#### **FINA2382 Real Estate Finance**

# K. S. Maurice Tse The University of Hong Kong Fall 2021

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

Venue: RHT

Demonstrator: Grace TSANG and Stephanie TING

#### 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**

Although this course does not specify any pre-requisite necessary for your application for enrolment in this course, 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
Acquisition and internalization of knowledge of the programme discipline	CLO1-8
Application and integration of knowledge	CLO3, 4, 6, 7, 8
3. Inculcating professionalism	CLO8
4. Developing global outlook	CLO2, 5
5. Mastering communication skills	CLO1, 2, 5, 8
6. Cultivating leadership	CLO8

#### **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	36	30
T&L2. Tutorial Sessions	12	10
T&L2. Assignments and Case analysis	30	25
T&L3. Self-Study	42	35
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 <u>such as</u> 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
Sep 06	Introduction	Lecture notes
Sep 13	Property Market Analysis	Lecture notes
Sep 20	Capital and Property Market	Lecture notes
Sep 27	Mortgage Market	Lecture notes
Oct 04	Securitization of Mortgages	Lecture notes
Oct 11	Reading Week	
Oct 18	Securitization of Mortgages and QUIZ	Lecture notes
Oct 25	Real Estate Investment Trusts (REITs):	Lecture notes
Nov 01	Pre-sale Transactions	Lecture notes
Nov 08	Real Estate Investment Performance and Portfolio Considerations	Lecture notes
Nov 15	Valuation of Income Producing Properties	Lecture notes
Nov 22	Valuation of Land and Redevelopment	RM1, RM2
Nov 29	Review	

### **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:

Tutorial Participation and Discussion	10%
Mid-term assessment: QUIZ	10%
TWO Assignments	10%
One Individual Case Analysis	10%
Semester-End Final Exam	60%

#### **Performance Assessment**

Grade	Descriptors		
A+ A A-	<ul> <li>All aspects were addressed and researched in great depth.</li> <li>Demonstrates a clear understanding of and the ability to apply and theory, concepts and issues relating to the topic.</li> <li>All aspects conform to a high academic / professional standard</li> </ul>		
B+ B B-	<ul> <li>Most aspects were addressed and researched in depth.</li> <li>Demonstrates a good understanding and some application of the theory and issues relating to the topic.</li> <li>Most aspects conform to a high academic / professional standard.</li> </ul>		
C+ C C-	<ul> <li>Most aspects were addressed and researched adequately.</li> <li>Demonstrates a good understanding of the theory, concepts and issues relating to the topic but limited application relating to the topic.</li> <li>Most aspects conform to an acceptable academic / professional standard.</li> </ul>		
D	<ul> <li>Basic aspects were addressed and researched adequately.</li> <li>Demonstrates mainly description, showing basic understanding of the topic but no application.</li> <li>Limited aspects conform to academic / professional standards</li> </ul>		
F	<ul> <li>Basic aspects were superficial, inadequate or absent.</li> <li>Demonstrates limited understanding of the topic and draws conclusions unrelated to the topic.</li> <li>The written work is not of an academic / professional standard</li> </ul>		

#### **Assessment Rubrics for Each Assessment**

Assignments: While the detailed assessment rubric may differ slightly across assignments, the criteria of assessment can be broadly divided into two aspects: (1) Appropriateness of Analysis (60%) and (2) Clarity/Readability (40%)

Group Case Report: Students will be given a choice of real estate issues to study, analyze and report with power point slides. Performance will be assessed based on (1) justification of arguments, (2) application of the principles and techniques discussed in class in analyzing the problem(s) and forming your angle of view, (3) ability to summarize the results in a professional report.

## **Academic Honesty and Integrity**

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

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.