



Rotman Commerce UNIVERSITY OF TORONTO

Course Outline

RSM 435 H1 S, L0101, L5101

Futures and Options Markets

Fall 2023

Course Meets:

L0101: Monday, 13:00 – 15:00, WO; **L5101:** Monday, 17:00 – 19:00, WO

Instructor: Kevin Wang
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Office Hours: By appointment

Course Scope and Mission

This course provides an introduction to popular derivative instruments such as options, forward contracts, futures contracts, and swaps. Both modern pricing theories and practical applications will be emphasized. 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

Exclusion: ACT370H1
Prerequisite: ECO204Y1/ECO206Y1, RSM332H1

Statement on Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Required Technology

Office hours (before the midterm quiz and the final exam) will be conducted online. Classes of this course will be conducted primarily in-person - the lectures are in-person. However, some components (e.g., project presentations) will be conducted online (e.g., via Zoom). To participate fully and successfully, you must ensure that you have a computer with a working webcam, microphone and reliable access to an internet connection. For further details, please visit this link: [Recommended Technology Requirements for Remote/Online Learning](#)

Required Readings

The required textbook is: John C. Hull, Options, Futures, and Other Derivatives, 11th Edition, Pearson, 2021, ISBN 013693997X.

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 they have command of the course materials. Note that all times are in Eastern Standard Time (EST) zone.

Summary of evaluation

<i>Evaluation</i>	<i>Weight</i>	<i>Notes</i>
<i>Homework Assignments</i>	15%	Two group assignments
<i>Quiz</i>	10%	Online quiz
<i>RPM Investment Project</i>	25%	Group term project using Rotman Portfolio Manager
<i>Final Exam</i>	48%	In-person, paper exam
<i>Class Participation</i>	2%	Class (group) participation is expected (required).

Summary of deliverables due date

<i>Evaluation</i>	<i>Due date</i>	<i>Notes</i>
<i>Homework #1</i>	Oct. 13, by 11:59 pm	Submit via Quercus
<i>Quiz</i>	Oct. 23, 6:00 pm – 7:00 pm	Online quiz via Quercus
<i>Homework #2</i>	Nov. 24, by 11:15 pm	Submit via Quercus
<i>RPM Project</i>		
<i>Presentation Slides</i>	Dec. 4, by 11:59 pm	Submit via Quercus
<i>Evaluation File</i>	Dec. 4, by 11:59 pm	Submit via Quercus
<i>Final exam</i>	TBD	Two-hour in-person exam

Details on Evaluation and Grades

Homework Assignments

There are two homework assignments, which are group-based work. Each group normally should have five members. Groups may be formed by your own preferences, for both the assignments and the term project. If a group has less than five members, however, new

member(s) may be added by the instructor. This is necessary since we need to control the total number of groups for the project presentation.

The two assignments are worth 5% and 10% of the final grade, respectively. The assignments are submitted on Quercus via file upload in the Assignments section. The submission should include a cover page listing names and IDs of all group members. Group members should keep a copy of each assignment in case that the member who has submitted the assignment ends up dropping the course. It should be emphasized that late submissions of assignments will not be accepted. Except for unusual circumstances, grades on the assignments are final and re-grading requests will not be accepted.

Quiz

We will have an online quiz that is worth 10% of your final grade. It is supposed to be 50 minutes but everyone will get one hour, to take care of extra time with uploading files. It is an open book online quiz via Quercus. A make-up quiz may be offered for those with a legitimate reason, but it will be harder since one has more time to prepare. If one misses the make-up quiz again, there is no more make-up chance – the weight of the quiz will be added to the final exam.

RPM Investment Project

You will complete an investment group project using the Rotman Portfolio Manager (RPM). This should be the same group for the assignments. (Although obvious, it should be emphasized that group work is required – one must join a group.)

The classes of the project presentation and discussions will be conducted online. Details will be provided later.

There are two deliverables for this term Project:

1. Presentation slides

Each group is required to present their work for the term project, using slides, in one of the two classes at the end of the term. There will be a live Q&A session for each group, which may also affect the grade of the project.

2. Evaluation file

Project presentation grades are determined by the instructor. However, peer evaluation is also expected, which is part of the group participation. An excel evaluation file with instructions will be provided before each of the last two classes. The performance of the presentation and Q&A for each group will be evaluated by people in other groups. Both the presentation slides and the excel files of peer evaluation results are due by 11:59 pm on the day of the final class, which are to be submitted via Quercus.

The order of project presentations will be determined by random draws. For any group formed across different sections, the section for the group to present will be assigned by the instructor.

Further details of the term project will be explained in a separate file and in our first class.

Final Exam

An exam worth 48% of the grade will be scheduled during the final exam period. For this term, the final exam will be a closed-book, in-person, paper exam. The exam will be comprehensive, covering all the course material, e.g., lecture notes, assignments, etc.

Group Participation

A total of 2% of the final grade is for group participation. It includes both individual contribution to the group work and group's contribution to participation during project Q&A and peer evaluation. This will be discussed in the first class. Note that group work is a requirement. One cannot work alone (unless permitted by the instructor due to special reasons). You should try to find a group to join as early as possible. Contact me if you need help for the grouping.

Class 5 will be online on Oct. 6 (Friday). To make up for the Thanksgiving (Oct. 9) holiday, we will have two identical online sessions (1:00-3:00pm and 4:00-6:00pm) on Oct. 6. The makeup classes will be recorded and the recordings will be posted.

Note: the last day one can drop this course without academic penalty is Nov. 6, 2023.

Rotman Commerce Centre for Professional Skills Teamwork Support

Various deliverables require students to work in teams of several students. Learning to work together in teams is a crucial transferrable skill you will use not only in your coursework, but also in your future careers. Support is available if you encounter common teamwork challenges such as:

- Team members feeling left out of the team.
- Team members not responding in a timely manner to communication.
- Division or quality of work among team members being unequal or unfair.

Consult the [Centre for Professional Skills Teamwork Resources page](#) for tips, strategies, and best practices. You can also [book an appointment with a teamwork mentor](#) through the RC Centre for Professional Skills Writing Centre. Teamwork mentors can help you resolve or mitigate conflict, strategize on planning, or improve team communication.

If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, consult with your Accessibility Advisor about the teamwork in this course.

Policies and procedure

Missed Tests and Assignments (including final test)

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may request special consideration **within 2 business days** of the missed midterm/test/assignment due date.

In such cases, students must:

1. Complete the Request for Special Consideration form: <https://uoft.me/RSMConsideration>
2. Provide documentation to support the request, eg. Absence Declaration from [ACORN](#), medical note etc.

Please note: As of September 2023, students may use the Absence Declaration on ACORN ***one time per term*** to report an absence and request consideration. **Any subsequent absence will require a [Verification of Illness form](#) or other similar relevant documentation.**

Students who do not submit their requests and documentation within 2 days may receive a grade of 0 (zero) on the missed course deliverable

When students miss an assignment for reasons beyond their control, the grades of other deliverables will be re-weighted accordingly.

Commitment to Accessibility

The University is committed to inclusivity and accessibility, and strives to provide support for, and facilitate the accommodation of, individuals with disabilities so that all may share the same level of access to opportunities and activities offered at the University.

If you require accommodations for a temporary or ongoing disability or health concern, or have any accessibility concerns about the course, the classroom or course materials, please [email Accessibility Services](#) or visit the [Accessibility Services website](#) for more information as soon as possible. Obtaining your accommodation letter may take up to several weeks, so get in touch with them as soon as possible. If you have general questions or concerns about the accessibility of this course, you are encouraged to reach out to your instructor, course coordinator, or Accessibility Services.

Generative AI or ChatGPT

The use of generative artificial intelligence tools or apps for the quiz and Assignments (1 and 2), including tools like ChatGPT and other AI tools, is prohibited.

However, such tools are allowed for creating strategies in the trading project. In other words, you may use such tools in design of the strategies you use in the RPM trading.

Academic Integrity

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarship 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](#) 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 U of T 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 U of T 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 ACORN. For more information visit help.ic.utoronto.ca/category/3/utmail.html.

Forwarding your utoronto.ca email to a Gmail or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Gmail 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.

Recording Lectures

Lectures will be recorded by the instructor for this term (using Zoom or via some other way).

Notice of video recording and sharing (Download and re-use prohibited)

Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation, and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor.

For questions about recording and use of videos in which you appear please contact your instructor.

The tentative schedule of lectures is as follow:

TENTATIVE CLASS SCHEDULE

<u>CLASS</u>	<u>Dates</u>	<u>Topics</u>	<u>Readings</u>
1	Sept. 11	Motivation, course overview, trading options and futures	Chapters 1, 2.1-2.8, 2.11, 10.1-10.7
2	Sept. 18	Trading strategies involving options	Chapter 12
3	Sept. 25	Properties of options, Technical Analysis – Part 1	Chapter 11
4	Oct. 2	Binomial trees, Technical Analysis – Part 2	Chapter 13.1-13.10
5	Oct. 6 (online)	Black-Scholes-Merton model, implied volatility mean-reversion	Chapter 15 (not 15.6 and 15.10)
6	Oct. 16	Volatility smiles, options on stock indices and currencies	Chapters 17, 20.1-20.5
7	Oct. 23	Quiz (online, open book)	
8	Oct. 30	Forward and futures contracts, futures options	Chapters 5.1-5.12, 18.1-18.9
9	Nov. 13	FRA, interest rate futures	Chapters 4.8, 4.9, 6.1-6.4
10	Nov. 20	Interest rate swaps, currency swaps	Chapters 7.1-7.9
11	Nov. 27	Project presentations: part 1	
12	Dec. 4	Project presentations: part 2	