

Course Title: Real Estate Primary Markets (FINC-GB.2329.20 / FINC-UB.0039.01)  
Meeting Location: TBD  
Meeting Day: Tuesday (in-person meetings only)  
Time: 1:30pm-4:20pm  
Office Hours: By appointment (coordinate via email)  
Dates: 1/31/17 – 5/2/17

*No Classes: 3/14/17*

**Faculty:**

David Eyzenberg, Adjunct Professor – [david@eyzenberg.com](mailto:david@eyzenberg.com) – 917.701.2814 (cell)

Patrick Kenney, Adjunct Professor – [pwk225@nyu.edu](mailto:pwk225@nyu.edu) – 609.707.5342 (cell)

**Course Overview:**

Building upon the concepts, models and tools previously studied, the student learns how to analyze and capitalize various types of transactions. The class emphasizes creating professional quality discounted cash flow models and the derivation of rates of return. Additionally, students will be exposed to advanced concepts of structuring capital stacks including leased fee/leasehold bifurcation, senior debt & mezzanine loan sizing and JV equity waterfall modeling. Though some theory is stressed, the class is a comprehensive primer on practical applications.

**Course Objectives:**

- Develop an analytical framework for real estate investment/capitalization structure decision-making by individuals and institutions.
- Develop an overall understanding of real estate as an investment class and obtain and enhance asset specific knowledge and key issues pertaining to various property types.
- Review and create several comprehensive analyses including; lease modeling and roll ups, proforma and sensitivity analysis, loan sizing, sources/uses, equity promote modeling & MIRR.
- Enhance excel skills by: (i) completing basic excel formulas, (ii) preparing and analyzing financial projections and (iii) building integrated complex financial models.
- Learn sources for real estate market and economic data.
- Continue to build a “library” of resource information which can be used in the future.

**Course Road Map:**

1) Finance & Investment Analysis Review

- Excel TVM Review
- Investment Metrics

## 2) Leases

- Abstracting key components
- Lease types by Revenue and Expenses
- Modeling Scheduled payments
- Base Year Expense Stops
- Calculating Leasing Commissions
- Lease Effective Rents and NPV w/ free rent, commissions and TI
- Ground Leases

## 3) Investment Analysis Part 1 – Unlevered Cash Flows

- Components to a DCF analysis
- Line Item components of NOI
- Variable/fixed expenses
- Using CPI and Porter Wage Indexes
- Data Sources

## 4) Investment Analysis Part 2 – Disposition / Exit Strategy - Unlevered

- Determining hold periods
- Cash Flow/Cap Rate on Exit
- Data Sources
- Disposition Fees/Proration's
- Calculating Marginal Incremental Rates of Return
- Analyzing feasibility of renovations
- IRR partitioning
- Sensitivity tables (data tables)
- Performance Measures – XIRR, XNPV, PI and Equity Dividend

## 5) Participants of the private capital market and how money is deployed.

## 6) Sources and Uses

## 7) Senior Debt

- Classification of the participants, nature and sources of capital
- Key Components
- Deal Structures – Participation, Accruals, IO
- 360/364
- reserves
- Compounding structures (full/partial)
- Points in and out
- Assumptions / Extensions
- Recourse – Full/Partial, Springing, Burn off/walkway
- 4 methods to reduce future defeasance cost
- 4 METHODS of LOAN SIZING
- Loan Pricing (how to calculate points for targeted yield given rate and vice versa)
- Modeling Floating Rate Loans and A/B structures with different Terms/Amortization periods
- Forward Standby and Forward Takeout Commitment structures

## 8) Structured Capital

- Classification of the participants, nature and sources of capital
- Mezz Debt / Preferred Equity – Uses of and Pricing Factors, Fixed/Floating/Participating  
Calculating IRR look backs on Fixed and Floating Rate Mezz loans

## 9) Construction Loans

- Modeling construction loans
- Key issues

## 10) Equity

- How money is distributed – Path of capital from sources to user
- Classification of the participants, nature and sources of capital
- Equity Structures – Entity Level, Programmatic Equity, JV and Forward Pre Purchases.
- Key components of JV agreements
- Calculating Equity Promote Structures using Microsoft Excel, including:
  - Pari Passu Preferred Return Structures
  - Senior Subordinated Preferred Return Structures
  - Preferred Return on Capital with Deferred Return of Capital Structures
  - Preferred Return of and on Capital Structures
  - Look-back and Claw-back Structures

### **Textbooks:**

N/A

### **Laptop:**

As a significant portion of class will be spent working with excel it is **REQUIRED** that you bring a laptop to every class.

### **NYU Classes:**

All coursework will be distributed and collected via NYU Classes. Credit students are required to use “nyu.edu” e-mail address to receive communications through NYU Classes.

### **Course Requirements:**

Attendance and participation is expected. All of the course work is original content (not from Textbook) therefore missing class will put you at a great disadvantage. No sleeping or ringing cell phones in class. No tape recording is allowed in the classroom.

### **Homework:**

Homework will be assigned and reviewed in class. Completed assignments must be posted to NYU Classes no later than **20 minutes prior to the start of class on the day it is due.**

### **Deadlines:**

Absolutely no excuse (force majeure exclusion) will be accepted. You will always have at least one week to do your homework so get started the next day not the day it is due. To submit your homework after the deadline (even 5 minutes), you must email the file to both Professors. For homework submitted by email after the deadline but within 24 hours from when it was due, student will receive a maximum score of 69%. If the Homework is not received 24 Hours after the start of class it is an automatic 0%.

### **Grading:**

At NYU Stern, we strive to create courses that challenge students intellectually and that meet the Stern standards of academic excellence. To ensure fairness and clarity of grading, the Stern faculty have agreed that for elective courses the individual instructor or department is responsible for determining reasonable grading guidelines.

The Finance Department has elected to use the following grading guidelines for this course and all other elective courses. Instructors should award grades of “A” or “A-” to approximately 35% of students in elective courses with enrollments of more than 25 students. In elective classes of less than 25 students, the instructor is at liberty to give whatever grades they think the students deserve, while maintaining rigorous academic standards.

Grading is based on the following schedule.

Homework (6 x 7%) -	42.0%
Midterm -	20.0%
Final Exam -	38.0%

The number of HW’s is subject to change due to how quickly material is covered in class. If the number of HW is decreased the total allocation will be recalculated over the number of HW issued.

*Assignments will generally be graded as follows:*

**A** – Assignment delivered on time, fully dynamic model, complete assignment, little or no modification required to achieve substantive correctness of calculations.

**B** – Assignment delivered on time, semi-dynamic model, complete assignment, some modification required to achieve substantive correctness of calculations.

**C** – Assignment delivered on time, little effort was used to build a non-dynamic model and/or semi-complete assignment, answers substantially off the mark.

**F** – No effort was exerted to complete the assignment as evidenced by an incomplete assignment and/or model, or no submission at all.

### **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.

### **Students with Disabilities**

Students whose class performance may be affected due to a disability should notify me early in the semester so that arrangements can be made, in consultation with the Henry and Lucy Moses Center for Students with Disabilities, to accommodate their needs. Please see [www.nyu.edu/csd](http://www.nyu.edu/csd) for more information.

## **Schedule:**

### **Session 1, 1/31/17, Course Overview**

Description: Introductions, Form and Presentation Review; Excel TVM Review

Assignments/deadlines: none

### **Session 2, 2/7/17, Leases**

Description: Abstract/Analysis, Modeling Scheduled Payments, Lease Present Value, Commission calculations

Assignments/deadlines: HW1 (Lease analysis and lease NPV) assigned

### **Session 3, 2/14/17, Investment Analysis**

Description: Components to a DCF analysis, Line Item components of NOI, Fiscal vs. Calendar roll-up, Research Tools

Assignments/deadlines: HW 1 (Lease analysis and lease NPV) due, HW 2 (Building Acquisition) assigned

### **Session 4, 2/21/17, Dispositions / Exit Strategy**

Description: MIRR, Sensitivity Analysis using data tables, IRR Partitioning, Performance Measures

Assignments/deadlines: HW 2 (Building Acquisition) due, HW 3 (Building Disposition) assigned

### **Session 5, 2/28/17, Ground Leases (& Corporate Trade & Sale Leaseback Potentially)**

Description: Structuring, Analysis.

Assignments/deadlines: HW 3 (Building Disposition) due

### **Session 6, 3/7/17, Midterm Exam**

Description: In-class midterm examination (using MS Excel)

Assignments/deadlines: none

### **Session 7, 3/21/17, Midterm Review, Intro to Private Equity Market Participants**

Description: Capital distribution, Direct vs. JV vs. Capital Aggregator vs. Capital Allocator model, Sources and Uses, Capital Stack bifurcation

Assignments/deadlines: none

### **Session 8, 3/28/17, Senior Debt (Part 1)**

Description: Excel Analysis review 2, debt parameters, basic underwriting and loan sizing

Assignments/deadlines: HW 4 (loan sizing, structuring analysis) assigned

### **Session 9, 4/4/17, Senior Debt (Part 2)**

Description: Sources of debt capital, various amortization tables, structured capital sources, sizing and parameters

Assignments/deadlines: HW 4 (loan sizing, structuring analysis) due; HW 5 (floating rate amortization table) assigned

### **Session 10, 4/11/17, Structured Capital & Construction Loans**

Description: Sources of capital for Mezzanine Loans and Preferred Equity, modeling structured capital, construction loan modeling and structuring.

Assignments/deadlines: HW 5 (floating rate amortization table) due; HW TBD

**Session 11, 4/18/17, Equity (Part 1)**

Description: Strategies, Structures, Key Terms, Analytical Framework

Assignments/deadlines: TBD due, HW 6 (Equity modeling part 1) assigned

**Session 12, 4/25/17 Equity (Part 2)**

Description: Sources of equity, modeling equity waterfall distributions

Assignments/deadlines: HW 6 (Equity modeling part 1) due. FINAL EXAM Assigned

**Session 13, 5/2/17, Final Exam Review**

Description: Review of Final Exam, Open Forum for Questions, closing remarks, completion of student course evaluation forms

Assignments/deadlines: Final Exam Due