

**BUS F734**  
**Real Estate Finance and Investments**  
**Winter 2023 Course Outline**

**Finance and Economics Area**  
**DeGroote School of Business**  
**McMaster University**

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***COURSE OBJECTIVE***

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This course prepares students to understand the risks and rewards associated with investing in and financing real estate properties. The topics include mortgage fundamentals, market analysis, appraising, valuation and investment analysis, mortgage back securities, and managing real estate portfolios.

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***INSTRUCTOR AND CONTACT INFORMATION***

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Instructor: **Dr. Sultan M. Awan**  
[awan@mcmaster.ca](mailto:awan@mcmaster.ca)

Course TA: **Eric Wilson**  
[wilsoe40@mcmaster.ca](mailto:wilsoe40@mcmaster.ca)

Class Schedule: THU 2:30 PM ~ 5:30 PM, Class Room: RJC 249  
Office Hours: After class or by appointment

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***COURSE ELEMENTS***

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Credit Value:	3	Leadership:	Yes	IT skills:	Yes	Global view:	Yes
Avenue:	Yes	Ethics:	Yes	Numeracy:	Yes	Written skills:	Yes
Participation:	Yes	Innovation:	No	Group work:	Yes	Oral skills:	Yes
Evidence-based:	Yes	Experiential:	Yes	Final Exam:	Yes	Guest speaker(s):	No

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***COURSE DESCRIPTION***

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The recent turmoil in world financial markets, which has been closely tied to events in the real estate market, suggests that investors, lenders, and others who participate in the real estate market need to better understand how to evaluate the risk and return associated with the various ways of investing and lending. This course prepares students to understand the risks and rewards associated with investing in and financing residential and commercial real estate. The topics include mortgage fundamentals, market analysis, appraising, valuation and investment analysis, mortgage back securities, and managing real estate portfolios.

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## **LEARNING OUTCOMES**

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Upon completion of this course, students will be able to complete the following key tasks:

- Understand the basic concepts of real estate investment
- Understand the different financing options for commercial real estate properties
- Conduct SWTO analysis of an investment in a real estate property
- Conduct financial analysis of real estate properties
- Evaluate risks and investment returns in the real estate development process
- Understand the structure of various types of mortgage-back securities
- Understand the principles of evaluating the investments in real estate market

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## **REQUIRED COURSE MATERIALS AND READINGS**

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**Real Estate Finance and Investments**, By *William B. Brueggeman and Jeffrey D. Fisher*,  
**McGraw-Hill 17<sup>th</sup> Edition, 2022**

*Note: McGraw-Hill Connect is an online learning platform designed to help students engage in course contents and develop critical higher-level thinking skills. However, access to McGraw-Hill Connect is not required for any evaluation activity in this course.*

For course contents such as lecture slides, assignments, other reference materials including text appendix, and course-related announcements, please visit the course webpage on Avenue:

<http://avenue.mcmaster.ca>

Texas Instruments or any other financial calculator is highly recommended for this course.

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## **EVALUATION**

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Learning in this course results primarily from lectures, in-class discussions, home readings, and assigned problem sets. Students' learning and progress in this course will be evaluated on a group and individual basis. Missed tests/exams will receive a grade of zero unless the student has submitted and been approved for a Notification of Absence or MSAF. Late assignments will be penalized 10% for each day they are late.

Assessment of the student's work and the final letter grades in this course will be calculated as follows:

<b>Assignment # 1</b>	Problem Set (Group of 2 students) due on Feb. 26	<b>15%</b>
<b>Midterm Exam</b>	Multiple Choice – Quantitative and Qualitative (Feb. 29)	<b>30%</b>
<b>Assignment # 2</b>	Problem Set (Group of 2 students) due on April 11	<b>15%</b>
<b>Final Exam</b>	Multiple Choice – Quantitative and Qualitative (semi-cumulative)	<b>40%</b>
	<b>Total</b>	<b>100%</b>

### ***Assigned Problem Sets***

Two quantitative problem sets will be assigned during the term. The first one will be due before the midterm and the second one will be due before the start of the final exam period. As most of the concepts and techniques required to analyze the investment and financing of real estate are highly quantitative, students are expected to practice quantitative problem sets presented in the text that require the use of such quantitative tools. The problem sets tested on two assigned take-home projects should provide students with an opportunity to practice quantitative problems with the help of the concepts and methodologies learned in class. As a fairly large number of questions on the midterm and the final will be quantitative, this evaluation exercise should help students prepare well for the exams as well. You may find some problems challenging. Please do your best. Serious attempts to arrive at the correct answer will be rewarded. Students are expected to work in a **self-chosen group** of a maximum of **TWO students** in each group. However, a submission from an individual student will also be accepted without any deductions of marks. The assigned problems set and the additional submission details will be posted on Avenue.

### ***Midterm and Final Exam***

Midterm and final exams will consist of multiple-choice questions ONLY. The nature and format of the questions will be similar to the ones on slides, examples discussed in class, and the ones found in assigned evaluation activities. Much of the details of financial calculations when analyzing investing and financing of real estate can be done on financial calculators to provide solutions to such analysis more efficiently. For the quantitative part of concepts related to investing, financing, and managing real estate in this course, learning the use of computational applications is a must and is highly recommended for a better show in the exams. The info on the readings for the midterm and the final exams are provided at the end of this outline and will also be posted on Avenue before each of the exams. The final exam will be semi-cumulative and only selected topics will make it to the readings list for the final. Such details will be posted on Avenue well before the final exams.

### **PLEASE NOTE:**

1. Students who do not submit the assignments by the deadline, with approval, will receive an extension of 3 days unless approved by the office based on the supporting documentation submitted.

2. If a student misses a lecture for any reason, it is the student's responsibility to obtain class lecture notes and other relevant material from other classmates.
3. Marks for all pre-final exam evaluation activities will be posted on Avenue.
4. Your letter grade will appear on MOSAIC through official channels. Hence, marks for the final exam will not be posted on Avenue.
5. You are encouraged to contact the course instructor or course TA for any questions on the outlines, course material, evaluation scheme, and Exams in this course.

### **Grade Conversion**

At the end of the course, your overall percentage grade will be converted to your letter grade by the following conversion scheme:

LETTER GRADE	PERCENT	POINTS
A+	90-100	12
A	85-89	11
A-	80-84	10
B+	75-79	9
B	70-74	8
B-	60-69	7
F	00-59	0

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### ***COMMUNICATION AND FEEDBACK***

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Students that are uncomfortable in directly approaching an instructor regarding a course concern may send a confidential and anonymous email to the respective Area Chair or Associate Dean:

<http://mbastudent.degroote.mcmaster.ca/contact/anonymous/>

Students who wish to correspond with instructors or TAs directly via email must send messages that originate from their official McMaster University email account. This protects the confidentiality and sensitivity of information as well as confirms the identity of the student. Emails regarding course issues should NOT be sent to the Administrative Assistant.

Instructors are encouraged to conduct an informal course review with students by Week #4 to allow time for modifications in curriculum delivery. Instructors should provide evaluation feedback for at least 10% of the final grade to students before Week #8 in the term.

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## ***ACADEMIC DISHONESTY***

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You are expected to exhibit honesty and use ethical behavior in all aspects of the learning process. The academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behavior can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at:

[www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which another credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations

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## ***AUTHENTICITY/PLAGIARISM DETECTION***

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**Some courses may** use a web-based service (Turnitin.com) to reveal authenticity and ownership of student-submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. A2L, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software.

**All submitted work is subject to normal verification that standards of academic integrity have been upheld** (e.g., online search, other software, etc.). For more details about McMaster’s use of Turnitin.com please go to

[www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity).

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## ***COURSES WITH AN ON-LINE ELEMENT***

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**Some courses may** use online elements (e.g. e-mail, Avenue to Learn (A2L), LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course.

The available information is dependent on the technology used. Continuation in a course that uses online elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

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## ***ON-LINE PROCTORING***

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**Some courses may** use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict their browser or other applications/software during tests or exams. This software may be required to be installed before the test/exam begins.

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## ***CONDUCT EXPECTATIONS***

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As a McMaster student, you have the right to experience, and the responsibility to demonstrate respectful and dignified interactions within all of our living, learning, and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the “Code”). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviors that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx, or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students’ access to these platforms.

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## ***MISSED ACADEMIC WORK***

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### ***Missed Mid-Term Examinations / Tests / Class Participation***

Where students miss a regularly scheduled mid-term or class participation for legitimate reasons as determined by the Student Experience – Academic (MBA) office, the weight for that test/participation will be distributed across other evaluative components of the course at the discretion of the instructor. Documentation explaining such an absence must be provided to the Student Experience – Academic (MBA) office within five (5) working days upon returning to school.

To document absences for health-related reasons, please provide to the Student Experience – Academic (MBA) office the Petition for Relief for MBA Missed Term Work and the McMaster University Student Health Certificate which can be found on the DeGroote website at <http://mbastudent.degroote.mcmaster.ca/forms-and-applications/>. Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. University policy states that a student may submit a maximum of three (3) medical certificates per year after which the student must meet with the Director of the program.

To document absences for reasons other than health-related, please provide the Student Experience – Academic (MBA) office with the Petition for Relief for MBA Missed Term Work and documentation supporting the reason for the absence.

Students unable to write a mid-term at the posted exam time due to the following reasons: religious; work-related (for part-time students only); representing the university at an academic or varsity athletic event; conflicts between two overlapping scheduled mid-term exams; or other extenuating circumstances have the option of applying for special exam arrangements. Such requests must be made to the Student Experience – Academic (MBA) office at least ten (10) working days before the scheduled exam along with acceptable documentation. Instructors cannot themselves allow students to unofficially write make-up exams/tests. Adjudication of the request must be handled by Student Experience – Academic (MBA).

If a mid-term exam is missed without a valid reason, students will receive a grade of zero (0) for that component.

### ***Missed Final Examinations***

A student who misses a final examination without good reason will receive a mark of 0 on the examination.



All applications for deferred and special examination arrangements must be made to the Student Experience – Academic (MBA) office. Failure to meet the stated deadlines may result in the denial of these arrangements. Deferred examination privileges, if granted, must be satisfied during the examination period at the end of the following term. There will be one common sitting for all deferred exams.

Failure to write an approved deferred examination at the pre-scheduled time will result in a failure for that examination, except in the case of exceptional circumstances where documentation has been provided and approved. Upon approval, no credit will be given for the course, and the notation N.C. (no credit) will be placed on the student's transcript. Students receiving no credit for a required course must repeat the course. Optional or elective courses for which no credit is given may be repeated or replaced with another course of equal credit value.

Requests for a second deferral or rescheduling of a deferred examination will not be considered.

Any student who is unable to write a final examination because of illness is required to submit the Application for Deferred MBA Final Examination and a statement from a doctor certifying illness on the date of the examination. The Application for Deferred MBA Final Examination and the McMaster University Student Health Certificate can be found on the DeGroote website at

<http://mbastudent.degroote.mcmaster.ca/forms-and-applications/>

Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. Students who write examinations while ill will not be given special consideration after the fact.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within five business days of the missed examination.

Special examination arrangements may be made for students unable to write at the posted exam time due to compelling reasons (for example religious, or part-time students only, work-related reasons):

- Students who have religious obligations which make it impossible to write examinations at the times posted are required to produce a letter from their religious leader stating that they are unable to be present owing to a religious obligation.
- Part-time students who have business commitments that make it impossible to write examinations at the times posted are required to produce a letter on company letterhead from the student's immediate supervisor stating that they are unable to be present owing to a specific job commitment.

In such cases, applications must be made in writing to the Student Experience – Academic (MBA) office at least ten business days before the scheduled examination date and acceptable documentation must be supplied.



If a student is representing the University at an academic or athletic event and is available at an overlapping scheduled time of the test/examination, the student may write the test/examination at an approved location with an approved invigilator, as determined by the Student Experience – Academic (MBA) office.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within ten business days of the end of the examination period.

Note: A fee of \$50 will be charged for a deferred exam written on campus and a fee of \$100 for deferred exams written elsewhere. In cases where the student's standing is in doubt, the Graduate Admissions and Study Committee may require that the student with one or more deferred examination privileges refrain from re-registering until the examination(s) have been cleared.

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### ***ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES***

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Student Accessibility Services (SAS) offers various support services for students with disabilities. Students are required to inform SAS of accommodation needs for course work at the outset of the term. Students must forward a copy of such SAS accommodation to the instructor normally, within the first three (3) weeks of classes by setting up an appointment with the instructor. If a student with a disability chooses NOT to take advantage of a SAS accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. The SAS website is:

<http://sas.mcmaster.ca>

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### ***RELIGIOUS, INDIGENOUS, OR SPIRITUAL OBSERVANCES (RISO)***

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Students requiring academic accommodation based on religious, indigenous, or spiritual observances should follow the procedures set out in the [RISO](#) policy. Students should submit their request to their Faculty Office ***normally within 10 working days*** of the beginning of the term in which they anticipate a need for accommodation or to the Registrar's Office before their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

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## ***COPYRIGHT AND RECORDING***

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Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright-protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical, and artistic work, **including lectures** by University instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for authorized distribution or by a student for personal study. Students should be aware that their voices and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

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## ***POTENTIAL MODIFICATION TO THE COURSE***

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The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with an explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

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## ***ACKNOWLEDGMENT OF COURSE POLICIES***

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Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) in the various learning activities of the MBA course will be considered to be an implicit acknowledgment of the course policies outlined above, or of any other, that may be announced during lecture and/or on A2L. **It is your responsibility to read this course outline, familiarize yourself with the course policies, and act accordingly.**

Lack of awareness of the course policies **cannot be invoked** at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand.

## COURSE SCHEDULE

### BUS F734 Winter 2024 Course Schedule

Date	Topics	Chapters
Jan. 11	Syllabus Review, Real Estate Mortgage Loan Foundations	CH-3
Jan. 18	Real Estate Financing Costs: Fixed Rate Mortgage Loan	CH-4
Jan. 25	Real Estate Financing Costs: Floating Rate Mortgage Loan	CH-5
Feb. 1	Income-producing properties: Market for leases, rents, and space	CH-9
Feb. 8	Valuation of Income properties: Appraisal and Market for Capital	CH-10
Feb. 15	Income properties: Investment and Taxation Analysis	CH-11
Feb. 22	<b>Midterm Recess – NO Class</b>	
Feb. 29	<b>Midterm Exam</b> <i>(Readings: Lecture Notes, Chapters 3, 4, 5, 9, 10, 11)</i>	
Mar. 7	Real Estate income property: Financial Leverage and Financing Alternatives	CH-12
Mar. 14	Income-Producing Real Estate: Investing in a Project Development	CH-16
Mar. 21	Secondary Market for Mortgage Loans I: Mortgage-Backed Securities	CH-19
Mar. 28	Secondary Market for Mortgage Loans II: CMO and Derivative Securities	CH-20
Apr. 4	Analysis of Investment Portfolios: Measurement of Return and Risk	CH-22
Apr. 11	Real Estate Portfolio Funds: Structure, Performance, Benchmarking	CH-23
<b>Apr. 13-27</b>	<b>Final Exam – Scheduled by MBA Office</b>	

\* The course topics may be changed during the term at the discretion of the instructors. The instructors will notify students during regular class time in case a change in course topics is made.