



Rotman Commerce UNIVERSITY OF TORONTO

Course Outline

RSM 332 H1 F, L0401, L0501, L0601, L5201

Capital Market Theory

Fall 2020

Course Meets:

L0401 Thursdays 09:00 – 11:00 online

L0501 Thursdays 11:00 – 13:00 online

L0601 Thursdays 15:00 – 17:00 online

L5201 Thursdays 17:00 – 19:00 online

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Office: RT437
Office Hours: online by appointment – see Quercus for details

Course Scope and Mission

This course provides an introduction to financial markets and lays out the foundation for analyzing the investment and financial decisions made by investors. You will learn about key investment concepts and techniques in the fixed income, equity, and derivatives markets. You will also learn how to create optimal combinations (portfolios) of securities with an emphasis on the trade-off between risk and return. Throughout the course, we will connect the concepts of capital markets in a real-world setting and study the quantitative skills essential to make rigorous financial decisions.

Course Prerequisites

Exclusion: ACT349H1, ECO358H1

Prerequisite: RSM230H1

Co-requisite: ECO204Y1/ECO206Y1, ECO220Y1/ECO227Y1/(STA220H1, STA255H1)/(STA257H1, STA261H1)

If you drop any of the co-requisite courses during the academic term, you must also drop this course. Contact Rotman Commerce Academic Program Services for academic advising if needed.

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

For Fall-Winter 2020-21, this course will be conducted entirely online. To participate fully and to complete the course successfully, you must ensure 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:

S. A. Ross, R. W. Westerfield, J. F. Jaffe, G.S. Roberts, H. Driss, Corporate Finance, 8th Canadian Edition, McGraw-Hill Education, 2019.

Note that this textbook is the same as that required in RSM230 and RSM333. You can purchase the textbook in hard copy or in digital form. You can also purchase the Connect resources made available by McGraw Hill Education if you would like access to their additional practice questions. The publisher has made available to us a special exclusive deal where your purchase of the textbook includes access to edition updates for FOUR YEARS in digital form. The University of Toronto Bookstore sells hard copies of the text as well as access codes for both the digital copy of the text and the optional Connect resources. The ISBN numbers are as follows:

Print package with Connect, 4-year access card: **126033984X \$189.95**

Digital Only Connect, 4-year access: **9781260339420 \$119 list**

Digital Only Connect, ebookless (180 day access): **9781260339413 \$60 list**

URL Link for the ebook: <https://connect.mheducation.com/class/a-corhay-fall-2020-student-access>

Summary of 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>Quizzes</i>	20%	11 quizzes, each worth 2% (best 10 of 11 in final grade)
<i>Homework Assignments</i>	15%	3 assignments, each worth 5%
<i>Video assignment</i>	10%	2 video assignments, each worth 5%
<i>Term project</i>	25%	5 separate deliverables, each worth 5%
<i>Final test</i>	25%	
<i>Participation</i>	5%	

Summary of deliverables due date

<i>Evaluation</i>	<i>Due date</i>	<i>Notes</i>
<i>Quizzes</i>	Sundays by 23:59	Submit via Quercus, see below for exact dates
<i>Homework #1</i>	Oct. 16, by 17:00	Submit via Quercus
<i>Video #1</i>	Oct. 16, by 17:00	Submit via Communicado
<i>Homework #2</i>	Oct. 30, by 17:00	Submit via Quercus
<i>Video #2</i>	Nov. 13, by 17:00	Submit via Communicado
<i>Homework #3</i>	Dec. 11, by 17:00	Submit via Quercus
<i>Term project</i>		
<i>1. DCF model</i>	Nov. 25, by 17:00	Submit via Quercus
<i>2. Report + slides</i>	Dec. 1, by 17:00	Submit via Quercus
<i>4. Presentation</i>	Dec. 2 - Dec. 9	Submit slides via Quercus + live presentation
<i>5. Feedback report</i>	1 week after pres.	Submit via Quercus

Details on Evaluation and Grades

Quizzes

There is a total of 11 weekly quizzes, each covering a specific topic of the course. You should view the weekly quizzes as companions to the content covered in each module. The quizzes encourage you to work through the material over the course of the term. In addition, they provide continuous feedback on your understanding of each module's material. The quizzes will focus on knowledge understanding and your ability to apply that knowledge to numerical and conceptual questions.

Each of the 11 quizzes is worth 2% but only the 10 best quiz grades will count towards your final grade. Note that late quizzes will be assigned a grade of zero. The quizzes can be found in the Quizzes section of Quercus. The quizzes are due on Sundays by 23:59 EST according to the following schedule:

<i>Week</i>	<i>Topic</i>	<i>Due Date</i>
1	Introduction and time value	Sep. 20
2	Fixed income I	Sep. 27
3	Fixed income II	Oct. 4
4	Fixed income III	Oct. 11
5	Introduction to derivatives	Oct. 18
6	Option pricing	Oct. 25
7	Stock valuation I	Nov. 1
8	Stock valuation II	Nov. 8
9	Modern portfolio theory	Nov. 22
10	Capital Asset Pricing Model	Nov. 29
11	Multi-factor models	Dec. 6

Homework Assignments. There are three homework assignments. The first homework assignment covers the fixed income portion of the course (topic 1–4), the second homework assignment covers the derivatives portion of the course (topic 5–6), and the third assignment covers the stock valuation and investment portion of the course (topic 7–11). Students are strongly encouraged to work in groups of two or five persons on the assignments but may work alone if they choose to. The goal of the homework assignments is to give you the opportunity to complete more detailed analysis to further your understanding and ability to apply the course material. The homework assignment questions will go beyond those in the Quizzes (i.e. answer longer, more difficult questions) and are a good opportunity to learn from/with your peers within your group.

Each homework assignment is worth 5% of your final grade. Homework assignments are submitted on Quercus via file upload in the Assignments section. **Every member** of the group **MUST** submit the assignment, which **MUST** include a submission note and/or cover page listing all of the members of the group. This is key to avoid losing the submission if the member that submits the assignment ends up dropping the course. The due dates/times are listed in the due dates table above. Late submissions will not be accepted. Except for unusual circumstances, grades on homework assignments are final and re-grading requests will not be accepted.

Video Assignments

There are two video assignments. The first video assignment covers the fixed income portion of the course (topic 1–4), the second video assignment covers the derivatives and stock valuation

portion of the course (topic 5–8). For each video, you will answer a question, randomly chosen from a pool of questions. The pool of questions will be posted ahead of time in the Video Assignment module. The video assignments provide a number of useful learning outcomes – both for the course and your future career. They train you to better express your thought verbally and the feedback you receive after each video will help you improve on your oral communication skills. This is a very important skill that you will need for your future job interview. In addition, a growing number of employers are using short videos as part of their recruiting process, which makes recording a competent, coherent video a useful skill.

Each video is worth 5% of your final grade. Video assignments are individual and submitted via the Communicado platform. We will provide detailed instructions on the Communicado platform in the Video Assignment module. The due dates/times are listed in the due dates table above and late submissions will not be considered.

Term Projects

You will complete a stock valuation group project on a stock of your group's choice. Minimum group size is 3, maximum group size is 5, and each group must have their stock selection first approved by the instructor – a specific stock can only be valued by one group.

There are five deliverables for the Term Project, each one worth 5% of your final grade:

1. Discounted Cash Flow (DCF) model – submitted as an Excel spreadsheet, the model will include a pro-forma model, free cash flow calculation, terminal value, and present value calculations to arrive at a price target for the subject company. The DCF model will be part of the written report (see below).
2. Written Report – submitted as a PDF file, the written report succinctly delivers the results of the DCF model to the reader, including a recommended course of action (buy/sell/hold) and the underlying assumptions used in the DCF model.
3. Presentation Slides – submitted as a PowerPoint or PDF file, the presentation slides visually deliver the results of the stock valuation analysis to the viewer, including a recommended course of action (buy/sell/hold) and underlying assumptions used in the DCF model. The presentation slides will be part of the presentation (see below).
4. Presentation – each group will present their stock valuation, using their submitted slides, to an online audience which can be composed of a set of graders (instructor and/or TAs), and one other student group (see Feedback below). The presentation will be followed by a Q&A session. **EVERY GROUP MEMBERS MUST SPEAK** during the presentation. The presentations will occur online between December 2 and December 9.
5. Feedback – each student group is required to attend another group's presentation and to submit a formative/constructive feedback to the group. The feedback will be graded but will not form a portion of the presentation grade of the presenting group.

The term project will allow you to develop professional skills that will be useful in your future career. You will gain practical experience in building a financial model to value a real company. In doing so, you will learn abilities such collecting financial data, making sensible assumptions, and thinking both rigorously and creatively. Finally, you will practice your presentation skills in front of a live audience. Please note that **clear, concise and correct communication – both oral and written** - will be considered in the evaluation of term project. 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. The same principles apply to the oral presentation.

Each presentation time slot will have two groups. While one group is presenting, the non-presenting group will be observing and taking notes to prepare a feedback report for the presenting group. The feedback should be formative (e.g., I think you made a good point when you said X, I would have liked to hear more about X, etc.) as well as critical (e.g., your

explanations for X and Y contradict, which detracts from the points you were making, I think this assumption is too strong because of this and that, etc.). The resulting feedback will be given to the presenting group (so make it useful) as well as being graded. The feedback must be submitted within 1 week of the presentation via Quercus.

Being able to constructively develop feedback is beneficial in any setting where you work with other people (you are going to have to figure out how to give feedback to your boss!). Attendance at a peer-feedback workshop facilitated by the **Centre for Professional Skills** is mandatory and will count for 1% out of the 5% feedback grade (the other 4% will be based on your submitted feedback). In addition, given the importance of writing skills for the written report, 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 (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.

Final Test

A final test worth 25% of the grade will be scheduled by the Rotman Commerce department during the final assessment period. The test is open book and the material is comprehensive, covering all the course material, e.g., lecture notes, assignments, etc. It will be administered online via Quercus.

Participation

A total of 5% of the final grade is awarded for participation. Participation grades can be earned by engaging with the course material and your fellow students. For instance, grades will be awarded to students who actively participate during the online webinars (e.g., online classes, group office hours, external speakers, etc.) as well as in the Quercus discussion board.

You can also earn participation mark by submitting an **original** sample question relating to one topic of your choice (e.g., a sample assignment or practice question on a bond arbitrage). The question should be original and significantly different from the other questions posted on Quercus. Just changing the numbers in an existing question is not enough! The sample question can be submitted via Quercus. The file should be in either Microsoft Word, PDF, or even better, Latex format and contain the question followed by a detailed solution.

Rotman Commerce Centre for Professional Skills Teamwork Support

Various deliverables require students to work in teams of several students. Working as a team is challenging; this is true both in the real world and in your academic classes. However, learning to work together in teams is an important aspect of your education and preparation for your future careers. You are encouraged to review the teamwork resources available to all Rotman Commerce students at <https://rotmancommerce.utoronto.ca/teamwork-resources> while navigating these challenges, but keep in mind that supports are also available for when you think you may need extra help.

New in the 2020-2021 academic year, the Rotman Commerce Centre for Professional Skills (RC-CPS) will offer appointments with Teamwork Mentors for any teams encountering challenges in their teamwork. Some possible reasons you might book an appointment with a Teamwork Mentor include:

- Team members have identified constraints on their time, work or accommodations they require that conflict with necessary timelines for the team.
- Teams are unsure how to divide their workload for a team project.
- Teams are concerned about how to integrate the individual contributions of each member and how to ensure team members are contributing equally.

- Teams are concerned about how to ensure all group members are aware of academic integrity guidelines (e.g. properly attributing sources) and follow them.
- Teams would like to be able to communicate more effectively with each other, particularly when navigating a remote work academic environment.

To book a meeting with a Teamwork Mentor, send an email to rotmancommerce.teamworkhelp@utoronto.ca with the course code (e.g. RSM100) and team number (if available) in the subject line of the email. Any member of the team may reach out individually to book an appointment, but we also encourage teams to book their appointments as a team. You will normally receive a response within 24-36 hours, but note that during busy times of the semester the waiting period may be longer. Be proactive in booking your meeting, and do so **as soon as** challenges arise!

If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, you should consult with your Accessibility Advisor about this course. For considerations pertaining to teamwork and accessibility, please see information in the section on Accessibility Needs below under the Policies and Procedures heading.

Lecture Schedule

The course will be delivered online using a combination of synchronous (i.e., live) and asynchronous contents. The lecture schedule is organized into weeks, each focusing on a topic. Any changes to the schedule will be posted on Quercus.

In a typical week, you will be assigned a set of required readings from the textbook. In addition, the lecture material will be delivered using videos and supporting slides. This material will be posted ahead of the scheduled class time. You are expected to **review the course material (readings and videos) before the webinar**. During the online class, I will give a brief summary of the lecture material, answer questions, and focus on more practical applications and discussions related to the weekly topic. In order to get most of our online classes, it is important that you review the material ahead of the class. Each topic will be followed by an online quiz, typically occurring the week after (see Quizzes section for details on the quizzes schedule).

The schedule of lectures is as follow:

<u>CLASS</u>	<u>DATE</u>	<u>TOPICS</u>	<u>READINGS</u>
1	Sep. 10	Introduction and time value: introduction to the course, review of time value of money, APR and EAR.	Chapter 5, pp. 96-125
2	Sep. 17	Fixed income I: bond valuation, spot interest rates, bond yields, term structure of interest rates	Chapter 6.1-6.3, pp. 136-142 Appendix 6A, pp. 166-174 Chapter 21.5, pp. 583-586
3	Sep. 24	Fixed income II: bid/ask price, accrued interest, bond arbitrage, bootstrapping	Chapter 26.6, pp. 709-715
4	Oct. 1	Fixed income III: duration, mortgages, corporate bonds, credit risk.	Chapter 21.4, pp 580 - 583
5	Oct. 8	Introduction to derivatives: futures, forwards, and options.	Chapter 26.1-26.4, pp. 695-703 Chapter 23.1-23.6, pp. 617-625
6	Oct. 15	Option pricing: put-call parity, binomial model, Black-Scholes formula.	Chapter 26.6-26.8, pp. 626-638
7	Oct. 22	Stock valuation I: common stock valuation, valuation by comparable.	Chapter 6.4-6.10, pp. 142-158
8	Oct. 29	Stock valuation II: Firm valuation case study.	
9	Nov. 5	Modern portfolio theory: statistics review, risk and return, modern portfolio theory.	Chapter 10.1-10.6, pp. 268-284 Chapter 11.1-11.4, pp. 290-309
10	Nov. 19	Capital Asset Pricing Model: diversification, introduction to CAPM.	Chapter 11.5-11.9, pp. 309-319
11	Nov. 26	Multi-factor models: introduction to APT, empirical applications, market efficiency.	Chapter 12.1-12.7, pp. 328-342
12	Dec. 2-9	Project presentations	

Please note that the last day you can drop this course without academic penalty is November 9, 2020.

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.

In such cases, students must:

1. Notify the instructor AND the Rotman Commerce Program Office **on the date** of the missed course deliverable, e.g. missed test, final assessments, assignment or class (in the case of participation marks).
2. Complete a [Request for Special Consideration Form](#) and submit it along with supporting documentation this may include either your Self-Declaration of Absence on ACORN, or [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.

Note that documentation must clearly establish that you were ill or had other circumstances that prevented you from attending on the date in question. After-the-fact reports are not sufficient.

Students who miss the final test due to illness and have provided the necessary documentation as outlined above will be granted a make-up test, which may take the form of an oral examination. When students miss an assignment for reasons beyond their control, the grades of other deliverables will be re-weighted accordingly.

Accessibility Needs

The University of Toronto is committed to accessibility. 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 contact Accessibility Services as soon as possible at accessibility.services@utoronto.ca or studentlife.utoronto.ca/as.

For courses with deliverables that require you to work in teams, please note the following. If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, requests for extensions impact everyone in the group. As a result, requests for late submissions of any component of teamwork will require compelling reasons, advance notice, and must work for everyone in the team. You are encouraged to discuss with your course instructor, Accessibility Advisor, and other team members what you need in order to successfully complete your coursework. Additionally, the Rotman Commerce Centre for Professional Skills offers Teamwork Mentors (see section above) who can help you and your team discuss how to support you effectively and how to develop a work plan that meets the needs and constraints of all team members.

Volunteer Notetaking

If you're interested in helping to make our classroom more accessible, volunteer to be a notetaker!

Accessibility Services needs dependable volunteer notetakers to assist students living with a disability to achieve academic success. All you have to do is attend classes regularly and submit your notes consistently.

1. Register online as a Volunteer Note-Taker at:

<https://clockwork.studentlife.utoronto.ca/custom/misc/home.aspx>

2. Follow the link that says "Volunteer Notetakers"
3. Select your course and upload a sample of your notes
4. Once you have been selected as a notetaker, you'll get an email notifying you to upload your Notes.

If you have any questions or require assistance, please email as.notetaking@utoronto.ca or call 416-978-6186.

Volunteers may receive co-curricular credit or a certificate of appreciation.

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. If you don't see the course listed here but you are properly registered for the course in ACORN, 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. Students who have been previously granted permission to record lectures as an accommodation for a disability are exempted. This includes tape recording, filming, photographing PowerPoint slides, Quercus materials, etc.

If permission for recording 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 forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.

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

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session.

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.

Credit/No-Credit Option in Rotman Commerce

You may request to Credit/No-Credit (CR/NCR) an RSM course in the following cases only:

- The course will not be used for any specialist or focus, including the 8.0 RSM FCE requirement.
- The course does not have a group work component.

If you wish to request CR/NCR for an RSM course, you must contact a Rotman Commerce academic advisor by the drop deadline for the current term. **The deadline for this term is November 9, 2020.**

Final approval is on a case-by-case basis with the permission of the Director, Rotman Commerce.