



## RED 375: Real Estate Development Analysis

**Units:** 4

**Term:** Fall 2021, Section 51663

**Days:** Monday, Wednesday

**Time:** 10:00 – 11:50 am

**Location:** VPD 112 (in person, except for Week 1)

**Instructor:** Moussa Diop

**Office:** RGL 315

**Office Hours:** Tuesday and Thursday, 11:00 am - 12:00 pm and by appointment

**Contact Info:** [diop@price.usc.edu](mailto:diop@price.usc.edu)

**Zoom Room:** <https://usc.zoom.us/j/2438718124>

**Teaching Assistant:** N/A

### Course Description

This is a commercial real estate development financial analysis course emphasizing the use of Microsoft Excel to develop cash flow projections and applying finance concepts to inform property development and investment decisions. In addition to examining the real estate development process and key aspects of multifamily, retail, office, and industrial real estate development, the course covers cash flow projections, property valuation and investment analysis, capital structure and financing, financial feasibility analysis, and before- and after-tax cash flow calculations and equity return analysis. The recourse starts with a review of finance concepts used in real estate financial analysis and closes with an introduction to cash flow waterfalls and affordable housing development.

### Learning Objectives

These are the course's key learning objectives for students.

- Demonstrate a thorough understanding of the commercial property development process, particularly market analysis and financial feasibility analysis.
- Demonstrate a good understanding of differences between retail, office, industrial, and multifamily property development.
- Understand commercial real estate lease structures, how they are used, and how they affect cash flow risk.
- Understand real estate development costs, financing options, and real estate capital markets.
- Demonstrate a thorough understanding of the steps involved in modeling before- and after-tax operating and property disposal cash flows.
- Be comfortable with applying finance concepts to analyze property-level cash flows and cash flows to equity investors to inform investment decisions.

- Demonstrate a knowledge of Microsoft Excel as it pertains to developing cash flow proformas, analyzing cash flows and performing sensitivity analyses.
- Be familiar with how the low-income housing tax credit program works.

**Prerequisite(s):** BUAD 215, ECON 203 and RED or PPD 362

**Co-Requisite(s):** N/A

**Concurrent Enrollment:** N/A

#### **Recommended Preparation**

Excel Workshop

#### **Attendance Policy and Recording of Lectures**

*This is an in-person course. Unless students provide an accommodation letter from USC's Office of Student Accessibility Services, attendance and active participation is expected in the classroom.* Any student with such accommodations should submit their accommodation document to the instructor as soon as possible to discuss appropriate accommodations. Either classroom recordings or live remote access to the class via Zoom will be provided.

**Students who are experiencing illness should not attend class in person.** Student must inform instructor in advance of any class sessions they cannot attend for medical reasons and accommodations will be arranged to view recorded lectures and submit alternatives to any missed class participation. Students will not be penalized for not attending class in-person under these circumstances.

At the discretion of the instructor, the in-person lectures will be recorded via Zoom and made available to students in situations where students are unable to attend class.

#### **Course Notes**

You will need to take notes during lectures. I will post my lecture slides and other course materials, as necessary, via Blackboard. However, lecture slides will not include everything discussed in class. You will be tested on any material covered in class.

#### **Communication**

All class communications will be via Blackboard postings and messaging. The best way to reach me is via email. I will make sure to respond to email within 24 hours.

#### **Technological Proficiency and Hardware/Software Required**

It is important that you have some basic knowledge of Microsoft Excel. You will need to have your laptop with you, particularly during Excel labs.

#### **USC technology rental program**

Attending classes online and completing coursework remotely requires access to technology that not all students possess. If you need resources to successfully participate in class activities, such as a laptop or internet hotspot, you may be eligible for the university's equipment rental program. To apply, please [submit an application](#).

#### **USC Technology Support Links**

[Blackboard help for students](#)

[Software available to USC Campus](#)

### **Required Materials**

Peiser, Richard B. and Hamilton, David (2012) Professional Real Estate Development Third Edition.

Textbook readings are listed below with the weekly lecture topics. ***Readings must be completed before class.*** Depending on the course's progress, the topics and readings for each week are subject to change. Required additional readings will be available on Blackboard. The course Blackboard site can be accessed at <http://blackboard.usc.edu>.

### **Optional Materials**

Geltner, David M. and Norman G. Miller (2014) Commercial Real Estate Analysis and Investments. 3<sup>rd</sup> Edition South-Western Educational Pub -

Readings from this textbook are optional since this is not a required textbook. However, it will serve you well to purchase this book, if you don't have it already, and read this material before class.

### **Description and Assessment of Assignments**

As a way of checking student progress and providing timely feedback, this course includes several assignments that are aligned with the learning objectives. These assignments are meant to evaluate your understanding of the material discussed in class and further expand your learning. Each assignment serves to measure student performance on at least one learning objective. Indicative assignment due dates are listed on the course schedule below. ***All assignments are individual assignments. You are encouraged to discuss them with other classmates, but you must complete and submit your own work. Any form of plagiarism will be severely punished.***

#### **1. Exams: (40%)**

There will be a midterm exam and a final exam worth 20% each. The final exam will be during finals week – the final exam will be non-cumulative with the understanding that course topics may build on previously covered material. ***Exceptionally, you may be excused from taking an exam at the scheduled time if you receive prior approval.***

#### **2. Excel Labs: (12%)**

There will be three (3) Excel labs accounting for 12% of the grade. Excel labs will include an instructor presentation/demonstration, followed by an assignment to be completed and submitted on Blackboard by the end of the session. Students are required to use a Laptop with Excel during Excel Labs. These are individual assignments, but you can work with your peers if you produce and submit your own work.

#### **3. Quizzes: (10%)**

You will be asked to complete 8 true/false, multiple-choice, and multiple-answer quizzes testing your understanding of course materials. Each quiz will consist of no more than 10 questions to be completed in 10 minutes on Blackboard. You are advised to review your class notes before taking the quizzes. You will generally have 48 hours to take each quiz. Once you open a quiz, you will have complete it in one attempt.

**4. Homework Assignments: (20%)**

This course includes five (5) homework assignments for a total of 20% of the grade. These assignments must be turned in on their due dates – see late assignment policy below. For assignments requiring Excel, you will have to submit your Excel spreadsheets as well. Again, these are individual assignments.

**5. Case Study: (15%)**

As a key requirement of this course, you will have to complete a comprehensive development financial case study at the end of the semester. This will give you an opportunity to apply and integrate all the concepts learned during the semester. This assignment will be the subject of a separate memo later.

**6. Class Participation: (3%)**

You are required to attend classes prepared and ready to fully participate in all classroom activities. Your class participation will be based on your participation to class activities while in class. I will monitor class participation for assigning participation grades.

**Grading Breakdown**

The course meets twice per week, for 110 minutes. Students are expected to attend each class and have read the required readings prior to class so that they can contribute to in-class discussions. Depending on progress during sessions, the topics and readings for each week may be subject to change.

Assignment	% of Grade
Midterm (March 9, tentatively)	20
Final (May 9)	20
Homework (5)	20
Excel Labs (3)	12
Case Study	15
Quizzes (8)	10
Class Participation	3
<b>Total</b>	<b>100</b>

**Grading Scale**

Course final grades will be determined using the following scale:

A	95-100
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62

F        59 and below

To receive an "A" grade, students must complete all work on time and submit work of superior quality at every stage. Work must address all aspects of the required assignments, exceed the minimum requirements, and demonstrate critical thinking and creative thinking. Students must consistently contribute to class discussion.

### **Course-specific Policies (Assignment Submission, Grading Timeline, Late work, and Technology)**

#### *Assignment Submission Policy*

All assignments must be submitted on Blackboard. Emailed submissions are strictly forbidden because I will communicate grades and feedback via Blackboard. Each assignment will include specific submission instructions.

#### *Grading Timeline*

I will strive to complete the grading of assignments and exams in a timely manner, but this will take time since spreadsheets will need to be graded individually.

#### *Late Assignment Submissions*

Assignments must be turned in by their due dates. Unless approved in advance, late submissions will be penalized by 20%. Assignments that are more than 2-day late will not be accepted.

#### **Sharing of course materials outside of the learning environment**

USC has a policy that prohibits sharing of course content outside of the learning environment.

#### *SCampus Section 11.12(B)*

Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).

#### **Course evaluation**

Course evaluation, which occurs at the end of the semester university-wide, is an important review of students' experience in the class. You will receive an email invitation to review the class at the end of the semester. Your feedback will help make appropriate changes to the course. In addition, I will seek your feedback at mid-semester for early course correction.

### **Statement on Academic Conduct and Support Systems**

#### **Academic Conduct:**

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" [policy.usc.edu/scampus-part-b](http://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See

additional information in SCampus and university policies on scientific misconduct,  
[policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct).

**Support Systems:**

*Counseling and Mental Health - (213) 740-9355 – 24/7 on call*  
[studenthealth.usc.edu/counseling](http://studenthealth.usc.edu/counseling)

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call*  
[suicidepreventionlifeline.org](http://suicidepreventionlifeline.org)

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press "0" after hours – 24/7 on call*  
[studenthealth.usc.edu/sexual-assault](http://studenthealth.usc.edu/sexual-assault)

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

*Office of Equity and Diversity (OED) - (213) 740-5086 | Title IX – (213) 821-8298*  
[equity.usc.edu](http://equity.usc.edu), [titleix.usc.edu](http://titleix.usc.edu)

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

*Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298*  
[usc-advocate.symplicity.com/care\\_report](http://usc-advocate.symplicity.com/care_report)

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity |Title IX for appropriate investigation, supportive measures, and response.

*The Office of Disability Services and Programs - (213) 740-0776*  
[dsp.usc.edu](http://dsp.usc.edu)

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

*USC Campus Support and Intervention - (213) 821-4710*  
[campussupport.usc.edu](http://campussupport.usc.edu)

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

*Diversity at USC - (213) 740-2101*  
[diversity.usc.edu](http://diversity.usc.edu)

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*  
[dps.usc.edu](http://dps.usc.edu), [emergency.usc.edu](http://emergency.usc.edu)

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call*  
[dps.usc.edu](http://dps.usc.edu)

Non-emergency assistance or information.

**Course Schedule: A Weekly Breakdown (Subject to adjustments)**

Session	Topics / Daily Activities	Readings	Deliverables
<b>Week 1</b> Mon 1/10	Introduction	GM 1, 2	
Week 1 Wed 1/12	Finance Concepts	GM 8, 9, 10	
<b>Week 2</b> Mon 1/17	<b>Holiday</b> (Martin Luther King Day)		
Week 2 Wed 1/19	Finance Concepts Real Estate Development Process	PH 1, 2	Homework 1 (1/21)
<b>Week 3</b> Mon 1/24	Real Estate Development Process	GM 28	
Week 3 Wed 1/26	Multifamily Residential Development	PH 4	Quiz 1 (1/28)
<b>Week 4</b> Mon 1/31	Real Estate Development Costs	PH 4, GM 28	
Week 4 Wed 2/2	Property-Level Cash Flows	GM 11	Quiz 2 (2/4)
<b>Week 5</b> Mon 2/7	Property-Level Cash Flows Property Valuation and Investment Analysis	GM 11 GM 10	Homework 2 (2/8)
Week 5 Wed 2/9	Property Valuation and Investment Analysis	GM 10	Quiz 3 (2/11)
<b>Week 6</b> Mon 2/14	Excel Lab 1 (Property-Level Cash Flow Analysis)		Lab 1 (2/14)
Week 6 Wed 2/16	Retail Development	PH 7	Quiz 4 (2/18)
<b>Week 7</b> Mon 2/21	<b>Holiday</b> (Presidents Day)		
Week 7 Wed 2/23	Capital Structure and Leverage Calculations	GM 15, 13	Quiz 5 (3/25)
<b>Week 8</b> Mon 2/28	Mortgage Basics	GM 17	
Week 8 Wed 3/2	Excel Lab 2 (Mortgage Calculations)		Lab 2 (3/2) Homework 3 (3/3)
<b>Week 9</b> Mon 3/7	Midterm Review		
Week 9 Wed 3/9	<b>Midterm Exam</b> (Tentatively)		
3/13 – 3/20	<b>Spring Break</b>		
<b>Week 10</b> Mon 3/21	Office Development	PH 5	
Week 10 Wed 3/23	Industrial Property Development	PH 6	Quiz 6 (3/25)
<b>Week 11</b> Mon 3/28	Financial Feasibility Analysis	GM 28	

Week 11 Wed 3/30	Financial Feasibility Analysis Before- and After-Tax Cash Flow Calculations	GM 14	Homework 4 (4/1)
<b>Week 12</b> Mon 4/4	Before- and After-Tax Cash Flow Calculations	GM 14	
Week 12 Wed 4/6	Equity Return Analysis	GM 14, 10	Quiz 7 (4/8)
<b>Week 13</b> Mon 4/11	Excel Lab 3 (Equity Return Analysis)		Lab 3 (4/11)
Week 13 Wed 4/13	Cash Flow Waterfalls		
<b>Week 14</b> Mon 4/18	Cash Flow Waterfalls		Quiz 8 (4/19)
Week 14 Wed 4/20	Case Study: West River Commons	PH 4	Homework 5 (4/22)
<b>Week 15</b> Mon 4/25	Affordable Housing		
Week 15 Wed 4/27	Final Exam Review		Case Study (4/27)
<b>Monday, May 9</b>	<b>Final Exam</b> 8 am – 10 am		

In the readings column, “PH” refers to chapter numbers in Peiser, Richard B. and Hamilton, David (2012) Professional Real Estate Development Third Edition and “GM” refers to chapters in Geltner, David M. and Norman G. Miller (2014) Commercial Real Estate Analysis and Investments. 3<sup>rd</sup> Edition South-Western Educational Pub.