

COURSE INFORMATION

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|-------------------|------------------------|-----------------|----------------------|
| Course title: | FinTech | Credits: | 1.5 |
| Course code: | BAFI 523 | Class location: | ANGU-335 |
| Session and term: | 2024W1, P6 | Class times: | MW 10:00AM – 12:00PM |
| Section(s): | 001 | Pre-requisites: | n/a |
| Course duration: | Sep 03 to Oct 04, 2024 | Co-requisites: | n/a |
| Division: | Finance | | |

INSTRUCTOR INFORMATION

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|-------------|--|------------------|----------------|
| Instructor: | Professor Markus Baldauf | Office location: | HA 873 |
| Phone: | 604-822-8558 | Office hours: | By appointment |
| Email: | baldauf@mail.ubc.ca | | |

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 [United Nations Sustainable Development Goals](#). 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. |
|--|---|
| <p>Goal 16: Peace, Justice, and Strong Institutions</p>  | <p><i>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</i></p> <p>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.</p> |
| <p>Goal 4: Quality Education</p>  | <p><i>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</i></p> <p>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.</p> |
| <p>Goal 5: Gender Equality</p>  | <p><i>Achieve gender equality and empower all women and girls</i></p> <p>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.</p> |

ASSESSMENTS

Summary

| <u>Component</u> | <u>Weight</u> |
|---------------------|---------------|
| Assignments | 30% |
| Group project | 30% |
| Midterm exam | 30% |
| Class participation | <u>10%</u> |
| Total | <u>100%</u> |

Details of Assessments

Assignments. All assignments will be administered via Canvas and ComPAIR (accessible via the Canvas website, <https://isit.arts.ubc.ca/compair/>). 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.

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: \$11.89):

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: <https://www.iveypublishing.ca/s/ivey-coursepack/a1ROF000001hCVB2A2>
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.
7. Once you have completed your order, click on your username on the top right --> Orders --> Purchases

NO DISTRIBUTION OF RECORDINGS

There is no distribution of recordings of class. Classes are designed as and are intended to be in-person. Your attendance is expected. If you are unable to attend, the policy regarding missed classes described in this syllabus applies. It is your responsibility to ensure that you have the materials you need for missed classes.

COURSE-SPECIFIC POLICIES AND RESOURCES

Missed or late assignments, and regrading of assessments

Late submissions will not be accepted and will receive a grade of zero.

Academic Concessions Policy

Requesting Academic Concessions

If you experience unanticipated events or other circumstances that constitute valid grounds for academic concession as defined by [UBC's Academic Concession Policy](#), complete and submit the [Academic Concession Request & Declaration Form](#). Concessions are time-sensitive and the online form should be submitted within 48 hours of the missed deadline. Upon submission, your request will be recorded in the RHL and you will also receive an email with further instructions. Please read this email

carefully and be sure to also refer to the relevant course syllabus for each concession that you have requested. Please know that you should continue to work on the coursework for the course(s) which you submitted a concession for. You should anticipate being asked to submit work or write an exam as soon as the circumstances affecting your ability to fulfil your academic responsibilities are resolved.

Code Plagiarism

Code plagiarism falls under the UBC policy for [Academic Misconduct](#). 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:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625>

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 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 <https://senate.ubc.ca/policies-resources-support-student-success>.

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 (Including ChatGPT) Not Permitted

Any work submitted must be your own original work. Any use of generative artificial intelligence (AI), including ChatGPT, is prohibited and constitutes academic misconduct. Any student suspected of submitting work that includes AI generated content may be asked for preliminary work or other materials to evidence the student's original and unaided authorship. The student may also be asked to separately explain or support their work. AI identification methods may also be employed by the instructor. After review, if it is determined by the instructor that submitted work likely contains AI generated content, the work may receive a zero and may be subject to further misconduct measures set out in the [UBC Academic Calendar](#).

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 x̣ẉməθḳẉəỵəm (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)

| Class | Date | Topic | Readings or Activities ⁱ | Assessments due |
|-------|-------------|---|-------------------------------------|-----------------|
| 1 | Wed, Sep 4 | Introduction, Course Overview | | |
| 2 | Fri, Sep 6 | Trading & Technology | Lecture notes L1 | |
| 3 | Mon, Sep 9 | Alternative Data: Finance with nonfinancial data | Lecture notes L2 | Assignment #1 |
| 4 | Wed, Sep 11 | Real Estate & iBuying | Lecture notes L3 | |
| 5 | Mon, Sep 16 | Robo-Advising: The rise of the machines | Lecture notes L4 | |
| 6 | Wed, Sep 18 | Payments | Lecture notes L5 | Assignment #2 |
| 7 | Mon, Sep 23 | MIDTERM (in-class) | | |
| 8 | Wed, Sep 25 | The DeFi Revolution | Lecture notes L6 | |
| 9 | Wed, Oct 2 | The DeFi Revolution | Lecture notes L6 | |
| 10 | Fri, Oct 7 | The DeFi Revolution | Lecture notes L6 | Group Project |

ⁱ All readings are available on the Canvas course website.