



**Commerce 4FI3  
Trading in Financial Markets  
Fall 2011 Course Outline  
Finance and Business Economics  
DeGroote 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: DSB 306 / RJC 221

Office Hours:

Monday 5:45 – 6:45 @ RJC 221

Tuesday 10:20 – 11:20 @ DSB 306

and by appointment

Email: [siam@mcmaster.ca](mailto:siam@mcmaster.ca)

Tel: (905) 525-9140 x27028 / x20559

**Class location:** DSB 122A, Allen H. Gould Trading Floor

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

**COURSE ELEMENTS**

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

**SELECTION CRITERIA FOR THE COURSE**

Prerequisites: Completion of 2FA3 (Introduction to Finance) in good standing, **enrolment is limited to a maximum of 20 students.**

**COURSE DESCRIPTION**

In 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. All students are able to trade stocks, bonds, options, futures, indices ...etc.



Pedagogically, students are assigned securities and their corresponding derivative products to trade subject to financial markets outlook and their expectations. A fictional account of one million dollar is created and will be 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 weekly reports with buy, hold, and sell recommendations. The report must include the students' weekly 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 that includes an one-hour of supervised trading session. Classes and trading will be conducted at the Allen H. Gould Trading Floor. In first hour; supervised trading sessions are conducted; the students are expected to justifying their trading positions/decisions. The trading sessions are used to systematically evaluate students' trading positions and offer suggestions and recommendations. Trading sessions are immediately followed by two-hour session where lectures are presented and students trading strategies are scrutinized. 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 great 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, basis risk vs. price risk, degrees of trading aggressiveness, uses of derivatives, such as, naked option selling, covered writing philosophy, ratio call writing, degrees of aggressiveness in options and futures hedging and arbitrage with cash positions, interest rate play, and various exotic spreads.



## SKILL BUILDING TOOLS

### 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 and futures (together, the “derivatives”) on each of their underlying securities, as well as some market indices. After receiving their derivatives, students begin trading the cash securities and the derivatives. Risk minimizing strategies typically involve trading combinations of cash and derivatives securities.

### II. *Weekly Market and Securities Analysis*

At the offset students are assigned to groups (Max five); each group submits weekly market and securities report. The reports present each group outlook for debt, equity, currencies, and commodities markets, plus detailed analysis of the cash securities assigned to each member of the group. These reports’ outlook (buy, sell, and hold recommendations) form the basis for the individual’s trading. ***These reports are due every Mondays on 9:00 A.M.***

### III. *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 and market taking, price discovery, bid-ask spreads and market depth, trading 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 problem. The trading problem is designed so students can apply finance concepts when formulating their trading strategies. *Typically before each trading session the students are quizzed on the assigned case.*

### IV. *Traders in Residence Speaker Series – TiR*

The trader-in-residence program is unique to DeGroote School of Business. The program is designed to add market reality, street insights and professional know-how to the academic experience. Professionals from different segments of financial services industry visit the Gould Trading Floor on a weekly basis to discuss a variety of current industry subjects and act as advisors to students. The program is an additional tool that enhances the students’ broad industry prospective and knowledge. The aim of the program is to enhance students’ knowledge, networking and offer professional views and experiences. The program has been recognized by MacLean’s and Canadian business magazines, and had a positive influence on McMaster’s ranking among Canadian universities. ***Attendance is compulsory and part of the course curriculum, failure to attend 80% or more of the scheduled TiR events will result in a penalty of 3 marks applied against your final grade. It is the student responsibility to sign the TiR attendance sheet designated for the trading classes (not the TiR sheet designated for general attendance).***

### V. *Bay Street Visit – A Day @ Bay Street*

Visits to the Canadian financial services industry called “A Day @ Bay Street” are scheduled to the brokerage houses. Students are invited to sit on the morning meeting, tour the facilities and



spend a day with professional traders in their environments observing professional in their “natural habitat”. The visits expose the students to the industry and the industry to the students. *Spaces are limited to sponsors’ participation and priority is given to students with high academic standing. **The visit is an extracurricular activity and not a requirement of the course and therefore not compulsory.** Interested students must submit their cv’s and grades to qualify for the visits. Upon approval by the sponsor and the instructor; students must sign the Bay St. Visit contract and possibly an additional documents requested by the sponsors.*

## 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 weekly group assignments (weekly market and securities analysis reports, WMSR) 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 for 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 on \$1,000,000), 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 Educational Trading Center are prerequisites. 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 the performance of markets and individual companies and develop the ability 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 series and Bay St. visits that might open career doors in financial services industry.



## REQUIRED COURSE MATERIALS AND READINGS

**THE Trading Manual**, Third Canadian Edition Version 3.0, John J. Siam \$80.00  
*Available at the Allen H. Gould Trading Floor.*

**Lecture Notes, Assignment and other course content** *Free*

Download from the 4FI3 website (<http://avenue.mcmaster.ca>)  
 USB drive (at least 256MB) 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
Weekly Market and Securities Analysis Reports <sup>1</sup>	10
Trading Cases	10
Midterm Exam	30
Individual Final Project <sup>2</sup>	50
<b>Total</b>	<b>100%</b>

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/examinationindex.html>

### 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	C+	67-69
A	85-89	C	63-66
A-	80-84	C-	60-62
B+	77-79	D+	57-59
B	73-76	D	53-56
B-	70-72	D-	50-52
		F	0-49

### PLACES TO GET HELP WITH YOUR WORK:

Allen H. Gould Trading Floor (MGD 122A) and financial web sites (listed on the GTF web site)

<sup>1</sup> Reports are due at the beginning of the class on the specified date; late reports will be subjected to 20% penalty.

<sup>2</sup> The Final Project is due one week after end of classes at 5 P.M., the overdue due penalty for the final project is 5% per day.



<http://gtf.mcmaster.ca>).

### 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 Director:

<http://www.degroote.mcmaster.ca/curr/emailchairs.aspx>

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 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.

### EXTRACURRICULAR ACTIVITIES

- **GTF MarketWatch** (<http://gtf.mcmaster.ca>)  
*A weekly financial letter prepared mostly by students and designed to inform/educate DeGroot and the surrounding communities. It serves as an experiential training ground. The letter is prepared mostly by students and supervised by myself. It is designed to inform, educate and to serve as an experiential training ground. Components of the letter are:*
  - ✓ *Market Indices: Summarizes last week's 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 GTFMW.*
- **Bay Street Visit – A Day @ Bay Street** (see above)



## ACADEMIC DISHONESTY

It is the student's responsibility to understand what constitutes academic dishonesty. Please refer to the University Senate Academic Integrity Policy at the following URL:

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

This policy describes the responsibilities, procedures, and guidelines for students and faculty should a case of academic dishonesty arise. Academic dishonesty is defined as to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. Please refer to the policy for a list of examples. The policy also provides faculty with procedures to follow in cases of academic dishonesty as well as general guidelines for penalties. For further information related to the policy, please refer to the Office of Academic Integrity at:

<http://www.mcmaster.ca/academicintegrity>

## COPYRIGHT

McMaster University has signed a license with the Canadian Copyright Licensing Agency (Access Copyright) which allows professors, students, and staff to make copies allowed under *fair dealing*. Fair dealing with a work does not require the permission of the copyright owner or the payment of royalties as long as the purpose for the material is private study, and that the total amount copied equals **NO MORE THAN 10 percent** of a work or an entire chapter which is less than 20 percent of a work. In other words, it is illegal to: i) copy an entire book, or ii) repeatedly copy smaller sections of a publication that cumulatively cover over 10 percent of the total work's content. Please refer to the following copyright guide for further information:

<http://library.mcmaster.ca/about/copying.pdf>

## POLICY ON MISSED MID-TERM EXAMINATIONS / TESTS / ASSIGNMENTS

Where students miss a regularly scheduled midterm, test, assignment or other course component for legitimate reasons as adjudicated by the Academic Programs Office (APO), the weight for that component 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 APO within five (5) working days upon returning to school. The approved McMaster Medical Form must be used to document absence for health related reasons. If an exam is missed without a valid reason, students will receive a grade of Zero (0) for that component. If a student submits three (3) medical certificates per year, the student must meet with the Director of the program. Please see the following URL for APO forms and the MacFiLLin form:

<http://www.degroote.mcmaster.ca/UG/register.html>

<https://mcmaster.ca/macfillin/>

Students unable to write 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; and conflicts between two overlapping scheduled midterm exams, have the option of applying for special exam arrangements. Such requests must be made to the APO at least ten (10) working days



before the scheduled exam along with acceptable documentation. There will be only one common sitting for the special exam. Instructors cannot themselves allow students to unofficially write make-up exams/tests. Adjudication of the request must be handled by the APO.

### **STUDENTS WITH DISABILITIES**

Students with disabilities are required to inform the Centre for Student Development (CSD) of accommodation needs for examinations on or before the last date for withdrawal from a course without failure (please refer to official university sessional dates). Students must forward a copy of such CSD accommodation to the instructor immediately upon receipt. If a student with a disability chooses NOT to take advantage of a CSD accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete.

The CSD website is: <http://csd.mcmaster.ca>.

### **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 4FI3  
Trading in Financial Markets  
Fall 2011 Course Schedule**



<b>Week</b>	<b>Topics</b>	<b>Material Covered</b>
1	<b>INTRODUCTION TO FINANCIAL MARKETS</b> <i>FTS REAL-TIME TRADER TRADING SHEET NETWORK TIES ANALYSIS FOR SELL-SIDE AND BUY-SIDE</i>	<b>Chapter 1</b> <i>APPENDIX 1A APPENDIX 1B APPENDIX 1C</i>
2	<b>TOOLS OF THE TRADE</b> <i>BUILDING A TRADING SCREEN FINANCIAL TRADING SYSTEM: FTS CASES</i>	<b>Chapter 2</b> <i>APPENDIX 2A APPENDIX 2B</i>
3	<b>UNDERSTANDING ESSENTIAL TRADING PROPERTIES</b> <b>Part I: The Cash Market</b> <i>Types of Orders READING STOCK QUOTATIONS: From the News Media</i>	<b>Chapter 3</b> <i>APPENDIX 3A APPENDIX 3B</i>
4	<b>UNDERSTANDING ESSENTIAL TRADING PROPERTIES</b> <b>Part II: The Forward and Futures Market</b> <i>FUTURES' QUOTES MONTH SYMBOLS FOR FUTURES CONTRACTS</i>	<b>Chapter 4</b> <i>APPENDIX 4A APPENDIX 4B</i>
5	<b>UNDERSTANDING ESSENTIAL TRADING PROPERTIES</b> <b>Part III: The Option Market</b> <i>FINDING ALL OPTION STRIKES ON REUTERS 3000XTRA USING OPTIONS SYMBOLS</i>	<b>Chapter 5</b> <i>APPENDIX 5A APPENDIX 5B</i>
6	<b>TRADING WITH OPTIONS: PART I</b> <b>The Basics</b>	<b>Chapter 6</b>
7	<b>TRADING WITH FUTURES: PART I</b> <b>The Basics</b> <i>BASIS POINT VALUE (BPV) DURATION AND CONVEXITY</i>	<b>Chapter 7</b> <i>APPENDIX 7A APPENDIX 7B</i>
8	<b>TRADING WITH OPTIONS: PART II</b> <b>Calendar and Neutral Spreads</b>	<b>Chapter 8</b>
9	<b>TRADING WITH FUTURES: PART II</b> <b>Futures Calendar Spreads</b> <i>TREASURY CONTRACTS SUMMARY</i>	<b>Chapter 9</b> <i>APPENDIX 9A</i>
<b>10</b>	<b>MID-TERM EXAM</b>	
11	<b>ARBITRAGE</b>	<b>Chapter 10</b>
12	<b>TRADING INDEX OPTIONS AND INDEX FUTURES</b> <i>INDEX FUTURES CONTRACT SPECIFICATIONS</i>	<b>Chapter 12</b> <i>APPENDIX 12A</i>
13	<b>ADVANCED OPTIONS AND FUTURES STRATEGIES</b> <b>SWAPS</b>	<b>Chapter 13</b> <b>Chapter 11</b>
<b>14</b>	<b>FINAL PROJECT DEADLINE</b> <i>Due one week after end of classes</i>	