

**THE UNIVERSITY OF HONG KONG
FACULTY OF BUSINESS AND ECONOMICS**

School of Economics and Finance

FINA0805/FINA2382 Real Estate Finance

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The University of Hong Kong

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E-mail: ktse@hku.hk

Class hours: 9:30am-12:20pm (Monday)

Venue: RHT

Demonstrator: TBA

Introduction

Real Estate represents a large fraction of the world's wealth. Its efficient utilization and the markets in which it is traded involve many interesting and complex economic and policy issues. A proper understanding of the real estate market is important for individuals to make sound savings and investment decisions, for businesses to make the right decision on whether to buy or lease a property, and important for banks to evaluate the asset risks underlying their mortgage loan portfolios and to innovate real estate related financial products. The objective of this course is to develop an analytical framework by which students can make sound real estate investment decisions. The main emphases of the course are on theory, concept building, financial modeling, and practical application. In particular, class discussions will cover the following areas in real estate:

- Real estate market analysis
- Mortgage Markets
- Mortgage-Backed Securities
- Real Estate Investment Trusts (REITs)
- Real Estate Investments
- International and Institutional Real Estate Investments
- Real Estate Transactions
- Valuation of Income Producing Properties and Land

Materials and data pertaining to local real estate market will be used throughout the course whenever possible. Although our discussion will focus on the property market in Hong Kong, the techniques and concepts discussed apply to any property market outside Hong Kong.

Pre-requisite: ECON1001/ECON1210 Introductory microeconomics

You are supposed to have the basic understanding of the time value of money concepts.

For those students who lack the concepts, the beginning tutorial sessions will be dedicated to cover the time value of money concepts.

Learning Objectives

Upon completion of this course, you should be able to:

- 1 Understand the nature of the Hong Kong property market and evaluate the supply and demand conditions of residential properties in Hong Kong.
- 2 Understand the relationship between the US real estate bubble and the global financial crisis.
- 3 Evaluate the various mortgage products for the financing of real estate properties.
- 4 Evaluate the risk and return tradeoffs of mortgage-backed securities and understand the nature and operation of real estate investment trusts.
- 5 Understand the international and institutional aspects of real estate investments
- 6 Analyze and evaluate the economic and financial implications of real estate transactions in Hong Kong.
- 7 Apply the various valuation techniques to appraise the fair market value of residential and commercial properties, land, and old properties.
- 8 Develop your own theoretical view to explain the phenomenon of the real estate market.

Aligned Faculty Goals	Course Learning Outcome
1. Acquisition and internalization of knowledge of the programme discipline	CLO1-8
2. Application and integration of knowledge	CLO3, 4, 6, 7, 8
3. Inculcating professionalism and leadership	CLO8
4. Developing global outlook	CLO2, 5
5. Mastering communication skills	CLO1, 2, 5, 8

Teaching and Learning Activities

The course will consist of lectures, case discussion and group presentation.

Course Teaching and Learning Activities	Expected contact hour	Study Load (% of study)
T&L1. Lectures	108	90
T&L2. Case discussion	6	5
T&L2. Group presentation	6	5
Total	120	100

Textbook and Reading Materials

There is no required textbook for this course. Reading materials for all topics will be handed out in class and will also be posted on the HKU website for the course. Students are responsible for all materials.

- References: Real Estate Finance and Investments, *Bruggeman and Fisher*, 9th Edition, Irwin.

Highly Recommended Tool

- A standard financial calculator such as TI BA35 and HP 12C.

Problem Sets

Problems sets at the end of lectures will be assigned, but some will *not* be collected and therefore *not* graded. The purpose of the problem sets is to assist you in your study, reviewing the materials and preparing for the exams.

Timetable

Date	Topic	Readings
Jan 16	Introduction	Lecture notes
Jan 23	Hong Kong Property Market	Lecture notes
Jan 30	Lunar New Year	
Feb 06	Capital and Property Market	Lecture notes
Feb 13	Mortgage Market	Lecture notes
Feb 20	Securitization of Mortgages	Lecture notes
Feb 27	Real Estate Investment Trusts (REITs)	Lecture notes
Mar 06	Reading Week	
Mar 13	Real Estate Auctions	Lecture notes
Mar 20	Pre-sale Transactions	Lecture notes
Mar 27	Real Estate Investment Performance and Portfolio Considerations	Lecture notes
Apr 03	Valuation of Income Producing Properties	Lecture notes
Apr 10	Valuation of Land	RM1, RM2
Apr 17	Easter Holiday	
Apr 24	Valuation of Land and Redevelopment	RM1, RM2

Reading Materials

RM1: Jeffrey Fisher, George Lentz, and K.S. Tse, "Valuation of the Effects of Asbestos on Commercial Real Estate."

RM2: George Lentz and K.S. Tse, “An Option Pricing Approach to the Valuation of Real Estate.”

Grading Policy

The course grade will be based on tutorial discussions on local real estate market, take-home assignments, and a semester-end exam. The point distribution is as follows:

Assessment Methods	Brief Description (Optional)	Weight	Aligned Course Learning Outcomes
Tutorial Participation and Discussion		10%	CLOs 1-8
Mid-term assessment		10%	CLOs 1-8
Take Home Assignments		20%	CLOs 1-8
Semester-End Final Exam		60%	CLOs 1-8
	Total	100%	

Performance Assessment

Course Grade Descriptors

Grade	Descriptors
A+ A A-	<ul style="list-style-type: none"> All aspects were addressed and researched in great depth. Demonstrates a clear understanding of and the ability to apply and theory, concepts and issues relating to the topic. Able to clearly identify the most critical aspects of the task and adopt a critical perspective. Excellent development of argument and offers a logically consistent and well-articulated analysis and insight into the subject. Draws widely from the academic literature and elsewhere whilst maintaining relevance All aspects conform to a high academic / professional standard
B+ B B-	<ul style="list-style-type: none"> Most aspects were addressed and researched in depth. Demonstrates a good understanding and some application of the theory and issues relating to the topic. Able to identify critical aspects of the task and adopt a critical perspective. Some evidence of analysis, supported by logical argument and insight into the subject. Draws on relevant academic and other material. Most aspects conform to a high academic / professional standard.
C+ C C-	<ul style="list-style-type: none"> Most aspects were addressed and researched adequately. Demonstrates a good understanding of the theory, concepts and issues relating to the topic but limited application relating to the topic. Some argument presented showing some insight but not always consistent and logical. Draws upon an adequate range of academic and other material Most aspects conform to an acceptable academic / professional standard.
D	<ul style="list-style-type: none"> Basic aspects were addressed and researched adequately.

	<ul style="list-style-type: none"> • Demonstrates mainly description, showing basic understanding of the topic but no application. • Little evidence of analysis but no clear and logical argument relating to the subject. • Draws primarily upon course materials. • Limited aspects conform to academic / professional standards.
F	<ul style="list-style-type: none"> • Basic aspects were superficial, inadequate or absent. • Demonstrates limited understanding of the topic and draws conclusions unrelated to the topic. • The written work is not of an academic / professional standard."

Assessment Rubrics for Each Assessment (Same as Course Grade Descriptors)

Academic Honesty and Integrity

The University Regulations on academic dishonesty will be strictly enforced. Please check the University Statement on plagiarism on <http://www.hku.hk/plagiarism/>.

Cheating or plagiarism of any kind would result in an automatic F grade for the course plus strict enforcement of all Faculty and/or University regulations regarding such behavior. Incident(s) of academic dishonesty will NOT be tolerated.

Academic dishonesty is a behavior in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

- a. Plagiarism - The representation of someone else's ideas as if they are one's own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one's own work. Paraphrasing of someone else's ideas is still using someone else's ideas, and must be acknowledged.
- b. Unauthorized Collaboration on Out-of-Class Projects - The representation of work as solely one's own when in fact it is the result of a joint effort.
- c. Cheating on In-Class Exams - The covert gathering of information from other students, the use of unauthorized notes, unauthorized aids, etc.
- d. Unauthorized Advance Access to an Exam - The representation of materials prepared at leisure, as a result of unauthorized advance access (however obtained), as if it were prepared under the rigors of the exam setting. This misrepresentation is dishonest in itself even if there are not compounding factors, such as unauthorized uses of books or notes.