Business A722/F722
Market Trading and Risk Management
Fall 2022 Course Outline
Finance and Business Economics
DeGroote School of Business
McMaster University

COURSE OBJECTIVES

This cross-listed (Accounting and Financial Management Services & Finance and Business Economics) experimental course attempts to develop practical skills in trading financial securities with a focus on risk management and return enhancement through role-playing. The course deals comprehensively with the increased importance played by risk and uncertainty in today's financial markets. The course employs in-person, synchronous and asynchronous learning and uses industry tools such as Thomson Reuters Refinitiv and Bloomberg Professional, through in-person classes, school's vlab and DTC remote access.

COURSE DELIVERY

LEARNING ACTIVITIES	DELIVERY	DESCRIPTION	TOOL(S)
In-person/Virtual Classes	Synch	Live sessions led by your instructor	**Zoom and Top Hat** Every week during class time
Self-Study	Asynch	Various multimedia learning materials, includes recoded lectures, tutorials & seminars	**Avenue to Learn** View at your own time and to prepare before live sessions
In-person/Virtual Tutorials	Synch	Live sessions/virtual sessions led by your instructor and/or TA.	**Zoom and Top Hat** Every week during class time
3 Quizzes		See Course Schedule	**Avenue to Learn**
Trading Cases	Both	Live sessions led by instructor and/or TA and on your own practice sessions on FTS server.	**Through the School's vlab and DTC remote access login to FTS Server**
Real-time Trading Sessions	Both	Live sessions led by your instructor and/or TA and on your own time when markets are open	**Through the School's vlab and DTC remote access login to FTS Server**
Weekly Seminars	Both	Thomson Reuters and Bloomberg Sessions led by your TA	**Zoom and on Avenue** Live, Recordings and PP

INSTRUCTOR AND CONTACT INFORMATION

Instructor: **Dr. John J. Siam**
Office Hours:
Fridays: 10:30 – 11:30
Or by appointment
Email: siamj@mcmaster.ca

TA: TBA on Avenue
Office Hours:
RJC 126
Or by appointment
Email: TBA on Avenue

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

SELECTION CRITERIA FOR THE COURSE

Prerequisite: F600 OR F650 Anti-requisite: A722.
REGISTRATION IN THE MBA PROGRAM OR Registration in the MFin Program OR enrollment in the Blended-Learning Part-time MBA program, e*nrolment is limited to a maximum of 20 students*.

COURSE DESCRIPTION

This experiential course, students are introduced to theoretical and empirical issues of different financial instruments, their valuation methodology, and their institutional uses in risk management. Market microstructure knowledge provides students guidance in implementing their trading strategies. Students can trade money market instruments, bonds, equities, indices, ETFs, currencies, commodities, and their corresponding derivatives; focusing on trading strategies that minimize market exposure through risk management. Pedagogically, students are assigned securities and their corresponding derivatives to trade subject to financial markets outlook and their expectations. Fictional accounts of one million dollar per currency (Canadian/US) created and evaluated at the end of the course. Students select their subgroups that act as individual investment/trading firms. Students will supply market reports with buy, hold, and sell recommendations. The reports must include the students' outlook for North American Markets and form the basis for the individual reasoning for trading the securities.

COURSE ORGANIZATION

The experiential course implements in-person, synchronous and asynchronous in virtual environment for lectures, presentations, supervised and unsupervised trading. The class meets once per week for a three-hour session. Supervised trading and weekly trading cases (see below) performed during class

time; students justifying their trading positions/decisions using due diligence and market microstructure. The trading sessions systematically evaluated; trading strategies scrutinized during lectures. In addition, students are responsible for trading their portfolios online for a *maximum* of four hours per week (at times of their choice and during markets hours). All trades logged to prevent falsification of trading histories.

LECTURES CONTENT

The aim of the course is to provide a comprehensive treatment of financial risk and uncertainty faced by firms and individuals exposed to financial markets. The course attempts to develop practical skills by focusing on hedging and hedging strategies, financial engineering, risk management (market risk), measuring and monitoring market risk across complex and volatile financial market.

Lectures

The course includes lectures that review stocks, bonds, money, and currency markets, as well as the derivatives markets. The focus is on trading and trading strategies that utilize cash securities in combination with derivatives. Students introduced to different financial instruments, institutional details, back office, markets microstructure, exchange and over-the-counter derivatives, principles of valuation, risk management and hedging techniques. Speculative strategies also discussed and examined in detail. The specific topics include, exchange and over-the-counter trading, market microstructure, reading the "signs" and "pulse" of the market, understanding the electronic book, risk/reward analysis, arbitrage, government and corporate securities, selection criteria, degrees of trading aggressiveness, uses of derivatives, such as, covered writing philosophy, cash/futures spreads, importance of Delta hedging, derivatives arbitrage, interest rate and exotic futures spreads…etc.

SKILL BUILDING TOOLS

"Trading Centres put emphasis on experiential learning and encourage critical reasoning and creative thinking. Intensive workshops, team projects, and real-world experience with traditional lectures establishes a dynamic forum for producing competent managers. Partnerships with industry ensure that the skills and competencies developed are relevant in today's marketplace" (Siam[1]). The course uses several tools that provide core and discipline specific competencies that link education and workplace. Students who can build industry tools are more valuable in the workplace and open new career opportunities for themselves.

I. ***Real-time Trading Sessions***

At the beginning of the course each student is assigned equities, fixed income securities (together, the "cash securities") and a fictional account of one million dollars. During the first four weeks, students trade the cash securities. In week five, students are assigned options on each of their underlying securities. After receiving their options, students begin trading the cash securities and

[1] Siam, J. (2005), "University Trading Centers and their Role in Business Education", *Journal of Financial Education*, Vol. 31 Lead Article.

their options. Risk minimizing strategies typically involve trading combinations of cash and derivatives securities.

II. *Group Market and Securities Analysis (GMSA)*

Students are encouraged to form groups on Avenue and work on Group Market and Securities Analysis Reports (GMSA). The reports present the group's outlook for relevant markets (Debt, Commodities, Currencies, Equity Markets…etc.), plus detailed fundamental and market microstructure analysis of the securities assigned to each member of the group. The reports include recommendations (buy, sell, hold), and present the basis of the individual trading strategies. These reports will lay the foundations and assist students in building their individual Final Report. The GMSA reports are optional and may be submitted to your TA for consultation.

III. Weekly Online Bloomberg Professional and Refinitiv (Thomson Reuters) Seminars

Although optional, attending these seminars increases your knowledge and knowhow in these industry tools and assist you in attending Professional Designation/Certificates that sends the right signal to potential employers.

IV. *Tutorials*

Several tutorials designed to transfer technical and professional knowledge and knowhow as part of the experiential learning process. These interactive and specialized tutorials are used to teach by example the use of software like Realtime Financial Trading System (FTS) and Cases ECN Platform.

V. *Trading Cases*

Several trading cases assigned throughout the course. The objectives of the trading cases are to provide an understanding of important market microstructure concepts, such as, trading, market making, market taking, price discovery, bid-ask spreads/width and market depth, trading frequency and trading volume. A virtual ECN (Electronic Communications Network) installed on DTC server and form a dealing system that allows the instructor to run cases using the students as the trading crowd. Each case poses a different trading question. The trading problems designed, so students can apply finance concepts in formulating their trading strategies.

VI. *Individual Final Project*

The individual final project is a record of the student trading activities, trading justifications, summary of return(s) on trading positions, analysis of market risk (inherent in your trading), collection of students acquired market insight and savvy. The report must build on the student group assignments (and not a copy of GMSA) with emphases on individual reasoning and value added. The report starts with executive summary followed by an economic review detailing, universal economic outlook, markets outlook and outlook of your trading horizon. The final report summarizes weekly expectations in a coherent manner, includes in-depth analysis and justification for the trading activities. Grade received based on your Final Project is based on the value of the portfolio, return on investment, market analysis, securities analysis, individual

reasoning, use of derivatives in risk management applications and "the manner" in which the wealth was accumulated.

EVALUATION

Learning in this course result from lectures, related readings, assignments, trading simulations, trading cases, weekly reports, final project, in class questions and discussions. Work evaluated on an individual basis.

COMPONENTS AND WEIGHTS

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 a Notification of Absence or MSAF.

EVALUATIONS	WEIGHT	DESCRIPTION
Participation	9%	Attending all classes and tutorials[2]. Plus, Answering all Lecture Questions on Top Hat
3 Quizzes	39%	Taken in-person/in class on Avenue to Learn
6 Trading Cases	12%	During Class time
Individual Final Report	40%	Timely[3] submission of Final Report
In-class presenting of Weekly Economic Outlook	2 Extra Marks added to your final grade	During Class time
Optional Project	3 Extra Marks added to your final grade	Submitted with the Final Project as an Appendix[4].
Participating in DeGroote MarketWatch	3 Extra Marks added to your final grade	Upon approval of submitted material/work.

*NOTE: The use of a McMaster standard calculator allowed during examinations in this course. See McMaster calculator policy at the following URL:*http://www.mcmaster.ca/policy/Students-AcademicStudies/UndergraduateExaminationsPolicy.pdf

GRADING CONVENTIONS

A standard grading scale will be used. The instructor will inform you of your marks for participation periodically.

LETTER GRADE	PERCENT	LETTER GRADE	PERCENT
A+	90-100		
A	85-89	B	70-74
A-	80-84	B-	60-69
B+	75-79	F	00-59

[2] *To receive full participation marks, you must participate in all lecture questions asked during class time and answered on 3FI3 Top Hat website; no partial marks are award.*

[3] *The Final Project is due on the Monday following the last lecture at 5 P.M., overdue final repots are subject to penalty of 5 marks per day, that is equivalent to 12.5% per day.*

[4] *Optional Project is due with the Final Project and subject to the same deadline and late penalty.*

PLACES TO GET HELP WITH YOUR WORK:

Instructor and TA on Zoom and financial web sites (listed on the Trading Center web site ***http://trading.degroote.mcmaster.ca/***).

Participation and Conduct

Strict adherences to the codes of conduct established by the DeGroote Trading Centers are pre-requisites. Students are reminded that they must adhere to the standards of academic ethics of the University. The standards are discussed in the booklet of Senate Policy Statements provided to you at registration and are available from the Senate Office. Any deviations from the norms may lead to disciplinary actions.

REQUIRED COURSE MATERIALS AND READINGS

THE Trading Manual, Forth Canadian Edition Version 4.0, John J. Siam *$150.00*
Available at the Allen H. Gould Trading Floor.

Lecture Notes, Assignment, and other course content *Free*
Download from the 3FI3 website (*http://avenue.mcmaster.ca*)
USB drive is required to save your trades and information from GTF platforms.

Online Requirements
Students must create online accounts on Zoom, Top Hat and Avenue. *Free*
Provided by the university to students free of charge.

LEARNING OUTCOMES

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

- ✓ Play the role of the decision maker(s) as trader or/and as a portfolio manager. In two setting: as an individual and as part of your group (firm).
- ✓ Use different platforms (Reuters, Bloomberg…etc.) to assess information, to evaluate and to forecast market direction and companies' prospects.
- ✓ Calculate all necessary industry metrics, marketing information, financial ratios and trends to defend your market view and recommendations.
- ✓ Identify important market opportunities and challenges facing a market/firm and setting out a course of action (strategy) to benefit from them.
- ✓ Implement changes (risk management techniques), as necessary, in order to enhance and protect your allocated capital.
- ✓ Acquire and develop networking skill through the TiR visits that might open career doors in financial services industry.

DEGROOTE MARKETWATCH

- ***DeGroote MarketWatch*** *(*http://trading.degroote.mcmaster.ca/degroote-marketwatch/*)*

  The weekly *DeGroote MarketWatch (DMW)* is financial letter designed to inform/educate DeGroote and the surrounding communities. The *DMW* prepared mostly by students and

supervised by me serves as an experiential training ground allowing dedicated students to gain hands on experience in concaving to readers market information and commentary. The *DMW* tracks the pulse of markets, business news, finance information, commentary, investment tools, and stories of interest submitted by students. Components of the *DMW* financial letter are:

- ✓ Market Indices: Summarizes the week major markets' activities (numbers and charts).
- ✓ Economic Calendar: Outlines the next week's major economic releases.
- ✓ Canadian Market Summary: Highlights last week's major events.
- ✓ Market Outlook: Expectations for the upcoming week.
- ✓ Story of Interest: An article that highlights a recent story submitted by either a student, faculty member, or an industry professional. To submit a story of interest for a possible publication in the DeGroote MarketWatch.

It is highly recommended that all student, signup to receive the weekly DeGroote MarketWatch update (at http://trading.degroote.mcmaster.ca/degroote-marketwatch/marketwatch-signup/).

EXTRACURRICULAR ACTIVITIES – EXTRA 8 MARKS ADDED TO YOUR FINAL GRADE

For more detailed information see Avenue.

- ***Optional Project (3 Marks)***
  The project is not mandatory; the purpose of the project is to enhance your final grade. The optional project is worth 3 marks that can be added to the final grade received in the course.
- ***Story of interest (3 Marks)***
  The DeGroote MarketWatch is a student generated weekly report on financial markets. A sub-section of the MarketWatch is known as the Story of interest, an opportunity for students to write a personal report on market/finance topics that they find interesting and pertinent to capital markets.
- ***Weekly Economic Outlook Presentation (2 Marks)***
  The Weekly Economic Outlook presentation is presented in class, usually by Professor Siam. Starting week two However, up to three students can collaborate to present the report for 2 marks each added to the final grade. Interest students must submit a request to Professor Siam to book their chosen week for the presentation, first come first serve.

COMMUNICATION AND FEEDBACK

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 Area Administrative Assistants. All students must receive feedback regarding their progress prior to the final date by which a student may cancel the course without failure by default.

- For Level 3 courses and above, this feedback must equal a minimum of 10% of the final grade.

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 below;

http://ug.degroote.mcmaster.ca/forms-and-resources/missed-course-work-policy/

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, 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.

For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at https://secretariat.mcmaster.ca/university-policies-procedures- guidelines/

The following illustrates only three forms of academic dishonesty:

- plagiarism, e.g., the submission of work that is not one's own or for which other credit has 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 (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 www.mcmaster.ca/academicintegrity.

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, Thinking Cap, 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 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.

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 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 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.

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 sas@mcmaster.ca to make arrangements with a Program Coordinator. For further information, consult McMaster University's Academic Accommodation of Students with Disabilities policy.

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.

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.

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.

POTENTIAL MODIFICATIONS 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.**

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.

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.

Business A722/F722
Market Trading with Options and Futures
Fall 2022 Course Schedule

Week	Topics	Material Covered
1	**Lecture 1: Introduction to Financial Markets** *Tutorial 1: Tools of The Trade – Real Time FTS*	**Chapter 1 & 2** **Appendix 2A & AH**
2	**Lecture 2: The Cash Market** *Tutorial 2: Start Trading – Thomson Reuters plus Trading Sheet*	**Chapter 3** **Appendix 1A & AH**
3	**Lecture 3: Market Direction** *Tutorial 3: FTS Interactive Cases plus Trading Case RE1s*	**Chapter 4** **Avenue Handout (AH)**
4	**Quiz 1** *(During class time from 11:30 – 12:45 PM, Lectures 1, 2, 3)* *In class Case FTS Trading Case RE1s (practice)* *Start Trading your Securities in FTS Real Trader*	**Quiz 90 min** **Avenue Handout (AH)**
5	**Lecture 4: Trading with Options** *Tutorial 4: Trading Case RE2s* *In class Case FTS Trading Case RE1s (practice)*	**Chapters 6 & 7** **Avenue Handout (AH)**
6	**Lecture 5: Delta Trading** *In class FTS Trading Case RE2s (Case Quiz 1:00 PM on Avenue)* *Tutorial 5: Trading Case OP2s with OP1s as background*	**Chapter 8** **Avenue Handout (AH)**
7	**Lecture 6: Directional Spreads – Spreading Options** *In class FTS Trading Case OP2s (Case Quiz 1:00 PM on Avenue)* *Tutorial 6: Trading Case OP4s*	**Chapter 9 & Chapter 10, sections 10.4.3, 10.4.4 & 10.4.5 (AH)**
8	**Quiz 2** *(During class time 11:30 - 12:45 PM, Lectures 4, 5, 6)* *Supervised FTS Trading*	**Quiz 90 min**
9	**Lecture 7: Interest Rates Dynamics, Market Outlook** *In class FTS Trading Case OP4s (Case Quiz 1:00 PM on Avenue)* *Tutorial 7: Trading Case B03as*	**Chapter 5** **Avenue Handout (AH)**
10	**Lecture 8: Trading with Futures** *In class FTS Trading Case B03as (Case Quiz 1:00 PM on Avenue)* *Tutorial 8: Trading Case IN2s*	**Chapters 12 & 13** **Avenue Handout (AH)**
11	**Lecture 9: Spreading Interest Rates and Index Futures** *Trading Case: Trading Case IN2s (Case Quiz 1:00 PM on Avenue)* *Tutorial 9: Trading Case FX2s*	**Chapters 14 & 15** **Avenue Handout (AH)**
12	**Quiz 3** *(During class time 11:30 - 12:45 PM, Lectures 7, 8, & 9)* *In class FTS Trading Case FX2s (Case Quiz 12:45 PM on Avenue)* *Supervised FTS Trading*	**Quiz 90 min**
13	**Lecture 10: Index Options plus Arbitrage** *Supervised FTS Trading*	**Chapters 10, 11 & 16** **Avenue Handout (AH)**
FINAL PROJECT DEADLINE ***Deadline: Due five days after end of classes/last lecture***		