

## Commerce 4FD3 Financial Institutions Fall 2024 Course Outline

### Finance and Business Economics Area DeGroote School of Business McMaster University

#### COURSE OBJECTIVE

This course aims to explain the use of modern finance theory in the financial decision-making and management of financial institutions, especially commercial banks. The financial decisions of commercial banks will be examined from a risk perspective. The course also aims to explain banks' major role in bearing, transforming, pricing, and monitoring financial risks.

#### INSTRUCTOR AND CONTACT INFORMATION

Instructor: **Dr. Sultan M. Awan**  
[awan@mcmaster.ca](mailto:awan@mcmaster.ca)

**Course TA**  
TBA

Class Schedule: TUE 2:30 PM ~ 5:20 PM.  
Office Hours: After class or by appointment

#### COURSE ELEMENTS

Credit Value:	3	Leadership:	Yes	IT skills:	No	Global view:	Yes
Avenue:	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:	Yes	Guest speaker(s):	No

#### COURSE DESCRIPTION

In the first part of the course, students will be introduced to the Canadian financial services industry, which comprises of deposit-taking banks, insurance companies, investment banks, pension, and mutual funds. We then go through the major risks of financial institutions' management: interest rate risk, liquidity risk, market risk, and credit risk. We discuss how financial institutions can identify and measure their exposures to each of these risks. In the second part of the course, we focus our attention on the risk management of financial institutions. Regulatory requirements dealing with capital adequacy and deposit insurance will be discussed. Finally, we will talk about the role of securitization and derivative instruments in risk mitigation.

## LEARNING OUTCOMES

Upon completion of this course, students are expected to be able to:

- Appreciate the economic challenges and opportunities encountered by financial institutions;
- Identify the risk/return trade-off of FIs' businesses in bearing, transforming, and managing financial risks;
- Apply relevant techniques to measure and manage FIs' interest rate risk, liquidity risk, market risk, and credit risk;
- Assess the implications of national and international regulatory requirements on FIs' business strategies.

## REQUIRED COURSE MATERIALS AND READINGS

***Financial Institutions Management: A Risk Management Approach, 11th Edition, by Anthony Saunders Marcia M. Cornett, and Otgo Erhemjamts, McGraw-Hill 2024.***

<https://www.mheducation.com/highered/product/financial-institutions-management-risk-management-approach-saunders-cornett/1264413041.html>

For course contents such as lecture notes, term assignments, chapter-end quantitative problem solutions, other reference materials, and course-related announcements, please visit the course webpage on Avenue:

<http://avenue.mcmaster.ca>

**Texas Instruments financial calculator** is recommended for this course. However, any calculator that performs time value of money functions is acceptable.

### **Important links:**

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

## OPTIONAL COURSE READINGS

***Fundamentals of Risk Management Understanding, Evaluating and Implementing Effective Enterprise Risk Management, 6<sup>th</sup> Edition*** by Clive Thompson and Paul Hopkin (2021).  
[Fundamentals of Risk Management \(koganpage.com\)](#)

***Risk Management and Financial Institutions, 5<sup>th</sup> Edition***, by John C. Hull, Wiley (2018).  
[Risk Management and Financial Institutions, 5th Edition | Wiley](#)

***An Introduction to Financial Markets: A Quantitative Approach - Wiley (2017)***  
[An Introduction to Financial Markets | Wiley Online Books](#)

## EVALUATION

Learning in this course results primarily from lectures, in-class discussions, home readings, and assigned problem sets. Students' learning and progress in this course will be evaluated on a group and individual basis. Final letter grades in this course will be calculated as follows:

### Components and Weights

<b>Assignment # 1</b>	Problem Set (Group) due on Oct. 21, 2024	<b>20%</b>
<b>Midterm Exam</b>	Multiple Choice – Quantitative and Qualitative (Oct. 22, 2024)	<b>30%</b>
<b>Assignment # 2</b>	Problem Set (Group) due on Dec. 2, 2024	<b>20%</b>
<b>Final Exam</b>	Multiple Choice – Quantitative and Qualitative (semi-cumulative)	<b>30%</b>
	<b>Total</b>	<b>100%</b>

### **Assigned Problem Sets**

Two quantitative problem sets will be assigned during the term; one during the pre-midterm period (assignment #1) and the other during the post-midterm period (assignment #2). As some algebra and fundamental statistical concepts are important components of quantitative risk and management analysis of financial institutions' operations, it is imperative students practice quantitative problems that require the use of such analytical tools. Therefore, the two assigned evaluation activities should provide students with an opportunity to practice quantitative problems with the help of the concepts and methodologies learned in class. As a fairly large number of questions on the midterm and the final will be quantitative in nature, this evaluation exercise should also help in student's preparation for both of the exams. You may find some problems challenging. Please do your best. Serious attempts towards finding an acceptable solution will be rewarded. Students are expected to work in a **self-chosen group of TWO students** per group. However, a submission from an individual student will also be accepted without any deductions of the marks. The details on the problem set and the submission will be posted on Avenue.

### **Midterm and Final Exam**

Midterm and final exams will include multiple-choice questions ONLY. The structure and format of the questions will be similar to the ones on slides, examples discussed in class, and the ones found in assigned evaluation activities. The answer key to selected chapter-end qualitative and quantitative questions will be posted on the avenue after a topic was discussed in the class. This answer key should provide enough sample questions for practice and enough details to work on similar chapter-end questions. The info on the readings for the midterm and the final exams are provided at the end of this outline and will also be posted on the Avenue-to-learn (A2L) before each of the exams. The Final will be semi-cumulative and only selected topics will be included in the readings for the final. Such details will be posted on A2L well before the final exams. **The midterm and finals will be open-book and in-person exams.** Students will be allowed to use reading material such as course textbook (hard copy), copies of lecture slides, handwritten notes, and formula sheets in the midterm and final exams. However, the use of a PC and any other digital devices will not be allowed in the midterm and final exams. The use of a financial calculator is highly recommended.

### **PLEASE NOTE:**

1. Missed assignments/exams will receive a grade of zero unless the student has been approved for MSAF. Late assignments submission will be penalized 10% for each day they are late.
2. Students who do not submit an assignment or write a midterm, with approval, will have their marks moved to the final.
3. If a student misses a lecture for any reason, it is the student's responsibility to obtain class lecture notes and other relevant material from other classmates.
4. Marks for all pre-final exam evaluation activities will be posted on Avenue.
5. Your letter grade will appear on MOSAIC through official channels. Hence, marks for the final exam will not be posted on Avenue.
6. You are encouraged to contact the course instructor or course TA for any questions on the course outlines, course material, evaluation scheme, and Exams.

### **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 before 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. Students with concerns about the course content, evaluation methods, or delivery should first contact the course instructor. If your concern remains unresolved after speaking with the instructor, you may then reach out to the relevant Area Chair for further consideration.

### **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.degroot.mcmaster.ca/forms-and-resources/missed-course-work-policy/>

\* Non-Commerce students must follow the Missed coursework protocols outlined by their home faculty and Program Office.

### **GENERATIVE ARTIFICIAL INTELLIGENCE (AI)**

Students are not permitted to use generative AI in this course. In alignment with [McMaster academic integrity policy](#), it "shall be an offense knowingly to ... submit academic work for assessment that was purchased or acquired from another source". This includes work created by generative AI tools. Also, stated in the policy is the following, "Contract Cheating is the act of "outsourcing of student work to third parties" (Lancaster & Clarke, 2016, p. 639)

with or without payment.” Using Generative AI tools is a form of contract cheating. Charges of academic dishonesty will be brought forward to the Office of Academic Integrity.

## ACADEMIC DISHONESTY

You are expected to exhibit honesty and use ethical behavior in all aspects of the learning process. The academic credentials you earn are rooted in principles of honesty and academic integrity.

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 behavior can result in serious consequences, e.g. a 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.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at:

[www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which another credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

## 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](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.

## 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 the term in which they anticipate a need for accommodation or to the Registrar's Office before 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 an instructor provides 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 authorized distribution, or by a student for 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.

## 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.**

Students must 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 behaviors 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.

## ACKNOWLEDGMENT OF THE COURSE POLICIES

Your enrolment in Commerce 4FD3 will be considered to be an implicit acknowledgment 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, familiarize yourself with the course policies, and 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.

## POTENTIAL MODIFICATIONS TO THE COURSE

From time to time there may be a need to remove/add topics in the course syllabus or to change the schedule or the delivery format of the course contents. If these are necessary, you will be given as much advance notice as possible. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

## 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, labor disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, Avenue to Learn and/or McMaster email..

## Commerce 4FD3 Financial Institutions Fall 2024 Course Schedule

Below is a **tentative** course schedule. As we progress in the course, the contents of some of the topics listed below may be modified, if required.

Date	Topics	Chapters
<i>Sept. 3</i>	Course outlines review, financial institutions operations, and exposures to financial risks: A brief review	Lecture slides and Notes Ch: 2 and 7 Appendix2A&2B
<i>Sept. 10</i>	<b>Interest rate risk – I:</b> Interest rate volatility, commercial bank, funding gap analysis, repricing, and duration model	8
<i>Sept. 17</i>	<b>Interest rate risk – II:</b> Interest rate volatility, commercial bank, funding gap analysis, repricing, and duration model	9
<i>Sept. 24</i>	<b>Credit risk – I:</b> Individual loans	10
<i>Oct. 1</i>	<b>Credit risk – II:</b> Loan portfolio and concentration risk	11
<i>Oct. 8</i>	<b>Foreign exchange (FX) risk:</b> FI foreign asset and liability position, the interaction of interest rates, inflation, and exchange rate	13
<i>Oct. 15</i>	<b><i>Midterm Recess – NO Class</i></b>	
<i>Oct. 22</i>	<b><i>Midterm Exam</i></b> <b><i>(Readings: Lecture Notes, Chapters 2, 8, 9, 10, 11,13)</i></b>	
<i>Oct. 29</i>	<b>Liquidity and Liability risk management:</b> liquid vs. illiquid assets, DI structure of liability portfolio, funding risks and costs of liability portfolio	19
<i>Nov. 5</i>	<b>Futures and Forward contracts:</b> FI uses of forward and futures contracts to manage interest, FX, and credit risk	23
<i>Nov. 12</i>	<b>Futures and Forward contracts:</b> FI uses of forward and futures contracts to manage interest, FX, and credit risk	23
<i>Nov. 19</i>	<b>Options and Floors – I:</b> FI use of options in hedging FX and credit risk	24
<i>Nov. 26</i>	<b>Options and Floors – II:</b> FI use of options in hedging FX and credit risk	24
<i>Dec. 3</i>	<b>Swaps:</b> FI credit risk concerns related to interest, currency, and credit swaps	25
<b><i>Dec. 6 - 19</i></b>	<b><i>Final Exam – Scheduled by Registrar’s Office</i></b>	