



# MBA F741 Introduction to FinTech Winter 2021 Course Outline

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

#### COURSE OBJECTIVE

This course provides a broad introduction to Financial Technology (FinTech), introducing you to key players in the sector and establishing a knowledge base that will enable you to critically assess this rapidly growing and highly competitive industry. This course builds on your previous learning, synthesizing diverse aspects of business and technology in order to instil an understanding of the challenges and opportunities in this nascent space. The course will leverage experiential and case-based learning to promote inquiry-driven discovery and greater financial literacy.

#### INSTRUCTOR AND CONTACT INFORMATION

Wed 11:30 - 14:20

Instructor: Dr. Katya Malinova

malinovk@mcmaster.ca

Office: RJC

Office Hours: via zoom

after class

or by appointment

Class Location: virtual classroom

Zoom links are on A2L

Student TA: Himanshu Kamra e-mail: kamrah1@mcmaster.ca Office Hours: by appointment

Course website: Avenue to Learn





#### **COURSE ELEMENTS**

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

#### **COURSE DESCRIPTION**

Financial technology is at the forefront of global development and is paving the way for tectonic shifts in long established orders. It is giving rise to rapid changes in the way we make, manage, interact with, and even define, money. And while this can mean uncertainty and upheaval for incumbents, it presents a world of possibility for those able to innovate and adapt. The course will provide a broad overview of the FinTech industry and lay the groundwork for students to analyze and identify opportunities in this emerging sector.

This course is based around education through experiential learning, inquiry and case studies. It will also involve readings, lectures, class discussions and collaborative group work. We will engage with important actors in Canadian FinTech to learn from those who are actively involved in shaping the industry landscape. This will include entrepreneurs at all stages of development as well as senior leadership at established banks. The subject matter will provide you with an understanding of Financial Technology and provide you with insight to critically assess the trajectory of the industry and develop new innovations in Financial Technology.

#### **LEARNING OUTCOMES**

The course will provide students with an introduction to Financial Technology. Specifically, it will enable students to understand the following:

- ➤ How financial services have evolved; how the industry currently operates; key players and their roles; existing products.
- How FinTech has evolved; what is driving its growth; key players and their innovations.
- The competitive landscape of FinTech.
- > The technologies that underpin FinTech innovations.
- Regulations governing the financial technology industry.
- How to identify and analyze future trends/opportunities of FinTech.
- Global perspectives on FinTech.
- Innovation strategies at large financial institutions.
- The role of entrepreneurship in the FinTech sector.





#### REQUIRED COURSE MATERIALS AND READINGS

Avenue registration for course content, readings and case materials

http://avenue.mcmaster.ca

\$ FREE

E-coursepack (Ivy MBA case for the group project)

details to be posted on A2L.

\$ 5-10 CAD

#### **OPTIONAL COURSE MATERIALS AND READINGS**

Additional readings and reference materials for each topic will be posted on A2L as the course progresses.

#### **EVALUATION**

Learning in this course results primarily from in-class lectures, including the pre-recorded materials, and in-class discussion, as well as out-of-class analysis in preparing case report and developing an idea for an innovation project. The innovation project reports will be evaluated primarily on the group basis, but the overall project report grade will include an individual peer evaluation component. If the majority of the group feels that a member does not deserve 100% of the group's mark, it is the group's responsibility to inform the instructor and the member involved, in writing, specifying the reasons. Your final grade will be calculated as follows:

# **Components and Weights**

Assignment 1 (FinTec Company Profile)	<b>h</b> (individual)	15%
Assignment 2 (Case)	(individual)	15%
Weekly quizzes	(individual)	20%
Innovation Project	(group, with individual peer assessment)	35%
Class Participation (incl. A2L discussion question submission & PeerWise quiz question creation)	(individual)	15%
Total		100%





### **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	Points
A+	90-100	12
Α	85-89	11
A-	80-84	10
B+	75-79	9
В	70-74	8
B-	60-69	7
F	00-59	0

#### Assignment 1 (15%): FinTech Profile

This assignment is worth 15% of your final grade and will be marked individually. You will choose a FinTech company of interest (from a list provided to you) and provide a brief company profile designed to anticipate is short-term/long-term success. The profile will examine various facets of the business including the company's core offerings, industry, competition, advantages, target market, positioning, finances etc. Further details will be provided on A2L. Due in week 5.

This assignment will ask questions similar to those that you will need to address for your group Innovation Project.

#### Assignment 2 (15%): Case Report

This assignment is worth 15% of your final grade and will be marked individually. You will have to purchase a case from Ivy (typically between \$4 and \$10, depending on whether you want a digital or a printed copy) and a set of questions. You will have to submit a short paper responding to questions posed. Details will be posted on A2L. Due in week 7.

#### Group Innovation Project (35%).

Your group of 4 students will propose a new FinTech innovation and develop a plan for its commercial launch. Innovations can be wholly novel products/services not yet available in the market or ventures positioned to compete with existing players. In either case, you will be graded upon the rationale and justification behind your innovation and your strategy to bring it to market. Projects may require you to examine market need and demand, competitive landscape, regulatory and legal hurdles, market positioning, etc. The project will comprise a written report ("white paper") and a brief (5-min) in-class pitch. Part of your evaluation will stem from an individual peer evaluation component. Group reports and pitches are due in the last lecture.





To ensure that you remain on track: one-page ideas are due in week 6 (5%). In week 7, we will follow up on these with within-each-group discussions of these ideas with Professor Malinova. Preliminary outlines are due in week 8 (10%).

#### Weekly Quizzes (20%)

Following the in-class discussion of pre-recorded videos (weeks 2-12), you will have 24 hours to complete a short quiz (each quiz is a 10-minite Avenue quiz, and you will be allowed 20 minutes of extra time to complete it – for a 30 minute total). A sample/practice, non-graded quiz will be posted in week 1. The grade will be based on your best 10 (out of 11) graded quizzes.

#### Class Participation (15%)

There are several ways to participate in the course:

- 1. A2L discussion board: submission of open-ended questions for the in-class discussion
- 2. PeerWise discussion board: collaboration on multiple-choice questions (potentially to be used in weekly quizzes).
- 3. Participation in live lectures (via chat or live discussion)

The course will proceed semi-asynchronously, with pre-recorded videos posted 5-7 days prior to each lecture (lectures 2-12). In lecture, we will expand on these videos and we will also welcome occasional guest speakers. Our in-class discussion will be in part driven by your questions. To facilitate this arrangement, you are required to submit one question per week (based on the course videos!) in advance, by 11:30am on Tuesdays prior to each lecture, to the course discussion board (on A2L).

In addition, you have the opportunity to contribute assessment questions (some of which may be used for after-class weekly quizzes!) and answers, via the PeerWise discussion board (details on how to register will be posted on A2L – registration on PeerWise is free of charge).

Your participation grade will be based on (1) your contributions to the A2L discussion board (expected: one question per week!), (2) your contribution to PeerWise assessment question creation (expected: create 2-3 questions per semester plus contribute by answering your peers' questions), and (3) your in-class contribution to the zoom chat/discussion.

ACTIVITY	DELIVERY	DESCRIPTION	TOOL(S)
Lecture Core Content	Asynch	Recorded lecture videos	Linked in A2L
<b>Live Lectures</b>	Synch	1.5-2 hour live lectures	Zoom
Readings	Asynch	Optional, expand on topics covered in the videos	Linked in A2L
Group Discussions	Asynch	Meetings for the group innovation projects	Asynch: Microsoft Teams, Zoom, WebEx (team's choice)
Class Participation	Synch and Asynch	Contributing to the in-class discussion and quiz creation	Zoom, PeerWise, A2L





#### **COMMUNICATION AND FEEDBACK**

Students that are uncomfortable in directly approaching an instructor regarding a course concern may send a confidential and anonymous email to the respective Area Chair or Associate Dean:

#### http://mbastudent.degroote.mcmaster.ca/contact/anonymous/

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 Administrative Assistant.

Instructors are encouraged to conduct an informal course review with students by Week #4 to allow time for modifications in curriculum delivery. Instructors should provide evaluation feedback for at least 10% of the final grade to students prior to Week #8 in the term.

#### **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





#### **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. 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 <a href="https://www.mcmaster.ca/academicintegrity">www.mcmaster.ca/academicintegrity</a>.

#### COURSES WITH AN ON-LINE ELEMENT

**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 online 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.

#### **ON-LINE 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 <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.

#### MISSED ACADEMIC WORK

### Missed Mid-Term Examinations / Tests / Class Participation

Where students miss a regularly scheduled mid-term or class participation for legitimate reasons as determined by the Student Experience – Academic (MBA) office, the weight for that test/participation will be distributed across other evaluative components of the course at the discretion of the instructor. Documentation explaining such an absence must be provided to the Student Experience – Academic (MBA) office within five (5) working days upon returning to school.

To document absences for health related reasons, please provide to Student Experience – Academic (MBA) office the Petition for Relief for MBA Missed Term Work and the McMaster University Student Health Certificate DeGroote website which can be found the on http://mbastudent.degroote.mcmaster.ca/forms-and-applications/. Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. University policy states that a student may submit a maximum of three (3) medical certificates per year after which the student must meet with the Director of the program.

To document absences for reasons other than health related, please provide Student Experience – Academic (MBA) office the Petition for Relief for MBA Missed Term Work and documentation supporting the reason for the absence.

Students unable to write a mid-term at the posted exam time due to the following reasons: religious; work-related (for part-time students only); representing university at an academic or varsity athletic event; conflicts between two overlapping scheduled mid-term exams; or other extenuating circumstances, have the option of applying for special exam arrangements. Such requests must be





made to the Student Experience – Academic (MBA) office at least ten (10) working days before the scheduled exam along with acceptable documentation. Instructors cannot themselves allow students to unofficially write make-up exams/tests. Adjudication of the request must be handled by Student Experience – Academic (MBA).

If a mid-term exam is missed without a valid reason, students will receive a grade of zero (0) for that component.

#### Missed Final Examinations

A student who misses a final examination without good reason will receive a mark of 0 on the examination.

All applications for deferred and special examination arrangements must be made to the Student Experience – Academic (MBA) office. Failure to meet the stated deadlines may result in the denial of these arrangements. Deferred examination privileges, if granted, must be satisfied during the examination period at the end of the following term. There will be one common sitting for all deferred exams.

Failure to write an approved deferred examination at the pre-scheduled time will result in a failure for that examination, except in the case of exceptional circumstances where documentation has been provided and approved. Upon approval, no credit will be given for the course, and the notation N.C. (no credit) will be placed on the student's transcript. Students receiving no credit for a required course must repeat the course. Optional or elective courses for which no credit is given may be repeated or replaced with another course of equal credit value.

Requests for a second deferral or rescheduling of a deferred examination will not be considered.

Any student who is unable to write a final examination because of illness is required to submit the Application for Deferred MBA Final Examination and a statement from a doctor certifying illness on the date of the examination. The Application for Deferred MBA Final Examination and the McMaster University Student Health Certificate can be found on the DeGroote website at http://mbastudent.degroote.mcmaster.ca/forms-and-applications/ Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. Students who write examinations while ill will not be given special consideration after the fact.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within five business days of the missed examination.

Special examination arrangements may be made for students unable to write at the posted exam time due to compelling reasons (for example religious, or for part-time students only, work-related reasons):

- Students who have religious obligations which make it impossible to write examinations at the times posted are required to produce a letter from their religious leader stating that they are unable to be present owing to a religious obligation.
- Part-time students who have business commitments which make it impossible to write examinations at the times posted are required to produce a letter on company letterhead from





the student's immediate supervisor stating that they are unable to be present owing to a specific job commitment.

In such cases, applications must be made in writing to the Student Experience – Academic (MBA) office at least ten business days before the scheduled examination date and acceptable documentation must be supplied.

If a student is representing the University at an academic or athletic event and is available at an overlapping scheduled time of the test/examination, the student may write the test/examination at an approved location with an approved invigilator, as determined by the Student Experience – Academic (MBA) office.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within ten business days of the end of the examination period.

Note: A fee of \$50 will be charged for a deferred exam written on campus and a fee of \$100 for deferred exams written elsewhere. In cases where the student's standing is in doubt, the Graduate Admissions and Study Committee may require that the student with one or more deferred examination privileges refrain from re-registering until the examination(s) have been cleared.

#### ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

Students Accessibility Services (SAS) offers various support services for students with disabilities. Students are required to inform SAS of accommodation needs for course work at the outset of term. Students must forward a copy of such SAS accommodation to the instructor normally, within the first three (3) weeks of classes by setting up an appointment with the instructor. If a student with a disability chooses NOT to take advantage of an SAS accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. The SAS website is:

http://sas.mcmaster.ca

# 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 <u>or</u> 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.

#### POTENTIAL MODIFICATION 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.

#### RESEARCH USING HUMAN SUBJECTS

#### ONLY IF APPLICABLE

Research involving human participants is premised on a fundamental moral commitment to advancing human welfare, knowledge, and understanding. As a research intensive institution, McMaster University shares this commitment in its promotion of responsible research. The fundamental imperative of research involving human participation is respect for human dignity and well-being. To this end, the University endorses the ethical principles cited in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans:

#### http://www.pre.ethics.gc.ca

McMaster University has mandated its Research Ethics Boards to ensure that all research investigations involving human participants are in compliance with the Tri-Council Policy Statement. The University is committed, through its Research Ethics Boards, to assisting the research community in identifying and addressing ethical issues inherent in research, recognizing that all members of the





University share a commitment to maintaining the highest possible standards in research involving humans.

If you are conducting original research, it is vital that you behave in an ethical manner. For example, everyone you speak to must be made aware of your reasons for eliciting their responses and consent to providing information. Furthermore, you must ensure everyone understands that participation is entirely voluntary. Please refer to the following website for more information about McMaster University's research ethics guidelines:

#### http://reo.mcmaster.ca/

Organizations that you are working with are likely to prefer that some information be treated as confidential. Ensure that you clarify the status of all information that you receive from your client. You **MUST** respect this request and cannot present this information in class or communicate it in any form, nor can you discuss it outside your group. Furthermore, you must continue to respect this confidentiality even after the course is over.

#### ACKNOWLEDGEMENT OF COURSE POLICIES

Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) to the various learning activities of MBA F741 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.





# MBA F741 Firms and Markets

# Winter 2021 Course Schedule (very tentative topic order!)

Topic schedule to be adjusted as the guest speaker availability is confirmed Please visit A2L for full details

Week	Date	Lecture Topics	Individual Assessments**	Group Assessments**
1	Jan 13	Intro to FinTech		
2	Jan 20	Intro to Blockchain and Crypto		
3	Jan 27	Intro to Decentralized Finance		
4	Feb 03	Intro to Payments		
5	Feb 10	Payments cont'd. Stablecoins and CBDC.	FinTech Firm Profile Due Friday Feb 12	
6	Feb 24	Lending and Credit		Group Project Ideas (one-page draft) Due Friday Feb 26
7	March 03	FinTech in Wealth Management & Personal Finance.	Case Report Due Friday Mar 05	
8	March 10	Case Discussion		Group Project Outlines Due Friday Mar 12
9	March 17	FinTech and Regulation		
10	March 24	Al and Machine Learning in FinTech		
11	March 31	InsurTech		
12	April 07	Review, ethics, special topics		
13	April 14	Group presentations of the innovation projects (pre-recorded)		Projects & pitches Due Tuesday April 13.

<sup>\*\*</sup>Please note that in addition to the listed assessments, the course also requires weekly pre-lecture question submission (due 24 hours prior to each lecture, i.e., Tuesdays @ 11:30am), participation in the PeerWise board question creation, and weekly (short) quizzes (weeks 2-12). Details on A2L.\*\*

This is a tentative schedule of classes. The schedule will be adjusted once the guest speakers confirm their availability. The instructor will provide advance notice to the students when changes to the schedule are made.