

## ECON 5352: Housing Economics (3 units)

HKUST Department of Economics

2025-26 Spring Term

<u>Instructor:</u> C.Y. (Eric) NG, CFA, FRM	<u>Lecture:</u> Tue 4:30 – 7:20 PM
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### Course Description

Housing has its unique characteristics in terms of heterogeneity, durability, and spatial fixity. These suggest that conventional economic concepts need to be readdressed in order to analyze the microeconomic issues of housing. In addition, a significant number of households borrow mortgages to finance their home purchases. A substantial collapse in housing prices might lead to negative equity for leveraged households and reduce their consumption and investment thereafter. The macroeconomic implication of housing market dynamics can be significant to the aggregate economy. The first part of the course focuses on microeconomic issues covering housing demand and supply analysis, models of housing and rental markets, and rationales/effects of public housing policies. The second part emphasizes the macroeconomic issues including the stylized facts on housing market dynamics, causes and consequences of housing market fluctuations, and housing market spillovers. The course objective is to develop analytical framework by which students can address both the microeconomic and macroeconomic issues of housing.

### Prerequisites

ECON 5130 AND ECON 5140 AND ECON 5280

### Assessments

Group Project 1*	10%	Case study analysis on the US subprime mortgage crisis, due by <u>April 12, 11:59pm</u>
Group Project 2**	40%	Economic analysis on the China's housing market, due by <u>April 30, 11:59pm</u>
In-class Exam	50%	In-class exam on <u>May 5</u>

Please form a group of 6 members. Please email the group information (names and student numbers) to the instructor by Feb 13.

\*Please refer to the file "Case Study Analysis" (on CANVAS course website: Files/Group Project 1) for project requirements.

\*\*Please refer to the file "Housing Market Analysis" (on CANVAS course website: Files/Group Project 2) for project requirements.

### **Course Intended Learning Outcomes (CILOs) and Mapped PILOs**

Upon successful completion of this course, students will be able to:

1. Apply the microeconomic concepts and models to conduct supply and demand analysis of housing markets. (PILO 2, 3, 4, 11, 12)
2. Understand the economic rationales and effects of public policies on housing. (PILO 2, 4, 11)
3. Apply the macroeconomic concepts and models to analyze the dynamics and spillovers of the housing market. (PILO 2, 5, 6, 11, 12)

### **Mapping of Course ILOs to Assessment Tasks**

<b>Assessed Task</b>	<b>Mapped CILOs</b>	<b>Explanation</b>
Exam	CILOs 1, 2, 3	The exam assesses students' understanding of the economic concepts and models discussed in the lectures.
Projects	CILOs 1, 3	The projects assesses students' ability to apply the economic concepts to analyze housing market related issues.

### **Final Grade Rubrics**

<b>Grade</b>	<b>Short Description</b>	<b>Elaboration</b>
A range	Excellent Performance	Demonstrate a deep understanding of the housing-related concepts, methods, and models covered in the course. Exhibit exceptional skills in utilizing them to analyse housing-related issues. Excel in the exam and projects.
B range (B+, B)	Good Performance	Show a solid grasp of the housing-related concepts, methods, and models covered in the course. Demonstrate good skills in utilizing them to analyse housing-related issues. Perform well in the exam and projects.
B-, C+, C	Marginal Performance	Demonstrate a basic understanding of the housing-related concepts, methods, and models covered in the course. Show limited skills in utilizing them to analyse housing-related issues. Perform fairly in the exam and projects.
F	Fail	Students display a lack of understanding of the course materials, inadequate application of concepts, and unsuccessful completion of exam and projects.

## **Learning Resources**

There is no required textbook. We use lecture slides for teaching. All teaching materials (including lecture slides and selected references) are downloadable from CANVAS.

The content of the course draws on various books, academic articles, and policy papers. A full list of references is available in the CANVAS course website.

## **Course Outline**

1. Housing Demand, Supply, and Equilibrium Analysis (Weeks 1-3)
  - Housing as a standard commodity
  - Housing as a heterogeneous commodity (Hedonic pricing model)
  - Housing in a spatial context (Alonso-Muth-Mills spatial model)
2. Role of Government in the Housing Market (Weeks 4-5)
  - Rationales for housing policies
  - Policies for equity and efficiency
  - Effects of housing policies
3. Housing and the Macroeconomy (Weeks 5-6)
  - National models of housing and mortgage markets (Stock-flow model)
  - Markets for Real Estate Assets and Space (DiPasquale-Wheaton model)
4. Housing Market Fluctuations and Spillovers (Weeks 7-9)
  - Stylized facts on housing market dynamics
  - Sources and consequences of housing market fluctuations
  - Business cycle models with housing market (DSGE models)
  - Determinants of housing market booms and busts
5. Applications for the Housing Markets (Weeks 10-11)
  - Subprime Mortgage Crisis and Financial Crisis of 2007-2009
  - Modeling Hong Kong residential property prices

## **Course AI Policy**

The use of Generative AI is permitted for self-learning only, but not for the assessment tasks including the group project and individual exam.

## **Academic Integrity**

Students are expected to uphold HKUST's Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to [Academic Integrity | HKUST - Academic Registry](#) for the University's definition of plagiarism and ways to avoid cheating and plagiarism.