**Schedule:**
Thursday, 9 am - 12:00 pm
113 Avery

**Instructor:**
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1. **Course Description**

The capstone course synthesizes the learnt analytical, comparative and critical processes involved in real estate development projects, transactions and investments. It provides an opportunity for the student to demonstrate his/her understanding of the dynamics of real estate development, its capital requirements, and delivery procedures.

With the utilization of various real estate development and investment case studies and the input by external industry professionals, this course presents a variety of property types, urban and economic contexts, critical decision-making and business styles. With the intensity of in-class examination of each case, the student will be required to advance his/her analytical and decision-making skills to respond to the rapid resolution of real estate issues and challenges. With reference to actual development sites and real-time analysis, students will proceed through the assessment of the physical aspects, financial returns, and transaction processes of a deal and propose solutions or alternatives to a given outcome given the current day conditions.

In anticipation of the student’s imminent professional practice, the format for addressing the case studies has three stages – each representing a typical dynamic of the work environment - progressing from full class discussion, though team-based debate, to the individual proposal, presentation and defense:

1. **All-class** discussion and debate of each of the selected case studies resulting in the identification of major development issues, capital structuring challenges, or decisions for which there might be alternatives given today’s context.
2. **Team-based**, detailed investigation of one of the prior cases (every student focuses on one of the cases studies), resulting in a classroom negotiation between conflicting parties with the objective of proposing alternative outcomes, as evaluated by the non-participating class members.
3. **Individual** exploration for a new or alternative resolution of the case study examined in Stage 2, taking into account the negotiation dynamics of that phase, and producing a comprehensive, detailed, and compelling proposal for a new or alternative outcome given current day conditions. Creative but credible efforts are encouraged, with the primary deliverable being a hard copy “Deal Book” for potential equity partners.
In addition, the final Capstone Project of each student will be presented in a 10 minute “pitch” to the class with guest instructors and external professionals. The five best pitches will be selected to participate in a subsequent “Shark Tower”, utilizing the known Shark Tank format with a committee of notable professionals and faculty.

1. Course Requirements and Assignments

Students will be expected to attend all classes, which will comprise lectures, guest presentations, classroom discussions, team negotiations, and individual presentations. Participation in all class discussions, are required as these will factor into the final grade.

Three case studies will be addressed throughout the course and utilized as follows:

- Each of the cases will be examined in class. Students will prepare for the discussion and constructive participation will be noted towards the final course grade.
- In teams of approx 10 people, students will elect one of the case studies to examine in detail with a view to critically evaluating the investment, its returns and risks.
- Individually, as the Capstone Project, each student is to propose a new or alternative outcome for the case study taken under evaluation, and make the proposal in the form of a Deal Book.

This Capstone Project is the key deliverable for the student’s presentation of his/her comprehensive understanding of the material studied in the MSRED program, and provides a tangible demonstration of professional capability and excellence.

Case Study and Capstone Project Content:

Discussions of the specific cases and the proposed Capstone Project should include the following:

- Development concept. Design, and functional program
- Zoning and entitlement approvals, hurdles, and/or strategies
- Market Analysis and input data for financial analysis
- Financial analysis and capital structure
- Project delivery schedule and management strategy
- Marketing and/or exit strategy

Case Study/Studio Method:

- All-class Case Analysis: The case studies will be subjected to class discussion in successive weeks. The student is required to read the case, compose a succinct
description of the status of the real estate project and the critical challenges or concerns, and be prepared to discuss the details in class. **The instructor will call upon any student to commence the discussion or respond to any issue raised.**

- **Team Debates:** Subsequent to the all-class discussions, each student will select one of the cases and join a team of approx 10 people. Teams will prepare to present their review of the case in the classroom setting and then debate the other teams also working on that respective case. The use of visual aids in these team presentations is recommended.

**Case Study Moderators and Judges:**

The all-class analysis and team debates will be moderated by the instructor/s. Additional external reviewers may be included as relevant to certain aspects of the cases. **All students not participating in the current debate will be expected to participate as judges in the debate.**

**SUGGESTED Case Study Team Dynamics**

Each case study team will elect a Project Manager (PM) on day one of each detailed team-based case analysis. That PM will be responsible for overall production and act as a facilitator for the group. The PM will lead self-elected Sub-teams:

- **Development Concept and Delivery Process** (1-2 people)
- **Site Layout, Design and Functional Program** (1-2 people)
- **Market Analysis, Property Comparables** (1-2 people)
- **Financial Analysis** (1-2 people)
- **Project Risks & Mitigation** (1-2 people)

**Team Meetings** will take place outside the classroom to prepare for the scheduled in-class presentation and debate with other teams.

**IMPORTANT -- Team Dynamics + Flexibility + Circular Nature of Case Study Activities**

Everything is based upon the vision and formulation of the development program and buildable square footage. This must be done immediately with input from the entire team. Vigorous and quick consensus building will be required by the team Project Manager. Without establishing a starting point for the overall vision and a breakdown of square footage by use, none of the other processes can reasonably go forward. Once the vision and site plan are established and the other processes are up and running the project proposal becomes an interactive discussion wherein the Financial Analysis + Market Support influences the Product Concept and Site Plan / Design Layout iteratively. This requires that all analyses be set up for quick changes/adjustments and to work efficiently for sensitivity analyses.

**Capstone Project Details:**
Individually, each student will be required to:

- Make a comprehensive, detailed, and compelling proposal for a real estate equity investment.
- The proposal is to be an alternative proposition for one of the case studies reviewed in the class. Each student is to create his/her own proposal and that proposal may be for an alternative in the property development, the investment structure, and/or the capital stack. Creative but credible solutions are encouraged.
- This proposal will be prepared in three steps and submitted as scheduled:
  - Proposal Memo 1 (10% of course grade): Give a general description of the alternative proposal. Provide an evaluation of the detailed aspects of the given case study that are to be further resolved in the new proposal. Present all new data and assessments necessary to support the new proposal, such as market analysis, site reviews, functional evaluations, capital markets conditions, and investor sentiment.
  - Proposal Memo 2 (15%): Provide the comprehensive financial analysis of the investment proposition. The full DCF Proforma for the holding period is to be provided in detail including the specifics of the development budget, construction funding, details of the capital stack, and returns to all investment participants. A summary in prose, with simple charts as necessary, is to be provided that is specifically directed to the equity investor – this is the financial core of the “pitch”.
  - FINAL SUBMISSION: DEAL BOOK: Complete presentation of the alternative Real Estate Investment Proposal comprising:
    1. Written submission (25%) that comprehensively makes the case for the investment, i.e. includes a summary which “sells” the proposal, and consolidated supporting material.
    2. Oral presentation (10% additional grading) in class for 10 minutes, that makes the “pitch” for investing in the project

The three components: Proposal Memo 1, and 2, and the Final Submission DEAL BOOK, in addition to the 1-page summary and visual aids for presentations must be posted to Canvas on schedule.

Capstone Submission Components:

- Five hardcopies of a one-page summary due at time of presentation
- Electronic copies of all materials to be submitted to Canvas prior to presentation including:
  - PDF of Deal Book
  - Active Excel file of proforma (formatted in a way that is easy to read and understand)
  - PowerPoint slides utilized in presentation
- Hard Copies of the Deal Book may be made at the election of the student.
Canvas:

Columbia University’s online Canvas system will be used for posting the course syllabus, selected class materials/handouts, hyperlinks to locations from where case studies and additional reading materials to be used in the course could be found and/or purchased by students. Canvas will also be utilized for the posting by students of all Case Study and Capstone submissions. Canvas will also be utilized as a tool for the instructor and Teaching Assistants to post announcements, and also for the instructor and students to connect outside of the classroom more consistently and conveniently.

III. COURSE GRADING CRITERIA

Course grading criteria are as follows:

- Attendance and in-class case study participation: 20%
- Detailed case study review as a team 20%
- Capstone Project (in three submissions): 50%
- Presentation or “pitch” of the Deal 10%

Team Grading:

- As a team member, each student will be assigned the grade of the team, so it is up to each team to ensure worthy performance of each member.
- Teams that make it to finalist for their site will receive 20/20. That is, there will be 4 teams (1 for each site) who will receive 20/20. Other teams will be graded below that in accordance with their performance.

Only exceptional performers in all of the grading criteria will receive a High Pass.

1. READINGS

Students will be expected to complete readings in advance of class.

The case studies for class discussion will be posted one week in advance on Canvas.

The Textbook referenced for the class is: Professional Real Estate Development, Richard Peiser & David Hamilton. ULI publications.

Additional references for the course will be provided on Canvas.

Other Notes
1. COURSE OUTLINE

Jan 16: Case Study 1 posted. Students to prepare for Classroom discussion on Jan 18.

Jan 18

Class 01: Course Introduction, the Capstone Project, Case Study Methodology: Course outline with grading details. Details of the Capstone Project. Analytical Framework for case study activities.

Overview of Key Elements of Real Estate Development Project Analysis: Review of the required macroeconomic analysis, planning compliance, and approvals for real estate development projects.

Case Study 1: 620 West 153rd Street with Anbau

Classroom discussion by all students.

Presentation by Anbau.

Reading: Peiser & Hamilton Ch1, Ch 2 (pgs 30-55).

Note: Case Study posted: to be prepared for Class 2.

Jan 25

Class 02: Case Study 2: Front Street with Flank

Classroom discussion by all students.

Presentation by Flank.

Reading: Peiser & Hamilton Ch4 (pgs 146-201), Ch 5 (pgs 238-261).

Note: Case Study posted: to be prepared for Class 3.

Feb 1

Class 03: Case Study 3: 106 West 56th Street with Savanna

Classroom discussion by all students.

Presentation by: Savanna.
Reading: Peiser & Hamilton Ch 7 (pgs 326-356).

Feb 8
Class 04:  Case Study: One Madison Avenue
Classroom discussion by all students.
Presentation by: SL Green

Feb 15
Class 05:  Team Debates: Case Studies 1& 2 Alternatives
Classroom discussion by all students

Feb 22
Class 06:  Team Debates: Case Study 3 Alternatives & Run-offs.
Classroom discussion by all students

March 1
Class 07:  Lecture: Review of Construction Costing. Prof Lambeck
Review of Financial Analysis of Development Projects Prof.Derrington
Submission: Capstone Project Proposal Memo 1.

March 8
Class 08:  Lecture: Review of MARKET ANALYSIS. Prof. Jonathan Miller

March 16: Spring Break. No class.

March 22
Class 09:  Lecture: Review of Capstone Project Proposal Memo 1 submissions. Derrington
Review of Equity Distributions and Promotes. Prof. Bloom

**Reading:** Peiser & Hamilton Ch 8.

**Submission:** Capstone Project Proposal Memo 2.

March 29

**Class 10:** Lecture: Marketing Real Estate Developments

Elissa Ours, Sunshine Corcoran

**Reading:** Peiser & Hamilton, pages 222-232, 266-272, 359-366.

April 5

**Class 11:** Lecture: The Deal Book. Profs. Shawn Amsler, Derrington

**Reading:** Posted Deal Book examples.

April 12

**Class 12:** Lecture: Marketing Real Estate Developments. Prof. Elisa Ours, Sunshine Corcoran

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**Review of Capstone Project Proposal Memo 2 Submissions.** Derrington

April 19

**Class 13:** Lecture: Professional Ethics. Prof. Rick Leland

April 23 11.59pm:

**Submission:** E-copy of Deal Books and 1-page summary.

Electronic submission of powerpoint deck for presentation.

April 24 - 26: all day, scheduled 8 mins presentations by students.

**Class 14:** Presentations of Capstone Projects and 1-page summary.

April 26: **Shark Tower: 5 – 8pm.**