

Course Outline

Course Code	RSM 332 H1 F, L0101, L0201, L0301
Course Name	Capital Market Theory
Term, Year	Fall, 2024
Web page URL	https://q.utoronto.ca
Course Meets	L0101 Tuesdays 09:00am - 11:00pm, WO 20 L0201 Tuesdays 11:00am - 01:00pm, WO 20 L0301 Tuesdays 03:00pm - 05:00pm, WO 30

Instructor Details

Name	Email	Office Hours
Liyan Yang	liyan.yang@rotman.utoronto.ca	Wednesday 10-11am, or by appointment.

Head TA: Kane Bae(kane.bae@rotman.utoronto.ca) will still act as the lead TA for the admin.

Course Description

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.

Learning Outcomes

By the end of this course, students will be able to:

- Apply advanced valuation techniques to estimate the prices of various financial securities, including bonds, stocks, and derivatives.
- Describe the key determinants of the term structure of interest rates and analyze their impact on asset prices.
- Understand the concept of arbitrage and develop replicating portfolio strategies to capitalize on arbitrage opportunities.
- Use fixed-income securities and derivatives to manage portfolio risk exposures.
- Develop option trading strategies to leverage market views.
- Collect key financial data about firms to estimate cash flows and apply asset pricing models to determine appropriate discount rates.

- Build a financial model to value a company, defend the results of the valuation analysis to a live audience, and clearly communicate the relevant factors influencing their conclusions.
- Employ mean-variance optimization to identify the optimal portfolio and explain the risk-return trade-off.
- Explain the concept of market efficiency and its implications for investors.

Course Prerequisites

Exclusion: ACT349H1, ECO358H1

Prerequisite: RSM230H1

Co-requisite: ECO204Y1/ECO206Y1, ECO220Y1/ECO227Y1/(STA220H1, STA255H1)/(STA237H1,STA238H1)/(STA257H1, STA261H1)

If the course has a co-requisite, include the following note: If you drop course XXX (the co-requisite) during the academic term, you must also drop this course. Contact Rotman Commerce Academic Services for academic advising if needed.

Required Readings

The required textbook is:

Ross, S.A., R.W. Westerfield, J.F. Jaffe, G.S. Roberts and H. Driss, Corporate Finance, 9th Canadian Edition, McGraw Hill Education, 2022.

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:

Digital package includes four-year access to textbook: ISBN 9781264830961

Hard copy of textbook: ISBN 9781264831302

Note: we will not be using Connect in this course.

Evaluation and Grades

Grades are a measure of the knowledge and skills developed by a student within individual courses. Each student will receive a grade on the basis of how well they have command of the course materials, skills and learning objectives of the course.

Summary of evaluation

<i>Evaluation</i>	<i>Weight</i>	<i>Notes</i>
<i>NPV Review Quiz</i>	5%	Quiz on NPV calculations review on Quercus
<i>Homework Assignments</i>	10%	2 assignments, each worth 5%
<i>Term project</i>	20%	3 separate deliverables
<i>Midterm test</i>	28%	
<i>Final test</i>	37%	

Summary of deliverables due date

<i>Evaluation</i>	<i>Due date</i>	<i>Notes</i>
<i>NPV Review Quiz</i>	Sep. 22, by 23:00	Submit via Quercus
<i>Homework #1</i>	Oct. 4, by 17:00	Submit via Quercus
<i>Homework #2</i>	Oct. 18, by 17:00	Submit via Quercus
<i>Term project #1 - DCF model</i>	Nov. 17, by 17:00	Submit via Quercus
<i>Term project #2 - Report</i>	Nov. 26, by 17:00	Submit via Quercus
<i>Term project #3 - Presentation</i>	Nov. 26 – Dec. 3	Live presentation
<i>Midterm test</i>	Oct. 23, 7pm	In-person, Rooms: EX100, EX200
<i>Final Exam</i>		TBD Dec. 6 – Dec. 21

Course Format and Expectations

NPV Review Quiz

In RSM230, you learned about the time value of money and some of its applications. You also got familiar with the mechanics of present value calculations. To ensure that your finance skills are up to date, we will provide a series of material on Quercus, consisting of videos, slides, and practice problems. The material covered includes the time value of money, present value calculations, effective annual rates, and annual percentage rates. After reviewing the material, you will take a Quiz on Quercus on these topics by the deadline specified in the due dates table above. The quiz is worth 5% of the final mark. Late quizzes will be assigned a grade of zero.

Homework Assignments.

There are two graded homework assignments and one ungraded take-home assignment. The first graded homework covers the fixed income portion of the course (topics 0–3), and the second graded homework covers the derivatives portion of the course (topics 4–5). To allow more time for focusing on the end-of-term project, the third assignment will not be graded. However, it covers important concepts that will be included on the final exam. This ungraded assignment covers the investment portion of the course (topics 6–10).

Students are strongly encouraged to work in groups of two to 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 are a good opportunity to learn from/with your peers within your group.

Each graded homework assignment is worth 5% of your final grade. Homework assignments are submitted on Quercus via file upload in the Assignments section. Submissions must include a cover page listing all of the members of the group. Note that if the student submitting the assignment drops the course, the submission will be lost. It is your responsibility to ensure that it does not happen. 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.

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 selected from a list provided by the instructor – a specific stock can only be valued by one group.

There are three deliverables for the Term Project, worth 5%, 5%, and 10%, respectively:

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. Live Presentation – conducted online via Zoom. Each group will present their stock valuation using their submitted slides to an online audience, which will include graders (instructor and/or TAs) and one other student group. The slides should visually communicate the results of the stock valuation analysis to the audience. The presentation will be followed by a Q&A session. You will be graded on the quality of both your slides and your presentation.

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.

Exam

There is a midterm exam worth 28% of the grade, which will cover the material from lectures 0-5. The time and date will be communicated on Quercus. In addition a final exam will be scheduled by the Faculty of Arts & Science during the final assessment period. The test is closed book and the material is comprehensive, covering all the course material, e.g., lecture notes, assignments, etc.

Writing Assignments or Presentations

How well you communicate your ideas, in writing or orally, will be considered in the evaluation of the assignment. In your written assignments, you should aim for clarity, strong organization, concision, professionalism, and correct grammar. Your presentations should reflect strong planning and organization, clarity of speech, and an engaging demeanour. Sources, whether in written or presentation assignments, should always be correctly attributed.

Support is available through the RC Centre for Professional Skills (CPS) for students who would like help or feedback on their writing or speaking (presentations). CPS offers both individual and group appointments with trained writing instructors and presentation coaches who are familiar with the RC program and common types of business assignments. You can also access your college Writing Centres for help with written assignments.

You can book an appointment with a writing or presentation coach through the RC Centre for Professional Skills Writing Centre. For more information about writing centres, student supports, and study resources, see the [Writing and Presentation Coaching academic support page](#).

Team or Group Assignments

The valuation project requires students to work in teams of 3-5. 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.

Missed Tests and Assignments

Students who miss a term 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.

Students who have provided the necessary documentation as outlined above will have the grades of other deliverables in the same category re-weighted accordingly.

Final Exams: If you miss the final exam in this course for a legitimate reason (illness, etc.) you will need to contact your College Registrar to file a petition for a deferred exam. This deferred exam will be written at a later date as established by the Faculty of Arts & Science. Instructions can be found here: <https://www.artsci.utoronto.ca/current/faculty-registrar/petitions-appeals/preparing-petition>

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.

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.

Plagiarism Detection

Normally, students will be required to submit their course essays to the University's plagiarism detection tool 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 tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the [University's Plagiarism Detection Tool FAQ](#) page from Centre for Teaching Support & Innovation.

Generative AI / ChatGPT

Students may use artificial intelligence tools, including generative AI, in this course as learning aids or to proofread/edit assignments. However, students are ultimately accountable for the work they submit. In addition, this use must be documented in an appendix for each assignment. The documentation should include what tool(s) were used, how they were used, and how the results from the AI were incorporated into the submitted work.

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 procedures outlined in the [Code of Behaviour on Academic Matters](#). If you have any questions 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 or RC resources such as the RC Centre for Professional Skills, the 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 the [Information Commons Help Desk](#).

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.

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 excepted. 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.

<u>CLASS</u>	<u>DATE</u>	<u>TOPICS</u>	<u>READINGS</u>
SELF-LEARNING		Review on time value: review of time value of money, APR and EAR.	Chapter 5, pp. 96-125
1	Sep. 3	Introduction and 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
2	Sep. 10	Fixed income II: bid/ask price, accrued interest, bond arbitrage, bootstrapping	
3	Sep. 17	Fixed income III: duration, mortgages, corporate bonds, credit risk.	Chapter 21.4, pp 580 - 583 Chapter 26.6, pp. 709-715
4	Sep. 24	Introduction to derivatives: futures, forwards, and options.	Chapter 26.1-26.4, pp. 695-703 Chapter 23.1-23.6, pp. 617-625
5	Oct. 1	Option pricing: put-call parity, binomial model, Black-Scholes formula.	Chapter 26.6-26.8, pp. 626-638
6	Oct. 8	Stock valuation I: DDM, DCF, WACC.	Chapter 6.4-6.10, pp. 142-158
7	Oct. 15	Stock valuation II: Valuation by multiples, terminal value, NPVGO	
	Oct. 23	Midterm Exam and No Class	
8	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
9	Nov. 12	Capital Asset Pricing Model: diversification, introduction to CAPM.	Chapter 11.5-11.9, pp. 309-319
10	Nov. 19	Multi-factor models: introduction to APT, empirical applications, market efficiency.	Chapter 12.1-12.7, pp. 328-342
11	Nov. 26 – Dec. 3	Project presentations	

Please note that the last day you can drop this course without academic penalty is November 4, 2024.

Other Useful Links

- [Become a volunteer note taker](#)
- [Accessibility Services Note Taking Support](#)
- [Credit / No-Credit in RSM courses](#)
- [Rotman Commerce Academic Support](#)
- [Where to find teaching assistant opportunities](#)

URL links for print

- ACORN: <http://www.acorn.utoronto.ca/>
- Email Accessibility Services: accessibility.services@utoronto.ca
- Accessibility Services website: <http://studentlife.utoronto.ca/as>
- University's Plagiarism Detection Tool FAQ: <https://uoft.me/pdt-faq>
- The University of Toronto's Code of Behaviour on Academic Matters: <http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>
- Information Commons Help Desk: <http://help.ic.utoronto.ca/category/3/utmail.html>
- Become a volunteer note taker: <https://studentlife.utoronto.ca/program/volunteer-note-taking/>
- Accessibility Services Note Taking Support: <https://studentlife.utoronto.ca/service/note-taking-support/>
- Credit / No-Credit in RSM courses: <https://rotmancommerce.utoronto.ca/current-students/degree-requirements/credit-no-credit-option/>
- Rotman Commerce Academic Support: <https://rotmancommerce.utoronto.ca/current-students/academic-support/>
- Book an appointment with a writing or presentation coach: <http://uoft.me/writingcentres>
- Writing and Presentation Coaching academic support page: <https://rotmancommerce.utoronto.ca/current-students/academic-support/writing-and-presentation-coaching/>
- Centre for Professional Skills Teamwork Resources page: <https://rotmancommerce.utoronto.ca/teamwork-resources>
- Book an appointment with a Teamwork Mentor: <http://uoft.me/writingcentres>