

Real Estate Finance

Efrat Tolkowsky, Ph.D

Lecture hours: Mondays 11:15 to 14:00

Room: 253

Final Exam:

Course Objectives:

THIS COURSE IS FOR PEOPLE WHO ARE INTERESTED TO KNOW SOME MORE. YOU WILL HAVE SOME WORK TO DO IN THE COURSE. IF YOU ARE LOOKING FOR EASY SOLUTION, IT IS NOT THE RIGHT COURSE FOR YOU!!!

In this course we will cover issues in real estate investment analysis, market analysis and external finance in direct and indirect real estate investments. We will emphasize the use of financial, economic and urban economics principles for understanding the behavior of real estate income, prices and risks.

Understanding real estate investments must be based on solid understanding of real estate markets. Real estate is an asset class generating income from the demand and supply for space. The discount rate for the valuation of real estate assets is derived from the financial markets. Understanding of both local urban economics and macro and financial markets are important in making real estate investments.

In the course we will cover issues such as:

- Mortgages:
 - Repayment schedules,
 - Underwriting process,
 - Probability of default and losses given default,
 - Difference between expected return and stated returns.
- Valuation of real estate assets:
 - Expected return: ex-post returns, expected returns models,
 - Proforma
 - Direct Capitalization: capRates and IRR
 - Lease valuation and strategy
- Financing Real Estate Development projects:
 - Financing development: construction loans and permanent loans
 - NPV analysis
 - Required rate of return in development projects
- Equity Investments in Real Estate:
 - Real Estate Investment Trusts (REIT)
 - Private equity funds
- Securitization of mortgages:
 - Commercial and residential mortgage backed securities (CMBS & RMBS).

Course Material:

- Material presented on Course Site.
- Cases and additional materials available for purchase.

Books:

- Commercial Real Estate Analysis and Investments (G&M), by David Geltner and Norman G. Miller, (Chapters numbering will refer to the first edition from 2001).
- Real Estate Financial Investments (B&F), by Brueggeman and Fisher
- Real Estate Finance & Investments: Risks and Opportunities , by Peter Linneman
- The Real Estate Game, by Poorvu and Cruikshank,

Evaluation:

Assignments		
	4 cases + 2 exercises	60%
	Final Exam	40%
Total		100%

All students most pass final exam at grade higher than 55.

Cases will be given A+,A, B+, B & C grades. The numerical value of those grades will be determined ex-post such that the average course grade will be 80 to 85.

How to do well on the assignments and cases

- The assignments and the cases are designed to help you learn and understand the material. Working in small groups is an effective way of learning the material and is encouraged. You may hand-in the assignments and cases in groups of up to 3 people **(PLEASE DO NOT APPROACH ME TO ASK FOR ONE ADDITIONAL PERSON)**.
- The assignments and the cases are due **in the beginning of class. Late assignments / case will not be accepted.**
- Case reports (and assignments, if possible) should be typed with clearly labelled appendices containing any calculations or diagrams. I am not real picky about this. However, in many careers, especially in finance, communication is crucial. If you cannot convince those you work with (or your client) that you have a point, your contribution (as well as promotion, big bonus, trip to Bermuda, etc.) is lost. The more you write (and prepare reports) the easier it becomes and the better the presentation.

How to do well in Final Exam

- Be active in doing the cases.
- Understand the exercises
- Read required readings,
- Come to class

Topics (in bold is the academic paper I expect you to read).

DATE	SUBJECT & REQUIRED READING & GENERAL BACKGROUND
Meeting 1: May 2	Introduction to Real Estate Investments
Meeting 2: May 2	Investment Analysis and Valuation of Commercial Real Estate, Chapter 11 in G&M Course Write-up on web site: "Valuation Analysis" Papers: " Commercial Real Estate Valuation: Fundamentals versus Investor Sentiment" , 2008, by Clayton, Ling and Naranjo "Real Estate Market Fundamentals and Asset Pricing", Sivitandes, Torto and Wheaton 2003.
Meeting 3: May 9	Mortgages, Chapters 16 to 18 in G&M Course Write-up on web site: "Mortgage Mathematics" and " commercial mortgage underwriting example" Papers: "Loss Recoveries, Realized Excess Returns, and Credit Rationing in the Commercial Mortgage Market", by Chiochetti and Shilling, 2004 "Commercial Mortgage Defaults: 1972-2000", by Howard Esaki,
Meeting 4: May 9	Class Discussion: SHADY TRAIL
Meeting 5: May 16	Microeconomics of Property Markets, Chapters 2 & 4 in G&M Course Write-up on web site: "real estate markets" Papers: "100 years of Commercial Real Estate prices in Manhattan", by Wheaton, Baranski and Templeton." "The Working of the London Office Market", by Patrick H. Hendershot, Colin M. Lizieri and George A. Matysiak, 1997
Meeting 6: May 16	Class Discussion: International Boston Place + Submission of Loan Problem Set
Meeting 7: May 23	Microeconomics of Property Markets, Cont.
Meeting 8: May 23	Development Projects , Chapter 29 in G&M Chapters 19 & 16 in B&F Course Write-up on web site: " development projects"
Meeting 9: May 30	Class Discussion: Waltz on the Danube
Meeting 10: May 30	Real Estate Equity: Chapter 24 in G&M Course Write-up on web site: " real estate equity" Papers: " The forces changing the Real Estate Industry Forever", 1997, by Peter Linneman "Why the new Conventional Wisdom About REITS is wrong", 1997, by John H. Vogel Jr.."
Meeting 11: June 6	AMB CONSOLIDATION class discussion & + Submission of second Problem Set
Meeting 12: June 6	<i>Course Wrap-up and discussion of Exam</i>

