



**Carleton University Department of Economics**

Fall 2024

ECON 3856 A

Housing Economics

**The Instructor**

**Instructor:** Attah K Boame, Ph.D  
**Email Address:** attah.boame  
**Office Location:** B-840 Loeb Building  
**Office Hours:** Thursday 17:15 – 17:45, or by appointment

**The Course**

**Course Location/Delivery:** Please check Carleton Central for location / In-person ONLY  
**Course Day and Time:** Thursday from 6:05 pm - 8:55 pm  
Lectures are three hours a week.

**TA:** TBD  
**Email Address:**  
**Office Location:**  
**Office Hours:**

The TA will be solely responsible for the research project. The TA will hold weekly office hours to discuss the research project problems with students. The TA will grade all the research project reports.

**Brightspace Course Page:** <https://brightspace.carleton.ca/d2l/home/288643>

**Course Description**

The course will apply basic microeconomic concepts to housing. It will examine housing markets, housing finance, and housing production. Models of demand, supply, and land markets will be developed, emphasizing the unique characteristics of housing. Welfare economics and public choice theory related to the housing market will be discussed. The rationale and effects of government intervention in the housing market will be examined. Housing investment decisions and housing finance in Canada (e.g., mortgages and mortgage loan insurance) will also be examined. Finally, housing demand forecasts will be studied. Topic covered in the course include the following:

## I. Selected economic principles and their application to housing

- The economic problem, efficiency, equity, allocation of resources, demand, supply and price.
- Why housing economics?
- Unique characteristics of housing (heterogeneity, durability, immobility, etc).
- Housing and the economy.
- Basic regression analysis.

## II. Selected models of the housing market

- Hedonic pricing, repeat sales price index, filtering model, property valuation, etc.

## III. Housing demand, housing supply, land markets, and price determination

- Demand and supply functions and price determination.
- Elasticity of demand and supply for housing.
- Land markets.

## IV. Investment and financing decisions and the financial crisis of 2007/2010

- Basic investment principles (e.g., discounting, net present value, user cost of housing, renting vs. owning).
- Housing finance, mortgages and mortgage loan insurance.
- Reasons for the financial crisis.

## V. Housing demand forecasts

- Household formation projection models (e.g., headship rate projections).

## VI. Rationale for government intervention in the housing market

- Economic rationale for government intervention.
- Housing need.

## VII. Mechanisms of government intervention in housing

- Mechanisms of intervention (e.g., landlord/tenant legislation and regulations such as rent controls, building codes and housing standards, social housing, rent subsidies, income vs. price subsidies, tax-based incentives).

### **Learning Outcomes**

- This course equips students to gain in-depth knowledge about Canadian housing conditions, housing markets in general, and housing economics literature.
- This course will benefit those interested in the operation of the housing market; how it relates to other markets; the reasons for government intervention; the forms and impacts of such intervention; housing finance; and housing policy development.

- This course will equip policy analysts and professionals who seek to work in the housing sector for various levels of government (federal, provincial, territorial, and municipal), in non-profit organizations, and in financial institutions focusing on housing finance.
- This course will benefit those who are interested in the real estate business.

**Preclusions and Prerequisites**

The prerequisite for this course is ECON 1001 or ECON 1000 or FYSM 1003.

Students who believe they have taken a similar background course or courses from another university must provide appropriate documentation to the Department of Economics Undergraduate Administrator.

**Course Calendar**

<b>DATE</b>	<b>CHAPTER/PROJECT/EXAMINATIONS</b>
September 5, 2024	Chapter 1 Introduction to Housing Economics
September 12, 2024	Chapter 2 Selected Microeconomics Principles
September 19, 2024	Chapter 3 Selected Models of Housing Economics
September 26, 2024	Chapter 4 Housing Demand and Housing Supply
October 3, 2024	Chapter 5 Housing and Land Markets
October 10, 2024	Research project work in C.U. Library
<b>October 17, 2024</b>	<b>In-class mid-term examination (Chapters 1, 2, 3, 4, 5)</b>
<b>October 21 – 25, 2024</b>	<b>Fall Break, no classes</b>
October 31, 2024	Chapter 6 Housing Demand Forecasts
November 7, 2024	Chapter 7 Housing Investment Decisions
November 14, 2024	Chapter 8 Housing Financing Decisions
November 21, 2024	Chapter 9 Rationale for Government Intervention in Housing
November 28, 2024	Chapter 10 Mechanisms of Government Intervention in Housing
December 5, 2024	Final Exam Review and Course Evaluation
<b>December 9 – 21, 2024</b>	<b>Final Examination (Chapters 6, 7, 8, 9, 10) - Scheduled by Carleton University Examination Office</b>

**Textbooks and Readings**

**Texts**

All the reading materials are loaded on **Brightspace** under “**Tools - Ares Reserves**”.

There is no one suitable textbook currently in print for Housing Economics. There exists a wide range of suitable material in various textbooks and refereed journals. The following is a selection of some relevant reading materials for the course. (Note: library call numbers are in parentheses.)

## **SELECTED MICROECONOMIC PRINCIPLES**

Oxley, M. 2004. Economics, Planning and Housing, Palgrave MacMillan, New York, Chapters 1 and 3 (CMHC HD7287 O95 2004).

Angel, S. 2000. Housing Policy Matters: A Global Analysis, Oxford University Press, Oxford, Chapter 2 (HD7283.3.A53).

Bogart, W. T. 1998. The Economics of Cities and Suburbs, Prentice Hall, Upper Saddle River, Chapter 13 (HT321.B66).

Canada Mortgage and Housing Corporation (CMHC). *Canadian Housing Observer 2010*, Chapter 2 ([www.cmhc.ca/observer](http://www.cmhc.ca/observer)).

Gujarati, D. 1995. Basic Econometrics, McGraw-Hill, 3<sup>rd</sup> edition, New York.

## **SELECTED MODELS OF THE HOUSING MARKET**

Eurostat (2013), Handbook on Residential Property Price Indices (RPPI)  
<http://ec.europa.eu/eurostat/documents/3859598/5925925/KS-RA-12-022-EN.PDF>

Bogart, W. T. 1998. The Economics of Cities and Suburbs, Prentice Hall, Upper Saddle River, Chapter 13 (HT321.B66).

Robinson, R. 1979. Housing Economics and Public Policy, McMillan, London, Chapter 3 (HD7333.A3R62).

Canada Mortgage and Housing Corporation (CMHC). "Filtering in Housing", *Socio-economic Series 04-040*, December 2004 (Online).

O'Sullivan, A. 2012. Urban Economics, McGraw-Hill Irwin, New York, 8<sup>th</sup> edition, Chapter 14.

McDonald, John F. and McMillen, Daniel P. 2011. Urban Economics and Real Estate: Theory and Policy, John Wiley & Sons, Inc., 2<sup>nd</sup> edition, Chapter 9 (CMHC HT321 M 348 2010).

## **HOUSING DEMAND, SUPPLY, LAND MARKETS AND EQUILIBRIUM PRICE**

Oxley, M. 2004. Economics, Planning and Housing, Palgrave MacMillan, New York, Chapter 2 (CMHC HD7287 O95 2004).

Robinson, R. 1979. Housing Economics and Public Policy, McMillan, London, Chapters 4 and 5 (HD7333.A3R62).

Canada Mortgage and Housing Corporation (CMHC). *Canadian Housing Observer 2012*, Chapter 4 ([www.cmhc.ca/observer](http://www.cmhc.ca/observer)).

Bogart, W. T. 1998. The Economics of Cities and Suburbs, Prentice Hall, Upper Saddle River, Chapter 9 (HT321.B66).

## **HOUSING INVESTMENT DECISIONS**

Redhead, Keith. 2008. Personal Finance and Investments: A Behavioural Finance Perspective, Routledge, London, Chapter 5.

Himmelberg, C., Mayer, C. and Sinai, T. "Assessing High House Prices: Bubbles, Fundamentals, and Misperceptions" *Journal of Economic Perspectives*, Vol. 19 No. 4, Fall, 2005, pp. 67–92 (uOttawa HB1.J642).

## **HOUSING FINANCE AND THE FINANCIAL CRISIS OF 2007/2010**

Redhead, Keith. 2008. Personal Finance and Investments: A Behavioural Finance Perspective, Routledge, London, Chapter 5.

Canada Mortgage and Housing Corporation (CMHC). *Canadian Housing Observer 2012* (Chapter 2) ([www.cmhc.ca/observer](http://www.cmhc.ca/observer)).

Lybeck, Johan A. 2011. A Global History of the Financial Crash of 2007–2010, Cambridge University Press, Cambridge, Chapters 3 and 4 (HB3717 2008 .L93 2011).

Shiller, Robert J. 2009. The Subprime Solution: How Today's Global Financial Crisis Happened and What to Do About It, Princeton University Press, Princeton, Chapters 1 and 2 (HG2040.15.S45 2008).

Tsounta, E. 2011. "Home Sweet Home: Government's Role in Reaching the American Dream", IMF Working Paper, WP/11/191 (Online).

Mays, E. 2004. Credit Scoring for Risk Managers: The Handbook for Lenders, Thomson South-Western, Chapter 4, pp. 63-89.

Siddiqi, N. 2017. Intelligent Credit Scoring: Building and Implementing Better Credit Risk Scorecards, John Wiley and Sons, Inc., Hoboken, New Jersey, Appendix A.

## **HOUSING DEMAND FORECASTS**

Robinson, R. 1979. Housing Economics and Public Policy, McMillan, London, Chapter 4 (HD7333.A3R62).

Canada Mortgage and Housing Corporation (CMHC). *Canadian Housing Observer 2009*, Chapter 3 (Potential Housing Demand Model) ([www.cmhc.ca/observer](http://www.cmhc.ca/observer)).

Kochanowski, P. "Headship Rates and Long-term Housing Forecasts: Some Regional Evidence," *Regional Science Perspectives*, Vol. 25, No. 2, 1995, pp. 25–44 (UOttawa HD1.R43 V. 25 1995).

## **RATIONALE FOR GOVERNMENT INTERVENTION IN THE HOUSING MARKET**

Oxley, M. 2004. Economics, Planning and Housing, Palgrave MacMillan, New York, Chapters 3, 4 and 6 (CMHC HD7287 O95 2004).

Whitehead, C. M. E. 2003. "The Economics of Social Housing" in O'Sullivan, T. and Gibb, K. (eds.), Housing Economics and Public Policy, Blackwell, Oxford, Chapter 8 (HD7287.3.H687 2003).

Rasmusen, E. 1989. Games and Information: An Introduction to Game Theory, Basil Blackwell, Inc., Cambridge MA, Chapter 1, pp. 21-41.

## **MECHANISMS OF GOVERNMENT INTERVENTION IN HOUSING**

Oxley, M. 2000. "Governments and Social Welfare", in King, P. and Oxley, M. Housing: Who Decides? Palgrave MacMillan, London, Chapter 3 (CMHC HD7333.A3 K358 2000).

Whitehead, C. M. E. 1996. "Private Renting in the 1990s", *Housing Studies*, Vol. 11 Issue 1, pp.7–12 (Carleton Library Electronic Resource).

Robinson, R. 1979. Housing Economics and Public Policy, McMillan, London, Chapter 8 (HD7333.A3R62).

Canada Mortgage and Housing Corporation (CMHC), "Mid-Rise Residential Wood Construction", *Canadian Housing Observer*, Article 1, February, 2016.

Canada Mortgage and Housing Corporation (CMHC). 2003. "Levies, Fees, Charges and Taxes on New Housing: 2002" *Research Report*, Executive Summary, pp. i-viii (pp. 5-12).

## Evaluation

### Evaluation

Assignment/Test	Date	Mode of Delivery	Percentage of Grade
Mid-term Examination	October 17, 2024	In-person	30
Research Project	All final research project reports are due in class on <b>December 5, 2024.</b>	Online - Brightspace	25
Final Examination	TBD	In-person	45
			Total: 100%

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

### Research Project

Students will complete a research project that involves some aspect of the Canadian housing market. Data for the project are available from Canada Mortgage and Housing Corporation's "Data and Research Portal," at their Web site: <https://www.cmhc-schl.gc.ca/en/data-and-research/data-tables>

Topics of interest might include, but are not limited, to the following:

- Housing starts, completions, dwellings under construction, as well as market absorption.
- Rental market conditions (e.g., vacancy rates, availability rates, rent controls).
- Mortgage loan approvals and mortgage loan insurance.
- Interest rates (variable versus fixed mortgage interest rates).
- Households served through social housing programs.
- Government spending on social housing programs.
- Housing affordability and core housing need.
- Housing in the national accounts.
- Employment in the housing sector.
- Elasticity of housing demand (own-price, cross-price, and income elasticity).
- The user cost of housing.

The objective of the project is to discuss the importance of housing in Canadian economic activity and housing conditions in Canada over time.

You must select one topic, for example, rental market conditions (*rental availability rates, rental vacancy rates, and average rents in Canada*). You may discuss the trends in rental market conditions selecting any number of years, for example, from 1990 to 2020. Note, however, that

the more years (data points) you have, the better your report since we are interested in the trend over time.

You may compare the rental market conditions for Canada, provinces, and selected metropolitan areas over time. Note, however, that housing is in general a **local market activity** and thus emphasis is placed on metropolitan areas, cities, towns, and rural areas. You may draw graphs to show the trends in the rental market. Your report must include the data you used for the analysis in a table as well as a bibliography.

You may replicate this process for any other topic discussing the role of housing in Canadian economic activity and housing conditions in Canada.

The research project report is not a literature review of housing economics. You must use Canadian housing data for your analysis. Please read “Chapter 3: Housing Markets” of the *2014 Canadian Housing Observer* for more details on the structure for your research report ([https://publications.gc.ca/site/archived-archived.html?url=https://publications.gc.ca/collections/collection\\_2014/schl-cmhc/NH2-1-2014-eng.pdf](https://publications.gc.ca/site/archived-archived.html?url=https://publications.gc.ca/collections/collection_2014/schl-cmhc/NH2-1-2014-eng.pdf)).

Students must not copy and paste any figures, charts, tables, etc. from CMHC’s website or any other source. Students must use data from CMHC’s website or any other source to create their own tables or draw their own charts, figures, etc. for their report.

The report should be 8 pages including tables, charts and figures, 1.5-spaced, 12-point font in Times New Roman, and must be typed or machine processed. Handwritten reports will not be accepted.

Students may use any reference style of their choice.

The research project report must be submitted in class on the following dates:

<b>Research report submitted on</b>	<b>To be graded and returned on</b>
November 21, 2024	December 5, 2024
November 28, 2024	Not Applicable
December 5, 2024	No Applicable

Students are not allowed to use Generative Artificial Intelligence tools (e.g., ChatGPT) in this course.

#### Late Policies and Extensions for Term Work

All final research project reports are due in class on **December 5, 2024**. Any project report that is not handed in by December 5, 2024, will receive zero marks.



### Midterm Policy

Feedback on the mid-term will be provided by October 31, 2024.

The mid-term examination and final examination will be essay-based applications of housing economics concepts and will cover all the material discussed in class and in the required readings.

Students who can document a compelling reason (e.g., a Self-Declaration form or PMC letter of accommodation) for missing the mid-term examination will be excused and their final grade will be based on their performance in the rest of the course—i.e., the weight of each of the remaining evaluation instruments will rise by a factor of 10/7 (e.g., the final examination weight will become  $45\% \times 10/7 = 64.29\%$  and the research project weight will be  $25\% \times 10/7 = 35.71\%$ ). Students must inform the instructor of such an absence in advance, if possible.

### Final Exam

The final exam will be in-person as scheduled by the University during the exam period. Students are not to make travel plans during the exam period as that is not a valid reason for missing a final exam.

### Satisfactory Performance Criteria

Students must fulfill all the course requirements, including the mid-term exam, research project, and final exam, to achieve a passing grade (D- or higher).

### Deferred Finals

Students who do not write the final examination because of illness or other circumstances beyond their control may apply to write a deferred final examination by contacting the Registrar's Office no later than three working days after the original final examination was scheduled. If a student writes a deferred examination, the deferred examination will carry the same weight as the final examination in determining the course grade. Any deferred examination will not be identical to the original final examination.

Students must fulfil all the preceding course requirements to write a deferred final examination.

### E-Proctoring

Please note that the mid-term and the final examination in this course will not use a remote proctoring service provided by Scheduling and Examination Services. E-proctoring will not be used for evaluations in this course.

**Plagiarism, Resources and Mental Health, Academic Accommodations**

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found [HERE](#).