



## BUS F701 Alternative Investments and Portfolio Management Winter 2024 Course Outline

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

## **COURSE DESCRIPTION**

This course introduces students to a wide range of alternative investments, including hedge funds, commodities, infrastructure, and others. Students are also provided a deeper, cutting-edge treatment of modern hedge fund investment strategies as well as a rigorous analysis of the practical portfolio management process. This course is highly recommended for any student considering a career in investments, portfolio management, corporate finance, investment advisory, or the broader financial services.

## INSTRUCTOR AND CONTACT INFORMATION

#### Fridays at 11.30 AM

All times referenced in this document are Eastern.

#### Adeel Mahmood

Instructor Tel: 905-525-9140 *Office Hours*: After class or by appointment

#### **COURSE ELEMENTS**

Credit Value: 3 I Avenue: Yes Participation: Yes

Leadership: Yes Ethics: No Innovation: Yes IT skills: Yes Numeracy: Yes Group Work: Yes

Global view: Yes Written skills: Yes Oral skills: Yes

#### **COURSE PREREQUISITES AND COMPLEMENTS**

Students should have the academic credit of F600 or F650 – or an equivalent preparation – prior to the start of this course.

## **COURSE OVERVIEW AND OBJECTIVE**

During the past decade, there has been an explosive growth in the use of "alternative" investments in enhancing investment portfolios. Alternative investments include hedge funds, private equity, commodities, infrastructure, and others. This first part of this course provides an introduction to a wide range of alternative investments. In the second half, we gain a rigorous understanding of the practical portfolio management process.

A deeper, cutting-edge treatment of modern hedge fund investment strategies forms the fabric of the major part of the course – much of which is delivered in a financial trading lab. Students will be introduced to spreadsheet-based investment and portfolio analysis and will also get to work with a range of financial data sources (such as Bloomberg and Thomson Reuters).

This course covers several key investment topics in such professional finance exams as:

- CFA Institute: Chartered Financial Analyst (CFA) all levels
- CAIA Association: Chartered Alternative Investment Analyst (CAIA) all levels
- Global Association of Risk Professionals: Financial Risk Manager (FRM) exams

#### LEARNING OUTCOMES

Upon completion of the first half of this course, students will be able to:

- > Identify and distinguish between the traditional and alternative investments;
- Use investment analytics to examine each alternative asset class;
- Address the unique attributes of, and investments under, each alternative asset class, including hedge funds, commodities, infrastructure, and others;
- Conduct a deeper, cutting-edge analysis of modern hedge fund investment strategies, including long/short, event driven, managed futures, and others.

In the second half, students will develop a sound understanding of the following topics:

- > Attributes and needs of institutional investors, including asset allocation;
- > Equity and fixed-income portfolio management; and
- Evaluating portfolio performance.

## REQUIRED COURSE MATERIALS AND READINGS

Course content and class communication available on Avenue:

• <u>http://avenue.mcmaster.ca</u>

#### **OPTIONAL COURSE MATERIALS AND READINGS**

(MTPM) Maginn, Tuttle, Pinto, McLeavey; <u>Managing Investment Portfolios: A Dynamic</u> <u>Process (CFA Institute Investment Series)</u>; *Third (3rd) Edition*; Wiley, 2007:

• ISBN: 978-0470080146

Maginn, Tuttle, Pinto, McLeavey; <u>Managing Investment Portfolios Workbook: A Dynamic Process (CFA Institute Investment Series)</u>; *Third (3rd) Edition*; Wiley, 2007:
ISBN: 978-0470104934

Anson, Fabozzi, Jones; <u>The Handbook of Traditional and Alternative Investment Vehicles:</u> <u>Investment Characteristics and Strategies</u>; *First (1<sup>st</sup>) Edition*; Wiley, 2010:

• ISBN: 978-0470609736

#### **EVALUATION**

Individual learning in this course results from in-class discussions, problem solving, and lab work. The balance of the individual learning results from lectures on specific topics, student research, and industry speakers. Team learning focus of this course is on an applied group project centred on hedge fund portfolio management.

The final grade will be calculated as follows:

## **Components and Weights**

Two Term Tests	Variable weights (individual)	55%
Alternatives Assignment	Due online during the term (group)	15%
Hedge Fund Portfolio Project	Due online at the end of the term (group)	30%
Total		100%

Note that the calculated grade in the course may be subject to an overall adjustment to bring the class average in line with the established grade ranges of the MBA Program.

## Grade Conversion

LETTER GRADE	PERCENT	POINTS
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

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

## Term Tests

Two term tests – *open-book*, *open-notes* tests – will be written during the term. More details of the format, structure, and content coverage will be provided during the course of the term.

A student *missing a test* is required to contact the 'Student Experience – Academic (MBA) office' and obtain an official approval of relief if he or she wishes to avoid getting a zero (0) grade for the test. If the 'Student Experience – Academic (MBA) office' adjudicates that relief be provided, the student will be able to write an alternate test, in lieu of the missed test, during the final exam period at the end of the term.

While the combined weight of the two term tests is 55%, the test in which the student's **percentage mark is higher will form 30% of the student's final grade** with the other test forming the remaining 25%. This re-weighting is still applicable if an alternate test is written in lieu of a missed test.

## Alternatives Assignment

The *Alternatives Assignment* will be completed and submitted for marking online by students in groups. More details of the format, structure, and content coverage will be provided during the course of the term.

Students will form groups for this component. Each student group will also complete the *Hedge Fund Portfolio Project* as described further below. *The group members will be assigned individual grades relative to the group grade based on the peer assessments completed towards the end of the course.* 

## Hedge Fund Portfolio Project

Students will form groups for this component. Each student group will also complete the *Alternatives Assignment* as described further below. *The group members will be assigned individual grades relative to the group grade based on the peer assessments completed towards the end of the course.* 

Each group will complete the *Hedge Fund Portfolio Project*, due at the end of the term. The project will entail analyzing and managing a hedge find investment portfolio using available financial data and the concepts covered in the course.

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

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 should conduct an informal course review with students 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.

#### COURSES WITH AN ONLINE ELEMENT

Our course may use on-line elements (e.g. e-mail, Avenue to Learn, 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, usernames 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 on-line 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.

#### **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 *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 behaviours that interfere with university functions on online platforms (e.g. use of A2L, 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.

#### **EXTREME CIRCUMSTANCES**

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.

#### 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. Speak with the instructor if this is a concern for you.

## ACADEMIC INTEGRITY

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. It is your responsibility to understand what constitutes academic dishonesty.

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, such as 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. For information on the various types of academic dishonesty, refer to the policy:

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. 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

## GENERATIVE AI

Students are **not permitted** to use generative AI to complete any graded assessments in this course. In alignment with McMaster academic integrity policy, it "shall be an offence knowingly to … submit academic work for assessment that was purchased or acquired from another source". This includes work created by generative AI tools. Also stated in the policy is the following: "Contract Cheating is the act of outsourcing of student work to third parties with or without payment." Using generative AI tools is a form of contract cheating. Charges of academic dishonesty will be brought forward to the Office of Academic Integrity.

#### **COURSE MODIFICATION**

From time to time, there may be a need to add and/or remove topics or to change the schedule or delivery format. If these are necessary, you will be given as much advance notice as possible.

#### MISSED ACADEMIC WORK

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

Please do not use the online McMaster Student Absence Form (MSAF) as this is for Undergraduate students only. The MBA program will not accept an MSAF.

When students miss regularly scheduled term work which contributes 10% or more to the final grade, for legitimate reasons as determined by the Student Experience – Academic Office (SEAO), the activity necessary to compensate for the missed work will be determined by the course instructor. The compensatory activities assigned will vary with the nature of the course and the missed requirement. They include, but are not restricted to, an alternative assignment, a rescheduled midterm exam, or re-weighting the marks for the missed component to other mark components. Documentation explaining such missed work must be provided to the SEAO within five (5) working days of the scheduled date for completion of the work.

Acceptable reasons for missed work, along with the Petition for Missed Term Work and the MBA Student McMaster University Student Health Certificate, can be found on the DeGroote MBA Student website (mbastudent.degroote.mcmaster.ca). Please direct any questions about acceptable documentation to the MBA Academic Advisors (askmba@mcmaster.ca).

University policy states that a student may submit a maximum of three (3) Petition for Missed Term Work per academic year, after which the student must meet with the Director of the program.

If term work is missed without an approved reason, students will receive a grade of zero (0) for that component.

## **Missed Final Examinations**

Students must be available for the duration of the posted exam period regardless of their personal exam schedule. This is to ensure student availability throughout the entire exam period in the event that an exam must be rescheduled due to unforeseen circumstances (university closure, power outage, storm policy, etc.). A student who misses a final examination without valid reason will receive a mark of 0 on the examination.

Students who have missed a final exam for a valid reason can apply to the SEAO to write a deferred examination by submitting an Application for Deferring a Final Exam with supporting documentation. The application must be made within five days of the scheduled exam.

The Application for Deferring a Final Exam and the MBA Student McMaster University Student Health Certificate can be found on the DeGroote MBA Current Student website (mbastudent.degroote.mcmaster.ca).

Deferred examination privileges, if granted, are normally satisfied during the examination period at the end of the following semester. In select cases, the deferred examination may be written at a time facilitated by the SEAO and agreed to by the course instructor.

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

#### ACADEMIC ACCOMMODATION FOR 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:

http://sas.mcmaster.ca

Students who are leveraging accommodation for tests and exams are supported by the SEAO. These exams are written at the Ron Joyce Centre and do not take place in the Tim Nolan Testing Centre. Correspondence for accommodations is managed via the DSBSAS@mcmaster.ca email address. Students must communicate their intent to leverage accommodations on a test or exam a minimum of 10 business days prior to the assessment.

# ACADEMIC ACCOMMODATION FOR 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 RISO 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 or 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.

#### ACKNOWLEDGEMENT OF COURSE POLICIES

Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) to the various learning activities of this course 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.

## COURSE SCHEDULE

Wĸ.	DATE	CONTENT	READINGS
1	Fri. Jan 12	<b>Introduction</b> Traditional vs. Alternative Investments, Intro to Hedge Funds	<ul> <li>Canada Hedge Fund Primer – AIMA Canada</li> </ul>
2	Fri. Jan 19	Hedge Funds I Long/Short Investing, Market-Neutral Investing	<ul> <li>Long/Short Equity Strategy – AIMA Canada</li> </ul>
3	Fri. Jan 26	Hedge Funds II Event-Driven Investing	• Introduction to Event-Driven Investing
4	Fri. Feb 2	Hedge Funds III Commodities Investing, Managed Futures	<ul> <li>Managed Futures – CME Group</li> <li>Mining &amp; Steel Primer – UBS</li> </ul>
5	Fri. Feb 9	Hedge Funds IV Global Macro Investing	Systematic Global Macro –     Graham Capital Management
6	Fri. Feb 16	Term Test 1 (Written during class hours)	
-	Feb 19 to 23	Midterm Recess (No Classes)	
7	Fri. Mar 1	<b>Portfolio Management I</b> Fixed-Income and Equity Portfolio Management	<ul> <li>MTPM – Fixed-Income Portfolio Management</li> <li>MTPM – Equity Portfolio Management</li> </ul>
8	Fri. Mar 8	<b>Portfolio Management II</b> Evaluating Portfolio Performance	MTPM – Evaluating Portfolio Performance
9	Fri. Mar 15	Capital Structure Arbitrage Convertible Arbitrage	Convertible Arbitrage Strategy – AIMA Canada
10	Fri. Mar 22	<b>Structured Finance</b> Asset-Backed Securities, Structured Lending	Secondary Real Estate Markets
-	Mon. Mar 25	Alternatives Assignment due online by 10.00 AM	

Wκ.	DATE	Content	READINGS
11	Virtual	Algorithmic Trading Developing Algorithms, High-Frequency Trading, Market Making	(TBA*)
12	Fri. Apr 5	Term Test 2 (Written during class hours)	
-	Mon. Apr 8	Hedge Fund Portfolio Project – Strategy Submission Due Online by 10.00 AM	
13	Fri. Apr 12	<b>Cryptocurrencies + Project Review</b> Blockchains, Bitcoin/Ethereum, Project Review	(TBA*)
-	Mon. Apr 15	Hedge Fund Portfolio Project – Final Report Due Online by 10.00 AM	

\* To be announced during the term