

CARLETON UNIVERSITY
DEPARTMENT OF ECONOMICS
ECON 3856 A
HOUSING ECONOMICS
Winter 2020

Instructor: Dr. Attah K. Boame
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Lecture hours: Thursday 18:05 – 20:55
Office hours: Thursday 17:15 – 17:45, or by appointment.

COURSE DESCRIPTION

The course will apply basic microeconomic concepts to housing. In particular, 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.

PREREQUISITE

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, Amanda Wright.

TEACHING APPROACH

The format of the course will be a combination of lectures, class participation, and discussions. Students will be expected to read course material before class to increase the value of their contributions to in-class discussions. They will also be expected to undertake research projects using housing data available from the Canada Mortgage and Housing Corporation's (CMHC) web site and other sources of reliable data (e.g., Statistics Canada).

EVALUATION

Project:	25%
Mid-term examination:	30%
Final examination:	45%

Feedback on the first graded work (the mid-term exam) will be provided by February 27, 2020. Students who can document a compelling reason for missing this exam 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 be $45\% \times 10/7 = 64.29\%$ 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.

Both the mid-term examination and the final examination will consist of essay-based applications of housing economics concepts and will cover all the material discussed in class and on the required reading list.

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 "Housing Market Information Portal," at their Web site: <https://www03.cmhc-schl.gc.ca/hmiportal#Profile/1/1/Canada>

Topics of interest might include, but are not limited, to the following data contained in the Canadian Housing Statistics and CMHC web site; for all but the final three in the list:

- 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 2016. 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” (<http://chbanl.ca/wp-content/uploads/Canadian-Housing-Observer-2014.pdf>) of the *2014 Canadian Housing Observer* for more details on the structure for your research report.

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:

Research report submitted on	To be graded and returned on
March 19, 2020	April 2, 2020
March 26, 2020	Not Applicable
April 2, 2020	No Applicable

Any project report that is not handed in by April 2, 2020 will receive zero marks.

EARNING CREDIT FOR THE COURSE

Students must fulfil all of the preceding course requirements in order to achieve a passing grade (D- or higher). Note, also the following:

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

Application to write a deferred final examination must be made at the Registrar’s Office.

cuLearn

All relevant course material and announcements will be available on cuLearn under ECON 3856A, which can be accessed at <https://carleton.ca/culearn/> Students are responsible for checking cuLearn regularly to ensure that they are up to date with any announcements.

PLAGIARISM

Please be aware that plagiarism is serious offence at Carleton and should be recognized and avoided. For further information on how to do so, please see “Pammett on Plagiarism and Paraphrasing” at www.carleton.ca/economics/courses/writing-preliminaries.

“Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments, and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).”

ACADEMIC ACCOMMODATION REQUESTS

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the [Equity Services website](#).

Religious obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the [Equity Services website](#).

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the [Paul Menton Centre website](#).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton’s Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see [the policy](#).

TENTATIVE LECTURES OUTLINE

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).

TENTATIVE SCHEDULE OF LECTURES

DATE	CHAPTER/PROJECT/EXAM/EVALUATION
January 9, 2020	Chapter 1 Introduction to Housing Economics
January 16, 2020	Chapter 2 Selected Microeconomics Principles
January 23, 2020	Chapter 3 Selected Models of Housing Economics
January 30, 2020	Chapter 4 Housing Demand and Housing Supply
February 6, 2020	Chapter 5 Housing and Land Markets
February 13, 2020	In-class mid-term examination (Chapters 1, 2, 3, 4, 5)
February 17 - 21, 2020	Winter Break, no classes
February 27, 2020	Chapter 6 Housing Demand Forecasts
March 5, 2020	Chapter 7 Housing Investment Decisions
March 12, 2020	Chapter 8 Housing Financing Decisions
March 19, 2020	Chapter 9 Rationale for Government Intervention in Housing
March 26, 2020	Chapter 10 Mechanisms of Government Intervention in Housing
April 2, 2020	Review and Course Evaluation
April 13 - 25, 2020	Final Examination (Chapters 6, 7, 8, 9, 10) - Scheduled by Carleton University Examination Office

READING LIST

All the reading materials are loaded on [cuLearn](#) under “**LIBRARY RESERVES – VIEW COURSE IN ARES**”

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).

Gujarati, D. 1995. Basic Econometrics, McGraw-Hill, 3rd 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 2 (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, 8th edition, Chapter 14.

McDonald, John F. and McMillen, Daniel P. 2011. Urban Economics and Real Estate: Theory and Policy, John Wiley & Sons, Inc., 2nd 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).

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.

Himmeberg, 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).

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).

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).