Columbia Business School
Real Estate Finance (B7314)
Summer 2014

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Contact information and office hours

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Teaching Assistant: TBA

Class Sessions Thursday evenings 6:00-9:00PM

Course Overview: Real estate accounts for one-third of the world’s capital assets. This course provides students with a comprehensive understanding of real estate valuation, cycles, markets, investments, and decision-making. The bulk of the course covers income-producing (commercial) property, although we will discuss residential housing. This course provides a unified finance-based framework to answer real estate investment decision-making problems encountered in the real world. Doing so requires a good understanding of the institutional features that differentiate real estate from other asset classes and markets as well as modern finance and economics tools.

Course handouts: Class notes will be handed out in class and posted on Canvas following the class session. Readings, homework exercises and cases will be posted on Canvas.

Reference books: Real Estate Finance and Investments: Risks and Opportunities by Peter Linneman (Edition 3.1)
Required. This book provides background material and context for many of the concepts covered in class.

Grading: Your grade will be determined by assignments including one individual case, three group cases, a midterm exam, a comprehensive final exam, and class participation. The relative contribution of each of these components to the overall course grade is discussed below. Students wishing to have an assignment or exam re-graded must do so within two weeks of receiving the graded work. A submission for re-grading must be done in
writing with an explanation of why the student feels that the grade was given in error. Re-grading will examine specific issues mentioned in the written submission.

**Assignments:** Written assignments jointly account for 45% of the overall grade, including one individual case (15%) and three group cases (10% each). The first case (Sunset Apartments) will be completed individually. All work on this assignment must be completed on your own. The sharing of work product among students is explicitly prohibited. The three remaining cases will be completed in groups. While each group will make one submission and receive a group grade, all members of each group must be prepared to contribute to the class discussion of the case, including their group’s answer to the questions posed in the case. Material covered by the assignments, including details of the cases, may be covered on the exams. The maximum size of any group will be four students. Please form groups and enter the names of your group members on Canvas prior to the third class session. *Groups must complete their own work and cannot discuss or share work with other groups or anyone else except the professor or TA.*

**Midterm:** The midterm exam covers material from the first five class sessions, the pre-readings associated with those sessions, the homework exercise, and the first case (Sunset Apartments). It will be offered in the sixth class session. The midterm will account for 15% of the overall course grade.

**Final Exam:** The final exam will be comprehensive in nature and will cover material from all of the class sessions, all of the course pre-readings, and all of the course exercises and cases. It will be offered only during the final scheduled class session. The final exam will account for 30% of the overall course grade.

**Missing an Exam:** Students who need to miss an exam must notify the Professor in writing in advance and have their absence approved by the Office of Student Academic Affairs. Students missing an exam without pre-approval from the Office of Student Academic Affairs will not receive credit for that exam. Makeup exams will not be offered except for pre-approved absences.

**Class Participation:** Class participation will account for 10% of your overall course grade. *In order to receive full credit for class participation a student must a) do the class session readings, b) attend class sessions, c) consistently engage in class discussions both voluntarily and when called upon and d) make constructive contributions to the class discussions which evidence an understanding of the topic and/or familiarity with the readings.*
Honor Code: Students are expected to follow the honor code at all times, including rules for individual and group work. Violations of the honor code will result in referral to the Student Leadership and Ethics Board. See: http://www7.gsb.columbia.edu/honor/resources.
OUTLINE AND ASSIGNMENTS

**Class 1, May 15:** Course Overview and Requirements; Leases; Pro Forma Income and Expenses

*Readings: Linneman*—For background, read Chapters 1, 2, & 6 and for class discussion Chapter 3: Fundamentals of Commercial Leases and Chapter 4: Property Level Pro Forma Analysis, pages 43-56.

**Class 2, May 29:** Introduction to Mortgage Analysis; ARMs vs. FRMs; Mortgage Underwriting; Real Estate Taxes; Introduction to Cap Rates; Equity Valuation with a Pro Forma


**Class 3, June 5:** Equity Valuation, etc...; Real Estate Cycles; Understanding Property Risk; Use of Leverage in Real Estate and it Impact on Risk and Return; Law of One Price

*Readings: Linneman*—Chapter 7: The Use and Selection of Cap Rates, including Supplements A and C, Chapter 12: Should You Borrow?, and Chapter 20: Real Estate Cycles (Supplements optional)

**Class 4, June 12:** Discuss Sunset Apartments; Real Estate Debt Valuation: Default/Loss and Expected Return; Sensitivity Analysis

*Assignment: Case 1, Sunset Apartments (individual assignment)*

**Class 5, June 19:** Understanding Housing Markets; Should you Buy, Rent, (or Invest in) a Home?; Review for Midterm

**Class 6, June 26:** Midterm Exam (in class)

**Class 7, July 10:** Corporate Use of Real Estate (Guest Speaker: Jesse Greene, Former IBM Executive and Senior Fellow at Columbia Business School); Renting Single Family Housing

**Class 8, July 17:** Mezzanine Debt; Borrower Default and Prepayment Decisions and Workouts; Discuss Duke and Byline

*Assignment: Case 2, Duke and Byline (group assignment)*

**Class 9, July 24:** Real Estate as an Asset Class; Public Securitized Real Estate Equity (REITs); Real Estate Private Equity
Class 10, July 31: Discuss 1800 L Street Case; Land Development; Land Valuation; Ground Leases
Assignment: Case 3, 1800 L Street (group assignment)

Class 11, Aug 7: Commercial Mortgage Backed Securities (CMBS); Discuss Graybar Case; Review for Final Exam
Assignment: Case 4, Graybar (group assignment)

Class 12, Aug 14: Final Exam