

FINE 434, Topics in Finance (Financial Trading Strategies - BCom) – Winter 2015

Tuesdays & Thursdays, 4:05 to 5:25 @ BRONF 205

Instructor: Ruslan Goyenko

E-Mail: ruslan.goyenko@mcgill.ca

Phone: 514 398 5692

Office Hours: Mon: 1-2pm. Also tutorial help in trading lab

Course Objectives

1. To learn to make effective financial decisions when the future is uncertain
2. To develop implementation strategies associated with various trading and investment objectives
3. To identify, quantify, and manage risks and expected returns associated with those strategies

Course Scope and Mission

The purpose of this course is to familiarize students with the different types of trading strategies employed by various money management institutions. These financial trading strategies are used to manage the risk and return profiles of specific portfolios.

First, we focus on how security prices reflect information, news, and investor behavior; and how traders generate liquidity, volatility, and profits/losses. The role of various market participants such as dealers, brokers, arbitrageurs, buy-side traders and retail investors will be emphasized.

Second, we will focus on new trends in financial markets including high frequency trading strategies to manage liquidity and price impact risks.

Third, we will proceed applying our skills to the types of decisions that traders, investors and risk managers must make in a variety of situations and trading in different asset classes.

This course specifically focuses on the execution, mechanics, and measurement of financial trading strategies. It does not, for example, teach students ‘how to make money playing the market’.

The focus of the course concepts will include, but not be limited to:

- Market Microstructure and Market Liquidity- VWAP, sourcing liquidity, and algorithmic strategies
- Portfolio Hedging and Risk Management- portfolio insurance and delta hedging
- Hedge Fund Strategies- inter-listed arbitrage, risk-arbitrage, trading volatility

Trading simulations employed the Rotman Interactive Trader (RIT <http://rit.rotman.utoronto.ca/>) will be used extensively in this course as a way to learn and test different trading strategies. Rotman Portfolio Manager (RPM) exercises will be assigned to apply your strategies to real-time quotes for actual securities.

Required Readings

There is no textbook for this course. As real-time capital market analysis will be part of the course content, the instructor may provide links to news articles or white papers on an ongoing basis. These articles will be individually noted as being an *optional* reading while others will be noted **as a required reading**.

Each meeting, students will be exposed to numerous trading case-studies. It is required that students read these case studies and think about the case questions prior to attending each class. Students will be cold-called on a frequent basis to discuss the trading cases and share the success (and failures) of their strategies.

Tentative (subject to change) schedule of topics covered

Class and Topic	Cases, Assignments and Practice Exercises	Resources
Overview of the course Introduction: Order driven Markets	RIT Agency Trading 1 & 2 Cases	Slides AT1 & AT2 Case Materials
Liquidity Risk	RPM VWAP Exercise RIT Liability Trading 2 & 3 Cases	Slides LT2 & LT3 Case Materials RIT RTD Documentation
Multiple Venues and Arbitrage	RPM cross-listed arbitrage exercise TIR Liability Trading 4 case RIT ALGO1 case Assignment 1: ALGO2 case	Slides LT4 and ALGO Case Materials RIT VBA API Documentation
Fixed Income Pricing Price Discovery in Equity Markets	LT4 performance evaluation RIT Fixed Income 1 RIT Price Discovery 0	Slides FI1&PD0 Case Material
Fixed Income Pricing Interest rate risk, Default risk, Yield Curve	RIT Fixed Income 2, 3, 4, 5	Slides FI2, FI3, FI4, & FI5
Diversification Managing Risk Capital	RIT PM1 case RIT VAR case	Slides PM1 & VaR Case Material
Valuation: Relative P/E valuation, DDM Valuation	RIT EV1 & EV2 cases	Slides EV1, and EV2 Case Material
Real Economy Risk	RIT COM2 Case Assignment 2: COM5 Excel Support	Slides COM2 & COM5 Case Material
Using Futures: Price and Production Risk	RPM Portfolio Insurance Exercise RIT F2&AH1 Cases	Slides F2&AH1 Case Material
Commodity Arbitrage	RPM Commodity Hedging Exercise Assignment #2 due RIT COM5 Case	Slides COM5 Case Material
Mergers and Acquisitions	MA1 Takeover Arbitrage	Slides MA1 Case Material
Review	COM5 Performance Evaluation ALGO2 Performance Evaluation	

Evaluation and Grades

Hand-In Group Assignments (10 + 10 %)	20 %
Performance Evaluations (LT4, COM5, ALGO2)	10+10+6 %
RPM Exercises (4 x 3 %)	12 %
Midterm	12 %
Final Test	30 %

Trading Evaluations

There will be three trading evaluations run through the course of the term. For these evaluations, you will be graded based on your ability to successfully execute proper trading strategies and generate trading profits (in the simulated world). Score will be based on your average rank across several replications of the RIT cases.

Assignments:

Assignment 1 involves learning how to use VBA to write an algorithm to implement a strategy

Assignment 2 requires you to build an Excel template with RTD links to the COM5 markets to identify speculative and arbitrage opportunities for commodities.

RPM Homework

There are four Rotman Portfolio Manager homework assignments. These assignments are composed of executing a few trades in the RPM software and providing a brief summary of the trade. They are due prior to class the week after assigned.

COURSE FORMAT AND EXPECTATIONS

Students are expected to attend all classes. Students are also expected to conduct themselves in a manner that is reflective of maintaining an orderly marketplace. They should not submit trades in a malicious or abusive way or use information not specifically available to them.

Format for assignments:

You must hand in a hard copy of your assignment reports that has an executive summary and is self-contained, i.e. with tables, figures and etc integrated into the text. Please note that clear, concise and correct writing will be considered in the evaluation of the assignments.