# UBC SAUDER SCHOOL OF BUSINESS

ROBERT H. LEE GRADUATE SCHOOL Syllabus

#### COURSE INFORMATION

Course title:	FinTech				
Course code:	BAFI 523	Credits:	1.5		
Session and term:	2023W1, Period 1	Class location:	ANGU-435		
Section(s):	001	Class times:	MW 8:00 – 10:00AM		
Course duration:	Sep 05 to Oct 04, 2023	Pre-requisites:	n/a		
Division:	Finance	Co-requisites:	n/a		
INSTRUCTOR INFORMATION					
Instructor:	Professor Markus Baldauf				
Phone:	604-822-8558	Office location:	HA 873		
Email:	baldauf@mail.ubc.ca	Office hours:	By appointment		

### **COURSE DESCRIPTION**

New technologies continue to disrupt and revolutionize how finance functions are performed. This course covers a range of topics that illustrate how FinTech providers and users employ technology to create new financial products and transform financial services. These innovations affect a range of financial market participants and have significant impacts on firms, individual investors and households. For example:

- Robo-advising, AI and commission-free trading have changed how investors and households manage their investments in financial assets.
- iBuying—the use of valuation algorithms in real estate, used automobiles and other markets has changed how people buy and sell those assets.
- High-frequency trading and the use of alternative data have changed how professional traders behave and are transforming the financial management industry.
- Cryptocurrencies and blockchain technology have introduced new possibilities for payment systems and have expanded the set of alternative assets (including NFTs) available to investors.

This course gives students tools to evaluate the challenges and opportunities of the FinTech revolution, and teaches how to connect these innovations to traditional finance frameworks. The course is open to everyone who seeks to learn about new and emerging trends in finance and finance technology, whether they seek a career in finance, high-tech innovation or technology management, or whether they want to improve their own financial decision making. The specific topics covered each year will vary according to the interests of the students and the instructor and with new developments in FinTech and related fields.

#### **COURSE FORMAT**

The course format will consist primarily of lectures, supplemented with worked-examples, case discussions, small presentations, interactive activities, and guest speakers.

#### LEARNING OBJECTIVES

Upon successful completion of the course, students will be:

- 1. familiar with FinTech and other new trends in finance and finance technology;
- 2. able to assess recent innovations using traditional finance paradigms; and
- 3. well-equipped to understand regulatory debates surrounding FinTech challenges.



#### SUSTAINABLE DEVELOPMENT GOALS (SDGS)

At UBC Sauder, we are committed to responsible business practices that can have transformative impacts on society. One of the ways we are reinforcing our commitment to responsible business is by showcasing relevant content in our courses via the lens of the <u>United Nations Sustainable Development</u> <u>Goals</u>. In this course, we will touch on topics that relate to the following goals:

Sustainable Development Goal	Description of how and when the goal is covered in the course.
Goal 16: Peace, Justice, and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels Many topics that we cover in this course relate to financial institutions and infrastructure. For example, in lectures 6 and 7, we will talk about the role of regulation and the rule of law for the provision certain financial functions such as payment systems.
Goal 4: Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all In lecture 5 we will discuss financial literacy and the role of education for financial decisionmaking. We will investigate to what extent robo- advisors can improve outcomes.
Goal 5: Gender Equality 5 GENDER EQUALITY	Achieve gender equality and empower all women and girls One example of gender bias that we will study is in the context of the use of alternative data (lecture 3) to inform credit decisions.

#### ASSESSMENTS

Summary	
Component	Weight
Assignments	30%
Group project	30%
Midterm exam	30%
Class participation	10%
Total	100%

#### Details of Assessments

**Assignments.** All assignments will be administered via Canvas and ComPAIR (accessible via the Canvas website, <a href="https://isit.arts.ubc.ca/compair/">https://isit.arts.ubc.ca/compair/</a>). Every student has to submit their individual submission (i.e., this is not a group project).

**Group project**. There will be a single group project that asks you to work on a pitch about a crypto investment to the institutional investor UBC Investment Management Trust. Group sizes between 3 and 5 members are permitted.

2

BAFI 523	001
Program: MBA	

**Midterm exam**. The midterm will take place in class and it will be administered via Canvas. You will need to bring a laptop. More details will follow on Canvas closer to the date.

**Participation**. I strive to create a respectful and interactive learning environment. Student participation is critical to accomplish that. Your participation grade has multiple components:

- 1. in-class participation: come prepared to class, do the readings, ask questions, and contribute to the discussion;
- 2. interactions with any guest speakers: prepare for guest lectures and use the opportunity to interact with potential employers; and
- 3. online components of the class: participation does not have to be in-person, for example, you could answer questions on the Canvas discussion.

## LEARNING MATERIALS

Links to all of the readings will be posted on Canvas.

All cases can be accessed via Ivey Publishing (estimated cost: \$10.35):

- 1. Go to the Ivey Publishing website at www.iveypublishing.ca
- 2. Log in to your existing account or click "Register" to create a new account and follow the prompts to complete the registration. If registering, choose the "Student" role.
- 3. Click on this link or copy into your browser: <u>https://www.iveypublishing.ca/s/ivey-</u> coursepack/a1R5c00000FvcDSEAZ
- 4. Click "Add to Cart".
- 5. Go to the Shopping Cart (located at the top of the page), click "Checkout", and complete the checkout process.
- 6. When payment has been processed successfully, an Order Confirmation will be emailed to you immediately and you will see the Order Confirmation screen.
- Once you have completed your order, click on your username on the top right --> Orders --> Purchases

## COURSE-SPECIFIC POLICIES AND RESOURCES

### Missed or late assignments, and regrading of assessments

Late submissions will be penalized as follows. If the submission is more than 1 minute late, then the grade will be reduced by 5%. If the submission is more than 1 hour late, then the grade will be reduced by 10%.

### Academic Concessions

If extenuating circumstances arise, please contact the RHL Graduate School program office as early as reasonably possible, and submit an <u>Academic Concession Request & Declaration Form</u>. If an academic concession is granted during the course, the student will be provided options by RHL, or by the instructor in consultation with RHL, per <u>UBC's policy on Academic Concession</u>.

In the event of an academic concession for an assignment, the grade weight for that assignment will be set to the weighted average of the other course grades.

# UBC SAUDER SCHOOL OF BUSINESS

## Code Plagiarism

Code plagiarism falls under the UBC policy for <u>Academic Misconduct</u>. Students must correctly cite any code that has been authored by someone else or by the student themselves for other assignments. Cases of "reuse" may include, but are not limited to:

- the reproduction (copying and pasting) of code with none or minimal reformatting (e.g., changing the name of the variables)
- the translation of an algorithm or a script from a language to another
- the generation of code by automatic code-generations software

An "adequate acknowledgement" requires a detailed identification of the (parts of the) code reused and a full citation of the original source code that has been reused.

Students are responsible for ensuring that any work submitted does not constitute plagiarism. Students who are in any doubt as to what constitutes plagiarism should consult their instructor before handing in any assignments.

## POLICIES APPLICABLE TO COURSES IN THE ROBERT H. LEE GRADUATE SCHOOL

#### Attendance

Excepting extenuating circumstances, students are expected to attend 100% of their scheduled class hours. Absent students limit their own academic potential, and that of their classmates, and cause unnecessary disruption to the learning environment. Students missing more than 20% of the total scheduled class hours for a course (including classes held during the add/drop period) without having received an academic concession will be withdrawn from that course. Withdrawals, depending on timing, could result in a "W" or an "F" standing on the transcript.

### Punctuality

Students are expected to arrive for classes and activities on time and fully prepared to engage. Late arrivals may be refused entry at the discretion of the instructor or activity lead. Students arriving later than halfway through a scheduled class will be treated as absent for that class.

### Electronic Devices

Devices such as laptops, tablets, and cell phones are not permitted to be used in class unless directed by the instructor for in-class activities. Students who do not follow the School's policy in this regard may be required to leave the room for the remainder of the class, so that they do not distract others. Research shows that students' use of laptops in class has negative implications for the learning environment, including reducing their own grades and the grades of those sitting around them.

### Citation Style

Please use the American Psychological Association (APA) reference style to cite your sources.

Details of the above policies and other RHL Policies are available at: <u>http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625</u>

### UNIVERSITY POLICIES AND RESOURCES

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic

# UBC SAUDER SCHOOL OF BUSINESS

community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on the UBC Senate website at <a href="https://senate.ubc.ca/policies-resources-support-student-success">https://senate.ubc.ca/policies-resources-support-student-success</a>.

## Respect for Equity, Diversity, and Inclusion

The UBC Sauder School of Business strives to promote an intellectual community that is enhanced by diversity along various dimensions including Indigeneity (including identification as First Nation, Métis, or Inuit), race, ethnicity, gender identity, sexual orientation, religion, political beliefs, social class, and/or disability. It is critical that students from diverse backgrounds and perspectives be valued in and well-served by their courses. Furthermore, the diversity that students bring to the classroom should be viewed as a resource, benefit, and source of strength for your learning experience. It is expected that all students and members of our community conduct themselves with empathy and respect for others.

## Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.

## Use of Artificial Intelligence

### **Generative AI Permitted Where Specified With Attribution**

For this course, students may use generative artificial intelligence (AI), including ChatGPT, for specific assessments or coursework, where it is expressly specified by the instructor. In these cases of permitted use, students must disclose any use of AI-generated material as per the assessment guidelines. At a minimum, this will include proper attribution, including in-text citations, quotations and references. Please see your assessment guidelines for full details.

### COPYRIGHT

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline and could be subject to legal action. Any lecture recordings are for the sole use of the instructor and students enrolled in the class. In no case may the lecture recording or part of the recording be used by students for any other purpose,



either personal or commercial. Further, audio or video recording of classes are not permitted without the prior consent of the instructor.

#### ACKNOWLEDGEMENT

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the x<sup>w</sup>məθk<sup>w</sup>əýəm (Musqueam) people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

#### COURSE SCHEDULE

(Subject to change with consultation)

Class	Date	Торіс	Readings or Activities <sup>i</sup>	Assessments due
1	Wed, Sep 6	Introduction, Course Overview		
2	Fri, Sep 8	Trading & Technology	Lecture notes L2	
3	Mon, Sep 11	Alternative Data: Finance with nonfinancial data	Lecture notes L3	Assignment #1
4	Wed, Sep 13	Real Estate & iBuying	Lecture notes L4	
5	Mon, Sep 18	Robo-Advising: The rise of the machines	Lecture notes L5	
6	Wed, Sep 20	Payment Systems	Lecture notes L6	Assignment #2
7	Mon, Sep 25	MIDTERM (in-class)		
8	Wed, Sep 27	The DeFi Revolution	Lecture notes L7	
9	Wed, Oct 4	The DeFi Revolution	Lecture notes L7	
10	Fri, Oct 6	The DeFi Revolution	Lecture notes L7	Group Project

<sup>i</sup> All readings are available on the Canvas course website.