NYU | STERN

Center for Real Estate Finance Research

Course Title: Real Estate Primary Markets (FINC-GB.2329.10)
Meeting Location: TBD
Meeting Day: Tuesday (in-person meetings only)
Time: 6:00pm-9:00pm
Office Hours: By appointment (coordinate via email)
Dates: 9/28/17 – 12/21/17

No Classes: *11/23/17*

Faculty:
David Eyzenberg, Adjunct Professor – david@eyzenberg.com – 212-519-1140 xt 101(office)
Emily Hunter, Department Assistant – emilyhunter0913@gmail.com – (917) 733-5443 (cell)

What to Expect (TAKE HEED):
This is an ADVANCED real estate class and lack of prior class and/or work experience will make it extremely challenging. There is a heavy emphasis on financial modeling and lots of assignments (all in excel). The first HW can take anywhere from 3 to 10 hours to complete, with subsequent HW's being less laborious but no less difficult.

There is no formal textbook with all assignments professor generated. Supplementary material will be uploaded allowing the student to pursue additional learning outside the class structure.

Course Overview
The semester is split into two parts. The first portion is devoted to granular analysis, proforma building and derivations of return on an unlevered basis. Heavy emphasis is placed on understanding long term structured leases found in office, retail & industrial properties. The second half will focus on structuring, analyzing and modeling the capital stack; debt, structured capital & equity.

Though some theory is stressed, the class is a comprehensive primer on practical applications. If you do well in the class you should will be able to interview well and be prepared for analyst role.

Course Road Map:
1) Finance & Investment Analysis Review
   - Excel TVM review
   - Investment metrics

2) Leases
   - 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) Construction Loans
- Modeling construction loans
- Key issues

9) Structured Capital
- Classification of the participants, nature and sources of capital
- Modeling Structured capital based on current/accrual structure.
- Mezz Debt / Preferred Equity – uses of and pricing factors, fixed/floating/participating calculating IRR look backs on fixed and floating rate mezz loans

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 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.

Homework:
Homework will be assigned and reviewed in class. Completed assignments must be posted to NYU Classes no later than **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 -	25.0%
Final Exam -	33.0%

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 for more information.

Schedule:
Session 1, 9/28/17, Course Overview
Description: Introductions, Form and Presentation Review; Excel TVM Review
Assignments/deadlines: none

Session 2, 10/5/17, Leases
Description: Lease component definitions and explanation, analysis, modeling scheduled payments and escalations, lease present value, commission calculations
Assignments/deadlines: HW1 (Lease analysis and lease NPV) assigned

Session 3, 10/12/17, Investment Analysis
Description: Components of 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, 10/19/17, 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, 10/26/17, Ground Leases (& Corporate Trade & Sale Leaseback Potentially)
Description: Structuring, Analysis. Midterm Prep.
Assignments/deadlines: HW 3 (Building Disposition) due

Session 6, 11/2/17, Midterm Exam
Description: In-class midterm examination (using Excel)
Assignments/deadlines: none

Session 7, 11/9/17, 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 and historical perspective
Assignments/deadlines: none

Session 8, 11/16/17, 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, 11/30/17, 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, 12/7/17, Construction Loans & Structured Capital
Description: components off and modeling a construction loan. sources of capital for mezzanine loans and preferred equity, modeling structured capital.
Assignments/deadlines: HW 5 (floating rate amortization table) due; HW TBD

Session 11, 12/14/17, Equity (Part 1)
Description: Strategies, Structures, Key Terms, Analytical Framework
Assignments/deadlines: TBD due, HW 6 (Equity modeling part 1) assigned

Session 12, 12/21/17 Equity (Part 2)
Description: Sources of equity, modeling equity waterfall distributions, review of final exam, open forum for questions, closing remarks, completion of student course evaluation forms
Assignments/deadlines: HW 6 (Equity modeling part 1) due. FINAL EXAM Assigned