



**Commerce 3FI3
Market Trading with Options
Winter 2020 Course Outline
Finance and Business Economics
DeGroot School of Business
McMaster University**



COURSE OBJECTIVES

The 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.

INSTRUCTOR AND CONTACT INFORMATION

Instructor: **Dr. John J. Siam**

TA: TBA

Office Hours:

Tuesdays 10:30 – 11:30 DSB 306
Thursdays 10:30 – 11:30 RJC 126
and by appointment

Office Hours:

TBA

Email: siamj@mcmaster.ca

Email: TBA

Tel: (905) 525-9140 x27028

Class location: DSB 122A, Allen H. Gould Trading Floor (GTF)

Course Website: <http://avenue.mcmaster.ca>

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

Prerequisites: Completion of Commerce 3FA3 (Introduction to Finance) in good standing, *enrolment 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 are able to trade money market instruments, bonds, equities, indices, ETFs, currencies, commodities and their corresponding options; focusing on trading strategies that minimize market exposure through risk measurement. Pedagogically, students are assigned securities and their corresponding options to trade subject to financial markets outlook and their expectations. Fictional accounts of one million dollar per currency (Canadian/US) are created and evaluated at the end of the course. In addition, students are divided into 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's reasoning for trading the securities.

COURSE ORGANIZATION

The experiential course uses a combination of lectures, presentations, supervised and unsupervised trading. The class meets once per week for a three-hour session. Classes and trading sessions are conducted at the Allen H. Gould Trading Floor. Supervised trading and weekly trading cases (see below) are conducted during class time; the students are expected to justifying their trading positions/decisions using due diligence and market microstructure. The trading sessions are used to systematically evaluate students' trading positions and offer suggestions and recommendations. Trading strategies are scrutinized during lectures. In addition, students are responsible for trading their portfolio a *maximum* of four hours per week (at times of their choice). All trades will be 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 are 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 are also discussed and are examined in detail. The specific topics cover: 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 options, such as, covered writing philosophy, ratio call writing, importance of Delta in hedging, options arbitrage, interest rate play and various exotic spreads.

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” (Siam¹). The course uses a number of tools that provide core and discipline specific competencies that link education and workplace. Students who are able to 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 their options. Risk minimizing strategies typically involve trading combinations of cash and derivatives securities.

II. *Group Monthly Market and Securities (MMSA) Analysis*

Students are advised to form groups (Maximum five members), and work on Monthly Market and Securities Reports (MMSA). The reports present each group’ 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 assist students in building their individual Final Report. The reports are optional and may be submitted to the TA for consultation and form the foundations of the Final Report.

III. *Tutorials*

A number of 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 examples the use of software like Thomson Reuters’ Eikon and Bloomberg professional and to tutor trading processes and techniques².

IV. *Trading Cases*

A number of trading cases are assigned throughout the course. The objectives of the trading cases is 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

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

² See Course Outline.



frequency and trading volume. An ECN (Electronic Communications Network) installed at the GTF network that forms 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 problem is designed so students can apply finance concepts in formulating their trading strategies. *Typically, before each trading session the students are quizzed on the assigned case.*

V. **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 MMSA) 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. The grade received is based on the final value of the portfolio, return on investment, market and securities analysis, individual reasoning, risk management applications and “the manner” in which the wealth was accumulated.

Participation and Conduct

Strict adherences to the codes of conduct established by the DeGroot 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 also are available from the Senate Office. Any deviations from the norms may lead to disciplinary actions.

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 individuals 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.



REQUIRED COURSE MATERIALS AND READINGS

THE Trading Manual, Forth Canadian Edition Version 4.0, John J. Siam \$120.00
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.

EVALUATION

Learning in this course result from lectures, related readings, assignments, trading simulations, TiR presentations, trading cases, weekly reports, final project and in class discussions. All work will be evaluated on an individual basis. Your final grade will be calculated as follows:

COMPONENTS AND WEIGHTS

The components of the course grade will be weighted as follows, tentatively. The instructor reserves the right to modify the weightings to adjust for more or less material covered during the semester.

COMPONENTS	PERCENT
6 Trading Cases	12
Two Midterm Exams	48
Individual Final Project ³	40
Total	100%
Opportunities to Earn Additional Marks	
Optional Project ⁴	3 Marks
Participating in DeGroot MarketWatch ⁵	3 Marks

NOTE: The use of a McMaster standard calculator is 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	B-	65-69
A	85-89	C+	60-64
A-	80-84	C	55-59
B+	75-79	C-	50-54
B	70-74	F	00-49

³ The Final Project is due on the Monday after the last lecture at 5 P.M., overdue due penalty for the final project 5 marks per day. That is equivalent to 12.5% per day.

⁴ To be submitted with the Final Project as an Appendix.

⁵ Upon approval of submitted material/work.



PLACES TO GET HELP WITH YOUR WORK:

Allen H. Gould Trading Floor (MGD 122A) and financial web sites (listed on the Trading Center web site <http://trading.degrootemcmaster.ca/>).

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.

Instructors are required to provide evaluation feedback for at least 10% of the final grade to students prior to Week #8 in the term.

Instructors may conduct an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

Students who wish to have a course component re-evaluated must complete the following form:

http://www.mcmaster.ca/policy/Students-AcademicStudies/Form_A.pdf

In order for the component to be re-read:

- the component must be worth 10% or more of the final grade in the course
- students pay a fee of \$50 in Gilmour Hall #209 and the receipt is then brought to Student Experience - Academic Office (formerly the APO) in DSB 104
- the Area Chair will seek out an independent adjudicator to re-grade the component
- an adjustment to the grade for the component will be made if a grade change of three points or greater on the 12 point scale (equivalent to 10 marks out of 100) has been suggested by the adjudicator as assigned by the Area Chair
- if a grade change is made, the student fee will be refunded

EXTRACURRICULAR ACTIVITIES

- **DeGroot MarketWatch** (<http://trading.degrootemcmaster.ca/degrootemcmaster-marketwatch/>)

The weekly *DeGroot MarketWatch (DMW)* is financial letter designed to inform/educate DeGroot and the surrounding communities. The *DMW* prepared mostly by students and supervised by myself 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 either by a student, faculty member, or an industry professional. To submit a story of interest for a possible publication in the DeGroot MarketWatch.



It is highly recommended that all students sign up to receive the weekly DeGroot MarketWatch update (at <http://trading.degroot.mcmaster.ca/degroot-marketwatch/marketwatch-signup/>).

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

ONLY IF APPLICABLE

In this course we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com and in hard copy so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to;

www.mcmaster.ca/academicintegrity

LANGUAGE FOR USE IN COURSES WITH AN ON-LINE ELEMENT

In this course we will be using X*. Students should be aware that, when they access the electronic components of this course, 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 this course will be deemed consent to this disclosure.

If you have any questions or concerns about such disclosure please discuss this with the course instructor.

X* = e-mail, LearnLink, WebCT, web pages, capa, Moodle, Thinking Cap, etc

REQUESTING RELIEF FOR MISSED ACADEMIC WORK

1. Students may request relief from a regularly scheduled midterm, test, assignment or other course component in the following ways:
 - a) **for absences from classes lasting up to three (3) days; or**
 - b) **for absences from classes lasting more than three (3) days.**
 - c) **for conflicts arising from Student Experience - Academic Office approved events**



a) For absences from classes lasting up to three (3) days

Students must use the MSAF (McMaster Student Absence Form). This is an on-line, self-reporting tool, for which submission of medical or other types of supporting documentation is normally not required. Students may use this tool to submit a maximum of one (1) request for relief of missed academic work per term as long as the weighting of the component is worth less than **25%** of the course weight. Students must follow up with their course instructors regarding the nature of the relief within two days of submitting the form. Failure to do so may negate the opportunity for relief. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in his/her course. Details are described below.

If the value of the component is worth **25%** or more, students must report to their Faculty Office (the Student Experience – Academic Office for Commerce students) to discuss their situation and will be required to provide appropriate supporting documentation.

Please visit the following page for more information about MSAF:

http://academiccalendars.romcmaster.ca/content.php?catoid=13&navoid=2208#Requests_for_Relief_for_Missed_Academic_Term_Work

b) For absences from classes lasting more than three (3) days

Students cannot use the MSAF. They **MUST** report to their Faculty Office (the Student Experience – Academic Office for Commerce students) to discuss their situation and will be required to provide appropriate supporting documentation.

Students who wish to submit more than one request for relief of missed academic work per term cannot use the MSAF. They must report to the Student Experience – Academic Office and discuss their situation with an academic advisor. They will be required to provide supporting documentation and possibly meet with the Manager.

c) For conflicts arising from Faculty Office approved events

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. Please see the DeGroot Missed Course Work Policy for a list of conflicts that qualify for academic accommodation

<http://ug.degroot.mcmaster.ca/forms-and-resources/missed-course-work-policy/>

Such requests must be made to the Student Experience – Academic Office at least ten (10) working days before the scheduled exam along with acceptable documentation.

Non-Commerce students must submit their documentation to their own Faculty Office and then alert the Student Experience – Academic Office of their interest in an alternate sitting of the midterm.

Adjudication of all requests must be handled by the Student Experience – Academic Office. Instructors cannot allow students to unofficially write make-up exams/tests.

The MSAF cannot be used during any final examination period.

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



POLICY FOR APPROVED MISSED ACADEMIC WORK

Students who cannot write a test, and have advanced knowledge and permission as described above, will be given the opportunity to write an alternate version of the test and an alternate time.

Students who did not write a test, and subsequently provide an MSAF submission, or documentation for which they have been approved by the Student Experience – Academic Office, will have the weight of the missed work reallocated across other course components. The student must follow up with the instructor to understand this process and decision.

Students who submit an MSAF, or have been approved by the Student Experience – Academic Office, for an assignment deadline, will be given an extension of 3 days for the assignment. Please note, the student will ultimately be required to submit the assignment.

STUDENT ACCESSIBILITY SERVICES

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 who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail sas@mcmaster.ca.

For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities;

<http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf>

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.**



 Commerce 3FI3 Market Trading with Options Winter 2020 Course Outline 		
Week	Topics	Material Covered
1	Lecture 1: Introduction to Financial Markets <i>Tutorial 1: Tools of The Trade</i>	Chapter 1 & 2 <i>Appendix 2A & AH</i>
2	Lecture 2: The Cash Market <i>Tutorial 2: Start Trading</i>	Chapter 3 <i>Appendix 1A & AH</i>
3	Lecture 3: Market Direction <i>Tutorial 3: FTS Interactive Cases plus Trading Case RE1s</i>	Chapter 4 <i>Avenue Handout (AH)</i>
4	Lecture 4: Interest Rates Dynamics and Market Outlook <i>Tutorial 4: Thomson Reuters Eikon plus Trading Case OP1s</i> <i>In class Trading Case RE1s (practice)</i> Deadline: First Group Market & Securities Analysis Report Start Trading your Securities in FTS Real Trader	Chapter 5 <i>Avenue Handout (AH)</i>
5	MID-TERM EXAM 1 (During class at 11:30 PM) <i>Tutorial 5: Bloomberg</i> <i>In class Case FTS Trading Case OP1s (practice)</i>	Duration 80 minutes <i>Avenue Handout</i>
6	Lecture 5: The Option Market <i>Tutorial 6: Trading Case RE2s</i> <i>In class FTS Trading Case OP1s (practice)</i> Deadline to Add Securities to FTS Real Time Trader	Chapter 6 <i>Avenue Handout (AH)</i>
7	Lecture 6: Trading with Options: The Basics <i>Tutorial 7: Trading Case B02as</i> <i>In class FTS Trading Case RE2s (for marks)</i>	Chapter 7 <i>Avenue Handout (AH)</i>
8	Lecture 7: Delta Trading <i>Tutorial 8: Trading Case RE3s</i> <i>In class FTS Trading Case B02as (for marks)</i> Deadline: Second Group Market & Securities Analysis Report	Chapter 8 <i>Avenue Handout (AH)</i>
9	Lecture 8: Directional Spreads – Spreading Options <i>Tutorial 9: Trading Case OP2s</i> <i>In class FTS Trading Case RE3s (for marks)</i>	Chapter 9 <i>Avenue Handout (AH)</i>
10	MID-TERM EXAM 2 (During class at 11:30 PM) <i>Free Trading</i>	Duration 80 minutes
11	Lecture 9: Trading Index and ETF Options <i>Tutorial 10: Trading Case OP4s</i> <i>In class FTS Trading Case OP2s (for marks)</i>	Chapter 10 <i>Avenue Handout (AH)</i>
12	Lecture 10: Option Arbitrage and Advanced Options Strategies <i>Tutorial 11: Trading Case OP8s</i> <i>In class FTS Trading Case OP4s (for marks)</i> Deadline: Third Group Market and Securities Analysis Report	Chapter 11 <i>Avenue Handout (AH)</i>
13	Lecture 11: Options On Futures <i>In class FTS Trading Case OP8s (for marks)</i>	Chapter 17
FINAL PROJECT DEADLINE Deadline: Due five days after end of classes/last lecture		