



# **Rotman** Commerce UNIVERSITY OF TORONTO

## Course Outline

### **RSM 435H1F**

#### **Futures and Options Markets**

##### **Fall 2014**

Tuesdays	L0101 9am-11am, WO 35
Tuesdays	L0201 11am-1pm, WO 35
Tuesdays	L0301 3pm-5pm, WO 35
Wednesdays	L5101 7pm-9pm, WO 35

Instructor: Alexandra MacKay  
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Phone: 416.978.0740  
Office: 453, 105 St. George Street  
Office Hours: Mondays, 2:30-4pm (except Monday October 13<sup>th</sup> and Monday November 10<sup>th</sup>)  
Pre-exam office hours will be announced separately.

Instructor: Christopher Witkowski  
E-Mail: [chris.witkowski@rotman.utoronto.ca](mailto:chris.witkowski@rotman.utoronto.ca)  
Office Hours: By appointment

#### **Teaching Assistant Support for the Course:**

Teaching assistants will hold tutorials in advance of the midterm examination and the final examination. Times and room locations will be announced.

Teaching assistants will be responsible for grading the weekly questions, the YouSeeU Q&A, the RPM Project submissions and the midterm examination. If you have follow-up questions or are concerned with the way in which a deliverable or the midterm was graded, please follow these steps:

- Review the solution key carefully (if one is available for that deliverable)
- Write an explanation indicating which question(s) you would like re-graded and the rationale for the request
- Submit the written explanation and the original graded piece of work to the TA **within two weeks of the return date** of the deliverable / midterm.
- If you are unsatisfied with the response from the TA, follow up with your instructor
- Please note: If the deliverable/midterm was written in pencil, it cannot be re-submitted for re-grading consideration

## Course Scope and Mission

This course covers the analysis of derivative instruments such as forwards, futures, swaps and options. By the end of the course, students will have good knowledge of how these contracts work, how they are used and how they are priced.

## Course Prerequisites

Prerequisite: ECO204Y1/ECO206Y1, RSM332H1

Exclusion: ACT370H1

## Required Readings

Hull, John C., Options, Futures, and Other Derivatives, 9<sup>th</sup> Edition, Pearson-Prentice Hall, 2015.

Hull, John C., Student Solutions Manual for Options, Futures, and Other Derivatives, 9<sup>th</sup> Edition, Pearson-Prentice Hall, 2015.

## Evaluation and Grades

*(Note: The RPM project submissions may be submitted to the Commerce Office or in class.)*

*(Note: Please attach a cover page to your course work submission. The template will be on the portal.)*

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well s/he has command of the course materials.

<u>Work</u>		<u>Due Date</u>
Weekly question	10%	ongoing
YouSeeU Q&A	10%	ongoing
RPM Project	10%	9am October 9 <sup>th</sup> and 9am December 3 <sup>rd</sup>
Midterm Examination	25%	October 15 <sup>th</sup>
Final Examination	45%	During the Faculty of Arts & Science Final Examination period, December 8-19

The midterm and final examinations will not be open book. You will be permitted to bring in a calculator and an 8.5"×11" one-sided "aid sheet" with notes and/or formulae to the midterm examination, and a calculator and an 8.5"×11" two-sided "aid sheet" with notes and/or formulae to the final examination. Working in groups can be an excellent way to learn concepts. Please note that you must always write up your own work and submit your own original work.

### Weekly Question:

Each week in class you will be given the opportunity to provide a written answer to one question based on material from the previous week's class. Each graded question will receive one of four possible grades: 2/2 for a perfect answer, 1.5/2 for an answer that is mostly correct, 1/2 for an answer that is not good but minimal effort was made, or 0/2 if no serious effort was made. You will receive a grade of 0/2 if you did not submit an answer that week. You are required to do a minimum of five weekly questions throughout the course. Your top five such answers will each be worth 2% of your final grade.

### YouSeeU Q&A:

Each week, questions will be posted based on current material in the course. You will be randomly assigned to one question. Each graded question will receive one of four possible grades: 2/2 for a perfect answer, 1.5/2 for an answer that is mostly correct, 1/2 for an answer that is not good but minimal effort was made, or 0/2 if no serious effort was made. If you did not do a Q&A for the week, you will receive a grade of 0/2 for that week. You are required to do a minimum of five Q&A throughout the course. Your top five such answers will each be worth 2% of your final grade. Further instructions will be provided at

the beginning of the course regarding how to create your account on the system to access these questions, and answer them.

### **The BMO Financial Group – Finance Research and Trading Lab**

The Finance Lab is located in the Rotman building, 105 St George St, 2<sup>nd</sup> floor. You may access the Finance Lab during regular business hours, provided it is not booked for a class. On your course webpage you will find information on how to check the Finance Lab schedule and detailed online help regarding Finance Lab resources available. Lab assistants are available to answer questions Monday through Friday, 9am to 5pm. They can help you learn to use the Finance Lab resources, but they will not provide answers to lab-related assignment questions.

You will be using the Rotman Portfolio Management (RPM) software during this course. It is critical that you attend a session that will introduce you to that software so you can get a good start on your RPM term project. There will be RPM tutorials scheduled in the Finance Lab during the week of September 15<sup>th</sup>. These tutorials will be offered outside class time, as follows:

- Monday September 15<sup>th</sup>, 8-9pm
- Wednesday September 17<sup>th</sup>, 8-9pm
- Thursday September 18<sup>th</sup>, 6-7pm
- Friday September 19<sup>th</sup>, 6-7pm

Please check on the portal and sign up for one tutorial. Please note: we reserve the right to cancel one of these tutorials if the number of people signed up is very small. This will be communicated on the portal.

### **The RPM Project:**

You will be trading derivatives throughout this course using the RPM software. Further details for this project will be provided at the beginning of the course.

## Weekly Schedule

Session	Topic	Readings
#1 – September 9/10	Introduction, Mechanics of Futures Markets, Hedging Strategies Using Futures	Chapters 1, 2 and 3
#2 – September 16/17	Interest Rates	Chapter 4
#3 – September 23/24	Determination of Forward and Futures Prices	Chapter 5
#4 – Sep 30 / Oct 1	Interest Rate Futures	Chapter 6
<b>Tutorials available during the week of October 6<sup>th</sup> – see portal for dates/times/locations Due Date: 9am Thursday October 9<sup>th</sup> (or before) – First RPM Project Submission</b>		
#5 – October 7/8	Swaps	Chapter 7
#6 – October 14/15	<b>Midterm Examination 7-9pm, Wed Oct 15<sup>th</sup> ALL SECTIONS</b>	
#7 – October 21/22	Mechanics of Options Markets; Properties of Stock Options	Chapters 10 and 11
#8 – October 28/29	Trading Strategies Involving Options	Chapter 12
<b>Monday, November 3<sup>rd</sup> (Last Day to Withdraw)</b>		
#9 – November 4/5	Binomial Option Pricing Model	Chapter 13 and Section 18.6
#10 – November 11/12	The Black-Scholes-Merton Model Options on Stock Indices and Currencies Futures Options	Read chapter 14 Chapters 15 (omit section 15.6), 17 and 18
November Break (No Classes) (Monday, November 17 <sup>th</sup> to Tuesday, November 18 <sup>th</sup> )		
#11 – November 25/19	The Greeks	Chapter 19
#12 – Dec 2/Nov 26	Securitization and the Credit Crisis of 2007; OIS Discounting, Credit Issues, and Funding Costs	Chapters 8 and 9
<b>Tutorials available during the week of December 2<sup>nd</sup> – see portal for dates/times/locations Due Date: 9am Wednesday December 3<sup>rd</sup> (or before) – Final RPM Project Submission</b>		
<b>FINAL EXAM (TBA - Exam Period - December 9<sup>th</sup> to 20<sup>th</sup>)</b>		

## **POLICY AND PROCEDURE**

### **Missed Tests and Deliverables (including the midterm examination)**

Students who miss a test or deliverable for reasons entirely beyond their control (e.g. illness) may submit a request for special consideration. Provided that notification and documentation are supplied in a timely manner, and that the request is subsequently approved, no academic penalty will be applied.

In such cases, students must notify Rotman Commerce on the date of the missed test (or due date in the case of course work) and submit supporting documentation (e.g. [Verification of Student Illness or Injury form](#)) to the Rotman Commerce Program Office within **48 hours** of the originally scheduled test or due date. Students who do not provide Rotman Commerce or the instructor with appropriate or sufficient supporting documentation will be given a grade of 0 (zero) for the missed test or course deliverable.

**Note that the physician's report must establish that the patient was examined and diagnosed at the time of illness, not after the fact. Rotman Commerce will not accept a statement that merely confirms a report of illness made by the student and documented by the physician.**

If you are only able to do fewer than five weekly questions, your grade for the weekly questions will be based on those you were able to do provided you supply documentation to the Commerce Office as outlined above. If you are only able to do fewer than five YouSeeU Q&A, your grade will be based on those you did do, provided you supply documentation to the Commerce Office as outlined above. For a missed first deliverable in the RPM Project, if an extension is not or cannot be granted, the weight will be shifted to the final deliverable in the RPM project. For a missed final deliverable in the RPM project, if an extension is not or cannot be granted, the weight will be shifted to the final examination. For missed midterm examination, the weight will be shifted to the final examination.

### **Late RPM Project Deliverable**

The first RPM deliverable will be due 9am on Thursday October 9<sup>th</sup> and will be submitted to the Commerce Office. The final RPM deliverable will be due 9am on Wednesday December 3<sup>rd</sup> and will also be submitted to the Commerce Office. Late submissions will not be accepted. Students who, for reasons beyond their control, are unable to submit by the posted deadline must obtain approval from the instructor for an extension. Supporting documentation will be required as per the policy on missed tests and assignments/deliverables.

### **Accessibility Needs**

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: [disability.services@utoronto.ca](mailto:disability.services@utoronto.ca) or <http://www.accessibility.utoronto.ca/>.

### **Academic Integrity**

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarships at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously.

*The University of Toronto's Code of Behaviour on Academic Matters*

<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm> outlines the behaviours that constitute academic misconduct, the process for addressing academic offences, and the penalties that may be

imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On tests and examinations:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers.
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to), medical notes.

All suspected cases of academic dishonesty will be investigated by the following procedures outlined in the *Code of Behaviour on Academic Matters*. If you have any question about what is or not is permitted in the course, please do not hesitate to contact the course instructor. If you have any questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other UofT resources such as College Writing Centres or the Academic Success Centre.

### **Email**

At times, the course instructor may decide to communicate important course information by email. As such, all UofT students are required to have a valid UTMail+ email address. You are responsible for ensuring that your UTMail+ email address is set up AND properly entered on the ROSI system. For more information please visit <http://help.ic.utoronto.ca/category/3/utmail.html>

Forwarding your utoronto.ca email to a Hotmail, Gmail, Yahoo or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Hotmail, Gmail or Yahoo accounts are filtered as junk mail, which means that important messages from your course instructor may end up in your spam or junk mail folder.

### **Blackboard and the Course Page**

The online course page for this course is accessed through Blackboard. To access the course page, go to the UofT Portal login at <https://portal.utoronto.ca/> and log in using your UTORid and password. Once you have logged in, look for the My Courses module where you'll find the link to all your course websites. If you don't see the course listed here but you are properly registered for the course in ROSI, wait 48 hours. If the course does not appear, go to the Information Commons Help Desk in Robarts Library, 1st floor, for help, or explore the Portal Information and Help at [www.portalinfo.utoronto.ca/students](http://www.portalinfo.utoronto.ca/students) and review the Frequently Asked Questions.

### **Recording Lectures**

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Canadian Copyright Act. Students wishing to record a

lecture or other course material in any way are required to ask the instructor's explicit permission, and may not do so unless permission is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, Blackboard materials, etc.