#### Commerce 3FI3

## Market Trading with Options and Futures Fall 2024 Course Outline

Finance and Business Economics
DeGroote School of Business
McMaster University



## Course Objectives

This experimental course introduces students to the theory and practice of investment analysis through a combination of in-class lectures and Real-time Financial Trading System (FTS). The FTS interactive market allows students to gain trading experience and implement various trading strategies with analytical industry tools, such as Thomson Reuters *Eikon* and Bloomberg. Students will acquire knowledge of security markets, and risk-return characteristics in options and futures trading, and develop a deeper understanding of how financial markets operate.

## **Instructor and Contact Information**

Sections	C01	C02	C03			
Date & Time	Monday 11:30 - 2:20 pm	Tuesday 11:30 - 2:20 pm	Wednesday 11:30 - 2:20 pm			
Location	TBA					
Instructor	Dr. Lulu Zhang (zhangl40@mcmaster.ca)					
Office Hours	$\operatorname{TBA}$					
TA 1	Ahsan Choudhry ( <u>chouda19@mcmaster.ca</u> )					
Office Hours	TBA					
TA 2	Paris Ostad ( <u>ostads@mcmaster.ca</u> )					
Office Hours	TBA					

#### Course Elements

Avenue:	Yes	Leadership:	Yes	Global view:	Yes	Critical thinking:	Yes
Participation:	Yes	Ethics:	Yes	Numeracy:	Yes	Written skills:	Yes
Evidence-based:	Yes	Innovation:	Yes	Group work:	Yes	Oral skills:	Yes
Experiential:	Yes	IT skills:	Yes	Final Exam:	No	Credit Value:	3

## Course Description

The course begins with an overview of the structure of financial markets in North America, followed by a more in-depth analysis of various securities (e.g., stocks, bonds, indices, currencies, etc.) and their corresponding derivatives. Later on, this course introduces well-employed trading strategies that minimize market exposure through risk management.

Students are assigned securities and their corresponding derivatives to trade based on their financial market outlook and expectations using the FTS trader system. A fictional account with 1 million (per currency, in \$CAD/\$USD) is created and evaluated at the end of the course. Students form subgroups that act as individual investment/trading firms. They will provide market reports with buy, hold, and sell recommendations, which must include their outlook for North American markets and the reasoning behind their trading decisions.

#### Selection Criteria for the Course

**Prerequisites**: Completion of Commerce 2FB3, 3FA3, or IBH 3AC3 in good standing, and enrolment is limited to a maximum of 27 students.

## Course Materials and Readings

Course content and readings are uploaded on Avenue To Learn ( $\underline{A2L}$ ). The following course material is available at the Campus Store.

John J. Siam THE TRADING MANUAL, Canadian Edition Version 4.0 \$150.00

#### Course Deliverables

#### In-class Lectures and Guest Lectures

The course includes lectures that cover stocks, bonds, money, and currency markets, as well as the derivatives markets. The primary focus is on trading and trading strategies that utilize cash securities in combination with derivatives. Additionally, the <u>Trader in Residence (TiR)</u> program invites professionals from the financial services industry to discuss a variety of current industry topics and provide advisory support to students. These guest lectures will be held on <u>Thursday</u>, 5:30 pm - 7:00 pm (Dates and Location, TBA).

#### Real-time Trading Sessions

Students will begin by trading cash securities (e.g., stocks, bonds) within their virtual accounts. Later, they will be assigned options on each of their underlying securities to trade. The trading will involve risk-minimizing strategies that typically combine cash and derivative securities.

#### Tutorials

Tutorials will be provided (in class or at another time) for pre-quiz practice, guidance in FTS trading, and the application of industry analysis tools.

#### Quizzes

In-class quizzes are designed to test students' understanding of the lectures throughout the term.

## Final Project

The final project is group-based and will be evaluated according to peer performance, trading criteria, and the final group report.

- Peer Performance: Your group will be ranked based on its absolute performance in CAD.
- Trading Criteria: You are expected to meet specific trading criteria.
- Final Report: The final report must be submitted on time and should include an executive summary, an economic review covering the global economic outlook, market outlook, and your trading horizon. The report should also present a time-series analysis of your positions, with an in-depth analysis and justification for your trading activities.

#### **Evaluation**

Strict adherence to the codes of conduct established by the DeGroote Trading Centers (<u>DTC</u>) are prerequisite. Students are reminded that they must adhere to the University's academic ethics standards.

Students are expected to come to class on time and be prepared for the class, i.e., to have read the assigned readings. Your performance will be evaluated on both individual and group basis. **Please** note that group size is limited to 3 students.

The components of the course grade weighted are as follows, tentatively. The instructor reserves the right to modify the weightings to adjust for material covered during the semester. Missed tests/exams will receive a grade of zero unless the student has previously submitted and been approved for the McMaster Student Absence Form (MSAF).

The weight of missed work will be carried over to the next one. Late submission of the final report is subject to a 20% deduction for each day late, up to 100%.

#### Components and Weights

Content	Number	Evaluation Method	Weight	Description
Attendance	5	Individual	5%	1% each, in-class random check
Quizzes	3	Individual	50%	15% to $20%$ each, in-class quiz
Final Project	1	Group	45%	End-of-term online submission
Total			100%	

The use of a McMaster standard calculator is allowed during examinations in this course. See McMaster calculator policy <u>here</u>.

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

#### Conversions of Numeric Grade to Letter Grade

Numeric	Letter	Numeric	Letter	Numeric	Letter	Numeric	Letter
90 - 100	A+	77 - 79	B+	67 - 69	C+	57 - 59	D+
85 - 89	A	73 - 76	В	63 - 66	$\mathbf{C}$	53 - 56	D
80 - 84	A-	70 - 72	В-	60 - 62	C-	50 - 52	D-
		0 - 49			F		

## Learning Outcomes

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

- Play the role of a decision-maker as a trader and/or portfolio manager in two settings: individually and as part of a group (firm).
- Use different platforms (Reuters, Bloomberg, etc.) to assess information, forecast market direction, and evaluate companies' prospects.
- Calculate necessary industry metrics, marketing information, financial ratios, and trends to support their market views and recommendations.
- Identify important market opportunities and challenges facing a market or firm, and develop strategies to benefit from them.
- Implement risk management techniques as needed to enhance and protect their allocated capital.
- Acquire and develop networking skills through TiR visits that may open career opportunities in the financial services industry.

#### Communication and Feedback

Students who wish to correspond with instructors or TAs directly via email must use their official Mc-Master University email accounts. This ensures the confidentiality and sensitivity of the information and verifies the student's identity. Students must receive feedback on their progress before the final date by which they may withdraw from the course without academic penalty.

Students who have concerns about the course content, evaluation methods, or delivery should first reach out to the course instructor.

## Requesting Relief for Missed Academic Work

In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "Requests for Relief for Missed Academic Term Work" and the link here.

#### Potential Modifications to The Course

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

It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

#### Generative AI

Students may use generative AI in this course according to the guidelines outlined for each assessment, provided that its use is properly **referenced and cited** as per the citation instructions given in the syllabus. Use of generative AI outside of these guidelines or without proper citation will be considered academic dishonesty. It is the student's responsibility to understand the limitations for use in each assessment and to adhere to the expectations for citation and referencing.

## **Academic Integrity**

You are expected to demonstrate honesty and ethical behavior in all aspects of the learning process. The 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 involves knowingly acting or failing to act in a manner that results in, or could result in, unearned academic credit or advantage. Such behavior can have serious consequences, including a grade of zero on an assignment, loss of credit with a notation on your transcript (e.g., "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. For information on the various types of academic dishonesty, please refer to the Academic Integrity Policy.

The following illustrates only three forms of academic dishonesty:

- Plagiarism, such as submitting work that is not your own or for which credit has already been obtained.
- Improper collaboration in group work
- Copying or using unauthorized aids in tests and examinations

## Authenticity/Plagiarism Detection

Some courses may use a web-based service (e.g., <u>Turnitin</u>) 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 or via an online learning platform (e.g. A2L, etc.) using plagiarism detection 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, please go here.

#### Courses with an Online Element

Some courses may use online elements (e.g., e-mail, Avenue to Learn, 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, 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 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.

## Online 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 behaviors 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.

#### Academic Accommodation of Students with Disabilities

Students with disabilities who require academic accommodation must contact Student Accessibility Services (SAS) at 905-525-9140 ext. 28652 or <a href="mailto:sas@mcmaster.ca">sas@mcmaster.ca</a> to make arrangements with a Program Coordinator. Consult McMaster University's <a href="mailto:Accommodation of Students with Disabilities">Academic Accommodation of Students with Disabilities</a> policy for further information.

# 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 <u>RISO</u> 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.

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

## **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, Avenue to Learn, and/or McMaster email.

## Acknowledgement of Course Policies

Your enrolment in Commerce 3FI3 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.

A 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.

## Tentative Course Schedule

Week	Chapters	Topics
W1	1 & 2	Lecture 1: Introduction to Financial Markets
W2	3	Lecture 2: The Cash Market
W3	4	Lecture 3: Market Direction: Indices and ETFs
W4		Quiz 1 (90mins, 11:30 - 1:00 pm, Lectures 1, 2 & 3)
W5	5	Lecture 4: Interest Rates Dynamics, Market Outlook
W6		Recess Week
W7	6 & 7	Lecture 5: The Options Market
W8	9	Lecture 6: Spreading Options
W9		Quiz 2 (90mins, 11:30 - 1:00 pm, Lectures 4, 5 & 6)
W10	10 & 11	Lecture 7: Index Options plus Arbitrage
W11	12 & 13	Lecture 8: The Forward and Futures Markets
W12	14 & 16	Lecture 9: Index Futures plus Arbitrage
W13		Quiz 3 (90mins, 11:30 - 1:00 pm, Lectures 7, 8 & 9)
Dec 13th		Final Project Submission

Several tutorials may be conducted in class after the lecture or at another time.