

**Commerce 4FN3  
Financial Risk Management  
Fall 2020 Course Outline**

**Finance and Business Economics Area  
DeGroot School of Business  
McMaster University**

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**COURSE OBJECTIVE**

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The goal of this course is to provide students with an in-depth coverage of concepts and principles used in the financial risk management. Specifically, this course discusses in detail how to manage market risk, credit risk, operational risk, liquidity risk and model risk.

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**INSTRUCTOR AND CONTACT INFORMATION**

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**Dr. R. Luo**  
Instructor

**Student TA**  
TBA

**Course website:** A2L

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**COURSE ELEMENTS**

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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:	Yes	Final Exam:	Yes	Guest speaker(s):	Yes

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## COURSE DESCRIPTION

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This course provides a systematic and advanced treatment of financial risk management. It focuses on interest rate risk, market risk, credit risk, operational risk and liquidity risk. Case studies and spreadsheet modeling in the area will be introduced. In addition to lectures, the course will also include students' presentations and one or two guest speakers' presentations.

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## LEARNING OUTCOMES

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Upon successful completion of this course, students will:

- have a good understanding of the knowledge and skills used in the financial risk management.
  - be able understand how regulatory environment affects the practice of financial risk management.
  - be able to conduct analysis on various types of risk.
  - be able to use the simulations or theoretical models to solve for the value at risk for various types of risk.
  - be able to quantify the risk associated with their financial portfolio.
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## REQUIRED COURSE MATERIALS AND READINGS

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- Risk Management and Financial Institutions by J. Hull, 5th edition, Wiley Finance. (Note that the electronic version of this text is available in Amazon.ca)
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## EVALUATION

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There are five components contributing to course evaluation. Each component and its weight are listed below. Students' final percentage grades are computed based on all the weights for the components.

Participation/practice questions	25%
Term Test	30%
Spreadsheet Assignments	10%
Group Presentation Project	10%
Individual Written Project	25%
<b>Total</b>	<b>100%</b>

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### **Conversion**

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme.

LETTER GRADE	PERCENT	LETTER GRADE	PERCENT
A+	90 - 100	C+	67 - 69
A	85 - 89	C	63 - 66
A-	80 - 84	C-	60 - 62
B+	77 - 79	D+	57 - 59
B	73 - 76	D	53 - 56
B-	70 - 72	D-	50 - 52
		F	00 – 49

### **COURSE DELIVERABLES**

The lecture for this course will be delivered online on the weekly basis and detailed information will be provided in our course website prior to the weekly live lecture. The participation in the weekly live lecture is required and will be accounted toward to the class participation grade. The lecture slides will be provided weekly prior to the weekly live lecture.

### **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.

### **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/>

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## ACADEMIC INTEGRITY

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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](https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/), located at <https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/>

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.
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## AUTHENTICITY/PLAGIARISM DETECTION

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*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. A2L, 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](http://www.mcmaster.ca/academicintegrity).

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## COURSES WITH AN ON-LINE ELEMENT

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*Some courses may* use on-line elements (e.g. e-mail, Avenue to Learn (A2L), 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.

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## ONLINE PROCTORING

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**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.

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## CONDUCT EXPECTATIONS

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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.

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## ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

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Students with disabilities who require academic accommodation must contact [Student Accessibility Services](#) (SAS) at 905-525-9140 ext. 28652 or [sas@mcmaster.ca](mailto:sas@mcmaster.ca) to make arrangements with a Program Coordinator. For further information, consult McMaster University’s [Academic Accommodation of Students with Disabilities](#) policy.

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

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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.

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## COPYRIGHT AND RECORDING

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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.

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## EXTREME CIRCUMSTANCES

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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, A2L and/or McMaster email.

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## RESEARCH USING HUMAN SUBJECTS

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All researchers conducting research that involves human participants, their records or their biological material are required to receive approval from one of McMaster's Research Ethics Boards before (a) they can recruit participants and (b) collect or access their data. Failure to comply with relevant policies is a research misconduct matter. Contact these boards for further information about your requirements and the application process.

McMaster Research Ethics Board (General board): <https://reo.mcmaster.ca/>

Hamilton Integrated Research Ethics Board (Medical board): <http://www.hireb.ca/>

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## ACKNOWLEDGEMENT OF COURSE POLICIES

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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.

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### TENTATIVE COURSE SCHEDULE

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WEEK	DATE	TOPIC / ASSIGNMENT
1	Sept. 14	Motivation for risk management: (Readings: Chapter 1)
1	Sept. 21	How traders manage their exposures: (Reading: Chapter 8)
2-3	Sept. 28	Interest rate risk: (Readings: Chapter 9)
3-4	Oct 5	Value at Risk: (Readings: Chapter 12)
5	Oct 19	Bank regulation presentation (materials to be signed later) Market Risk VaR: (Readings 13 and 14)
6	Oct 26	Midterm test
7-8	Nov 2	Market Risk VaR: (Readings: Chapters 13 and 14)
8-9	Nov 9	Credit risk: (Readings: Chapters 19, 20 and 21)
10	Nov 16	Operational risk: (Readings: Chapter 23)
10-11	Nov 23	Liquidity risk: (Readings: Chapter 24)
12	Nov 30	Economic capital and RAROC: (Readings: Chapter 26)
13	Dec 7	Concluding remarks: Learning from some big losses (Readings: Chapter 29 and Student's presentations)