



Commerce 4FD3 Financial Institutions Fall 2021 Course Outline

Finance and Business Economics Area DeGroote School of Business McMaster University

COURSE OBJECTIVE

The goal of this course is to explain the use of modern finance theory to the financial decision making and management of financial institutions, especially the commercial banks. The financial decision in commercial banks will be looked at from the perspective of risk. The course also aims to explain major role banks play to bear, transform, price, and monitor financial risks.

INSTRUCTOR AND CONTACT INFORMATION

Instructor: **Dr. Sultan M. Awan** Office: TSH-615 <u>awan@mcmaster.ca</u> Student TA TBA

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

COURSE ELEMENTS

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, 10th Edition, by Anthony Saunders and Marcia M. Cornett and Otgo Erhemjamts, McGraw-Hill 2021.

https://campusstore.mcmaster.ca/cgimcm/ws/txsub.pl?wsTERMG1=214&wsTERMDESC1=Fall+2021&wsDEPTG1=COMMERCE&wsD EPTDESC1=COMMERCE&wsCOURSEG1=4FD3&wsSECTIONG1=DAY+C01&crit_cnt=1

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

http://avenue.mcmaster.ca

<u>Texas Instruments BA II Plus financial calculator</u> is recommended for this course. However, any calculator that performs time value of money functions is acceptable.

OPTIONAL COURSE READINGS

Quantitative Financial Risk Management: Theory and Practice, by Constantin Zopounidis, Emilios Galariotis, Wiley Finance series 2015.

Financial Risk Management: Applications in Market, Credit, Asset and Liability Management and Firmwide Risk, by Jimmy Skoglund, Wei Chen, Wiley Finance series 2015.

Risk Management and Financial Institutions, 5th Edition, by John C. Hull, Wiley March 2018.

EVALUATION

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





Components and Weights

| Assignment # 1 | Problem Set (Group) due on Oct. 14 th | 15% |
|----------------|---|------|
| Midterm Exam | Multiple Choice – Quantitative and Qualitative (Oct. 21 st) | 30% |
| Assignment # 2 | Problem Set (Group) due on Dec. 2 nd | 15% |
| Final Exam | Multiple Choice – Quantitative and Qualitative (semi-cumulative) | 40% |
| | Total | 100% |

Assigned Problem Sets

Quantitative problem sets will be assigned during this term; one in pre-midterm period (assignment #1) and one in post-midterm period (assignment #2). As some algebra and fundamental statistical concepts are important components of quantitative risk and management analysis, it is imperative students practice quantitative problems that require use of such analytical tools. Therefore, two assigned evaluation activity should provide students an opportunity to practice quantitative problems with the help of the concepts and methodologies learnt in class. As fairly large number of questions on the midterm and the final will be quantitative in nature, this evaluation exercise should help students prepare well for the exams. You may find some problems challenging. Please do your best. Serious attempts to arrive at the correct answer will be rewarded. Students are expected to work in a self-chosen group of maximum of three students each. However, a submission from a group of two or an individual student will also be accepted without any deductions of marks. The problem sets and rest of the submission details will be posted on Avenue.

Midterm and Final Exam

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

PLEASE NOTE:

- 1. Students who do not submit the assignments by the deadline, with approval, will receive an extension of 3 days unless approved by the student experience office based on the supporting documentation submitted.
- 2. Students who do not write midterm, with approval, will have marks moved to final and will write a cumulative final of 70%.
- 3. If a student misses a lecture for any reason, it is 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 come through official channels. Hence, marks for the final exam will not be posted on Avenue.
- 6. You are encouraged to contact course instructor or course TA for any questions on the course material and outlines, evaluation scheme, and the final Exam.

Grade 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 |
| А | 85 - 89 | С | 63 - 66 |
| A- | 80 - 84 | C- | 60 - 62 |
| B+ | 77 - 79 | D+ | 57 - 59 |
| В | 73 - 76 | D | 53 - 56 |
| B- | 70 - 72 | D- | 50 - 52 |
| | | F | 00 - 49 |

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. Instructors are required to provide evaluation feedback for at least 10% of the final grade to students prior to Week #9 in the term. Instructors may solicit feedback via an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

ACADEMIC DISHONESTY

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.

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.

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

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 other credit has been obtained.
- 2. Improper collaboration in group work.
- 3. Copying or using unauthorized aids in tests and examinations.



REQUESTING RELIEF FOR MISSED ACADEMIC WORK

Students may request relief from a regularly scheduled midterm, test, assignment or other course components. Please refer to the policy and procedure on the DeGroote website at the link below:

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

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 <u>sas@mcmaster.ca</u> to make arrangements with a Program Coordinator. For further information, consult McMaster University's <u>Academic Accommodation</u> <u>of Students with Disabilities</u> 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 requiring a RISO accommodation should submit their request, including the dates/times needing to be accommodated and the courses which will be impacted, to their Faculty Office normally within 10 days of the beginning of term 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.

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 <u>Code of Student Rights & Responsibilities</u> (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.

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, A2L and/or McMaster email.

ACKNOWLEDGEMENT OF THE COURSE POLICIES

Your enrolment in Commerce 4FD3 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.

POTENTIAL MODIFICATIONS TO THE COURSE

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.



Commerce 4FD3 Financial Institutions Fall 2021 Course Schedule

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

| Date | Topics | Chapters |
|---------------|---|--|
| Sept. 9 | Syllabus Review, Central bank, commercial banks, interest rate, and financial markets, A Review | Lecture notes 2 Ch: 2, Appendix2A&2B |
| Sept. 16 | Interest rate risk – I: Central bank and interest rate Gap analysis, repricing and duration model | 8 |
| Sept. 23 | Interest rate risk – II: Central bank and interest rate Gap analysis, repricing and duration model | 9 |
| Sept. 30 | Credit risk – I: Individual loans | 10 |
| <i>Oct.</i> 7 | Credit risk – II: Loan portfolio and concentration risk | 11 |
| Oct. 14 | Group Assignment #1 due Midterm Recess – NO Class | |
| Oct. 21 | Midterm Exam (Readings: Lecture Notes 2, Chapters 2, 8 – 11) | |
| Oct. 28 | Liquidity risk: Causes of liquidity Risk at Depository and other financial Institutions | 12 |
| Nov. 4 | Foreign exchange (FX) risk: FI foreign asset and liability position, interaction of interest rates, inflation, and exchange rate | 13 |
| Nov. 11 | Futures and Forward contracts: FI use of forward and future contracts to manage interest, FX, and credit risk | 22 |
| Nov. 18 | Futures and Forward contracts: FI use of forward and future contracts to manage interest, FX, and credit risk | 22 |
| Nov. 25 | Options and Floors: FI use of options in hedging FX and credit risk | 23 |
| Dec. 2 | Group Assignment #2 due Swaps: FI credit risk concerns related to interest, currency, and credits swaps | 24 |
| Dec. 9 - 22 | Final Exam – Scheduled by Registrar Office | |