"The Blue Bible of Real Estate"

Peter Linneman, PhD
Bruce Kirsch, REFAI®

Edition 5.3

The textbook used not only by more than 125 colleges and universities...

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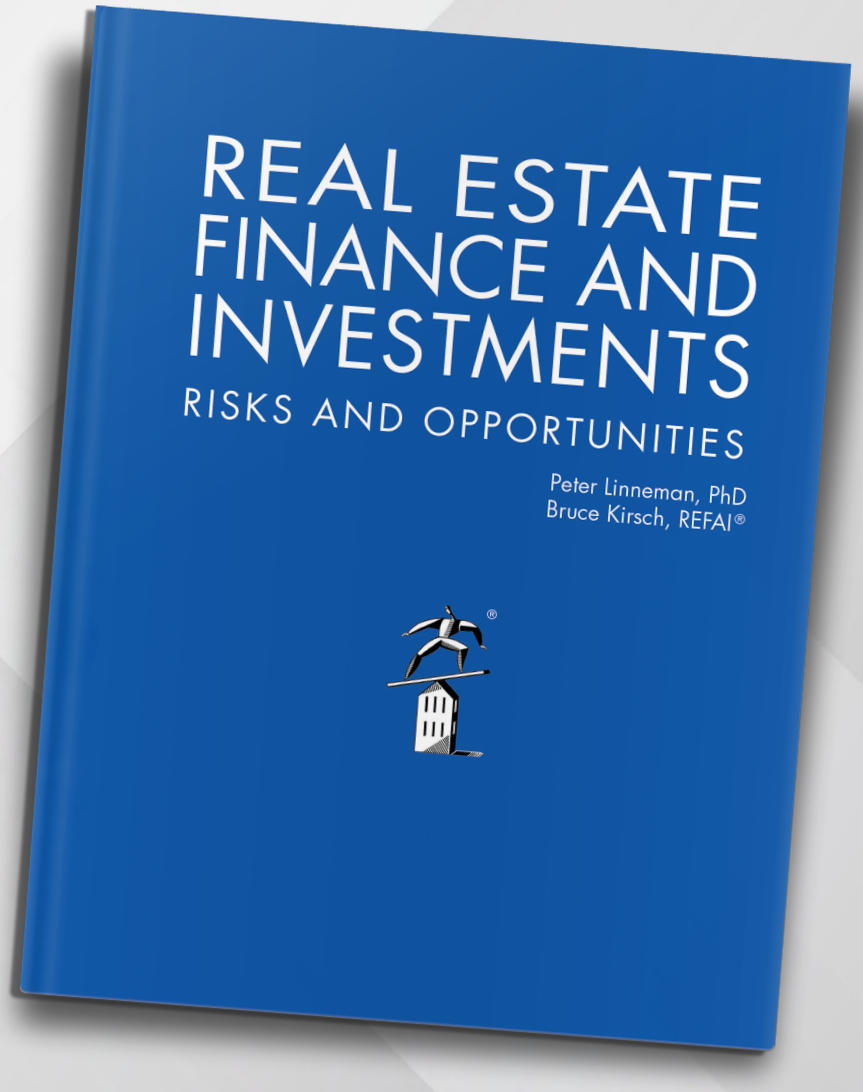
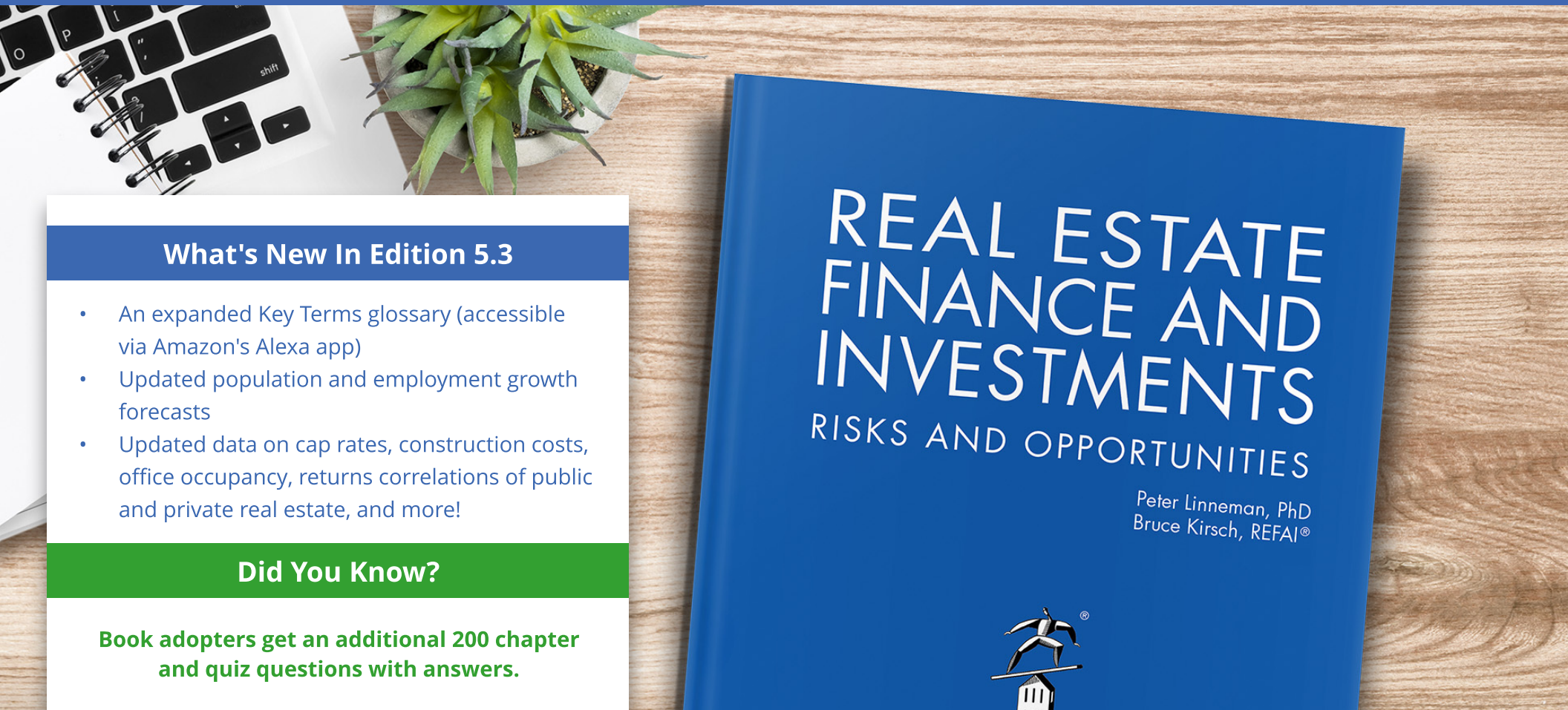


Faculty Inquiries: Douglas Linneman | dlinneman@linnemanassociates.com | 215-825-9257

REAL ESTATE FINANCE AND INVESTMENTS: RISKS AND OPPORTUNITIES

CONTACT SALES

In circulation for more than 20 years, and originally authored by Dr. Peter Linneman, the book earned the nickname "the Blue Bible of real estate" from many industry professionals. The book is based on Dr. Linneman's Wharton classes, and it reflects his frustration with texts that concentrate excessively on theoretical detail and literature, while ignoring important aspects of financial analysis and the challenging ambiguity of decision making. The book balances the "real world" aspects of real estate finance without compromising key theoretical underpinnings. It is an exploration of the key concepts of real estate finance and investment strategy, not a mere formulaic analysis of numbers designed to give students "the answer" to any and all real estate investment decisions.



What's New In Edition 5.3

- An expanded Key Terms glossary (accessible via Amazon's Alexa app)
- Updated population and employment growth forecasts
- Updated data on cap rates, construction costs, office occupancy, returns correlations of public and private real estate, and more!

Did You Know?

Book adopters get an additional 200 chapter and quiz questions with answers.

FAST FACTS ABOUT THE BOOK

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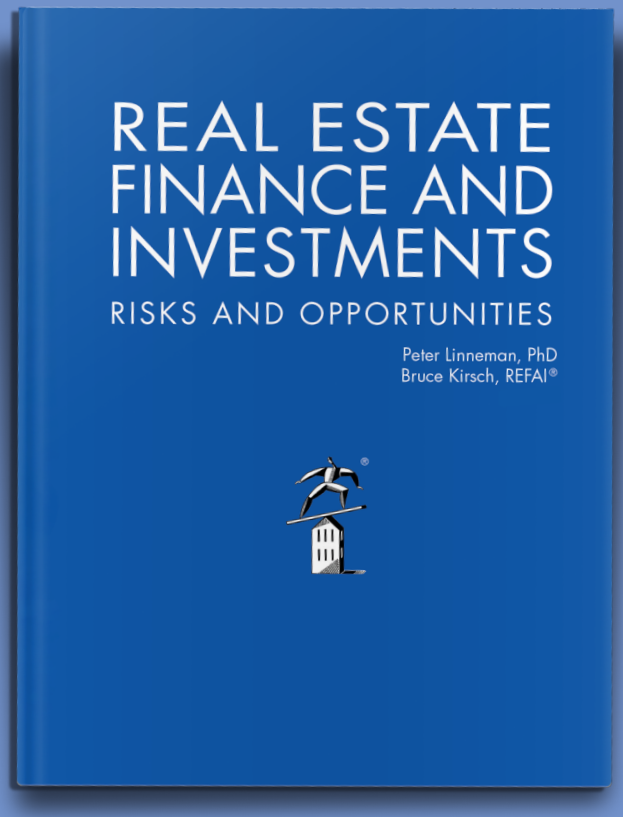

Current Edition: 5.3

Authors: Peter Linneman, PhD and Bruce Kirsch, REFAI®

Length: 467 pages

Chapters: 26

Additional Sections: 9

First Published: 2003

University Adoptions: 125+

Unique Features:

- Chapter 1 available as an audiobook
- Hands-on Excel modeling exercises integrated throughout
- Chapters on Due Diligence and Corporate Real Estate
- ARGUS platform overview
- Available REFAI® Certification program.

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"I have been using Peter's and Bruce's book for several years and they do an excellent job of combining the theory and practice of real estate finance and investments."

Will McIntosh, Ph.D.

UTSA
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SUPPORTING MATERIALS FOR FACULTY

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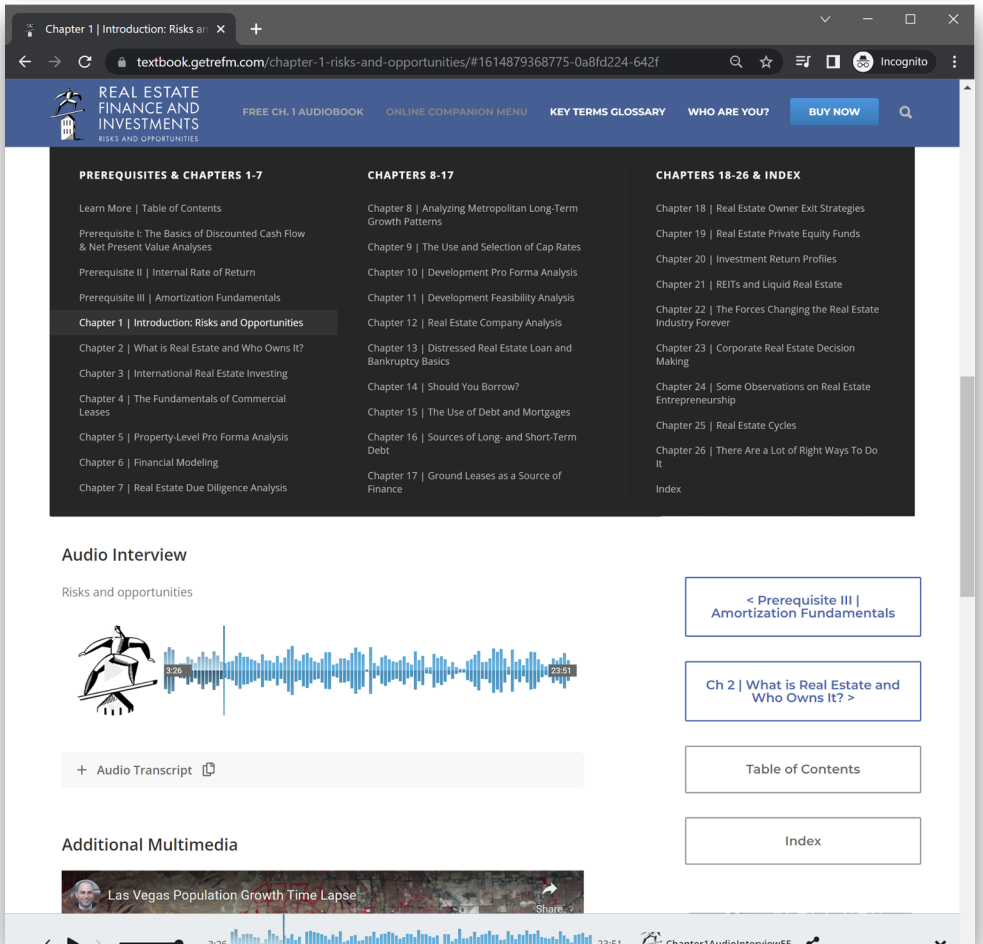
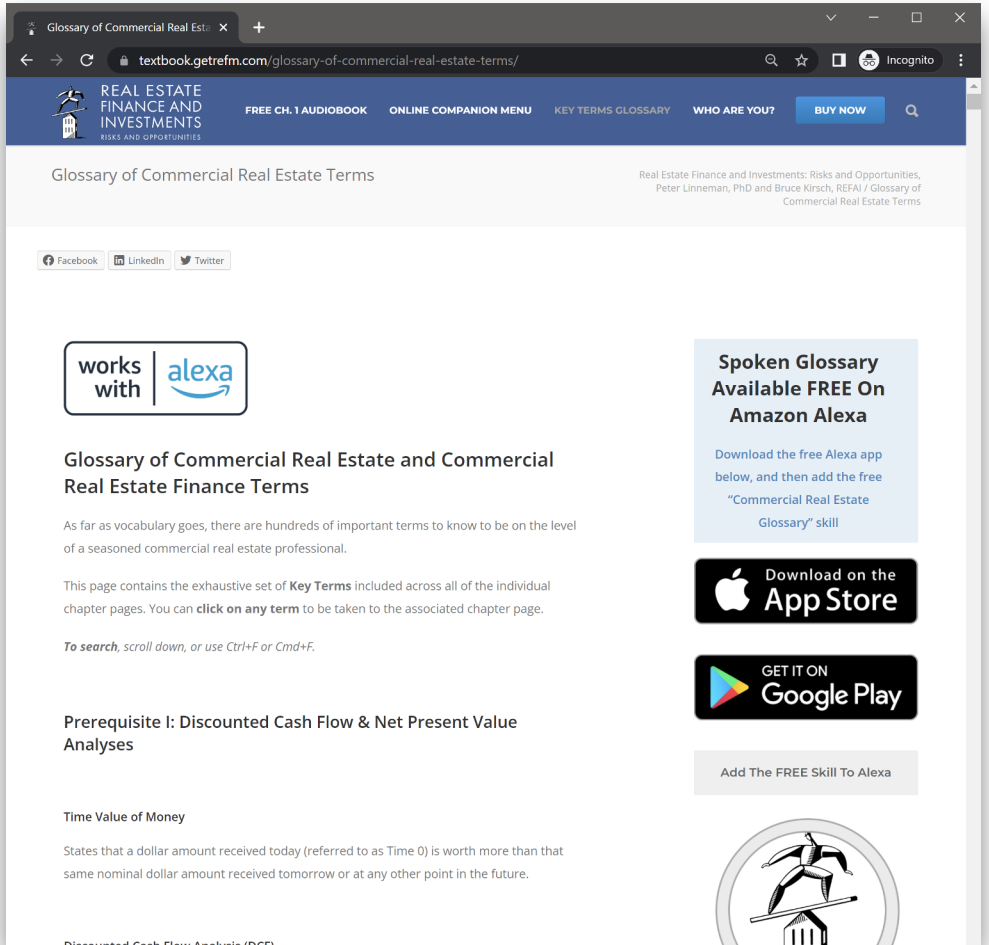
"The online support materials, Excel sheets and exam questions are great. The course has become more rigorous but the students are better positioned to succeed."

Mathew Avrhami, Faculty Associate

W.P. Carey School of Business
Arizona State University

ONLINE COMPANION WEBSITE





CHAPTER SUMMARIES, QUESTIONS AND ANSWERS

Real Estate Finance and Investments: Risks and Opportunities
Peter Linneman, PhD and Bruce Kirsch, REFAI®

QUESTIONS

1. Alexis Development Corp. was recently given the opportunity to bid on an attractive development site in the financial district in downtown Philadelphia. The executives at Alexis believe there is growing demand for high–end office towers due to the growing demand by pharmaceutical companies in the area. The investors at Alexis expect to achieve an 11% return on development projects and do not wish to begin developments if such return cannot be achieved. Doug is the Head of Development at the firm who was given the task of assessing the feasibility of the Alexis Office Tower project.

   Below are the cost and income data Doug has collected for the project:

Expected Development Cost and Operating Assumptions for Alexis Office Tower	
Land Cost	$37 per GSF (building gross square foot)
Hard Costs	$73 per GSF
Soft Costs	$35 per GSF
Total Development Cost	$145 per GSF
Rent	$38 per Leasable Square Foot
Operating Costs	$12 per GSF
Stabilized Occupancy	94% of Leasable Square Footage
Loss Factor	30% of GSF

   a. Calculate the expected return on cost (build to return/yield on cost/going in cap rate) for the Alexis Office Tower development project.

   b. Does the expected return meet the investors' threshold of 11% return on cost?

   c. What is the minimum replacement rent per gross SF and per leasable SF that Doug must expect for the development to meet the investors' expected return?

   d. Given that FAR for this site is 5, how much should Doug be willing to pay **per acre** of land and still meet the return threshold set by the investors of Alexis Development Corp.?

   e. How can Doug increase the expected return on the site? Give 3 ideas.

A. Expected Return on Cost = Expected Stabilized NOI / Expected Total Cost per SF

*I. Total Cost per SF = **$145***

*II. Effective Rent per Leasable SF = Market Rent per Leasable SF * (1 –Stabilized Vacancy %)*

*= $38 * (1 – 0.06) = $38 * 0.94 = **$35.72***

AVERAGE =C16*D16

	A	B	C	D	E
1					
2		Expected Development Cost and Operating Assumptions for Alexis Office Tower			
3					
4		Land Cost	$37 per GSF (building gross square foot)		
5		Hard Costs	$73 per GSF		
6		Soft Costs	$35 per GSF		
7		Total Development Cost	$145 per GSF		
8					
9		Rent	$38 per Leasable Square Foot		
10		Operating Costs	$12 per GSF		
11		Stabilized Occupancy	94% of Leasable Square Footage		
12		Loss Factor	30% of GSF		
13					
14		**A. Expected Return on Cost**			
15		Effective Rent Per Leasable SF	= Market Rent Per Leasable SF	* (1 - Stabilized Vacancy)	
16			$38.00	94%	
17		=C16*D16			
18					
19					
20		Effective Rent per Gross SF	= Effective Rent Per Leasable SF	* (1 - Loss Factor)	
21			$35.72	70%	
22		$25.00			
23					
24		Expected Stabilized NOI per Gross SF	= Rental Revenues per Gross SF	- Operating Costs per Gross SF	
25			$25.00	$12.00	
26		$13.00 (note: rounded to penny)			
27					
28		Expected Return on Cost	= Expected Stabilized NOI	/ Expected Total Costs	
29			$13.00	$145.00	
30		8.97%			
31					
32					
33		**C. Replacement Rent**			
34		Replacement Rent per Gross SF	= (Build to Return	* Expected Total Cost)	+ Expected Operating Costs
35			11%	$145.00	$12.00
36		$27.95			
37					
38		Replacement Rent per Leasable SF	= Replacement Rent per Gross SF	* (1 / (1 - Loss Factor)	* (1 / (1 - Stabilized Vacancy))
39			$27.95	1.43	1.06
40					
41		$42.48			
42					
43					
44		**D. Maximum Land Cost**			
45					
46		Expected Return on Total Cost	= Stabilized NOI per Gross SF	/ Total Cost per SF	
47		11.00%	$13.00	$108.00	
48					
49			$118.18		
50		$10.18 (note: rounded to penny)			
51					
52		5.00 FAR			
53		43,560 SF/acre			
54		$2,217,204.00			
55					

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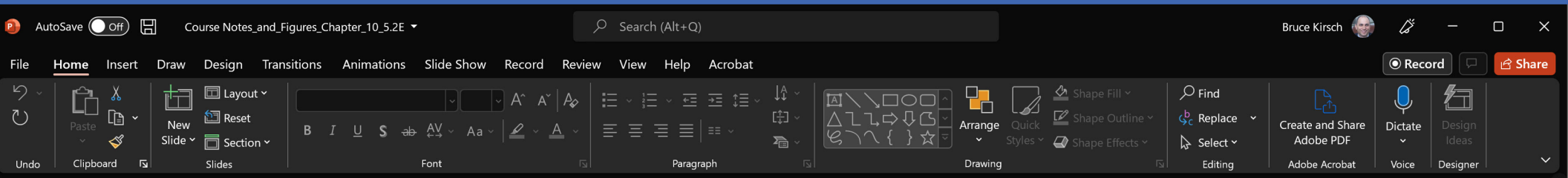
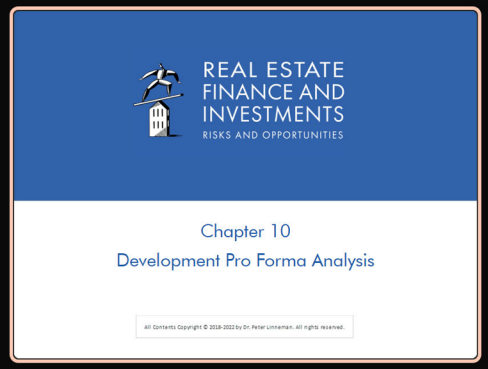
LECTURE SLIDES IN POWERPOINT





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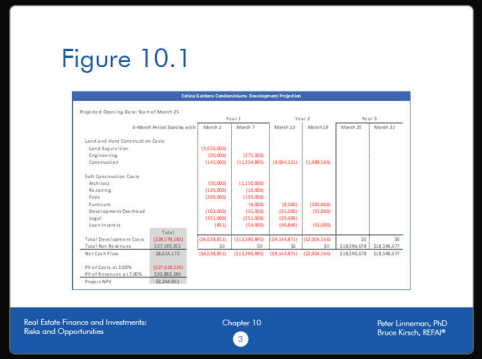

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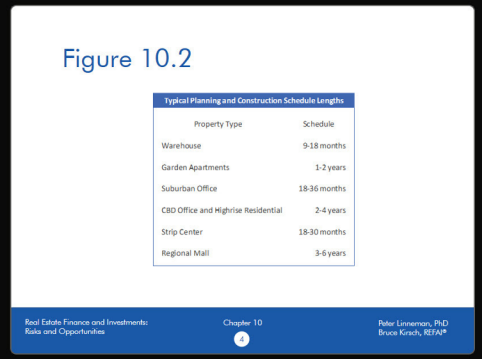

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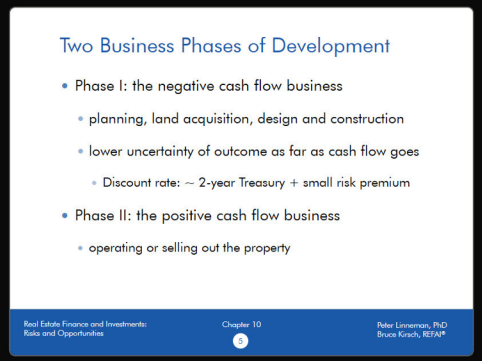

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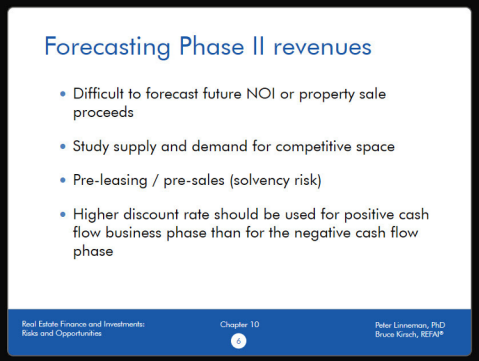

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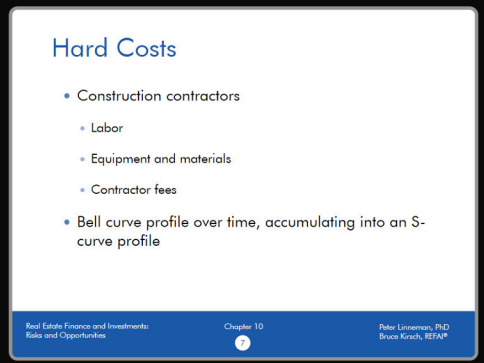

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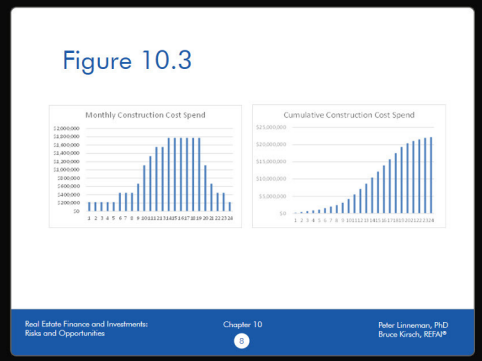

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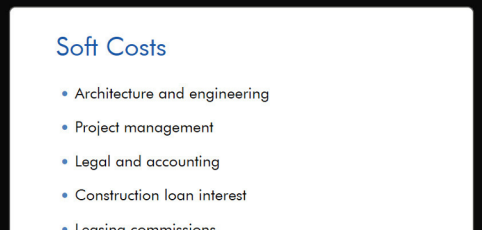

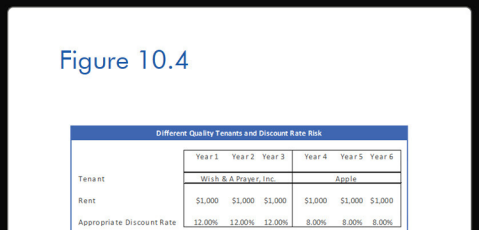

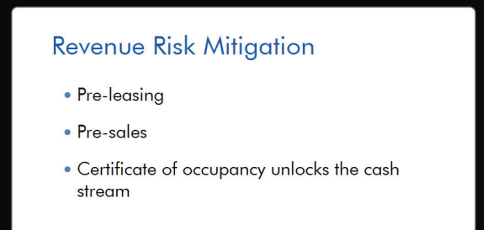

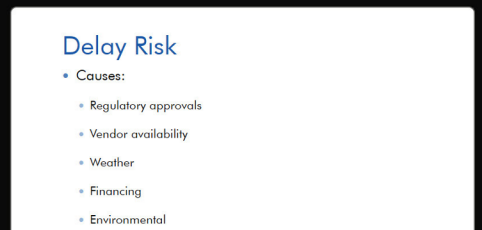

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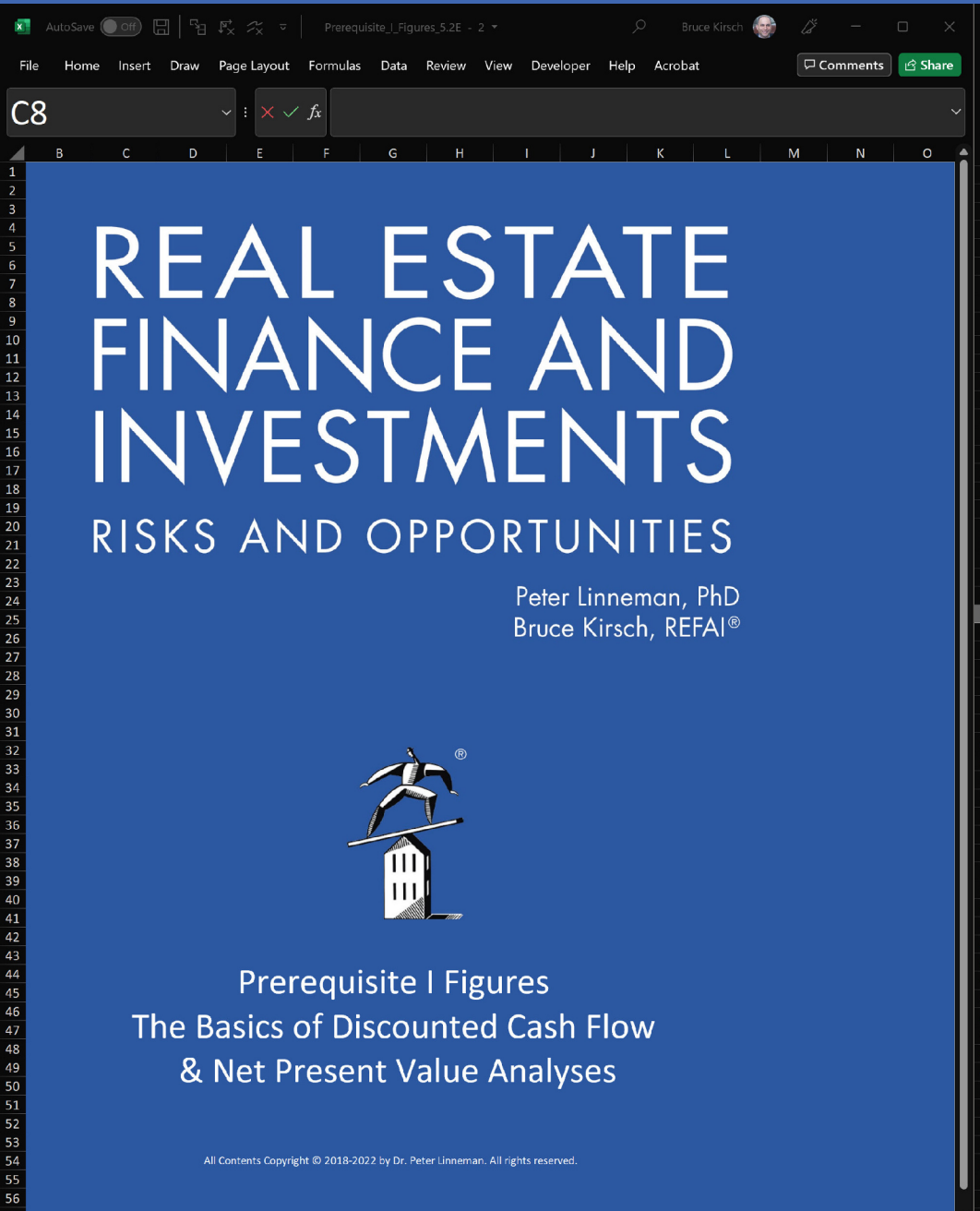
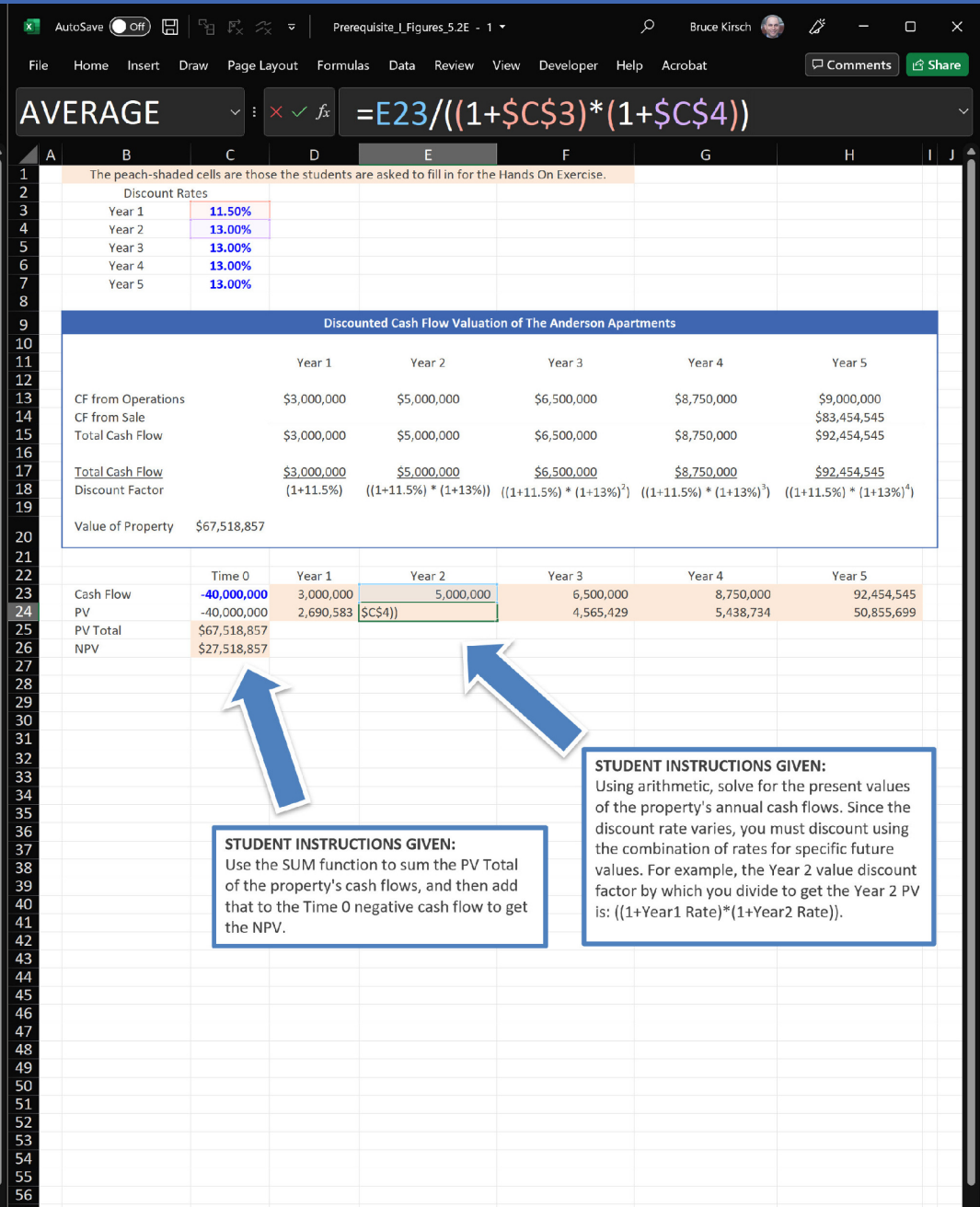
BOOK FIGURES IN UNLOCKED EDITABLE EXCEL FILES





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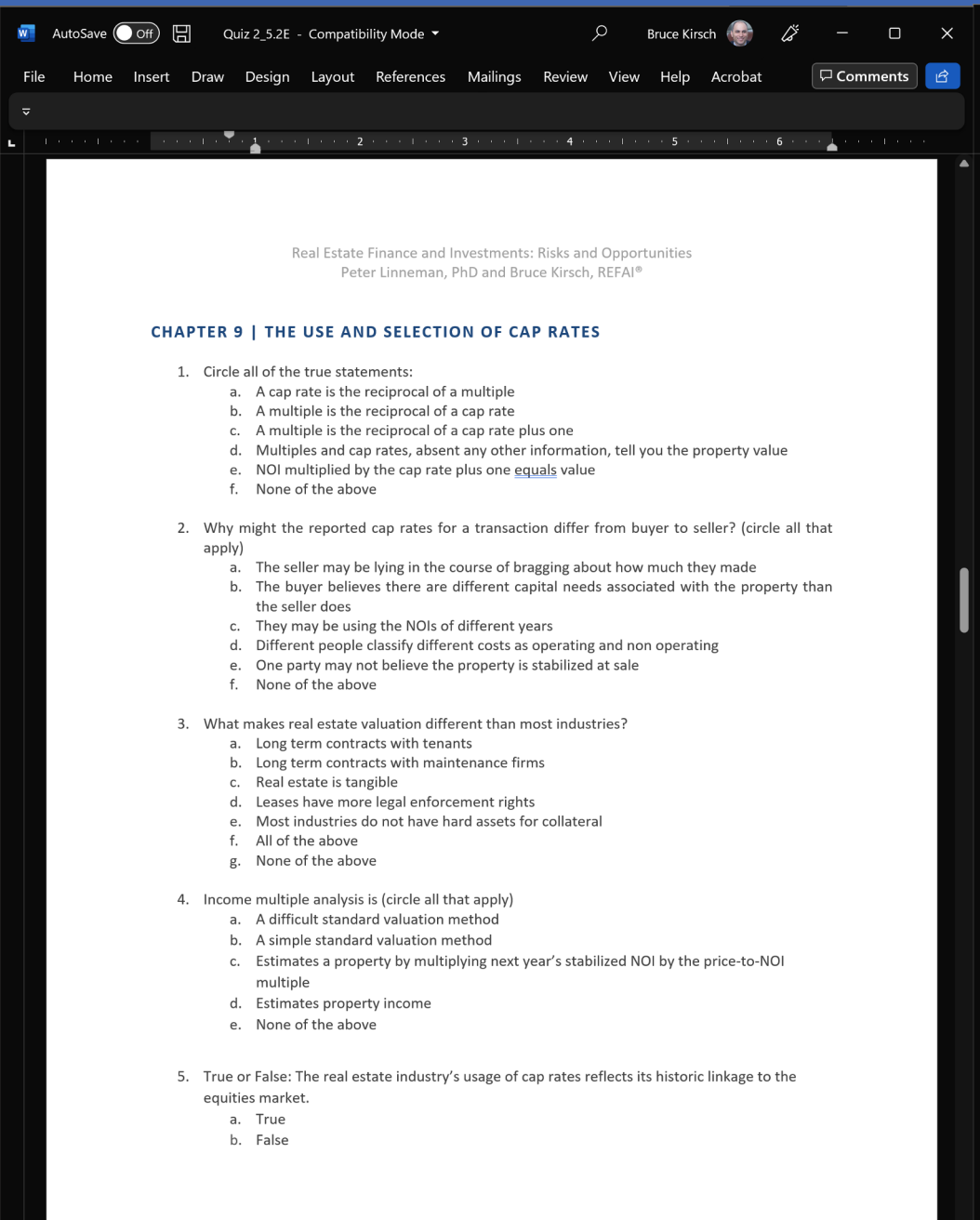
QUIZZES AND EXAMS



Real Estate Finance and Investments: Risks and Opportunities
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CHAPTER 9 | THE USE AND SELECTION OF CAP RATES

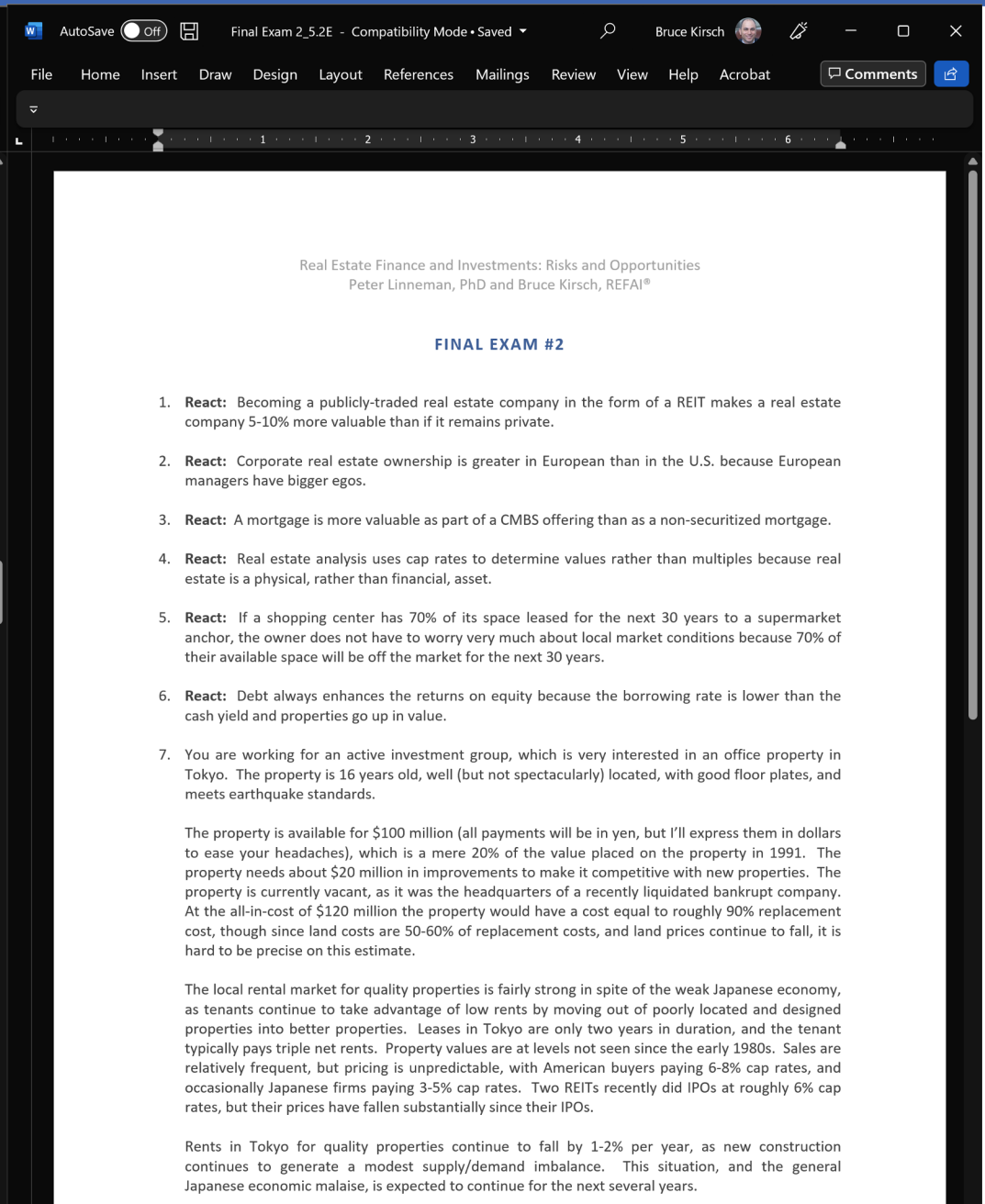
1. Circle all of the true statements:
   a. A cap rate is the reciprocal of a multiple
   b. A multiple is the reciprocal of a cap rate
   c. A multiple is the reciprocal of a cap rate plus one
   d. Multiples and cap rates, absent any other information, tell you the property value
   e. NOI multiplied by the cap rate plus one equals value
   f. None of the above

2. Why might the reported cap rates for a transaction differ from buyer to seller? (circle all that apply)
   a. The seller may be lying in the course of bragging about how much they made
   b. The buyer believes there are different capital needs associated with the property than the seller does
   c. They may be using the NOIs of different years
   d. Different people classify different costs as operating and non operating
   e. One party may not believe the property is stabilized at sale
   f. None of the above

3. What makes real estate valuation different than most industries?
   a. Long term contracts with tenants
   b. Long term contracts with maintenance firms
   c. Real estate is tangible
   d. Leases have more legal enforcement rights
   e. Most industries do not have hard assets for collateral
   f. All of the above
   g. None of the above

4. Income multiple analysis is (circle all that apply)
   a. A difficult standard valuation method
   b. A simple standard valuation method
   c. Estimates a property by multiplying next year's stabilized NOI by the price-to-NOI multiple
   d. Estimates property income
   e. None of the above

5. True or False: The real estate industry's usage of cap rates reflects its historic linkage to the equities market.
   a. True
   b. False



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FINAL EXAM #2

1. **React:** Becoming a publicly-traded real estate company in the form of a REIT makes a real estate company 5-10% more valuable than if it remains private.

2. **React:** Corporate real estate ownership is greater in European than in the U.S. because European managers have bigger egos.

3. **React:** A mortgage is more valuable as part of a CMBS offering than as a non-securitized mortgage.

4. **React:** Real estate analysis uses cap rates to determine values rather than multiples because real estate is a physical, rather than financial, asset.

5. **React:** If a shopping center has 70% of its space leased for the next 30 years to a supermarket anchor, the owner does not have to worry very much about local market conditions because 70% of their available space will be off the market for the next 30 years.

6. **React:** Debt always enhances the returns on equity because the borrowing rate is lower than the cash yield and properties go up in value.

7. You are working for an active investment group, which is very interested in an office property in Tokyo. The property is 16 years old, well (but not spectacularly) located, with good floor plates, and meets earthquake standards.

   The property is available for $100 million (all payments will be in yen, but I'll express them in dollars to ease your headaches), which is a mere 20% of the value placed on the property in 1991. The property needs about $20 million in improvements to make it competitive with new properties. The property is currently vacant, as it was the headquarters of a recently liquidated bankrupt company. At the all-in-cost of $120 million the property would have a cost equal to roughly 90% replacement cost, though since land costs are 50-60% of replacement costs, and land prices continue to fall, it is hard to be precise on this estimate.

   The local rental market for quality properties is fairly strong in spite of the weak Japanese economy, as tenants continue to take advantage of low rents by moving out of poorly located and designed properties into better properties. Leases in Tokyo are only two years in duration, and the tenant typically pays triple net rents. Property values are at levels not seen since the early 1980s. Sales are relatively frequent, but pricing is unpredictable, with American buyers paying 6-8% cap rates, and occasionally Japanese firms paying 3-5% cap rates. Two REITs recently did IPOs at roughly 6% cap rates, but their prices have fallen substantially since their IPOs.

   Rents in Tokyo for quality properties continue to fall by 1-2% per year, as new construction continues to generate a modest supply/demand imbalance. This situation, and the general Japanese economic malaise, is expected to continue for the next several years.

SUPPORTING MATERIALS FOR FACULTY

CONTACT SALES

CASE STUDIES WITH TEACHING NOTES AND SOLUTION EXCEL FILES

Case Study Title	Length of Case / Solution (pages) *	Subject Asset Type	Transaction Type	Recommended Format
Build-to-Suit	2 / 8	Single-tenant Outparcel Retail	Pre-Leased Development and Sell	Individual
The Condo Case	5 / 5	Residential Condominiums	Spec Development and Sell Out	Individual
The London Location	1 / 6	Commercial Office	Corporate Real Estate Strategy	Individual
The Upzoning Decision	11 / 7	Residential Condominiums	Spec Development and Sell Out	Individual
Welcome To The Big Leagues	4 / 7	Convertible Note on Mall Property	Equity Option on Loan Collateral	Team
Westwood Plaza	8 / 25	Multi-tenant Strip Retail	Repositioning of Owned Asset	Team
The Mexican Maquiladora Case	5 / 5	Industrial	Pre-Leased/Spec Development and Hold	Individual

* All Solutions include narrative discussion in a Word document that contains graphics suitable for use in lectures, as well as a fully-dynamic Excel model.

SOLUTION: WESTWOOD PLAZA

pose

case is "modeling intensive" and designed to provide students some experience with Excel. In the el framework file that is provided for the students, there are more than 100 inputs to be made on the umptions tab and more than 200 lines of formulas to consider and construct across the Projection, ncing Options, and Amortization tabs. As such, it is a good introduction to the complexity of modeling e-by-lease for a multi-tenant commercial property, and it serves as a backdrop to the use of Argus erprise by institutional-level real estate stakeholders.

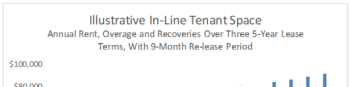
ould be stressed to students that the assumed input values they make in the template need to have fying hard data and/or rationale behind them. In other words, no input in their model should be a guess. In the working world, carrying an unsubstantiated assumption value in a model that is going vestment or credit committee is a serious offense, possibly even grounds for dismissal.

is a good case after students have read the Prerequisite I: The Basics of Discounted Cash Flow & Net ent Value Analyses, Prerequisite III: Amortization Fundamentals, and the chapters on The damentals of Commercial Leases, Property-Level Pro Forma Analysis, Financial Modeling, and on The of Debt and Mortgages. It is an eye-opener to the many moving parts in multi-tenant commercial perties, in that it attacks the common misconception that real estate investment analysis is merely ied math. Moreover, variations of this case scenario are occurring throughout the United States with expansion of Walmart.

ith all pro formas, the two main modeling challenges are:

1. Getting the operating cash flows to reflect the business realities of the property, and
2. Simulating the debt financing cash flows accurately to get to levered cash flow.

modeling aspect of this case can cause students to be hopelessly engrossed in modeling detail, while ely ignoring the conceptual analysis of what's going on with the property. Also, if students do not erstand the interactions between the numbers (e.g., increase in vacancy will decrease base rental me, overage income, alter leasing commissions, and TIs, etc.) they will construct a poor model. Below illustration of an in-line tenant space cash flow stream over three 5-year lease terms separated by 9 ths of re-leasing. Similar cash flow valleys from the re-tenanting events for both anchors and in-line nts should be present in the students' models.



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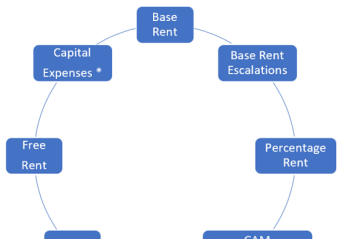
Numbers

A comment on the numbers is in order. This case is intentionally silent on some elements, so that students are not spoon fed the assumptions and merely left with the mindless task of creating a spreadsheet. Students are expected, either through research or common sense, to make reasonable assumptions about items such as TI costs, leasing commissions, and re-lease timing, among many other variables. This will lead to slightly different numbers for each student. As an example, if students pick 6 months versus 9 months (which are both reasonable) for leasing vacant space, it will impact their calculation outputs.

The massive amounts of free market data available online from the major brokerages can expose students to some sample levels for TI costs in the central Florida market (although it might take some digging, or not be possible, to find the most recent data). But individual historical data points, or reported averages, are just that. Our own research turned up some lease transaction data that shows no TIs at all, some where TIs are higher than the year 1 base rent PSF, and some where TIs that are lower than the year 1 base rent PSF. So what should the students have chosen for TIs in constructing their model? There is no right answer, but it is instructive for the students to have been required to back up their selections with data/rationale. In reality, as the owner, we would have the leases, which would have the previous TI amounts documented, and those would serve as a guide. Nonetheless, on the margin, students would be wise to conservatively carry some dollar amounts for TIs, instead of nothing at all, even if their research turns up all data with $0 for TIs.

It is beneficial to reinforce that every lease is a "snowflake" i.e., totally unique. In some instances, retail landlords would prefer to give free rent to tenants instead of TI allowance. In other cases, it's the reverse. In some deals, neither TI allowance nor free rent are given to the tenant. Students must keep in mind that landlords are always balancing the economic elements below when negotiating the terms in a lease, and there is no "right decision database" against which they can verify their offered terms.



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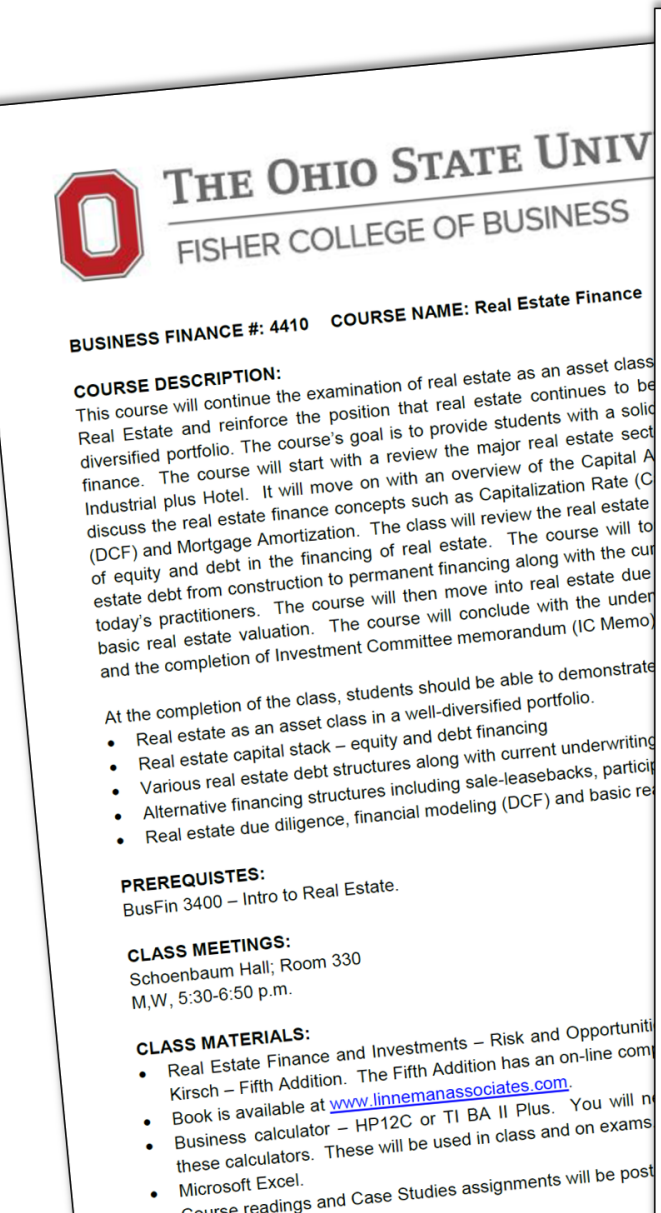
SUPPORTING MATERIALS FOR FACULTY

CONTACT SALES

SAMPLE SYLLABI FROM ADOPTERS



THE OHIO STATE UNIV

FISHER COLLEGE OF BUSINESS

BUSINESS FINANCE #: 4410 COURSE NAME: Real Estate Finance

COURSE DESCRIPTION:
This course will continue the examination of real estate as an asset class
Real Estate and reinforce the position that real estate continues to be
diversified portfolio. The course's goal is to provide students with a solid
finance. The course will start with a review the major real estate sect
Industrial plus Hotel. It will move on with an overview of the Capital A
discuss the real estate finance concepts such as Capitalization Rate (C
(DCF) and Mortgage Amortization. The class will review the real estate
of equity and debt in the financing of real estate. The course will to
estate debt from construction to permanent financing along with the cur
today's practitioners. The course will then move into real estate due
basic real estate valuation. The course will conclude with the under
and the completion of Investment Committee memorandum (IC Memo)

At the completion of the class, students should be able to demonstrate

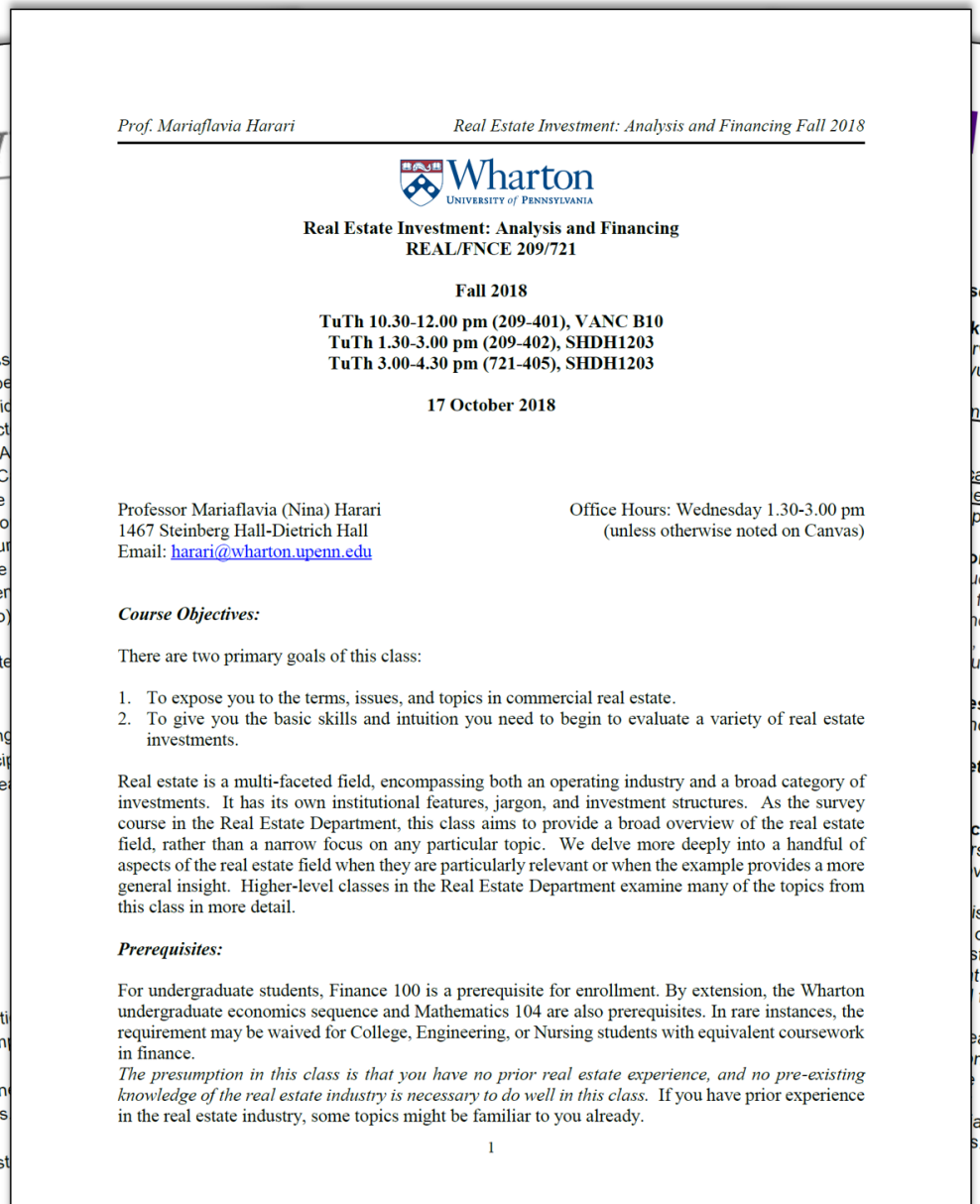
- Real estate as an asset class in a well-diversified portfolio.
- Real estate capital stack – equity and debt financing
- Various real estate debt structures along with current underwriting
- Alternative financing structures including sale-leasebacks, particip
- Real estate due diligence, financial modeling (DCF) and basic re

PREREQUISTES:
BusFin 3400 – Intro to Real Estate.

CLASS MEETINGS:
Schoenbaum Hall; Room 330
M,W, 5:30-6:50 p.m.

CLASS MATERIALS:

- Real Estate Finance and Investments – Risk and Opportuniti
  Kirsch – Fifth Addition. The Fifth Addition has an on-line com
- Book is available at www.linnemanassociates.com.
- Business calculator – HP12C or TI BA II Plus. You will n
  these calculators. These will be used in class and on exams
- Microsoft Excel.
- Course readings and Case Studies assignments will be post



Prof. Mariaflavia Harari *Real Estate Investment: Analysis and Financing Fall 2018*

Wharton
University of Pennsylvania

Real Estate Investment: Analysis and Financing
REAL/FNCE 209/721

Fall 2018

TuTh 10.30-12.00 pm (209-401), VANC B10
TuTh 1.30-3.00 pm (209-402), SHDH1203
TuTh 3.00-4.30 pm (721-405), SHDH1203

17 October 2018

Professor Mariaflavia (Nina) Harari
1467 Steinberg Hall-Dietrich Hall
Email: harari@wharton.upenn.edu

Office Hours: Wednesday 1.30-3.00 pm
(unless otherwise noted on Canvas)

Course Objectives:

There are two primary goals of this class:

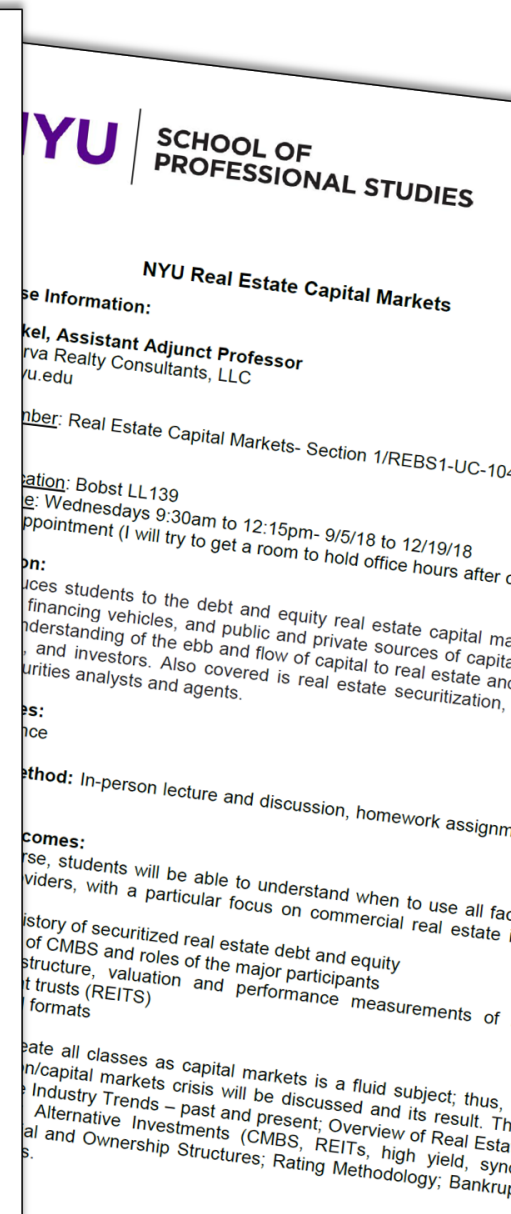
1. To expose you to the terms, issues, and topics in commercial real estate.
2. To give you the basic skills and intuition you need to begin to evaluate a variety of real estate investments.

Real estate is a multi-faceted field, encompassing both an operating industry and a broad category of investments. It has its own institutional features, jargon, and investment structures. As the survey course in the Real Estate Department, this class aims to provide a broad overview of the real estate field, rather than a narrow focus on any particular topic. We delve more deeply into a handful of aspects of the real estate field when they are particularly relevant or when the example provides a more general insight. Higher-level classes in the Real Estate Department examine many of the topics from this class in more detail.

Prerequisites:

For undergraduate students, Finance 100 is a prerequisite for enrollment. By extension, the Wharton undergraduate economics sequence and Mathematics 104 are also prerequisites. In rare instances, the requirement may be waived for College, Engineering, or Nursing students with equivalent coursework in finance.
The presumption in this class is that you have no prior real estate experience, and no pre-existing knowledge of the real estate industry is necessary to do well in this class. If you have prior experience in the real estate industry, some topics might be familiar to you already.

1



NYU | SCHOOL OF PROFESSIONAL STUDIES

NYU Real Estate Capital Markets

se Information:

kel, Assistant Adjunct Professor
rva Realty Consultants, LLC
yu.edu

nber: Real Estate Capital Markets- Section 1/REBS1-UC-104

cation: Bobst LL139
e: Wednesdays 9:30am to 12:15pm- 9/5/18 to 12/19/18
ppointment (I will try to get a room to hold office hours after c

on:
uces students to the debt and equity real estate capital ma
financing vehicles, and public and private sources of capita
nderstanding of the ebb and flow of capital to real estate and
, and investors. Also covered is real estate securitization,
urities analysts and agents.

es:
nce

ethod: In-person lecture and discussion, homework assignm

comes:
rse, students will be able to understand when to use all fac
viders, with a particular focus on commercial real estate
istory of securitized real estate debt and equity
of CMBS and roles of the major participants
structure, valuation and performance measurements of
t trusts (REITS)
formats

eate all classes as capital markets is a fluid subject; thus,
n/capital markets crisis will be discussed and its result. Th
Industry Trends – past and present; Overview of Real Esta
Alternative Investments (CMBS, REITs, high yield, syn
al and Ownership Structures; Rating Methodology; Bankrup
s.

OPTIONAL ADD-ON

REFAI® CERTIFICATION PROGRAM

Give your students the chance at an industry recognized credential!

REAL ESTATE FINANCE AND INVESTMENTS CERTIFICATION

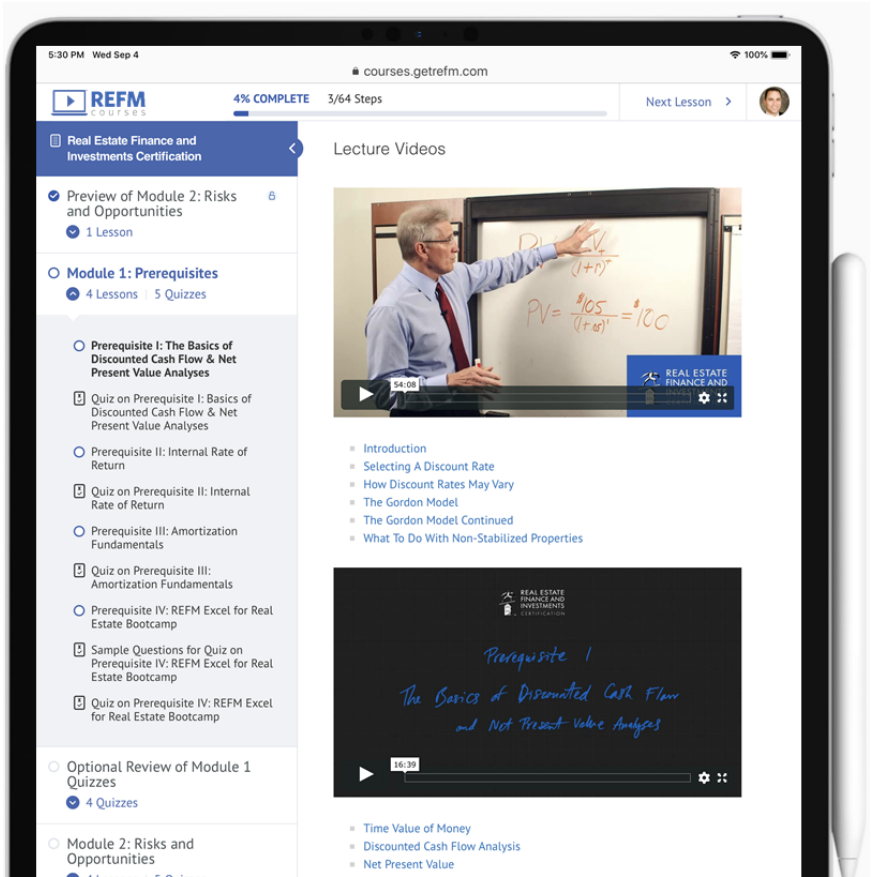
A rigorous self study online program tied to the Linneman/Kirsch textbook, focused on practical, high impact outcomes.

Participants Include

AUBURN

FLORIDA STATE UNIVERSITY
COLLEGE OF BUSINESS

CLEMSON UNIVERSITY



Students can do the program:

- parallel with coursework, or
- independently.

Additional program cost includes:

- lifetime platform access
- the Linneman/Kirsch textbook in hard copy
- 30 hours of video
- 12 hours of audio
- 300+ PDF slides
- and more!

Inquiries:

Bruce Kirsch, REFAI®
bkirsch@getrefm.com
703-577-4110

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 1 | INTRODUCTION: RISKS AND OPPORTUNITIES

"Saying 'no' is as important as saying 'yes,' only tougher."

- Risks and Opportunities: That's What It's All About
- The Risks
- Operating Expenses
- Vacancy
- Natural Disaster
- Leasing
- Liquidity
- The Opportunities
- Operating Expenses
- Terminal Value
- Rental Growth
- Where You Should Focus Your Analysis
- Market Research
- Personal Decision
- Risk Parameterization

CHAPTER 2 | WHAT IS REAL ESTATE AND WHO OWNS IT?

"Overnight success almost always took 10-25 years."

- Real Estate is About Space
- Land
- Retail Properties
- Warehouse and Industrial Properties
- Office Properties
- Multifamily
- Hotels
- Self-Storage
- Real Estate is Many Different Industries
- Gross Versus Net Leasable Square Footage
- Occupancy and Vacancy
- Stacking Plan
- Who Owns U.S. Commercial Real Estate?

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 3 | INTERNATIONAL REAL ESTATE INVESTING

"You don't have to go far from home to lose a lot of money."

- Great Potential is Only That
- The Capital Shortage Myth
- The Land of the Rising Sun
- A Risky World
- The Old Soviet Empire
- South of the Border
- The United States of Europe
- India
- China
- Brazil

CHAPTER 4 | THE FUNDAMENTALS OF COMMERCIAL LEASES

"Analyze first; then leap."

- Economic Terms
- Rent
- Marketing Budget
- Utilities, Insurance, and Property Taxes
- HVAC – Heating, Ventilation, and Air Conditioning
- Security and Property Maintenance
- Tenant Improvements
- Free Rent
- Capital Costs
- Net Rent
- Non-Economic Terms
- Signage
- Going Dark
- Hours and Days of Operation
- Length of Lease
- Expansion Rights
- Usage Restrictions
- Sublet Rights
- Location Assignment
- Detailed Description of the Space
- Tenant Mix
- Parking
- Recourse and Security Deposit

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 5 | PROPERTY-LEVEL PRO FORMA ANALYSIS

"Run the numbers carefully but understand why these numbers will not occur."

- Lease-by-lease analysis
- Line Item Analysis
- Operating Income
- Gross Potential Rental Revenue
- Vacancy
- Percentage Rent/Overage
- Expense Reimbursements
- Ancillary Income
- Credit Loss/Bad Debt
- Operating Expenses
- Common Area Maintenance
- Property Taxes
- Insurance
- Utilities
- Property Management
- Net Operating Income
- Capital and Leasing Costs
- Tenant Improvements
- Leasing Commissions
- Capital Expenditures
- Unlevered Cash Flow
- Cap Ex Versus Depreciation
- Purchase Depreciation
- Depreciation of TIs and Cap Ex, Part 1
- Levered Cash Flow
- Loan Points
- Debt Service Expense
- Taxable Income
- Depreciation of TIs and Cap Ex, Part 2
- Amortization of Loan Points
- After-Tax Cash Flow to Equity
- Losses
- The Crazy 1980s

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 6 | FINANCIAL MODELING

"Believing a forecasted 26.24% IRR is silly; no one is 200 basis points accurate, much less 24 basis points accurate."

- What is Financial Modeling?
- Things Change for a Reason
- Leslie Court Apartments
- Base Rental Revenue
- Vacancy
- Ancillary Income
- Operating Expenses, Replacement Reserves and Cap Ex
- TIs and Leasing Commissions
- Sale Value
- Gross Sale Price, Sale Income Tax and Net Sales Proceeds

CHAPTER 7 | REAL ESTATE DUE DILIGENCE

“It’s often a foregone conclusion left unchecked that comes back to bite you.”

- What is Due Diligence?
- Wrong but Useful
- Little Mistakes + Big Numbers = Big Problems
- Title, Survey, Environmental, and Legal
- Revenue, Operating Expenses, and Capital Expenditures
- Capital Expenditure Needs
- Loan Documents
- Neighborhood and Market

CHAPTER 8 | ANALYZING METROPOLITAN LONG-TERM GROWTH PATTERNS

"Get a good pair of sunglasses and some sunblock if you want to build for the Boomers."

- A Nation of Constant Positive Population Growth
- Metropolitan County Population Growth
- 2030 Forecast
- Local Population Growth Insights
- Past Growth
- Economic Diversity
- Immigrant Presence
- Biology and Age Distribution
- Weather
- Vintage of Existing Housing Stock
- Coastal Adjacency and Zoning
- Educational Achievement
- Local Income and Sales Tax Rates
- Skilled Labor Force
- Population Density
- Regional Growth Variability
- Methodology

REAL ESTATE FINANCE AND INVESTMENTS

RISKS AND OPPORTUNITIES

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 9 | THE USE AND SELECTION OF CAP RATES

"'What is the bet?' is the critical question."

- Basic Cap Rate Valuation
- Not Everyone Agrees
- Replacement Cost
- Gordon Model: Simple Cap Rate Estimation
- Let Your Common Sense Prevail
- Market Change
- Responding to the Market
- A Look at the Past
- Contractual Information

CHAPTER 10 | DEVELOPMENT PRO FORMA ANALYSIS

"Be prepared to adjust if you want to succeed."

- Development
- The Two Business Phases of Development
- Phase I: The Negative Cash Flow Business
- Phase II: The Positive Cash Flow Business
- Certainty of Cash Flows
- Revenue Risk Mitigation
- Pre-Leasing
- Pre-Sales
- Delay Risk
- Opportunity
- Options and Development
- The Develop Versus Buy Analysis Framework

CHAPTER 11 | DEVELOPMENT FEASIBILITY ANALYSIS

"In the battle between fear and greed, greed wins about 80% of the time."

- Development Feasibility Assessment
- Simple Calculations
- Solve Backwards for Replacement Rent
- A Common Mistake
- Land Cost
- An Example: Anoop Court
- Hard Costs
- Forecasting Hard Costs
- Soft Costs
- Timing
- Design

CHAPTER 12 | REAL ESTATE COMPANY ANALYSIS

"People are the ultimate assets."

- Differences Between Property- and Company-Level Cash Flows
- Company-Level Net Income Projection
- Existing Properties Revenue Growth
- Acquisitions and Developments and Rates of Return
- Dispositions During the Period
- Fees from Noncombined Affiliates
- EBITDA
- Debt Service Expense
- Amortization and Depreciation and Impairments
- Minority Interest
- Value of a Company
- Funds from Operations
- Adjusted Funds from Operations
- DCF Valuation
- Cap Rate Valuation
- Net Asset Value

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 13 | DISTRESSED REAL ESTATE LOAN AND BANKRUPTCY BASICS

"Have both a professional and private life to balance the ups and downs of each."

- Distressed Loan Resolution Options
- Loan Restructuring
- Dissolution Options
- Bankruptcy
- Borrowers' Rights
- Bank of America Versus La Salle Street Partners
- Section 11.11B

CHAPTER 14 | SHOULD YOU BORROW?

"Embrace the 11th Commandment: thou shalt not take yourself so seriously."

- Sources of Debt Capital
- The Four Reasons to Use Debt in a Transaction
- Do Not Have Enough Money
- Diversification
- Interest Tax Shield
- Enhanced Equity Returns
- Capital Appreciation
- Cash Flow Return
- Positive Leverage
- Negative Leverage
- Japan and Positive Leverage
- How Much Should You Borrow?
- Mezzanine Finance

CHAPTER 15 | THE USE OF DEBT AND MORTGAGES

"Stick to what you know but keep learning in order to expand what you know."

- Interest Types and Short-Term Versus Long-Term Debt
- Interest Calculation Bases
- Key Loan Sizing Ratios
- Loan-to-Value and Loan-to-Cost
- Debt Yield
- Interest Coverage Ratio
- Debt Service Coverage Ratio
- Fixed Charges Ratio
- Other Key Loan Terms
- Common Negative Covenants
- Prepayment Penalty
- Distributions
- Operating Restrictions
- Additional Debt
- Common Positive Covenants
- Deposits
- EBIT, Cash Flow, or NOI
- Leases
- Loan Terms
- Secured
- Recourse
- Guarantees
- Receivables
- Draws
- Amortization
- Insurance
- Sweep
- Loan Points
- The Refi Decision
- Repayment Penalties
- Refinancing in a Down Market

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 16 | SOURCES OF LONG- AND SHORT-TERM DEBT

"The machine is rarely the problem; the people operating the machine are usually the problem."

- Capital Evolution
- Follow the Money
- How is a CMBS Issuance Created?
- How Do You Sell?
- Profit from the CMBS Packaging
- It's about Specialization
- Creating Tranches
- Default Dynamics
- The Evolution of the U.S. CMBS Market

CHAPTER 17 | GROUND LEASES AS A SOURCE OF FINANCE

"Judgment is far more important than intellect."

- Valuation of an Operating Asset Subject to a Ground Lease
- Method #1: Ground Lease Payment DCF
- Method #2: Ground Lease Payment Capitalization
- Method #3: Building Net Operating Income DCF
- Method #4: Building NOI Capitalization
- Financing of a Property Subject to a Ground Lease

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 18 | REAL ESTATE OWNER EXIT STRATEGIES

"There are two ways to exit: when you want to, and when you have to."

- Why Exit?
- How to Exit
- Disposition
- Refinancing
- Like-Kind Exchange (1031 Exchange)
- Exchange for Public Company Shares
- Go Public

CHAPTER 19 | REAL ESTATE PRIVATE EQUITY FUNDS

"Find out who you are and stay true to your values."

- Evolution
- A Bit of History
- Who Are They?
- Investment Banks
- Investment Houses
- Dedicated Real Estate Players
- Return Waterfall
- Investor Protections

CHAPTER 20 | INVESTMENT RETURN PROFILES

"You don't need to be 100% right when you buy if you are invested for the long haul."

- Study #1: Investment Vehicle and Limited Partner Performance
- Qualitative Differences
- The Set-Up
- Market Scenario Comparisons
- The Impact of Sponsor Promotes
- Sensitivity Analyses
- Study #1 Conclusion
- Study #2: Property Risk and Opportunity

REAL ESTATE FINANCE AND INVESTMENTS
RISKS AND OPPORTUNITIES

CHAPTER 21 | REITS AND LIQUID REAL ESTATE

"It is easy to raise money if you're not the one doing it."

- History of REITs
- REIT IPO Basics
- REIT Income Tax Advantages and Operating Restrictions
- REIT Versus Publicly Traded Real Estate Company
- Public Versus Private and Large Versus Small
- Taxable REIT Subsidiary
- UPREIT Structure
- Return on Capital Versus Return of Capital

CHAPTER 22 | THE FORCES CHANGING THE REAL ESTATE INDUSTRY FOREVER

"Those who know how and when to adapt have the best chance of thriving."

- Real Estate is a Capital-Intensive Business
- The "Forces" Which Changed Real Estate
- Force #1: Shifting of Control of Capital
- Force #2: Consolidation of Capital
- Force #3: Prevailing of Basic Economics
- The Keys to Successful Long-Term Real Estate Ownership
- Managerial Vision and Ability to Sell It
- Low Capital Costs Relative to Competitors
- Lower Operating Costs Relative to Competitors
- Lower Overhead Costs Than Competitors
- Enhanced Revenues Relative to Competitors
- Successful Risk Management
- Operating Efficiency
- Proof of the "Forces" at Work
- Growth in Company Size, Liquidity, and Prominence
- No Reversion to Excessive Leverage
- Growth in Transparency
- Is Bigger Better?

TEXTBOOK CONTENTS

CONTACT SALES

CHAPTER 23 | CORPORATE REAL ESTATE DECISION MAKING

"Why ever do less than the best you can?"

- What Type of Space Do I Need?
- Where Should I Locate?
- How Much Space Do I Need?
- Should I Own or Rent?
- Faulty Own Versus Rent Model
- What Is The Problem?
- Corrected Own Versus Rent Model
- One Size Does Not Fit All
- Propensity for Corporate Ownership of Real Estate
- Synthetic Leases
- For How Long Should I Lease?
- The Corporation of You

CHAPTER 24 | SOME OBSERVATIONS ON REAL ESTATE ENTREPRENEURSHIP

"When asked if real estate entrepreneurs are born or made, my answer is always Yes."

- Are There Entrepreneurial Traits?
- What Makes Sammy Run?
- Better, Faster, Cheaper
- What Are the Risks?
- Raising Capital

CHAPTER 25 | REAL ESTATE CYCLES

"Don’t lose your cool about things you cannot possibly control."

- What Are Cycles?
- Contractual Obligations and Market Frictions
- Demand Adjustments
- Structural Office Demand Headwinds?
- Permits and Regulations
- Capital Cycle
- What Led to the 2008-2009 Financial Crisis

CHAPTER 26 | THERE ARE A LOT OF RIGHT WAYS TO DO IT

"Do the right thing simply because it is the right thing to do."

- Ethics in Real Estate?
- Right and Wrong
- Bribes
- But Everybody is Doing It!
- Perverse Incentives
- Favoritism
- Do Not Expect Thanks
- Conflict of Interest

MEET THE AUTHOR: **PETER LINNEMAN, PHD**

CONTACT SALES

Peter Linneman, PhD
CEO of
Linneman Associates

For over 40 years, Dr. Peter Linneman's unique blend of scholarly rigor and practical business insight has won him accolades from around the world, including PREA's prestigious Graaskamp Award for Real Estate Research, Wharton's Zell-Lurie Real Estate Center's Lifetime Achievement Award, Realty Stock Magazine's Special Achievement Award, being named "One of the 25 Most Influential People in Real Estate" by Realtor Magazine and inclusion in The New York Observer's "100 Most Powerful People in New York Real Estate".

After receiving both his Masters and Doctorate in Economics under the tutelage of Nobel Prize winners Milton Friedman, Gary Becker, George Stigler, Ted Schultz and Jim Heckman, Peter had a distinguished academic career at both The University of Chicago and the Wharton School of Business at the University of Pennsylvania. For 35 years, he was a leading member of Wharton's faculty, serving as the Albert Sussman Professor of Real Estate, Finance and Public Policy as well as the Founding Chairman of the Real Estate Department and Director of the prestigious Zell-Lurie Real Estate Center. During this time, he was co-editor of The Wharton Real Estate Review. In addition, he published over 100 scholarly articles, four editions of the acclaimed book Real Estate Finance and Investments: Risks and Opportunities, and the widely read Linneman Letter quarterly report.

Peter's long and ongoing business career is highlighted by his roles as Founding Principal of Linneman Associates, a leading real estate advisory firm; CEO of American Land Fund; and CEO of KL Realty. For more than 35 years, he has advised leading corporations and served on over 20 public and private boards, including serving as Chairman of Rockefeller Center Properties, where he led the successful restructuring and sale of Rockefeller Center in the mid-1990s.

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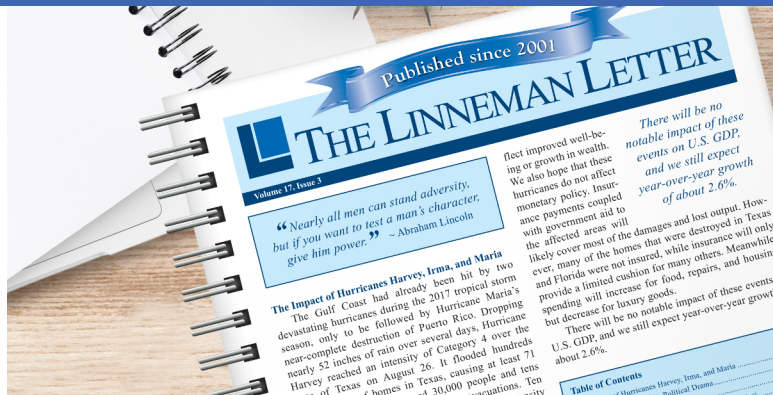

MEET THE AUTHOR: **BRUCE KIRSCH, REFAI®**

CONTACT SALES

Bruce Kirsch, REFAI®

CEO of Real Estate
Financial Modeling

As the founder of Real Estate Financial Modeling (REFM), Bruce Kirsch has trained thousands of students and professionals around the world in Excel-based projection analysis. In addition, REFM's self-study products, Excel-based templates and its Valuate® property valuation and investment analysis software are used by more than 250,000 professionals. Mr. Kirsch's firm has assisted with modeling for the raising of billions of dollars of equity and debt for individual property acquisitions and developments, as well as for major mixed-use projects and private equity funds. Mr. Kirsch has also maintained a blog on real estate financial modeling, Model for Success, authoring more than 500 posts.

Mr. Kirsch began his real estate career at CB Richard Ellis, where he marketed highrise New York City office buildings for re-development in the Midtown Manhattan Investment Properties Institutional Group. After CBRE, Mr. Kirsch was recruited to lead acquisitions at Metropolis Development Company, and later joined The Clarett Group, a programmatic development partner of Prudential.

While at The Clarett Group, Mr. Kirsch was responsible for making development site recommendations for office, condominium and multi-family properties in the greater Washington, D.C. metropolitan area. In addition, Mr. Kirsch had significant day-to-day project management responsibilities for the entitlement, financing and marketing of the company's existing D.C.-area development portfolio.

Mr. Kirsch holds an MBA in Real Estate from The Wharton School of the University of Pennsylvania, where he was awarded the Benjamin Franklin Kahn/Washington Real Estate Investment Trust Award for academic excellence. Prior to Wharton, Mr. Kirsch performed quantitative equity research on the technology sector at The Capital Group Companies. Mr. Kirsch served as an Adjunct Faculty member in real estate finance at Georgetown University School of Continuing Studies. Mr. Kirsch graduated with a BA in Communication from Stanford University.

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REAL ESTATE FINANCE AND INVESTMENTS

RISKS AND OPPORTUNITIES

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