

CRE/School of Architecture and Planning  
Spring, 2013

## 4.254J/11.303J

### Real Estate Development Studio: Mixed Use Projects

Monday, Wednesday 2:30-5:30 PM; Room 10-485, plus special sessions

Dennis Frenchman, Professor, Dept. of Urban Studies and Planning

Peter Roth, Lecturer, Dept. of Architecture, Developer

Victor Eskinazi, Instructor, Sasaki associates

TA: Kwan Butts, MCP

#### Objectives

This subject provides students with skills and experience in synthesizing complex real estate development projects. It addresses the interaction among design, finance, market and public policy factors. As potential developers, or participants in the development process, students need to understand: the *products* of real estate, the *development process*; what makes *good design* for the private sector, and how to *synthesize a project* from multiple constraints. The course is based on the philosophy that real estate development is a creative process. Students are encouraged to innovate as they synthesize all aspects of a project.

The subject is oriented to students who have already taken Real Estate Products 11S.968 although it is not a prerequisite. We will also accept a limited number of additional students who bring skills in architecture, city planning, urban design or other disciplines related to real estate. This policy reflects the reality that development is a team effort requiring multiple disciplines. In the past, students from many backgrounds have benefited from, and contributed greatly to the course.

#### Format

The format for 4.254J/11.303J is a studio. This means we will learn mainly by doing. In a series of exercises, students will be presented with typical development issues that they must evaluate and respond to in the process of synthesizing a project. The exercises require decisions about:

- *Site and context* -- What makes a good site? Recognizing real estate development opportunities and constraints inherent in a given location.
- *Development program* -- What makes a good project? Arriving at a development concept that best responds to the marketplace, while resolving physical, financial, and public policy constraints.
- *Project design* -- What is the right form and image for a program that maximizes benefits to the project and its surrounding community?
- *Project finance* -- Does the project work financially and how should it unfold over time, managing risk while maximizing opportunities for value creation?

The exercises will be supplemented by lectures, discussions, and required field trips offered by the instructors and invited guests. These will provide background information for each exercise, as well as exposure to the design and development process. Written material relating to each exercise, studio seminars, and case studies will be posted on the course Stellar web site. Given the diverse mix of skills in the class, several optional sessions will be held outside of normal class time to provide additional instruction and practice in key skill areas for the students who need these.

## Organization

The semester will be divided into two parts:

- In part 1, we will take a close look at **existing mixed-use real estate projects** by dissecting their physical, programmatic and financial elements, focusing on case examples in Boston and New York. Students will be challenged to figure out where the project succeeds and fails and recommend changes that would enhance its value across design, financial, and civic dimensions. (5 weeks)
- In part 2, students will use the knowledge they have gained to prepare a comprehensive, professional **development proposal for a large-scale mixed-use project**. We begin by preparing site and market studies to provide a foundation for the proposal. Following this, an RFP will be issued describing the requirements for a submission to be made at the end of the class, to include a program, design, financials, and proposed deal structure for the project. The faculty will serve as consultants to multidisciplinary development teams and will expect projects that innovate in some way. Lectures and cases will highlight cutting edge trends in real estate development. (9 weeks)

Two options are now under consideration for part 2 of the class. The first of these is to develop a project in **downtown São Paulo, Brazil** one of the world's most dynamic cities. We have identified possible sites and currently in the process of negotiating with potential partners to see if we can obtain the necessary financial support to bring the class to Brazil. **We will discuss the feasibility of pursuing this option with students on the first day of class. If acceptable arrangements can be made in time, we would be traveling to Brazil during spring break.**

If São Paulo does not materialize, the site for our project proposal will be the **Volpe National Transportation Research Center** in Kendall Square, which is also an exciting development opportunity. The US Department of Transportation has decided to relinquish their 14-acre parcel, which includes a high rise office building. This is the last major underdeveloped tract in the world's hottest biotech cluster. Zoning and urban design guidelines prepared by the city encourage housing, commercial uses, and a large public park on the site, however, the design and financial feasibility of this vision has yet to be tested in a development proposal.

## Requirements

Much of the learning in this subject will come from interactions with fellow students and with the faculty. Participation in lecture and workshop sessions, field trips, and reviews is required. Teams will have assigned desks in 10-485, and work on the exercises should be done in the studio to the degree possible. Each team member will be required to prepare a self-evaluation, and to evaluate the contribution of other members of their team to the project at the completion of Parts 1 and 2 of the course.

Final grades for the subject will be determined as follows:

- |                                      |     |
|--------------------------------------|-----|
| ▪ Class participation and "teamwork" | 25% |
| ▪ Assignment 1                       | 25% |
| ▪ Assignment 2                       | 10% |
| ▪ Assignment 3                       | 40% |

### Faculty

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Instructor: Victor Eskinazi  
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### Room 10-485

You will have a work place in 10-485 for use during the semester and we encourage you to make use of the space as much as possible. Note that you will be assessed for any damage to the furniture or equipment provided for your use during the semester. No cutting, drawing, gluing, or other work should take place directly on table-tops in the studio; use cutting boards to protect the table surfaces. The seminar room table must not be used for studio work. Please see the TA if you have any questions.

Everyone is responsible for security in the space. The rear door will be closed and locked at all times. The front door will be locked and alarmed after 5:00. All students in the class will have key card access to the space.

Studio phone: 253-1392.

### MIT Notes

Disabilities. If you have a documented disability, or any other problem you think may affect your ability to perform in class, please see the instructor early in the semester so that arrangements may be made to accommodate you.

Academic Integrity. Plagiarism and cheating are not acceptable. Never (1) turn in an assignment that you did not write yourself, (2) turn in an assignment for this class that you previously turned in for another class, or (3) cheat on an exam. If you do so, it may result in a failing grade for the class, and possibly even suspension. Please see the instructor if you have any questions about what constitutes plagiarism.

## 4.254J/11.303J Real Estate Development Studio: Complex Urban Projects

## Schedule -- Spring 2013 (draft 1.27.13)

WEEK	DATE	TOPIC/ACTIVITY	ASSIGNMENTS
<b>PART ONE: Repositioning an Existing Project</b>			
1 W	6-Feb	Course Introduction, Overview of semester and projects	<b>Assign. 1: De-Engineering a project</b>
F	8-Feb	Overview of Assign. 1 -- Introduce Re-engineering cases. Optional workshop: Graphic fundamentals (KB) time TBD Optional workshop: Financial fundamentals (PR) time TBD	
2 M	11-Feb	Pin-up: Place value; form teams	<b>Assign. 1a due: Place value</b>
W	13 Feb	Lecture: introduction to the Prudential Center case	
F	15 Feb	Field trip: Prudential Center/Boston Properties Field Trip: NYC Mixed Use Projects (to be arranged with class)	
3 T	19-Feb	Lecture: Financial value sources: Balancing the Market (PR+Guest)	<b>Assignment 1b due: Financial Value</b>
W	20-Feb	Optional review session: Residential RE Products (DF) Lecture: International mixed use cases (DF + class) Optional review session: Commerical Real Estate Products.(DF)	
4 M	25-Feb	Lecture: Civic value sources: land and community impacts	
W	27-Feb	Studio time: Work with teams	<b>Assignment 1c due: Civic value</b>
5 M	4-Mar	Review: Project assessment/repositioning	<b>Assign. 1 due: De-Engineering strategy</b>
<b>PART TWO: A New Mixed-Use Development</b>			
<b>Site and market research</b>			
W	6-Mar	Overview case project: Volpe Block, Kendall Square Field trip: Volpe Transportation Center	<b>Assign 2: Volpe Block site+ market studies</b>
6 M	11-Mar	Guests: City of Cambridge Community Development	
W	13-Mar	Lecture: The value of mixing markets (PR+Guest)	
7 M	18-Mar	RE Innovation 1: New Century Cities (DF)	<b>Assign 2 due: Site+market studies/ innovation interests</b>
W	20-Mar	Pin-up: Site and market studies and recommendations.	
8		<b>SPRING BREAK</b>	
<b>Development proposal</b>			
9 M	1-Apl	Introduce Development capacity/alternatives: (DF, PR)	<b>Assign 3: MIT Kendall RFP</b>
W	3-Apl	Introduce Financial model and assessment RE Innovation 2: Transit oriented development	
10 M	8-Apr	Studio time: Work with teams	
W	10-Apr	RE Innovation 3: Insitutional partnerships: MITIMCO/ MIT Campus	
11 W	17-Apr	Pin up: Alternative development scenarios	<b>Assign 3a due: Alternative scenarios</b>
12 M	22-Apl	Review financials, discuss model questions	<b>Assign 3b due: Financial model and assessments</b>
W	24-Apr	RE Innovation 4: Retrofit	
13 M	29-Apl	Pin-up: Program and deal structure	<b>Assign 3c due: Program and deal structure Submit diagrammatic site plan; key place</b>
W	2-May	Workshop: Place Brainstorming Charrette	
14 M	6-May	Lecture: Preparing a professional development proposal	
W	8-May	RE Innovation 4: Low-carbon development	
15 M	13-May	Studio time: Work with teams	<b>Assign 3 due: Professional Development Proposal</b>
W	15-May	Studio time: work with teams	
F	17-May	Review: Development proposals (Invited guests)	