

Commerce 4FY3 Introduction to FinTech Fall 2025 Course Outline

Finance and Business Economics Area DeGroote School of Business McMaster University

INSTRUCTOR AND CONTACT INFORMATION

Thursday 11:30 - 14:20

Dr. Katya Malinova

malinovk@mcmaster.ca

Office: DSB A106 Office Hours: TBA

Class Location: See Mosaic or A2L

Student TA

See Avenue to Learn for details

Course website: Avenue to Learn http://avenue.mcmaster.ca

COURSE ELEMENTS

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



COURSE INFORMATION

Lectures: 3 hours per week

Course Delivery Mode: In-person. However, in certain situations (e.g., a resurgence of Covid

causing health risks), it may be necessary to switch to an on-line format. In that case, we will be using Zoom. The link will be subsequently provided.

Course Description: The course provides a broad overview of the financial technology (FinTech)

industry. Specifically, it will cover; how financial services have evolved key players and their roles; existing products, how FinTech has evolved key players and their innovations; technologies underpinning FinTech innovations, major FinTech innovations and their impact on financial services, regulations governing the financial services industry and how to

identify and analyze future trends/opportunities of FinTech.

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:

- Explain how financial services have evolved, how the industry currently operates, and identify the roles of key players and existing products.
- Describe the evolution of FinTech, the drivers of its growth.
- Analyze the competitive landscape of FinTech across different market segments.
- Understand the core technologies that underpin FinTech innovations, including blockchain and the infrastructure supporting decentralized finance.
- Identify the key regulatory frameworks governing the FinTech industry and assess their implications.
- Evaluate innovation strategies pursued by large financial institutions in response to FinTech disruption.



COURSE LEARNING GOALS

The goal of this course is to introduce students to the rapidly evolving field of financial technology (FinTech). Students will gain an understanding of how technology is transforming traditional financial services, explore the innovations reshaping payments, lending, and investment management, and analyze the role of blockchain and decentralized finance in this transformation. The course emphasizes both conceptual understanding and critical evaluation, enabling students to connect theory with practice, assess risks and opportunities, and develop an informed perspective on the future of financial services.

REQUIRED MATERIALS AND TEXTS

Required:

Avenue registration for course content, reading materials and slides: http://avenue.mcmaster.ca

No required textbooks for this course. All required readings as well as further suggested, optional ones will be posted on A2L.

Optional textbooks:

- Michael R. King & Richard W. Nesbitt FinTech Explained: How Technology is Changing Financial Services and Driving Financial Inclusion (University of Toronto Press, 2023). Cost: \$49.95 (paperback)
- Campbell R. Harvey, Ashwin Ramachandran, & Joey Santoro DeFi and the Future of Finance (Wiley, 2021). Cost: \$31.99 (amazon.ca; hardcover)

CLASS FORMAT

This course will be delivered in person, with each class scheduled for three hours. Sessions will combine lectures, in-class discussions, and opportunities to apply concepts. Students will be expected to complete assigned readings, as well as non-graded assignments and applied activities that reinforce course material. While these exercises will not be formally assessed, familiarity with the process and the insights gained will be expected on the midterm and final exams.



COURSE EVALUATION

You will be evaluated based on four components according to the following weights. All evaluation components are individual.

Components and Weights

Mankly A2I guizza	400/
Weekly A2L quizzes	10%
Assignment 1 (individual)	10%
Assignment 2 (small groups: 2 students)	15%
Midterm Test (see notes 1), 2))	25%
Final Exam (see notes 1), 2))	30%
Class Contribution	10%
Total	100%

- 1) Both the midterm and the final exam are designed to assess understanding, critical thinking, and knowledge of the topics discussed in class, the assigned readings, practice problems, and exercises, and your own assignment work.
 - The midterm will cover material from Weeks 1–7.
 - The final exam will cover material from Weeks 7–13.

While the final is not fully cumulative, please note that there is some overlap in Week 7; additionally, the course material is sequential and builds on earlier topics. You are therefore expected to be familiar with concepts covered prior to the midterm.

2) Any calculator is permitted at the midterm and final exams.



Grade Conversion

At the end of the course, a student's overall percentage grade will be converted to a letter grade in accordance with the following scheme:

Letter Grade	Percent Range	Letter Grade	Percent Range
A+	90–100	C+	67–69
Α	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

COURSE DELIVERABLES

This course has several deliverables. The overview for them is below, only to give you an idea of what to expect. The specifics required to complete the assignments will be posted on A2L and discussed in class.

Weekly Quizzes (10%)

Following each lecture in weeks 2-7 and 9-12, a short multiple-choice question quiz will be assigned on the A2L portal of the course webpage. A sample non-graded quiz will be posted in week 1. The grade will be based on your best 8 (out of 10) graded quizzes. No make-up quizzes will be offered. If a student misses a quiz for legitimate reasons, the weight for the missed quiz will be reallocated to the Midterm for weeks 2-7 and to the Final Exam for weeks 9-12.

Quiz opens: Friday. Due: Wednesday 11:59pm of the following week.

Assignment 1 (10%): FinTech profile. Due: Fri October 24, 11:59pm

This assignment is worth 10% of your final grade and will be marked individually. You will be asked to provide a brief company profile for a specific FinTech (provided to you at the time the assignment is posted). The deliverable is a written report. Details will be posted on A2L. You will have two weeks, including the reading week, to work on this assignment.

Assignment 2 (15%): A 2-person group project. Due: Assignment 2 Due: Fri Nov 28, 11:59pm

Your will work in groups of 2 to deliver a report on integrating novel FinTech-related features into existing firms/financial institutions. The deliverable is a written report. Details, questions, and requirements for this project will be posted on A2L. You may self-select into groups of two before 11:59pm on Friday, October 31. I will assign the remainder of you into groups after that date. You will have three weeks to work on this assignment.



Class Contribution 10%

You are expected to actively participate in each class and to contribute to the in-class discussion, for instance, by asking and answering questions. Participation grades will be based on an assessment of a variety of factors, including the quantity and the quality of your in-class contributions.

Term Test (25%) and the Final Exam (30%)

A term test and a final exam (both closed-book, in-person) will assess understanding, critical thinking, and knowledge of the topics discussed in class, the assigned readings, practice problems, and exercises, and your own assignment work. A crib sheet with restricted content will be permitted. These tests will consist of multiple choice and/or short answer questions. Additional details on content coverage and sample questions will be posted on the A2L. The use of calculators will be permitted. No restrictions on a calculator.

While the final is not fully cumulative, please note that there is some overlap in Week 7; additionally, the course material is sequential and builds on earlier topics. You are therefore expected to be familiar with concepts covered prior to the midterm.

LATE ASSIGNMENTS

Each assignment and each A2L quiz will include a 30-minute grace period with no penalty, to accommodate unexpected technical issues. Beyond this grace period, late submissions will not be accepted and will instead be treated as Missed Academic Work in accordance with Missed Course Work Policy (see below).

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.

In keeping with the University's academic regulations, all students who complete the required assignments and midterm will have received feedback for at least 10% of the final grade prior to the final date by which a student may cancel the course without failure by default.

Students who have concerns about the course content, evaluation methods, or delivery should first reach out to 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 <u>"Requests for Relief for Missed Academic Term Work"</u> and the link below*;

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

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

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

Students may use generative AI in this course in accordance with the guidelines outlined for each assessment, and so long as the use of generative AI is 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 <u>Student Accessibility Services</u> (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 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 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 4FY3 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.



TENTATIVE COURSE SCHEDULE

Commerce 4FY3: Introduction to FinTech Fall 2025 Course Schedule

The topics listed are tentative and may be adjusted following the in-class discussions and/or any significant developments in the space

Week	Date	Topics and Activities	
1	Sept. 4	What is FinTech? Why now?	
2	Sept. 11	Intro to Payments. How money moves. Main pain points.	
3	Sept. 18	Innovation in Payments. Open Banking.	
4	Sept. 25	Foundations of blockchain I: What is it? Consensus protocols. Smart Contracts.	
5	Oct. 2	Foundations of blockchain II. Scalability, layer 2 solutions.	
6 Oct. 9		Assignment 1 posted. Stablecoins. Crypto-regulation. CBDC.	
	Oct. 16	Reading Week – No Classes	
7	Oct. 23	Assignment 1 Due: Friday, October 24, 11:59pm Financing and Tokenization.	
8	Oct. 30	Midterm Test (in class, room TBA) – covers weeks 1-7	
9	Nov. 6	Assignment 2 posted. Intro to Decentralized Finance (DeFi). Trading Crypto-assets.	



Week	Date	Topics and Activities
10	Nov. 13	FinTech in Lending and Credit
11	Nov. 20	FinTech in Wealth Management and Personal Finance
12	Nov. 27	Assignment 2 Due: Friday, Nov 28, 11:59pm FinTech and Crime. RegTech.
13	Dec. 4	Catching up, Q&A, and discussion of emerging topics.
		Final Exam (to be scheduled centrally during the final exam period). Covers weeks 7-13

^{*}Please note that in addition to the assessments outlined in the table above, the course requires weekly participation/class contribution and weekly A2L quizzes, as described under course evaluation