#### **COURSE INFORMATION**

Course Title:	Risk Management	
Course Code:	BAFI 513	Credits:
Session, Term, Period:	2023W1, Period 7	Class Locatio
Section(s):	001	Class Times:
Course Duration:	Oct 31 – Nov 30, 2023	Pre-Requisite
Division:	Finance	Co-Requisite
Program:	MBA	

Credits:	1.5
Class Location:	HA 437
Class Times:	Tue/Thu, 10:00am - 12:00pm
Pre-Requisites:	BAFI 500 or BAFI 550
Co-Requisites:	n/a

## INSTRUCTOR INFORMATION

Instructor:	Dr. Carlos da Costa		
Phone:	604-306-0458	Office Location	: HA 424
Email:	carlos.dacosta@ubc.ca	Office Hours:	By appointment

### **COURSE DESCRIPTION**

There are many types of risk management going on in different parts of a company at the same time. The most familiar loci of risk management are trading operations and the treasury office. But many other parts of the firm are involved in risk management. The marketing department designs types of contracts for customers that share risk. Business unit managers evaluate projects with different risk characteristics and decide on ways to alter projects so as to minimise risk without sacrificing return. The tax, legal, and accounting departments are concerned with risk, hedging, and corporate governance issues. At the highest level of the company, key questions about the firm's strategy and ability to fund its operations must be answered with an eye on the risks of each alternative and strategic decision that can secure the greatest value for shareholders.

The problem before a commodity trader is not the same problem that is before the business unit manager and not the same problem that is before the CFO—the difficulties facing each actor within the firm demand a focus on different risk-related issues.

Each of these different risk management activities focuses on various aspects of risk management - the umbrella of such corporate risks is usually referred to as Enterprise Risk Management (ERM). Specifically, ERM is the process of planning, organising, directing, and controlling the activities of an organisation to minimise the harmful effects of risk on its capital and earnings. ERM includes financial, strategic, operational, and associated risks associated with accidental losses.

### **COURSE FORMAT**

The course will include lectures, case discussions, and in-class case activities. Please see the detailed course schedule below.

### LEARNING OBJECTIVES

The course will be organised according to the following outline of topics. Due to the short and concentrated nature of the course, the depth into which each is explored will vary greatly. However, the outline is very useful for organising the thinking about the place of risk management in the firm's business.

By the end of this course, students will gain a good understanding of:

- 1. The overall role risk plays in managing corporate performance and identifying the key steps of the risk management process
- 2. The application of risk-responsive frameworks (such as Enterprise Risk Management (ERM)) to an organisation
- 3. How to identify and analyse risks faced by an entity and dissect real business cases requiring the use of multiple risk management techniques
- 4. How to use financial derivatives (futures, options, and swaps) to hedge portfolio/corporate risk
- 5. Corporate governance in risk management

#### SUSTAINABLE DEVELOPMENT GOALS (SDGS)

One of the ways UBC Sauder intends to demonstrate its commitment to responsible business is by noting certain course content via the lens of <u>United Nations Sustainable Development Goals</u> (UNSDG). As can be seen from the course description above and class schedule below, this course touches on topics related to: financial instruments, institutions, services and infrastructure, credit, entrepreneur finance, regulation and governance (elements of UNSDG 8, 9, 16).

#### ASSESSMENTS

Summary	
<u>Component</u>	<u>Weight</u>
<ul> <li>Case Studies</li> <li>Assignments will include case studies and readings to complement weekly topics. Class members will be divided into teams to present cases and lead discussions.</li> </ul>	40%
<ul> <li>Class Participation</li> <li>Individual and group participation will be evaluated by meaningful contributions to class discussion, possible class exercises, and timely completion of weekly reading assignments.</li> </ul>	25%
<ul> <li>Final Exam</li> <li>Multiple choice exam: it will cover the material discussed throughout the semester in the modules (see PPT notes – excluding the discussed case studies) (open textbook &amp; PPT notes (no electronic device except a calculator) will be permitted).</li> </ul>	35%
Total	100%

# Details of Assessments

#### **Class Participation:**

• Please be ready and willing to actively engage in all aspects of the classroom learning experience. We all have something to contribute to the collective learning experience each day, and we all want to benefit from it.



### Group Work:

• Groups will be posted on Canvas.

#### Case Summaries:

- Case summaries are short summaries of the key issues in the case.
- Details and guidelines for the case summaries will be posted on the course website.

#### Case Reports:

- Case analysis and report guidelines will be posted on the course website.
- Questions to guide the analysis will also be posted on the course website.

### LEARNING MATERIALS

#### **Required:**

- 1. Course pack containing the Harvard Business School (HBS) and Ivey Publishing cases (will be available electronically; see information on the course website).
- 2. Class notes (will be posted before class on the course website: access via https://canvas.ubc.ca/).
- 3. Links to some required (and some recommended) readings will be posted in the course Canvas shell.
- 4. Syllabus (will be posted in the course Canvas shell).
- 5. Textbook: Essentials of Financial Risk Management: Practical Concepts for the General Manager by: Rick Nason and Brendan Chard — Business Expert Press (2018)

### References:

Some good textbooks to utilise as references are:

1. Enterprise Risk Management: Today's Leading Research and Best Practices for Tomorrow's Executives, 2nd Edition

by: John R. S. Fraser, Rob Quail, and Betty Simkins (Editors) — John Wiley & Sons (2021)

2. CME Group Risk Management Handbook: Products and Applications

by: John W. Labuszewski, John E. Nyhoff, Richard Co, and Paul E. Peterson (Authors) — John Wiley & Sons (2010)

3. Options, Futures, and Other Derivatives

by: John C. Hull — Pearson; 11th Edition (2022)

- 4. Readings may be assigned from newspapers, magazines, journals, books, and online sources as the class progresses. Such additional readings will be selected during the class in order to use the most up-to-date and topical material. Useful online sources include reports and publications from major risk-related professional organisations, including:
  - Professional Risk Managers International Association: PRMIA
  - Global Association of Risk Professionals: GARP
  - Chicago Mercantile Exchange (CME) Group

## COURSE-SPECIFIC POLICIES AND RESOURCES

### No Distribution of Recordings

Other than as announced in class, there is no distribution of recordings of class and classes will not be live-streamed or recorded, and you may not record classes or have classmates record classes for you. Your attendance in class is expected. If you are unable to attend, the policies regarding academic concessions and attendance described in this syllabus apply. It is your responsibility to ensure that you have the materials you need for missed classes. It is strongly recommended that you make arrangements at the start of the semester for materials in case you miss class (for instance, you may wish to exchange contact information with a classmate who can provide you with notes in the event you miss class). If you believe you are an exceptional case that merits special consideration, please promptly reach out to RHL Sauder to advise them of your circumstances and then work with RHL to contact the instructor.

## 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>.

## Missed or Late Assignments, and Regrading of Assessments

Late submissions, or missed exams/quizzes, will receive a grade of zero unless academic concession is granted as explained herein. Requests for regrades must be submitted in writing, within 24 hours of the initial grade being posted, specifying in detail the believed grading error – if a regrade is granted the entire assignment/quiz will be regraded and the grade may rise, fall or remain unchanged as a result.

### Policies for Illness and Attendance & Academic Concessions

If a student feels unwell, they should stay home and send a courtesy email to each impacted instructor and cc their program manager. The student should also submit an <u>Academic Concession Request &</u> <u>Declaration Form</u>. If a student suspects possible COVID-19 infection, they should use the BC Ministry of Health's <u>self-assessment tool</u>, to help determine whether further assessment or testing for COVID-19 is recommended.

### Centre for Accessibility

The <u>Centre for Accessibility</u> (CfA) facilitates disability-related accommodations and programming initiatives designed to remove barriers for students with disabilities and ongoing medical conditions. If you are registered with the CfA and are eligible for accommodations, it is your responsibility to coordinate with the CfA, RHL and instructor.

### 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 recognises 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 <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.

## Respectfulness in the Classroom

Students are expected to be respectful of their colleagues at all times, including faculty, staff and peers. This means being attentive and conscious of words and actions and their impact on others, listening to people with an open mind, treating all UBC Sauder community members equally and understanding diversity. Students who act disrespectfully toward others will be asked to leave the class and be marked as absent for the day. They may also be removed from a team, lose credit for in-class assessments and activities, or be asked to complete a group assignment individually.

## 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 <u>submitting only original work done by you and clearly</u> <u>acknowledging all sources of information or ideas</u> (including without limitation on-line sources, websites, and Artificial Intelligence tools, for example Chat) and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work nor should you help others to do the same. For example, it is prohibited to: share past assignments and answers with other students; work with other students on an assignment when an instructor has not expressly given permission to do so; or spread information of a class exercise or assessment. 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

Any work submitted must be your own original work, written without outside assistance or collaboration. Any use of generative artificial intelligence (AI), including ChatGPT, is not permitted 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 <u>UBC Academic Calendar</u>.

## 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>əỷəm (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)

Week	Class	Date	Topics	Reading(s) / Deliverable(s)	Assessments Due
One	1	Tues, Oct 31	<ul> <li>Course Overview</li> <li>Module 1 – Defining Risk Management &amp; Enterprise Risk Management (ERM)</li> <li>Definitions of Risk – Overview</li> </ul>	Refer to Canvas shell Nason and Chard (2018): Chapter(s) 1 & 3	
	2	Thur, Nov 2	<ul> <li>Module 1 – Defining Risk Management &amp; Enterprise Risk Management (ERM) (Cont)</li> <li>Risk Management Process Steps</li> <li>Enterprise Risk Management</li> <li>Governance of Risk Management</li> </ul>	Refer to Canvas shell Nason and Chard (2018): Chapter(s) 3 & 10	<ul> <li>Introducing case study (for next Tuesday): Risk Management at Wellfleet Bank: All That Glitters Is Not Gold</li> </ul>
Two	3	Tues, Nov 7	<ul> <li>Module 2 – Financial Risks</li> <li>Financial Risks for Corporations: Market, Credit, Liquidity, Operational, etc.</li> </ul>	Refer to Canvas shell	<ul> <li>In-class group case assignment discussion: Risk Management at Wellfleet Bank: All That Glitters Is Not Gold</li> </ul>



Week	Class	Date	Topics	Reading(s) / Deliverable(s)	Assessments Due
	4	Thur, Nov 9	<ul> <li>Module 3 – Financial Risk Management</li> <li>Financial Risk Management Approach, Strategies, and Process; Impact of Interest Rates, Foreign Exchange, and Commodity Prices</li> </ul>	Refer to Canvas shell	<ul> <li>Introducing case study (for next Tuesday): Enterprise Risk Management at Hydro One (A)</li> </ul>
Three	5	Tues, Nov 14	<ul> <li>Module 4 – Value at Risk (VaR)</li> <li>Understanding Value at Risk and How It's Computed (Historical, Parametric, and Monte Carlo VaR)</li> </ul>	Refer to Canvas shell Nason and Chard (2018): Chapter(s) 4	<ul> <li>In-class group case assignment discussion: Enterprise Risk Management at Hydro One (A)</li> </ul>
	6	Thur, Nov 16	<ul> <li>Module 5 – Financial Derivatives</li> <li>Financial Risk Tools: Futures, Forwards, Options, and Swaps</li> <li>Structured Finance, Securitization, and Structured Products (at a glance: What are they?, Types?, Benefits &amp; Risks, and more)</li> </ul>	Refer to Canvas shell	<ul> <li>Group VaR article (<i>see Canvas shell</i>)</li> <li>Introducing case study (for next Tuesday): FX Risk Hedging at EADS</li> </ul>

Week	Class	Date	Topics	Reading(s) / Deliverable(s)	Assessments Due
Four	7	Tues, Nov 21	<ul> <li>Module 6 – Hedging Strategies using Futures</li> <li>Hedging (Interest Rates, FX, and Commodities) using Futures - definition, meaning, strategies, and examples</li> </ul>	Refer to Canvas shell Nason and Chard (2018): Chapter(s) 5, 6, 7, & 9	<ul> <li>In-class group case assignment discussion: FX Risk Hedging at EADS</li> </ul>
	8	Thur, Nov 23	<ul> <li>Module 7 – Hedging Strategies using Swaps</li> <li>Hedging (Interest Rates, FX, and Commodities) using Swaps - definition, meaning, strategies, and examples</li> </ul>	Refer to Canvas shell Nason and Chard (2018): Chapter(s) 5, 6, 7, & 9	<ul> <li>Introducing case study (for next Tuesday): Metro do Porto - An Interest Rate Swap</li> </ul>
Five	9	Tues, Nov 28	<ul> <li>Module 8 – Hedging Strategies using Options</li> <li>Hedging (Interest Rates, FX, and Commodities) using Options - definition, meaning, strategies, and examples</li> </ul>	Refer to Canvas shell Nason and Chard (2018): Chapter(s) 5, 6, 7, & 9	<ul> <li>In-class group case assignment discussion Metro do Porto - An Interest Rate Swap</li> </ul>
	10	Thur, Nov 30	<ul> <li>Module 9 – Measuring Credit Risk</li> <li>Definitions, Analysis, and Examples (Credit Derivatives and Credit Risk Metrics)</li> </ul>	Refer to Canvas shell Nason and Chard (2018): Chapter(s) 8	



Week	Class	Date	Topics	Reading(s) / Deliverable(s)	Assessments Due
Six		Written during the exam week	Covers Modules 1 to 9 ( <i>excluding the</i> <i>discussed case</i> <i>studies</i> )	Multiple Choice Exam (Qualitative & Quantitative Questions)	