserve the right to change this policy if this impacts the learning environment.
- Phones must be turned off and put away. If a phone has to be on for a medical emergency, you must inform me before class begins.
- Whatever seat you choose on the third class meeting (i.e., 2/26/18) is yours for the
 entire semester. Please sit there every class.
- The class schedule is an ambitious goal and may not reflect the actual timing, or even sequence, of covering material.

Getting help:

 Contact me. Do not think that a question is too "basic" to ask me. I am happy to help students understand any material they are having difficulty with. All I ask is that you take a serious stab at it yourself before turning to me. I hold office hours by appointment, and answer questions by email. I will respond to all emails within 48 hours.

Honor Code:

• You are responsible for maintaining Stern's Honor Code which mandates zero tolerance for cheating and plagiarism. Violations of the honor code will be prosecuted with a minimum penalty of failure for the course, as required by code of conduct rules. If you become aware of any violations of the honor code you must take whatever steps are necessary to stop the violators. You must include a signed statement at the top of each problem set and exam, indicating that you adhere to the honor code. The statement is: "I pledge my honor that I have not violated the Stern Honor Code in the completion of this exam/problem set." It is in your best interest that the market place knows that Stern takes honesty seriously; it adds to the value of your degree.

Course Schedule

Date	Topic	Preparation
February 5, M	Topic 1: Course Requirements,	ULI Emerging Trends in Real Estate - United
	class overview, and overview of	States and Canada 2018, chapters 1-2.
	real estate markets	(Available on NYU Classes)
		*Linneman, chapter 1: "Introduction: Risks and
		Opportunities"
		*Linneman, chapter 2: "What Is Real Estate?"
		Discussion:
		1. Real Estate as an Alternative Asset for
		Institutional Investors (such as NYU
		endowment)
		2. Reference pages 5, 9, 37, 71, and 73 from
		ULI Emerging Trends in Real Estate - United
		States and Canada 2018
February 12, M	Guest Lecture and Tour at Delos	Paul Scialla - Founder, Delos
	Headquarters (Please dress in	
	business casual attire.)	860 Washington Street (between West 13th
		Street and West 14th Street in Meatpacking
		District)
		ULI Emerging Trends in Real Estate - United
		States and Canada 2018, pp. 6-9 (Working
		Smarter and Working Harder)
		Smarter and Working Harder)
		Delos:
		http://delos.com/
		https://delos.com/people/paul-scialla
		Delos has recently relocated its headquarters
		to a 23,226 square-foot space at 860
		Washington Street in New York City. The new
		office spans the fourth and fifth floors of the
		building, and includes a 1,520 square-foot
		terrace on the 4th floor. The north, east and
		west facing walls are full glass curtain walls
		with views overlooking Washington Avenue
		and the High Line, a nearby elevated park. The

space layout will primarily include open seating areas, limited enclosed offices and conference rooms, and an array of huddle and phone rooms.

International WELL Building Institute:

https://www.wellcertified.com/

The International WELL Building Institute (IWBI) is a public benefit corporation that is leading the movement to promote health and wellness in buildings and communities everywhere. IWBI was launched in 2013 following a Clinton Global Initiative commitment made by founder Paul Scialla. IWBI delivers the cutting-edge WELL Building Standard, and a professional suite of tools to empower our global community of leaders to match their convictions with their careers.

860 Washington Street:

http://860washington.com/

Located in New York's Meatpacking District, 860 Washington Street will sits directly adjacent to the city's iconic High Line Park. The Class A, 10-story glass building, constructed in 2016, replaces a former meatpacking plant with 120,413 sf of office, retail and showroom space. The owners are Romanoff Equities and Property Group Partners. The property is currently 72% leased/occupied. The property's tenancy includes the following:

- Tesla Ground floor showroom (7,800 sf / rent of \$600 psf)
- Social Finance 2nd floor (13,000 sf / rent of \$155 psf, 10-yr lease term)
- Baker Brothers Investments 3rd and 10th floors (23,045 sf / rent of \$140 and \$170 psf, 15-yr lease term)

February 19, M	No class . <i>Presidents' Day</i>	 Delos - 4th and 5 floors (23,226 sf) Twin Point Capital - 6th floor (4,500 sf / rent of \$130-\$140 psf, 10-yr lease term) Alibaba - 8th floor (10,853 sf) Vacant Space - 6th, 7th and 9th floors and basement
February 26, M	Topic 2: Property-level income;	*Linneman, chapter 4: "Property Level Pro
T C ST dai y 20, 1VI	sources, risk, and value	Forma Analysis", pp. 43-56 *Linneman, chapter 5: "Financial Modeling" *Linneman, chapter 7: "The Use and Selection of Cap Rates"
		Linneman, "Prerequisite I: The Basics of Discounted Cash Flow and Net Present Value Analyses"
		Linneman, "Prerequisite II: IRR: What It Is and What It Isn't"
		Discussion of cash flow model (posted on NYU Classes) - Please bring your computers and the cash flow model to class.
March 5, M	Topic 3: Debt financing and simple mortgages	*Linneman, chapter 4: "Property Level Pro Forma Analysis", pp. 56-58 *Linneman, chapter 11: "Real Estate Bankruptcy Basics" *Linneman, chapter 12: "Should You Borrow?" *Linneman, chapter 13: "The Use of Debt and Mortgages"
		*Linneman, "Prerequisite III: Amortization Fundamentals"
	Introduction of HBS Angus Cartwright IV Case Study Assignment (Case 1) - Assignment due on 3/26/18	Discussion of cash flow model (posted on NYU Classes) - Please bring your computers and the cash flow model to class.
March 12, M	No class. Spring Break	
March 19, M	Guest Lecture (1st half of class):	Michael Ferry, Chief Operating Officer of DDG Partners

	Topic 4: Introduction to leases	*Linneman, chapter 3: "The Fundamentals of Commercial Leases"
	Topic 5: Ground leases	*Linneman, chapter 15: "Ground Leases as a Source of Finance"
	Topic 6: Real Estate Cycles	*Linneman, chapter 20: "Real Estate Cycles"
March 26, M	Topic 7: Real Estate Private Equity Funds	*Linneman, chapter 17: "Real Estate Private Equity Funds" (No formal lecture on Chapter 17 in class)
	Guest Lecture (first half of class):	Joseph Cohen, Principal of East River Partners (Real Estate Private Equity Fund Simulation)
		*Linneman, chapter 14: "Commercial Mortgage Backed Securities"
	Angus Cartwright Solutions and Discussion (2nd half of class)	Discussion of Angus Cartwright IV case and solutions in Class (Case study solutions to be turned in prior to class)
April 2, M	Midterm exam	
	Discussion of cash flow model for Cases 2 to 5	
April 9, M	Midterm exam review	
	Case 2 (Office) handed out in class	
	Discussion of cash flow model for Cases 2 to 5	
April 16, M	Case 2 (Office Team A) group presentation	Case 2 to be turned in prior to class by all six groups
	Case 2 (Office Team B) group presentation	
	Guest Speaker (2nd half of class):	Mehul Patel, Chief Operating Officer of Midwood Investment and Development
	Case 3 (Industrial) handed out in class	

April 23, M	Case 3 (Industrial Team A) group presentation	Case 3 to be turned in prior to class by all six groups
	Case 3 (Industrial Team B) group presentation	
	Discussion of current industrial sector	
	Case 4 (Retail) handed out in class	
April 30, M	Guest Lecture (first half of class)	Jeff Sutton, Founder of Wharton Properties
	Case 4 (Retail) group presentation (2nd half of class)	Case 4 to be turned in prior to class by all six groups
	Discussion of the current retail sector	
	Case 5 (Multifamily) handed out in class	
May 7, M	Case 5 (Multifamily Team) group presentation (1st half of class)	Case 5 to be turned in prior to class by all six groups
	We'll spend the second half of class drawing broad conclusions	Final Wrap-Up Topics. Lecture, discussion, group exercises.
	from our earlier learning on the main property types and risk/return spectrums of real estate investing. And we'll put this into the broader context of a multi-sector investment portfolio.	 Compare and contrast industrial, office, retail, multifamily sectors. Qualitative and quantitative attributes. Importance of demand side analysis and comparative market analysis Layers of financial analysis: revenues, expenses, capital items, debt (can be multiple loans), JV partner 1, JV partner
	The second half of class will also focus on real estate careers.	2 - Final thoughts on culture, wisdom, skepticism and making sound investment decisions Career paths and real estate interview tips

Information about the MBA Real Estate Specialization

The Real Estate specialization at NYU Stern provides rigorous training in (i) the economics of real estate development and investment, the financing such projects, leasing, and appraisal of buildings, (ii) the pricing/valuation and trading of financial instruments with real estate as the underlying, such Real Estate Investment Trusts (REITS), residential and commercial mortgage backed securities (MBS), and related derivative and structured finance products such as collateralized debt obligations (CDOs), credit default swaps (CDS), and index products (CDX, ABX, etc.), and (iii) the workings of real estate primary and secondary markets, including the various participants in these markets, their roles, and (iv) the legal, taxation, and regulatory environment. Elective courses can be chosen to emphasize the commercial real estate development process or the investment strategies in real estate capital markets. With an appropriate choice of elective courses, this track provides in-depth preparation for careers in real estate development, real estate brokerage, real estate project investment for private equity firms, family offices, sovereign wealth funds, and careers in real estate finance in the fixed income or equity desks of investment banks (research, sales & trading), hedge funds, and sovereign wealth funds.

Real estate specialization courses: **three courses** among this list must be taken for the specialization (all courses are 3 unit courses):

- 1. Real Estate Primary Markets (**FINC-GB.2329**, co-req: Corporate Finance **FINCGB**. 2302)
- 2. Real Estate Capital Markets (FINC-GB.2339)
- 3. Real Estate Transactions (BSPA-GB.2300)
- 4. Real Estate Development and Entrepreneurship (**OPMG-GB.2360**)
- 5. Real Estate Investment Strategies (FINC-GB.2341)
- 6. Urban Systems (ECON-GB.3375)
- 7. Operations in Panama (OPMG-GB.2312)
- 8. Operations in Entertainment: Las Vegas (**OPMG-GB.2360**, with approved real estate project)
- 9. Law and Economics of Municipal Governance (ECON-GB.3182)
- 10. At most one course from the list of pre-approved non-Stern courses: http://www.stern.nyu.edu/AcademicAffairs/Specializations/RealEstate/index.htm

Academic advisor for the real estate specialization: Prof. Stijn Van Nieuwerburgh

Information about the Undergraduate Real Estate Track

The Real Estate Track provides rigorous training in (i) the economics of real estate development and investment, the financing such projects, leasing, and appraisal of buildings, (ii) the pricing/valuation and trading of financial instruments with real estate as the underlying, such Real Estate Investment Trusts (REITS), residential and commercial mortgage-backed securities (MBS), and related derivative and structured finance products such as collateralized debt obligations (CDOs), credit default swaps (CDS), and index products (CDX, ABX, etc.), and (iii) the workings of real estate primary and secondary markets, including the various participants in these markets, their roles, and (iv) the legal, taxation, and regulatory environment. Elective courses can be chosen to emphasize the commercial real estate development process (RED focus) or the investment strategies in real estate capital markets (REF focus). With an appropriate choice of elective courses, this track provides in-depth preparation for careers in real estate development, real estate brokerage, real estate project investment for private equity firms, family offices, sovereign wealth funds, and careers in real estate finance in the fixed income or equity desks of investment banks (research, sales & trading), hedge funds, and sovereign wealth funds.

Prerequisites

- Stern Business Tools
- Law, Business, and Society
- Foundations of Financial Markets (FINC-UB.0002)

Essentials

- Corporate Finance (FINC-UB.0007, req: Foundations of Financial Markets)
- Real Estate Transactions (MULT-UB.0051)
- Real Estate Primary Markets (FINC-UB. 0039, co-req: Corporate Finance)
- Real Estate Capital Markets (FINC-UB.00 38, req: Foundations of Financial Markets)

Advanced Electives – Four courses from the following list, of which <u>at least one of the first two courses</u>. The courses denoted by [REF] are more interesting for students who want to specialize more towards a real estate finance specialization, whereas the courses denoted with [RED] are more interesting for students who want to focus on the development, direct investment, or management of property.

- [RED] Real Estate Development and Entrepreneurship (MULT-UB.0050)
- [REF] Real Estate Investment Strategies (FIN-UB.00XX)
- [RED] Urban Economics (ECON-UA 227 CAS)
- [RED/REF] Financial Statement Analysis (ACCT-UB.0003)
- [RED] Taxation of Individuals (ACCT-UB.0063)
- [REF] Risk Management in Financial Institutions (FINC-UB.0022)
- [RED/REF] Topics in Emerging Financial Markets (FINC-UB.0023)
- [REF] Debt Instruments (FINC-UB.0026)
- [RED/REF] Behavioral Finance (FINC-UB.0029)
- [REF] Equity Valuation (FINC-UB.0041)

- [RED] Topics in Entrepreneurial Finance (FINC-UB 61)
- [RED] Mergers, Acquisitions, and Restructuring (FINC-UB 50)
- [REF] Monetary Policy and the Financial System (ECON-UB 221)
- [REF] Macroeconomic Foundations for Asset Prices (ECON-UB 233)
- [RED] Strategic Analysis (MGMT-UB 18)
- [RED/REF] Negotiation and Consensus Building (MGMT-UB 30)

For more information on the Stern undergraduate track system, please see http://www.stern.nyu.edu/portal-partners/current-students/undergraduate/academics/tracks/index.htm

Academic advisor for the real estate track: Prof. Stijn Van Nieuwerburgh