



UNC
COLLEGE OF
ARTS & SCIENCES

THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

DEPARTMENT of CITY and REGIONAL PLANNING

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PLAN 575

Real Estate Development
Spring 2017
Friday, 11:15 a.m. – 2:15 p.m.
New East 102

Instructor

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Office hours: Friday, 2:30 p.m.-4:00 p.m. or by appointment

Course Description

Real estate development examined from both the entrepreneurial and public perspectives. Emphasis on risk management and the inherent uncertainties of development. The four dimensions of real estate are addressed: legal/institutional, physical, financial and economic/market.

The course meets the undergraduate experiential education (EE) requirement.

Prerequisite

Undergraduates with interest in real estate are encouraged to enroll.
Graduate students need permission of the instructor.

Method of Instruction

The instructor combines lectures, reading assignments and case studies with field trips, interviews with real estate professionals and independent field work to master important concepts. Students with different preparation levels are teamed to improve learning outcomes.

Honor Code

The UNC Honor Code states: "It shall be the responsibility of every student at The University of North Carolina at Chapel Hill to obey and to support the enforcement of the honor code, which prohibits lying, cheating, or stealing when

these actions involve academic processes or University, student or academic personnel acting in an official capacity.”

Grading

Assignment #1 CD/MD analysis	10%
Assignment #2 DCF analysis or Public meeting	10%
Dispute resolution report	5%
Field Work Team Project	10%
Field Work Individual Assignment	15%
Final Examination	35%
Attendance, Participation, Presentations	15%

Text

Godschalk, David R. & Emil E. Malizia, *Sustainable Development Projects*. Chicago: APA Press, 2013 available from the instructor. The text includes a brief glossary of real estate development terms. See also NAIOP Research Foundation, NAIOP Terms and Definitions, 2012 and John McNellis, “Back to School: Real Estate Jargon Demystified,” *Urban Land*, September 21, 2015.

Lecture notes and assigned readings will be distributed via email. Sakai will not be used.

Course Calendar Topics

Note: Session A from 11:15 a.m. until 12:45 p.m.
Session B from 1:00 p.m. until 2:15 p.m.

01/13	A) Course review; Assignments review & team formation B) Real estate development & the development process
01/21	A) Risk management a la Graaskamp Political economy B) Political economy discussion Integrating development, design & regulation
01/28	A) Static & dynamic financial analysis: Back-of-the-envelope, CD/MD financial analysis & Discounted Cash Flow analysis B) Urban design Vibrant employment centers
02/03	A) CD/MD analysis review assignment #1 Revenue-expense analysis DCF concepts & example B) Roles of government: Regulation Long-range planning, zoning, CIP, project review

- 02/10 A) DCF analysis review Assignment #2
Real estate lending
- B) Roles of government: Infrastructure provision & finance tools
Student presentations
- 02/17 A) Financial plan & Ownership structures
Note: session will end at 12:15 p.m.
- B) Community relations & Dispute resolution
Negotiation: City of Durville - Bluebell
Note: session run from 12:30-2:15 p.m.
- 02/24 A) Turn in Negotiation Report
Negotiation de-brief
Environmental Factors in RED
- B) Construction process
Construction management
- 03/03 A) Real estate economics-intraurban, rent theory
- B) Capital budgeting
Construction contracts
- 03/10 A) Real estate economics-interregional, economic location &
vibrant employment centers
- B) Construction contracts (cont.)
Site selection & site control
- 03/13-17 Spring Break
- 03/24 Special class
See Field Trips, p. 10
- 03/31 A) Leases
- B) Real estate appraisal
Real estate market analysis
- 04/07 No Class: field work
- 04/14 University holiday
- 04/21 A) Field trips de-brief
- B) Course review

04/28	A) Final team presentations of Field Work
	B) Final exam prep Course evaluation & feedback
05/01	Individual field work papers due
05/02	Final exam at 12 Noon (Confirm)

Assignments

In addition to the text, most assigned readings will be distributed as email attachments at least 4 days before class. Most of this material will be articles provided as pdf documents. At times, the reference will be a URL.

Class presentations, usually in power point format will be distributed on Friday morning before class. Additional materials will be distributed in class as handouts.

Laptops can be used in class to help you follow presentations and to facilitate note taking.

Instructor Expectations

The class is scheduled on Fridays to facilitate field trips and field work. Since we meet once weekly, each class represents almost 8% of total class time. Missing class will lower your grade.

I expect you to come to class prepared to participate. I will call on one or two of you as we begin class to ask about the previous session or assignments. I will try to make the class interesting and informative. My objective is to create an environment where you can learn as much as possible about the topics we will cover.

Class Rules

You cannot use your laptop to browse during class. You must turn off your cell phone before class and keep it off when you are in the classroom. If these rules present a hardship for you, please drop the class.

Assignments

Assignment # 1: Turn in the templates and a write-up of your analysis hard copy before class.

Static Financial Analysis: Cost-Driven & Market-Driven Analysis

Your task is to analyze a proposed office project in the Research Triangle area. The developer proposes the construction of either a three-story or four-story office building with 60,000 square feet (SF) of gross building area (GBA). The design of the project results in a building efficiency ratio of 85%. The most attractive site is off 15-501 in Durham near the I-40 interchange. The site is 4.309 acres and the asking price is \$542,000. This site is more than adequate for the building footprint, associated parking and landscaping.

Preliminary construction numbers indicate a construction “hard cost” of \$120 per SF. Construction interest for the 9-month construction period, indirect costs for design, legal work and all other “soft costs” are estimated to be 30% of hard costs.

The lender is offering permanent debt financing at a rate of 4.5% amortized over 20 years, with monthly payments and a 10 year term (call provision). The annualized monthly mortgage constant on such a loan is 0.0759179. The lender will apply a 75% loan to cost ratio (L/C) and use a debt coverage ratio (DCR) of 1.25 to underwrite the project.

The developer is seeking investors who are willing to provide the equity and want to earn 12% cash-on-cash return (12% on equity invested).

Analysis of comparable projects indicates that annual operating expenses will average \$2.50 per SF of space (GBA). The county assessor’s office posts the real estate tax rate at \$1.20 per \$100 value. The appraiser will use the cost of the project as its initial assessed value.

The market for office space is improving, and demand for small buildings is growing. When lease up is completed (i.e., first year of stabilized operations), the project should have a vacancy rate of 15%. Rents are expected to stabilize at \$24.00 per SF of leasable space, paid on a gross basis (i.e., the owner pays operating expenses and real estate taxes).

Analysis of the Project

Using the Cost driven and Market driven approaches, answer the following questions:

1. Construction cost estimate

How much will it cost to construct a three-story building including land?

2. Income analysis

What is the expected (stabilized) net operating income given expected rents for this project?

3. Cost driven analysis with loan to cost ratio

What level of rents is necessary to support the capital costs of this project?

How does this rent level compare to current market rents?

4. Market driven analysis with debt coverage ratio

What are the justified mortgage amount and justified project investment using this approach?

If estimates of the cost to construct the building and associated soft costs are firm, how much can the developer pay for the land?

By how much would the land price have to be reduced in order to make the deal “work”?

5. Other analysis

Can you identify any important cost item that has been omitted?

How can you use the CD/MD analysis to estimate the amount of loan?
What is that amount?

For in-class discussion, what are the pros and cons of developing a 4-story building instead?

Assignment # 2:

You may choose one of the following two options to complete this assignment.

Option I

Attend a public meeting considering a proposed development project either in Chapel Hill or Carrboro

The meeting could convene the town council or one of its advisory boards – the zoning board, planning board or historic commission

Describe the meeting you attended – which board, when & where

Summarize the agenda

Focus on one project under discussion

Discuss one “take-away” related to the role of local government or community relations

Turn in a two-page 1.5-spaced write up before Spring Break

Option II

Refer to the results of the before-tax DCF analysis in Ch. 6

Calculate the BTIRR that would result from a 10% reduction in rents

Select two of the following factors: vacancy rate, operating expenses, degree of leverage or going-out capitalization rate or change the loan terms, both interest rate & amortization period

Which factors are easiest to manipulate?

By how much would each of the factors you chose have to increase or decrease to regain the initial BTIRR?

Which one has the greater relative impact on rent?

Come to class prepared to discuss the results of your sensitivity analysis

Note: This sensitivity analysis could also be applied to after-tax returns

Field Work (about 12 hours)

Field work is designed to provide in-depth knowledge of one commercial (income-producing) real estate development project and an opportunity to talk with a member of the development team that executed that project.

The project should have been completed within the past 2-3 years and have cost at least \$10 million. The project must be located outside of Wake, Durham or Orange Counties. Viable locations include any larger city in North Carolina (Charlotte, Greensboro, Winston-Salem are the best options) and relatively nearby larger cities in Virginia or South Carolina (Richmond, Norfolk area, Columbia or Greenville, SC). Redevelopment projects located in or near downtown would be most compatible with the course content, but any project that is interesting to the team is acceptable.

The instructor will help each team find an interesting project to consider. We will also discuss the best ways to deal with the logistics.

Team Assignment: Your team should gather the following information on this project.

1) Determine the development timeline:

What were the approximate dates from idea inception through stabilized occupancy?

How many months did it take for the developer to get public approval?

How many months did construction take – from building permit to CO?

How long did it take from CO to achieve stabilized occupancy (or target sales)?

2) Describe the project

Property types (most of these projects will be mixed/multi use)

GBA by property type

Location – city, state & country

Cost – in addition to total development cost, try to distinguish land/site costs, site development costs, hard construction costs & soft costs

3) Development team

Developer & sources of equity

Permanent & construction lender(s)

General contractor

A&E firm

Other significant team member

4) Public participation in the project

How did the local government facilitate this project – financial subsidies, in-kind contributions, etc.?

Where there any other important public or non-profit participants?

If so, how did they help make the project feasible?

5) Significant features of the project

Does this project have any noteworthy features?

6) Challenges

Identify one or more important problems that confronted the development team

How was/were the problem(s) resolved?

Your team should prepare a power point presentation or story board that summarizes these points. We will display these boards in NE 102 on 04/28 and spend Session A) having presentation and reviewing the story boards.

Individual Assignment: Each team member should select a different member of the development team that executed this project and arrange a telephone interview with this person.

Cover at least the following questions with the person you interview:

Current position – what are your major areas of responsibility?

With respect to the development project under study, did you learn something new about real estate development/financing/construction/design from this experience?

Career path – how did you come to do what you are now doing?

How did you become qualified to do this work? – combination of experience, apprenticeship and education

In the real estate course I am taking, we are emphasizing how developers and development team members manage risk during the development process.

Please describe the areas of risk that concern you most

Which strategies do you use to manage these risks?

What advice would you offer students like me who may want to pursue a career in development?

You should write a 3-5 page paper (1.5 line spacing) summarizing your interview. This paper is due by noon on 05/01. Please put one hard copy in the instructor's New East mail box located below his name.

Field Trips (about 16 hours for preparation, execution and reporting)

You are expected to take two field trips to better understand live-work-play environments (vibrant centers) in this region. For the first one, visit either downtown Raleigh, Cameron Village or North Hills before spring break. The second one to downtown Durham should be completed before April 14. You may visit these places once or visit on several occasions. You will be a member of a team but can visit alone or with any class member(s).

To prepare for the first field trip, you should visit the Downtown Raleigh Alliance (DRA) website or the websites for North Hills or Cameron Village. Get a sense of the physical lay out and the points of interest. For teams who want to visit downtown Raleigh, note that the DRA definition of downtown is much larger than the area on which you should focus: Fayetteville Street between the Capitol Building and Memorial Auditorium and two blocks on either side of Fayetteville Street.

During the first trip, you are expected to 1) walk the area, 2) tour projects under construction, 3) look at properties and public spaces that appear prominent, and 4) talk with pedestrians on the street. Your objectives are to find out why people are in the area (for work, to shop, for exercise, etc.) and what they like and dislike about the area. You should also get a sense of the features of the built environment that add to or detract from your experience.

Basic questions are: What makes this place vibrant/active/interesting? What is missing that could improve its vibrancy? More specific questions include: How would you describe the people on the streets? Why are they here (ask them)? Is your walking experience interesting and enjoyable? Do you feel safe?

There will be a special session on March 24 to discuss the findings from the Raleigh trips (location TBA). Session A) should be devoted to individual team meetings where you share your experience with other members of your team. During Session B), students will meet in one group to generate questions to be answered or topics to be addressed during the second field trip to Durham. One member of each team will be responsible for writing up notes to inform his or her team's second field trip. These notes should be prepared as a WORD document and sent to the instructor as an email attachment by noon on 03/27.

The second field trip to downtown Durham should be informed by reading the Downtown Durham Inc. website. Like the DRA, DDI defines downtown in terms of five districts. You should focus on City Center, American Tobacco and Central Park and ignore the other two. You should consider assigning team members to one of the three areas and/or to have team members focus on several but not all of the topics/questions to be addressed.

Each team will be asked to make a 15-minute presentation on its Durham field trip during class on 04/21. You should prepare a powerpoint and send it to the instructor after class.