

**Commerce 4FN3
Financial Risk Management
Fall 2023 Course Outline**

**Finance
DeGroot School of Business
McMaster University**

INSTRUCTOR AND CONTACT INFORMATION

Thur 14:30 – 17:20
Alicia Damley, CFA, CPA, CA, MBA
Instructor
damleya@mcmaster.ca
Office Hours: after class or by appointment

Sima Fallah-Tafti
TA
fallahts@mcmaster.ca
Office: TBA
Office Hours: TBA

Course website: Avenue 2 Learn

We are here to help you succeed!

Both our course TA and I are here to help you navigate this course successfully!

Outside of class, it is easiest to connect via email. We can address a question quickly via email or setup a time to speak directly. I endeavor to respond to emails within 48 hours. For our mutual benefit and protection, please send all emails from your Mac id. If I have not responded to your inquiry within 48 hours, please re-send it in case it has been lost between our in-boxes or I have missed it!

COURSE ELEMENTS

Credit Value: 3	Leadership: Yes	IT skills: Yes	Global view: Yes
A2L: Yes	Ethics: No	Numeracy: Yes	Written skills: Yes
Participation: Yes	Innovation: Yes	Group work: Yes	Oral skills: Yes
Evidence-based: Yes	Experiential: No	Final Exam: No	Guest speaker(s): No

COURSE INFORMATION

Lectures: 3 hrs x 1x/week
Course Delivery Mode: In-person

Course Description:

This course provides a systematic and advanced treatment of financial risk management. It focuses on interest rate risk, market risk, liquidity risk, credit risk and operational risk. It is designed for students pursuing careers in finance and accounting.

The course begins with a review of risk-return, types of financial institutions, financial markets and the global financial crisis. It then shifts to examine financial risk management techniques, both qualitative assessments and quantitative techniques, including Value at Risk, Expected shortfall and counterparty credit (xVAs). Current issues viewed through the risk lens include climate risk and financial innovations such as blockchain and central bank digital currencies.

The course concludes with the credit risk crisis of 2007 which served as a turning point for risk management, representing a shift in regulatory philosophy from an objective of converging regulatory capital with economic capital to one of a divergence. The background behind this shift in focus and the implications for risk management will be discussed in detail for the remaining sections of the course.

IMPORTANT LINKS

- [Mosaic](#)
- [Avenue to Learn](#)
- [Student Accessibility Services - Accommodations](#)
- [McMaster University Library](#)

COURSE LEARNING OUTCOMES

Upon successful completion of this course, students will be able to complete the following key tasks:

- Learn and compare the advantages and disadvantages of several methodologies for the measurement of various types of risk, including market, interest rate, credit, operational, liquidity and model risk
- Integrate the methodologies into an overall framework for enterprise risk management

COURSE LEARNING GOALS

Upon completion of this course, students will understand:

- risk management techniques used in financial institutions and applicable to other sectors
- techniques underpinning quantitative assessments of risk
- know how to read and understand a bank's risk management and capital disclosure in an annual report

REQUIRED MATERIALS AND TEXTS

Required:

Risk Management and Financial Institutions 6th Edition, John Hull, 2023

Bookstore link:

https://campusstore.mcmaster.ca/cgi-mcm/ws/txsub.pl?wsTERMG1=234&wsTERMDESC1=Fall+2023&wsDEPTG1=COMMERCE&wsDEPTDESC1=COMMERCE+-+Commerce&wsCOURSEG1=4FN3&wsSECTIONG1=DAY+C01&programG1=McMaster+Undergrad+and+Graduate&crit_cnt=1

CLASS FORMAT

This is an in-person 3-hour course. The three hours will consist of lectures, related discussion, and consideration of applicable market examples of the concepts covered. A short break at a convenient point in the discussion will be taken to meet personal needs.

COURSE EVALUATION

Learning in this course results primarily from in-class discussion and participation of comprehensive business cases as well as out-of-class analysis. The balance of the learning results from the lectures on strategic concepts, from related readings, and from researching your presentations, cases, assignments, simulation decisions and projects. Work will be evaluated on an individual and group basis as shown below. For group work, all group members will share the same grade. Your final grade will be calculated as follows:

Components and Weights

Assignments (2)	See separate document for details	25%
Bank analysis & presentation	See separate document for details	30%
Mid-Term	Details to be provided in class	45%
Total		100%

NOTE: The use of a McMaster standard calculator is allowed during examinations in this course. See McMaster calculator policy at the following URL:

www.mcmaster.ca/policy/Students-AcademicStudies/UndergraduateExaminationsPolicy.pdf

COURSE DELIVERABLES

Students are strongly encouraged to explore the data and trading related resources available in-person and/or virtually in the DSB's Allen H. Gould Trading Floor. <https://trading.degrootemcmaster.ca/qtf/>

Assignments (2)

Each assignment may be completed in groups of up to 4 students. Due dates for the assignments are found in the Course Schedule.

Bank Analysis & Presentation

This analysis and in-class presentation will be completed in groups of up to 4 students. Each group will analyze a bank's capital and risk position from the list provided. Allocation will be done on a first-come, first-served basis. Details of the effort is found in a separate document on Avenue.

Mid-Term Exam

The mid-term exam can include multiple choice and/or written answers. An 8.5" x 11" sheet of paper containing any information chosen by the student may be brought to the mid-term exam.

End of textbook chapter questions will be provided for student review and self-confirmation of mastery of material learning outcomes. These will be made available as part of each lecture's material on Avenue. These questions are also intended as foundation for the group project company analysis and provide a perspective on written questions on the mid-term exam.

LATE ASSIGNMENTS

Due dates are clearly indicated in the course schedule. Please plan accordingly. Please also review the University's policy on requesting relief for missed academic work below.

Otherwise, a late assignment will attract a 15% penalty for each 24 hours after the due date. Assignments handed-in three (3) or more days late without a pre-determined arrangement will be awarded a mark of zero.

COMMUNICATION AND FEEDBACK

Students who wish to correspond with instructors or TAs directly via email must send messages that originate from their official McMaster University email account. This protects the confidentiality and sensitivity of information as well as confirms the identity of the student. Emails regarding course issues should NOT be sent to the Area Administrative Assistants. All students must receive feedback regarding their progress prior to the final date by which a student may cancel the course without failure by default.

- For Level 1 and Level 2 courses, this feedback must equal a minimum of 20% of the final grade.
- For Level 3 courses and above, this feedback must equal a minimum of 10% of the final grade.

Instructors may solicit feedback via an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

REQUESTING RELIEF FOR MISSED ACADEMIC WORK

In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "[Requests for Relief for Missed Academic Term Work](#)" and the link below;

<http://ug.degroote.mcmaster.ca/forms-and-resources/missed-course-work-policy/>

COURSE MODIFICATION

From time to time there may be a need to remove/add topics or to change the schedule or the delivery format. If these are necessary, you will be given as much advance notice as possible.

GENERATIVE AI

Some use of Generative AI is permitted for the bank project analysis. Students may find its use helpful to augment their understanding and interpretation of trend data. However, ensure that the responses generated make sense and assist your analysis!

Any use of Generative AI must be referenced and cited following citation instructions given in the syllabus. Use of generative AI outside assessment guidelines or without citation will constitute academic dishonesty. It is the student's responsibility to be clear on the limitations for use for each assessment and to be clear on the expectations for citation and reference and to do so appropriately.

ACADEMIC INTEGRITY

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. **It is your responsibility to understand what constitutes academic dishonesty.**

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. For information on the various types of academic dishonesty please refer to the [Academic Integrity Policy](#).

The following illustrates only three forms of academic dishonesty:

- plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
- improper collaboration in group work.
- copying or using unauthorized aids in tests and examinations

AUTHENTICITY/PLAGIARISM DETECTION

Some courses may use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. Avenue to Learn, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software. **All submitted work is subject to normal verification that standards of academic integrity have been upheld** (e.g., on-line search, other

software, etc.). For more details about McMaster's use of Turnitin.com please go to www.mcmaster.ca/academicintegrity.

COURSES WITH AN ON-LINE ELEMENT

Some courses may use on-line elements (e.g. e-mail, Avenue to Learn, LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in a course that uses on-line elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

ONLINE PROCTORING

Some courses may use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict their browser or other applications/software during tests or exams. This software may be required to be installed before the test/exam begins.

CONDUCT EXPECTATIONS

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

Students with disabilities who require academic accommodation must contact [Student Accessibility Services](#) (SAS) at 905-525-9140 ext. 28652 or sas@mcmaster.ca to make arrangements with a

Program Coordinator. For further information, consult McMaster University's [Academic Accommodation of Students with Disabilities](#) policy.

ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the [RISO](#) policy. Students should submit their request to their Faculty Office **normally within 10 working days** of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

COPYRIGHT AND RECORDING

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by University instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

EXTREME CIRCUMSTANCES

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, Avenue to Learn and/or McMaster email.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in Commerce 4FN3 will be considered to be an implicit acknowledgement of the course policies outlined above, or of any other that may be announced during lecture and/or on A2L. **It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.**

Lack of awareness of the course policies **cannot be invoked** at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand.

COURSE SCHEDULE

**Commerce 4FN3 – Financial Risk Management
Fall 2023 Course Schedule**

WEEK	DATE	ASSIGNMENT	CHAPTER(S)
1	Sep 7	Class Outline, Schedule, Participation, Courseware, Groups Lecture: <i>Review</i> of Risk vs Return and Financial sector - Banks; Insurance companies & Pension funds; Fund Managers	1, 2, 3, 4
2	Sep 14	Lecture: Financial markets & Global Financial Crisis	5, 6, 7
3	Sep 21	Lecture: Volatility, Correlation & Copulas	8, 9, 10
4	Sep 28	Lecture: Value at Risk (VaR) and Expected Shortfall (ES)	11
5	Oct 5	Lecture: Calculation of VaR and ES	12, 13
6	Oct 12	Mid-term recess (no lecture)	
7	Oct 19	Lecture: Credit Risk Assignment #1 Due Oct 22 @1159pm via A2L	17
8	Oct 26	Lecture: Credit Risk (cont'd)	18, 19
9	Nov 2	Lecture: Operational risk, Liquidity risk and Model risk	20, 21, 22
10	Nov 9	Lecture: Climate risk, Enterprise risk management and Financial innovation	23, 24, 29
11	Nov 16	Lecture: Basel II.5, Basel III and FRTB Assignment #2 Due Nov 19 @1159pm via A2L	26, 27
12	Nov 23	Mid-Term (in-class)	
13	Nov 30	Bank Group Presentation (in-class) & Report (via A2L)	