



Rotman Commerce UNIVERSITY OF TORONTO

Course Outline

RSM 435 H1 F

Futures and Options

Fall 2019

Course Meets: L0101 Tuesday 1-3pm in OI4422; L0201 Tuesday 4-6pm OI4422; L0301
Wednesday 12-2pm BF323; L5101 Wednesday 6-8pm OI4422

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Instructor: Chris Witkowski
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Teaching Assistants: We have a team of four teaching assistants, all of whom are students who have taken this course in the past.

Course Scope and Mission

RSM435 - Futures and Options - is, as its name suggests - about the analysis of financial derivative securities such as forward, futures, options and swaps. You will become well informed regarding how these contracts work, how they are used and how they are priced.

There will be an emphasis on applied learning in this course. To that end, much of the lecture content is made available to you in the form of short videos that you are expected to watch ahead of class. The video content very closely mirrors the content in the textbook. There are short non-credit 'Knowledge Checks' you can try that follow most of the videos. Shifting much of the lectures to video means that we can devote large portions of classroom time to application. Teams will present solutions to problems, teams will work to solve problems, we will trade derivatives and discuss issues relevant to financial derivatives.

We will be using the newest version Communicado platform developed by The Mind Brain Behaviour Hive at the University of Toronto. This was piloted last fall, and the most up to date fourth version is now available for our use. We will be piloting TeamUp – an award-winning teaching app developed here at UofT. These evolutionary changes to the course will be rewarding, but will also require patience, perseverance and understanding. Thank you in advance for adopting such an approach to this course.

You will develop skills to communicate their knowledge of financial derivatives. This will include contributing to discussion in class, producing video answers to questions and creating clear written reports. Arguably, the ability to communicate knowledge is as essential as the knowledge itself.

Course Prerequisites

Prerequisite: ECO204Y1/ECO206Y1 and RSM332H1

Exclusion: ACT370H1

Required Readings

Hull, John C., Options, Futures, and Other Derivatives, 10th Edition, Pearson-Prentice Hall, 2018

Hull, John C., Student Solutions Manual for Options, Futures, and Other Derivatives, 10th Edition, Pearson-Prentice Hall, 2018

Required Software License

Each student in RSM435 is required to have an individual license to the Rotman Portfolio Manager (RPM) software. The cost is \$35.00. This was charged as an ancillary fee when you registered for the course. (In other words, you have already purchased the license.) The second class will be held in the BMO Financial Markets Finance and Research Lab. You will be informed regarding how to set up your individual RPM account during that class.

Evaluation and Grades

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

<u>Work</u>		<u>Due Date</u>
RIT-related Video Quizzes	10%	Nov 11 and Dec 6
Weekly Questions	9%	every class except the week of the midterm
TeamUp Questions	8%	every non-Lab, non-midterm week
Group Presentations	8%	every non-Lab class
RPM Project	10%	Oct 15 and Dec 6
Midterm Examination	20%	Oct 23
Final Examination	35%	During the Arts & Science exam period

COURSE FORMAT AND EXPECTATIONS

Normally students will be required to submit their written course submissions to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the university's use of the Turnitin.com service are described on the Turnitin.com website.

Please note that clear, concise, and correct writing will be considered in the evaluation of all written deliverables. That is, you may lose points for writing that impedes communication: poor organization, weak paragraph development, excessive wordiness, hard-to-follow sentence structure, spelling mistakes and grammatical errors. Students who require additional support and/or tutoring with respect to their writing skills are encouraged to visit the Academic Success Centre (<http://www.studentlife.utoronto.ca/asc>) or one of the College Writing Centres (www.writing.utoronto.ca/writing-centres). These centres are teaching facilities – not editing

services, where trained staff can assist students in developing their academic writing skills. There is no charge for the instruction and support.

The two group presentations require students to work in teams of no more than 6 people. Learning to work together in teams is an important aspect of your education and preparation for your future careers. To work well in teams, it helps to follow a set of core expectations to best succeed at your team projects.

1. Read the document entitled, “Working in Teams: Guidelines for Rotman Commerce Students” which is available on the RC portal under the Academic Services tab.
2. When working in a team, Rotman Commerce students are expected to:
 - Treat other members with courtesy and respect;
 - Honour the ground rules established by the team;
 - Contribute substantially and proportionally to the final project;
 - Ensure enough familiarity with the entire contents of the group project/assignment so as to be able to sign off on it as original work;
 - Meet the project timeline as established by the team.
3. Resolving conflicts:
Conflicts are part of the team’s process of learning how to work together. When handled well, it can generate creativity and bring-multiple perspectives to the solution.

Student teams are expected to work through their misunderstandings as soon as they arise (and prior to submission of the final project). When teams are unable to arrive at a solution that works for all members, the team must meet with the Rotman Commerce Team Coach** as soon as possible. The Coach will listen to the team and help develop options for improving the team process. All members of the project team must commit to, and, utilize their action plans.

**For an appointment with a Rotman Commerce Team Coach, please contact Professor Nouman Ashraf at nouman.ashraf@rotman.utoronto.ca Nouman is highly skilled at facilitating team dynamics and collaboration. Note that the Team Coach’s role is to provide guidance, support and advice on team matters – not to formally evaluate or assess teamwork for academic purposes.

RIT-related Video Quizzes:

There will be two video quizzes in this course. They will be created and submitted via the **Communicado** platform. The Mind-Brain Hive within the Desautels Centre for Integrative Thinking created the Communicado platform. This platform allows students to submit recorded videos to posed questions. The platform produces a written transcript of the video recording, and allows the grader to provide time-stamped comments on the submission. The student will receive the comments, the transcript and his/her grade. The student will be able to download the video s/he submitted for later review.

The video quizzes will be related to the RIT case traded in the BMO Financial Markets Finance and Research Trading Lab (“the Finance Lab”) on October 29/30 and the RIT case traded on November 26/27. Together, these video-recorded answers to questions based on the case are worth a combined total of 10 percent of your final grade. This is calculated as follows:

Grade on RIT1 = 4%, if Grade on RIT1 > Grade on RIT2
else 0%

Grade on RIT2 = 6%, if Grade on RIT1 > Grade on RIT2
else 10%

You will notice that you do not have to submit an answer to the video quiz based on the RIT case from October 29/30. However, the advantage of doing so is to obtain feedback to help you improve for the video quiz based on the RIT case from November 26/27.

Weekly Questions:

Each week except the week of the midterm examination and Reading Week, beginning with the **first class** in the week of September 10th, there will be a question at the beginning of class. This will usually last 10 minutes, but length may vary. The question will be based on material to be prepared for that class and/or on material discussed in the preceding class. Please bring your laptop or tablet that enables you to log in to Quercus to class each week; these weekly questions will usually be conducted and submitted online. There are eleven such classes. The top nine scores on the weekly questions will count toward your final grade. They will be graded based on the correctness of your response, and based on the clarity and appropriateness of your written response. These are individual assignments.

If you arrive late for class, you will be allowed whatever time remains for the Question. For example, if 10 minutes were allocated for a particular week's Question, and you arrive 4 minutes late, you will have 6 minutes to answer the Question. However, if you arrive 11 minutes late, you will miss the opportunity. Do not despair: remember only nine count, and each that does count, counts for 1% of your final grade.

TeamUp

Each week that is not in the Finance Lab and not the midterm, there will be in-class questions answered as a group. In this case, the group can be formed at the beginning of the relevant class. A group MAY NOT have more than six members, and the instructor reserves the right to shift group composition. One member of the group will be designated as the team leader. Only the team leader may submit answers, and will be submitting on behalf of the entire group.

If the group answers the question correctly on its first attempt, this is worth 1% of the final grade for ALL members of the group. If the group answers the question correctly on its second attempt, this is worth 0.5% of the final grade for ALL members of the group. If the group answers the question correctly on its third attempt, this is worth 0.25% of the final grade for ALL members of the group. There will two TeamUp questions in each such class. Thus, you (and each member of your group) will earn between 0% and 2% toward the final grade in each of these classes. If you miss the relevant class for valid and documented reasons, please contact your instructor and arrange a mutually convenient time to answer an oral question.

Group Presentations:

Two student groups will present the solution to an assigned problem in each of classes 3, 4, 5, 6, 9, 10 and 12. The assigned problem will be communicated in advance to each student group. Each student group will present twice in the term. Each group may contain NO MORE than six people. You may not switch groups. Each group member must present. Each presentation will count for 4% of your final grade. If you miss either or both of your group's presentations for valid and documented reasons, you will need to arrange a time with your instructor to answer an oral question based on the content of the presentation.

Group Presentation Schedule:

September 24 and 25	Teams 1 and 2
October 1 and 2	Teams 3 and 4
October 8 and 9	Teams 5 and 6
October 15 and 16	Teams 7 and 1

November 12 and 13	Teams 4 and 2
November 19 and 20	Teams 3 and 6
December 3 and 4	Teams 5 and 7

Rotman Portfolio Manager (RPM) Project:

We will be using the RPM software for this course. Part of class during the week of September 17th will be devoted to an introduction to this software. For the RPM project, you will build, monitor and revise a portfolio of derivatives based on your investment strategy using the fictitious capital allocated to you at the beginning of the term. Please refer to detailed guidelines on the RPM project that will be posted on Quercus, and also to the RPM guides. You will submit two reports on your RPM portfolio. The reports will be graded on the logic you used to form and modify your portfolio, what you state you learned, and the clarity with which you write your report. The RPM Project is an individual assignment. In total, the two reports will be worth 10% of your overall grade for the course.

Midterm Examination

The midterm examination will cover all course content up to and including the end of the 7th class (week of October 21st). This includes any content from the class in the BMO Financial Markets Finance Research and Trading Lab, and from group presentations. You are permitted a one-sided letter-sized (8.5" x 11") piece of paper with notes and/or formulae for the midterm examination. You are also permitted a silent calculator.

If you have a conflict with the date/time of the midterm examination, and can provide valid evidence supporting this claim, please send an email to the designated TA (this information will be posted on Quercus) explaining the conflict and providing the relevant documentation. (For example, if the conflict is with another course in which you are registered, please provide a screen shot of your timetable.) A conflict time will be established. If you miss the midterm examination for other valid reasons such as an emergency medical condition, please provide your documentation to the Rotman Commerce office. Once confirmed, you will be eligible to write the makeup midterm examination. If you miss the makeup midterm examination for valid reasons for which you provide documentation, an alternative arrangement will be made. This may be shifting the weight of the midterm to the final examination, or an oral examination in place of the midterm examination.

Re-Grade Requests

ALL re-grade requests must be submitted in writing, outlining the rationale for the request, to Instructor / Lead TA / Course Coordinator within one week of the grade release. If you write your answers to the midterm examination in pencil, you forfeit the right to request it be re-graded.

Final Examination

The final examination will be held during the December examination period. It will be comprehensive and cover all material in the course, including content from class, from group presentations and from sessions in the Finance Lab. You are permitted a two-sided letter-sized (8.5" x 11") piece of paper with notes and/or formulae. You are also permitted a silent calculator.

Preparation for Class Each Week:

Ahead of each class, preparation is required. For classes in the assigned classroom, each student is asked to prepare for class by reading the readings identified on the course schedule below and to watch the video content that supports the same material. Be an attentive video watcher. You can replay the video. You can answer questions that help assess whether you have understood the video content. Class time will be used to work with the concepts from the readings and video. To apply the concepts, you need to have thought about them in advance of class.

For the three classes that are scheduled for the Finance Lab, prepare for class by reading the assigned RIT case and give some careful thought to how you intend to trade.

Weekly Schedule

	Date	Location	Topic	Videos	Reading
1	Sep 10/11	classroom	Introduction Mechanics of Futures Markets Hedging Strategies Using Futures	Yes	Chapters 1, 2 & 3
SEPTEMBER 18: LAST DAY TO ADD A COURSE					
2	Sep 17/18	Finance Lab	Introduction to CBOE, RPM, RIT RIT Case		
3	Sep 24/25	Classroom	Interest Rate Determination of Forward & Futures Prices	Yes	Chapters 4 & 5
4	Oct 1/2	Classroom	Interest Rate Futures	Yes	Chapter 6
5	Oct 8/9	Classroom	Swaps	Yes	Chapter 7
6	Oct 15/16	Classroom	Mechanics of Options Markets Properties of Stock Options Trading Strategies Binomial Option Pricing Model	Yes	Chapters 10, 11, 12 & 13
DUE OCTOBER 15th: RPM REPORT, PART 1					
Midterm examination October 23rd, 6-8pm					
7	Oct 29/30	Finance Lab	RIT Case		
NOVEMBER 4: LAST DAY TO DROP A COURSE					
NOVEMBER 4-8: READING WEEK					
DUE by NOVEMBER 11th: VIDEO QUIZ for RIT from October 29/30					
9	Nov 12/13	Classroom	Binomial Option Pricing Model (con't) Black-Scholes-Merton Model	Yes	Chapter 13, Section 18.6, Chapter 15 (excluding section 15.6)
10	Nov 19/20	Classroom	Black-Scholes-Merton Model The Greeks	Yes	Chapters 15 (excluding section 15.6) and 19
11	Nov 26/27	Finance Lab	RIT case		
12	Dec 3/4	Classroom	Options on Stock Indices, Currencies & Futures Review & Wrap Up	Yes	Chapters 17 & 18
DUE DECEMBER 6th: RPM REPORT, PART 2					
DUE by DECEMBER 6th: VIDEO QUIZ for RIT from November 26/27					
FINAL EXAMINATION: DURING ARTS & SCIENCE EXAM PERIOD DEC 7-20					

POLICY AND PROCEDURE

Missed Tests and Assignments

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may submit a request for special consideration. The Request for Special Consideration Form and supporting documentation must be submitted in a timely manner in order for the request to be reviewed.

In such cases, students must notify the Rotman Commerce Program Office on the date of the course deliverable such as a missed test, or assignment missed class (in the case of participation marks), or due date. They must then complete a [Request for Special Consideration Form](#) and submit it along with supporting documentation (e.g. [Verification of Student Illness or Injury form](#)) to the Rotman Commerce Office within **2 business days** of the originally scheduled course deliverable. Students who do not provide appropriate or sufficient supporting documentation will be given a grade of 0 (zero) for the missed course deliverable.

Documentation submitted in support of petitions for missing tests and assignments must be original; no faxed or scanned copies will be accepted.

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 later report of illness made by the student to a physician.

Weekly Questions:

There will be eleven Weekly Questions – one at the beginning of each weekly class that is not the midterm examination. The best nine of these will count. Therefore, if you miss one of them (subject to appropriate verified documentation submitted to the Commerce Office), the remaining best nine of ten will count. If you miss two, the remaining nine will count. If you miss three or more, the weight of the missed Weekly Question(s) will be added to the weight for the Midterm Examination if the missed Weekly Question is before October 23rd, or the Final Examination if the missed Weekly Question is after October 23rd.

Video Quizzes:

There will be two Video Quizzes created and submitted via the Communicado platform. Each is associated with the RIT case traded in class just before the due date. If you miss the second of these (subject to appropriate verified documentation submitted to the Commerce Office), the weight of the missed Video Quiz will be added to the weight for the Final Examination.

TeamUp:

If you miss a TeamUp classroom group assignment (subject to appropriate verified documentation submitted to the Commerce Office), please contact the designated TA (this information will be posted on Quercus) to arrange a time for an oral question to be administered in place of the missed TeamUp deliverable.

Group Class Presentations:

If you miss one or both of your Team's assigned presentations (subject to appropriate verified documentation submitted to the Commerce Office), please contact the designated TA (this

information will be posted on Quercus) to arrange a time for an oral question based on the content of the group presentation to be administered in place of the missed presentation.

RPM Reports:

If you are unable to meet the deadline for the submission of the RPM Part 1 report (subject to appropriate verified documentation submitted to the Commerce Office), the weight will be added to the weight for the RPM Part 2 report. If you are unable to meet the deadline for the submission of the RPM Part 2 report (subject to appropriate verified documentation submitted to the Commerce Office), the weight will be added to the Final Examination.

Late Assignments

Students who, for reasons beyond their control, are unable to submit an assignment by its deadline must obtain approval from the instructor for an extension. Supporting documentation will be required as per the policy on missed tests and assignments. Please note that the extension will be granted (or not) at the discretion of the instructor on a case-by-case basis, taking into account the rationale for the request and any pedagogical issues that would arise if the extension were granted. It is not always feasible to grant an extension.

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:

accessibility.services@utoronto.ca or <http://www.studentlife.utoronto.ca/as>.

If you are registered with Accessibility Services and there is information or documentation that your instructor may need, you are encouraged to share that information or documentation as soon as you can.

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 UofT 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 test and exams:

- 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 is not 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.

Quercus and the Course Page

The online course page for this course is accessed through Quercus. To access the course page, go to q.utoronto.ca and log in using your UTORid and password. Once you have logged in, you will be at the Quercus Dashboard. On this page you will see all of the courses you are presently enrolled in. If you do not see the course listed here but you are properly registered for the course in ROSI, wait 48 hours.

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, Quercus materials, etc.

If permission is granted by the instructor (or via Accessibility Services), it is intended for the individual student's own study purposes and does not include permission to "publish" them in any way. It is absolutely forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.

Pre-Recorded Video Content

This course will make use of substantial pre-recorded video content. You are not permitted to download this video content or to share it or post it. Its only allowed use is within the confines of this course this term.