





BusAdmin F741 Introduction to FinTech Summer 2023 Course Outline

DeGroote School of Business McMaster University

COURSE OBJECTIVE

This course provides a practical introduction to Financial Technology (FinTech), and establishes a knowledge base, that enables a student to critically assess this rapidly growing industry. Over four modules of three weeks each, students will obtain.

- a thorough business understanding of blockchain technology,
- a thorough understanding of the economics of blockchain businesses,
- · case study insight into FinTech business implementations, and
- an understanding of the change management and corporate social responsibility issues associated with blockchain technology.

Students demonstrate mastery of the material via completion of a group whitepaper, documenting a FinTech solution to an identified business problem.

INSTRUCTOR AND CONTACT INFORMATION

C01: Tue 19:00-22:00

Martin Butcher

butchm1@mcmaster.ca

Telephone: (905) 403-8286 Class Location: RJC 263

COURSE ELEMENTS

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

COURSE DESCRIPTION

FinTech is at the forefront of economic 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 provides a non-technical overview of the technology and lays the groundwork by which students can 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 lectures, class discussions, and collaborative group work. The subject matter will give you an understanding of FinTech and provide you with the insight to critically assess the trajectory of the industry and develop new innovations in FinTech.

LEARNING OUTCOMES

The course will provide students with an introduction to FinTech. Specifically, it will enable students to understand the below key components of the technology.

- What FinTech is, why it is a game-changer, who this technology is affecting, and how.
- The nuts and bolts of blockchain, smart contracts, algorithms, tokens, and their regulation.
- The decentralized-finance (de-fi) business model, in varying business uses.
- Integration of Change Management and Corporate Social Responsibility.
- How to evaluate a proposed White Paper, and FinTech application.

COURSE MATERIALS AND READINGS

Avenue registration for course content, readings and case materials

https://avenue.mcmaster.ca/

\$ FREE

COURSE OVERVIEW AND ASSESSMENT

Learning in this course results primarily from weekly lectures, individual engagement, two tests, and a group project. Your final grade will be calculated as:

Voluntary Individual Engagement	0%
TEST ONE	35%
TEST TWO	35%
GROUP WHITEPAPER	30%
TOTAL	100%

Course Deliverables

Individual Engagement (0%)

 10 weeks of voluntary asynchronous chat question and response. The purpose of the engagement is to highlight the different views and approaches to various engagement questions as we go through the course.

TEST ONE (35%) - Week 07

• A true/false, multi-select, multiple choice test delivered via A2L, during class time. The content covers weeks 1 through 6 inclusive.

TEST TWO (35%) - Week 13

• A true/false, multi-select, multiple choice test delivered via A2L, during class time. The content covers weeks 8 through 12 inclusive.

GROUP WHITEPAPER (30%) - Week 13; due midnight Jul-28

• As a group of 4, your group will propose a new FinTech innovation, and draft a White Paper against a standardized template.

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 may solicit feedback via an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

ACADEMIC INTEGRITY

You are expected to exhibit honesty and use ethical behavior 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 behavior 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 <u>Academic Integrity Policy</u>, 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.

COURSES WITH AN ON-LINE ELEMENT

Students should be aware that, when they access the electronic components of a course, private information such as first and last names, usernames 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.

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 behavior's 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

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 return to school.

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 <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 (e.g., severe weather, labor disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in MFIN 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.

COURSE SCHEDULE

WEEK	DAY			LECTURE AND ASSIGNMENT
1	May 02	Module 1.1	BLOCKCHAIN TECHNOLOGY	Introduction and course overview. 1. Meet & greet 2. What is FinTech? 3. Why is it a game-changer? 4. Who is it affecting? 5. Corporate Social Responsibility 6. Where today's technology is at.
2	May 09	Module 1.2		Nuts and bolts of Blockchain. 1. Blockchain benefits 2. Block structure walk-through 3. Bitcoin protocol walkthrough 4. Smart contract walkthrough 5. Consensus mechanisms 6. Types of blockchain 7. Layer architecture
3	May 16	Module 1.3		The Whitepaper. 1. Business vs IT view 2. Solution Architecture 3. Whitepaper evaluation
4	May 23	Module 2.1	BLOCKCHAIN ECONOMICS	Disintermediation/network business model. 1. Pros and cons of blockchain 2. Costing and financials impact 3. Corporate social responsibility 4. Using the long straddle 5. Tokens and the OSC
5	May 30	Module 2.2		Case Discussion: Lending Loop 1. P2P Lending 2. Changing credit metrics
6	Jun 06	Module 2.3		Case Discussion: Robo-Advisors to Humans: We come in Peace. 1. Automated wealth management 2. Changing organizational structures

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7	Jun 13			Test ONE (35%)		
8	Jun 20	Module 3.1	BUSINESS USE CASES	Case Discussion: Bitcoin: Investment or Illusion. 1. Bitcoin Protocol 2. Hamilton vs Satoshi 3. Central Bank Digital Currency 4. Non-Fungible Token .		
9	Jun 27	Module 3.2		Case Discussion: CIBC - Internalizing Open Innovation FinTech innovation in Canadian financial institutions. 1. Corporate Social Responsibility 2. Change management premium		
10	Jul 04	Module 3.3		Case Discussion: The Rise of Ant Financial. TechFin innovation in international markets. 1. Size is not protection 2. Marketing: Product/Experience/Story.		
11	Jul 11	Module 4.1		People versus technical skills. 1. Why and how it matters. 2. Managing Change Management 3. Managing Corporate Social Responsibility (CSR) 4: Managing Environmental, Social, and Governance Reporting (ESG)		
12	Jul 18	Module 4.2		Privacy, Immutability, Artificial Intelligence 1. Different meanings of privacy. 2. Immutable, but NOT complete. 3: The new database		
13	Jul 25			Test TWO (35%)		
13	Jul 28			GROUP WHITE PAPER (30%)		