

## General Course Information

**Instructor:** Jian Zhou  
*Email* jian@uoguelph.ca  
*Office Location* MINS 213A, Ext 56634  
*Office Hours* Thursday 11:30-12:30 or by appointment  
*Department/School* Marketing & Consumer Studies

**Class Schedule:** Tuesday/Thursday 1:00-2:20, GFTC 241  
4:00-5:20, MCLN 107

**Pre-requisites:** 5 credits

**Restrictions:** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the Department for more information.

## Course Description

This course examines the financing of both residential and commercial investment real estate. A mathematical approach is used to examine the impact of various lender and borrower decisions on loan terms (amortization periods, pre-payment options, etc.). The evolution of the Canadian housing finance system is contrasted with that in the United States. New methods of financing real estate other than traditional mortgages are discussed.

## Course Learning Outcomes

**Upon successfully completing this course, you will:**

### Knowledge and Understanding:

- 1) Demonstrate thorough understanding of the concepts of real estate financial analysis at the level of the individual decision unit.
- 2) Develop a critical understanding of the impact of decisions about mortgage terms on the household financial position
- 3) Understand the nature, form, and development of financing instruments in Canada and the U.S.
- 4) Demonstrate knowledge of financing in the real estate development process.
- 5) Demonstrate an understanding of the role of government regulation.
- 6) Understand the contrast between the financing of commercial and residential real estate.

## Summary of Course Content and Materials

This course is of mathematical nature. We will be using mathematical techniques to evaluate various types of mortgage borrowing and lending decisions. The math involved is primarily simple algebra. If you have concerns about your math skills please see me early.

This is a course for which a standard textbook is not available. Class attendance is important. Our primary method of instruction is lectures, which will be delivered through PowerPoint slides. Before each class, a condensed version of lecture notes will be posted on CourseLink. You are expected to read it prior to the class and make it a full-version the next day by taking appropriate notes in class. The full-version notes will be the information base you should rely on to prepare for assignments and exams.

Week-by-week schedule (subject to changes)

<u>Date:</u>	<u>Topic and readings</u>
Week 1	Introduction to Real Estate Finance Mortgage mathematics: Discounted cash flow analysis
Week 2	Mortgage mathematics: Effective interest rates, payment calculations, outstanding balances; <i>REF A:4 &amp; A:5</i> Evaluating other mortgage features: Term, Amortization Period, prepayment options, etc; <i>REF A:11</i>
Week 3	Prepayment penalties; <i>REF A:11</i> <b>Assignment 1 handout Tuesday Jan 21</b> The Lending Decision: Homeowners & Commercial; <i>REF A:2 &amp; A:3</i>
Week 4	The Refinancing Decision; Take up Assignment 1 <b>Assignment 1 due Thursday Jan 30</b>
Week 5	Insurance; <i>REF A:9</i> ; Taxes (including the new HST); <i>REF A:8</i> <b>Assignment 2 handout Tuesday Feb 4</b>
Week 6	Take up Assignment 2; Review for Midterm exam <b>Assignment 2 due Tuesday Feb 11; Midterm Exam Thursday Feb 13</b>
Week 7	Winter Break No Classes
Week 8	Take up Midterm exam Mortgage innovations (GPM, PLAM, etc)
Week 9	Mortgage innovations continued ; Guest speech rental property investment, Thursday; <b>Assignment 3 handout Thursday Mar 5</b>
Week 10	Guest speech mortgage brokerage Mar 10 Tues; Take up Assignment 3 <b>Assignment 3 due Thursday Mar 12</b>

Week 11	Financial and Tenure Options of Housing for Older Canadians; Choosing between alternate projects: NPV & IRR & Development Financing <b>Assignment 4 handout Thursday Mar 19</b>
Week 12	Secondary Mortgage Market; Canadian vs US mortgage market, subprime mortgage, credit crisis; Take up Assignment 4; <b>Assignment 4 due Thursday Mar 26</b>
Week 13	Miscellaneous: Green mortgage, RRSPs & housing, etc; Review for Final

## Course Assessment

			<b>Associated Learning Outcomes</b>	<b>Due date /Location</b>
<b>Assessment 1:</b>	10%	Periodic Assignment	LO 1-2	<i>Jan 30</i>
<b>Assessment 2:</b>	8%	Periodic Assignment	LO 1,5,6	<i>Feb 11</i>
<b>Assessment 3:</b>	6%	Periodic Assignment	LO 1-2	<i>Mar 12</i>
<b>Assessment 4:</b>	6%	Periodic Assignment	LO 1,4	<i>Mar 26</i>
<b>Assessment 5:</b>	30%	Midterm	LO 1,2,5,6	<i>Feb 13/ in Class</i>
<b>Assessment 6:</b>	40%	Final	LO 1-6	TBD
<b>Total</b>	<b>100%</b>			

## Teaching and Learning Practices

<b>Assignments</b>	You can do them on your own or as groups. If choosing group, you decide whom to work with but at most three students for a group. You can form a new group or choose to work on your own for the next assignment.
<b>Midterm Exam</b>	The midterm exam will cover all materials in the course up to and including the class before the test and the format will be discussed prior to the test.
<b>Final Exam</b>	This exam will cover the entire course, including material from the assignments, all reading material and issues discussed during the lectures. The format will be discussed in the review class.

## Course Resources

**Required Text:** N/A

**Recommended Text:** N/A

**Other Resources:**

1. Real Estate Finance (REF) by Auld, J.W. and J. Londerville; available online through CourseLink. Useful material but **not** a text. It does not include everything we discuss in class.
2. Financial calculator: must have one to do the calculations. I recommend Texas Instruments TI-BA-II Plus. However, any calculator with PV, FV, i%, PMT type keys will do. You should learn to use the calculator early on in the course.

## Course Policies

Assignments are due at the beginning of the classes as indicated above. Late assignments will not be accepted. Clearly list (all of) the name(s) and student ID(s) on your assignment. Assignments should be submitted stapled in the top left corner, without a folder.

## University Policies

### Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for Academic Consideration:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

### Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

### Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email [sas@uoguelph.ca](mailto:sas@uoguelph.ca) or see the website: <https://wellness.uoguelph.ca/accessibility/>

### Course Evaluation Information

Please refer to the [Course and Instructor Evaluation Website](#)


### Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

### Drop date

The last date to drop one-semester courses, without academic penalty, is April 3, 2020. For regulations and procedures for Dropping Courses, see the Academic Calendar:

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

<b>Date Submitted to Chair:</b>	
<b>Chair Signature (Approval):</b>	
<b>Date Approved by Chair:</b>	