





## MBA F734 Real Estate Finance and Investment Winter 2021 Course Outline

# Finance and Economics Area DeGroote School of Business McMaster University

# **COURSE OBJECTIVE**

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

### INSTRUCTOR AND CONTACT INFORMATION

Time: Friday 2:30 – 5:20 p.m. Dr. Yan Wang Instructor ywang@mcmaster.ca

Office: DSB 323 Office Hours: By appointment

Tel: (905) 525-9140 x23984 Class Location: Zoom Virtual Classroom

#### **Student TA**

Qiao Wang

Course website: https://avenue.mcmaster.ca/

# **COURSE ELEMENTS**

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

## **C**OURSE **D**ESCRIPTION

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 the commercial real estate. The topics include mortgage fundamentals, market analysis, appraising, valuation and investment analysis, mortgage back securities, and managing real estate portfolios.

## **LEARNING OUTCOMES**

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 principals of evaluating the investments in real estate market

### **REQUIRED COURSE MATERIALS AND READINGS**

Course Materials Are Available on Avenue To Learn

<u>http://avenue.mcmaster.ca</u>

**Case Studies** 

Download from Harvard Business Review: <u>https://hbr.org/</u>

Reading

William B. Brueggeman and Jeffrey D., Fisher, Real Estate Finance and Investments. McGraw-Hill, 16th ed. or 15th ed.

**Optional Reading** 

David M. Geltner, Norman G. Miller, Jim Clayton and Piet Eichholtz, 2013 ed., Commercial Real Estate Investment and Analysis.

### **EVALUATION**

Learning in this course results primarily from in-class discussion and participation of comprehensive business cases as well as out-of-class assignment. All work will be evaluated on an individual basis except for case studies (reports and presentation) where group work is expected. In the case study analysis and presentation, group members will share the same grade adjusted by peer evaluation.

Missed exams will receive a grade of zero unless the student has submitted and been approved for a Notification of Absence or MSAF. Late assignments and case studies will NOT be accepted. Your final grade will be calculated as follows:

## **Components and Weights**

Assignments	Multiple Choices + Problem Sets (individual)	Avenue	10%
Case Study 1	Case Analysis, Written Report (group)	Avenue	15%
Case Study 2	Case Analysis, Written Report (group)	Avenue	15%
Case Presentation	Case Presentation (group)	Zoom	10%
Midterm Exam	Multiple Choices + Problem Sets (individual) on Avenue Quiz	Avenue Quiz	20%
Final Exam	Multiple Choices + Problem Sets (individual) on Avenue Quiz	Avenue Quiz	20%
Attendance	Attendance (individual)	Zoom	5%
Participation	In-class Contribution (individual)	Zoom	5%
Total			100%

NOTE: The use of a McMaster standard calculator and/or a financial calculator is allowed during examinations in this course. See McMaster calculator policy at the following URL:

www.mcmaster.ca/policy/Students-AcademicStudies/UndergraduateExaminationsPolicy.pdf

# **Grade Conversion**

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme:

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

## **Course Deliverables**

#### Assignment – Multiple Choice + Problem Sets

The assignment is worth **10%** of your final grade. The purpose of assignment is to help you review the knowledge learned in the class and practice your ability to solve the real estate related questions. The individual assignments and corresponding due dates will be posted on Avenue after each session. All assignments are submitted online via Avenue.

#### Case Study 1-2

This course incorporates **two** case studies related to topics on real estate evaluation, investment analysis and real estate development. Each case study analysis (in written report) in this course accounts for **15%** of your final grade. Both case studies (in written reports) account for **30%** of your final grade. Details of each case study will be posted on Avenue. You will be provided with the links to download the case studies from Harvard Business Review.

Students will form 12 teams and each team consists of 3-4 members. You need to form a team before the second lecture starts. You are allowed to switch team for each case study but you need to inform the instructor in advance. For each case study, a list of questions will be posted on Avenue and your team is required to conduct analysis and write a report based on these questions. All written reports are submitted online via Avenue.

The written reports along with data files are due on the date of each case study presentation. Please find the due dates in the course schedule below.

Please note that a peer group evaluation will be performed by all groups for each case study. Students will set their own rules regarding the functioning of their group, which includes attendance at meetings, work allocation and contributions to the project. Students not performing according to the group's standards will have their grade lowered accordingly. (See Peer Evaluation instructions on the Peer Evaluation Form)

#### **Case Study Presentation**

Each team is required to present one of the two case studies. Your team can choose which case study to present. The case study presentation accounts for **10%** of your final grade. You have 15 minutes to present your case analysis and 5 minutes to answer the questions. The case study presentations will be held on Zoom.

#### Midterm Exam

The midterm exam accounts for **20%** of your final grade. The exam will cover material from the lectures, assignments and class discussions. The exam will **NOT** cover the content on case studies and will **NOT** cover any optional readings. The exam is a **close-book** exam. Students who do not write the midterm exam, with approval, will write a makeup midterm exam. The midterm exam will be on Avenue Quiz.

#### Final Exam

The final exam accounts for **20%** of your final grade. The final exam will be cumulative. The exam will cover material from the lectures, assignments and class discussions. The final exam will **NOT** cover the content on case studies and will **NOT** cover any optional readings. The exam is a **close-book** exam. The final exam will be on Avenue Quiz.

#### Attendance

The attendance grade accounts for 5% of your final grade. The student attendance will be checked randomly. If you missed one lecture, one point will be deducted. You can miss lecture(s) for valid reasons such as job interviews or case competition, but an email must be sent well in advance to the instructor for approval. It is your responsibility to report your attendance on Zoom virtual classroom for the lecture.

#### Participation

Your in-class participation accounts for 5% of your final grade. You will get one point per lecture for your participation in the class. Your names on zoom classroom are used to help give credit for your participation. You must use your registered names on Zoom for every class. It is your responsibility to check your participation for each lecture after class.

ACTIVITY	DELIVERY	DESCRITION	TOOL(S)
Lecture	Synch	live session	Zoom
Group Presentation	Synch	live session	Zoom
Group Discussion	Synch	live session	Zoom

### **COMMUNICATION AND FEEDBACK**

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 prior to Week #8 in the term.

## ACADEMIC DISHONESTY

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. 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 behaviour 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

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 other credit has been obtained.
- 2. Improper collaboration in group work.
- 3. Copying or using unauthorized aids in tests and examinations

### AUTHENTICITY/PLAGIARISM DETECTION

**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., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to <a href="https://www.mcmaster.ca/academicintegrity">www.mcmaster.ca/academicintegrity</a>.

## COURSES WITH AN ON-LINE ELEMENT

**Some courses may** use on-line 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.

## **On-Line Proctoring**

**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.

### **CONDUCT EXPECTATIONS**

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 <u>Code of Student Rights & Responsibilities</u> (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 behaviours 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.

## MISSED ACADEMIC WORK

## 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 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 Student Experience – Academic (MBA) office 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 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 for 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 which 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.

# ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

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 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 an 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:

## RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

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

### **COPYRIGHT AND RECORDING**

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 the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

## POTENTIAL MODIFICATION TO THE COURSE

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 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.

### **RESEARCH USING HUMAN SUBJECTS**

#### ONLY IF APPLICABLE

Research involving human participants is premised on a fundamental moral commitment to advancing human welfare, knowledge, and understanding. As a research intensive institution, McMaster University shares this commitment in its promotion of responsible research. The fundamental imperative of research involving human participation is respect for human dignity and well-being. To

this end, the University endorses the ethical principles cited in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans:

#### http://www.pre.ethics.gc.ca

McMaster University has mandated its Research Ethics Boards to ensure that all research investigations involving human participants are in compliance with the Tri-Council Policy Statement. The University is committed, through its Research Ethics Boards, to assisting the research community in identifying and addressing ethical issues inherent in research, recognizing that all members of the University share a commitment to maintaining the highest possible standards in research involving humans.

If you are conducting original research, it is vital that you behave in an ethical manner. For example, everyone you speak to must be made aware of your reasons for eliciting their responses and consent to providing information. Furthermore, you must ensure everyone understands that participation is entirely voluntary. Please refer to the following website for more information about McMaster University's research ethics guidelines:

#### http://reo.mcmaster.ca/

Organizations that you are working with are likely to prefer that some information be treated as confidential. Ensure that you clarify the status of all information that you receive from your client. You **MUST** respect this request and cannot present this information in class or communicate it in any form, nor can you discuss it outside your group. Furthermore, you must continue to respect this confidentiality even after the course is over.

### ACKNOWLEDGEMENT OF COURSE POLICIES

Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) to the various learning activities of MBA F734 will be considered to be an implicit acknowledgement 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, to familiarize yourself with the course policies and to 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.

# **C**OURSE SCHEDULE

# MBA F734 Real Estate Finance and Investment Winter 2021 Course Schedule

Week	Date	Place	Due Date	Contents
1 (Week Jan. 11)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting		Introduction & Mortgage fundamentals
2 (Week Jan. 18)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting	Register your team members Assignment 1 (Mortgages) Due	Real Estate Valuation & Investment Analysis Part 1
3 (Week Jan. 25)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting		Real Estate Valuation & Investment Analysis Part 2
4 (Week Feb.1)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting	Assignment 2 (Valuations) Due	Financing Alternatives Part1
5 (Week Feb. 8)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting		Financing Alternatives Part2
6 (Week Feb. 15)	Fri., 2.30 – 5.20 p.m.		Winter Break, No Class	
7 (Week Feb. 22)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting	Assignment 3 (Financial alternatives) Due	Midterm Exam
8 (Week Mar.1)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting	Case study 1 report due	Case Study 1: Discussion & Presentations
9 (Week Mar. 8)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting		Real Estate Development
10 (Week Mar. 15)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting		Mortgage Back Securities
11 (Week Mar. 22)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting		REITs
12 (Week Mar. 29)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting	Case study 2 report due	Case Study 2: Discussion & Presentations
13 (Week April.5)	Fri., 2.30 – 5.20 p.m.	Zoom Meeting	Assignment 4 (Real estate development + Mortgage back securities) Due	Overview & Assignments & Mock Exam