

COURSE INFORMATION

Course title:	Risk Management	Credits:	1.5
Course code:	BAFI 513	Class location:	HA 437
Session, term, period:	2021W1, Period 5	Class times:	M/W 10:00AM-12:00PM
Section(s):	001	Pre-requisites:	BAFI500 or BAFI580A
Course duration:	Nov 1 to Dec 11, 2021	Co-requisites:	None
Division:	Finance		
Program:	MBA		

INSTRUCTOR INFORMATION

Instructor:	Lorenzo Garlappi	Office location:	HA870
Phone:	604-822-8848	Office hours:	By appointment
Email:	lorenzo.garlappi@sauder.ubc.ca		

Teaching assistant:	Keling Zheng
Office hours:	By appointment
Email:	keling.zheng@sauder.ubc.ca

COURSE DESCRIPTION

Risk management is one of the fast growing and most dynamic fields in finance. Risk management is about taking risks intelligently, not necessarily eliminating all risk. A goal is to understand how much, and what types, of risk one faces and to shape the risks to which one chooses to be exposed while protecting oneself against risks one wishes to avoid. The concepts, analysis framework and types of solutions explored in this course can be used across industries, in corporations large and small, governments, and in a variety of financial institutions including banks and hedge funds.

COURSE FORMAT

Classes consist primarily of lectures, discussions, and presentations. Students will be responsible for understanding lecture material and engaging in class discussions and will also present the results of their own investigations/analysis in a class presentation and end-of-term paper on a topic of their choice.

LEARNING OBJECTIVES

By the end of this course, students should be able to analyze, apply and explain fundamental issues, concepts and methods in finance risk management

ASSESSMENTS

Summary

<u>Component</u>	<u>Weight</u>
In-class Presentation	25%
End-of-term paper	40%
Final quiz	25%
Class participation/discussions	<u>10%</u>
Total	<u>100%</u>

Details of Assessments

End-of-term paper / presentation

The final project consists of a real-world analysis of a risk management problem of your own choice. In the project you are expected to apply some of the tools discussed in class. You can work in **teams of at most three people (no exceptions)**. The team will be required to present a preliminary version of their project during the last week of class. Please consult with me as you choose your topic of investigation.

Final quiz

There will be a 1.5-hour final quiz. Logistics details will be provided in due time.

Participation

Please make every effort to attend the lectures and review the material beforehand. Come well prepared and ready to contribute to the lecture discussion.

LEARNING MATERIALS

Required:

Lecture notes posted on Canvas

Additional materials recommended but not required:

1. Robert McDonald: *“Derivatives Markets”* Third Edition, 2013.
2. **Software.** Real world risk management applications necessarily involve some familiarity with analytical tools and some programming skills. To get the most from this class I think it is important to become familiar with some common programming languages. I recommend two programming languages widely used in industry:
 - a. **R:** Open source statistical software. You should install R from <https://cran.r-project.org> and the R Studio IDE from <https://rstudio.com/products/rstudio/>
 - b. **Python:** You can install Python through the Anaconda distribution <https://www.anaconda.com/products/individual> and then install and launch the Python IDE Spyder. Alternatively, you can install Python directly from the [Spyder IDE website](#) Occasionally I might be using Jupyter notebooks which you can access through the Anaconda Navigator.

Missed or late assignments, and regrading of assessments

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

Academic Concessions

If extenuating circumstances arise, please contact the RHL Graduate School program office as early as reasonably possible, and submit an [Academic Concession Request & Declaration Form](#). 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 [UBC’s policy on Academic Concession](#).

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.

COVID-19 Policies for 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 [Academic Concession Request & Declaration Form](#).

If a student suspects possible COVID-19 infection, they should use the BC Ministry of Health’s [self-assessment tool](#), to help determine whether further assessment or testing for COVID-19 is recommended.

If a student is required to self-isolate (e.g., while waiting for test results), they should follow the steps above (stay home, email instructor(s) and program manager, submit an [Academic Concession Request & Declaration Form](#), and follow BC Health Guidance.

Students who are required to quarantine, should get in touch with their Program Manager to discuss the possibility of academic concessions for each impacted course. The Program Manager will work closely with your instructors to explore options for you to make up the missed learning.

COVID-19 Safety in the Classroom:

Masks: Masks are **required** for all indoor classes, as per the BC Public Health Officer orders. For our in-person meetings in this class, it is important that all of us feel as comfortable as possible engaging in class activities while sharing an indoor space. For the purposes of this order, the term “masks” refers to medical and non-medical masks that cover our noses and mouths. Masks are a primary tool to make it harder for COVID-19 to find a new host. You will need to wear a medical or non-medical mask for the duration of our class meetings, for your own protection, and the safety and comfort of everyone else in the class. You may be asked to remove your mask briefly for an ID check for an exam, but otherwise, your mask should cover your nose and mouth. Please do not eat in class. If you need to drink water/coffee/tea/etc, please keep your mask on between sips. Students who need special accommodation are asked to discuss this with the program office.

Seating in class: To reduce the risk of COVID-19 transmission, please sit in a consistent area of the classroom each day. This will minimize your contacts and will still allow for the pedagogical methods planned for this class to help your learning.

Visit the following website for the most recent updates regarding COVID-19 protocol on campus:
<https://students.ubc.ca/campus-life/returning-to-campus>

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 [DO NOT MODIFY THIS PARAGRAPH]

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 status as a First Nation, Metis, Inuit, or Indigenous person, 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.

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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. Students may not share class Zoom links or invite others who are not registered to view sessions.

ACKNOWLEDGEMENT

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the x^wməθk^wəy̓əm (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 class consultation)

Class	Date	Topic	Readings or Activities	Assessments due
Week 1	Nov 1 & 3	Introduction to risk management and derivatives	Read lecture notes	
Week 2	Nov 8 & 10	Forwards and Futures contracts	Read lecture notes	
Week 3	Nov 15 & 17	Option strategies and pricing/hedging	Read lecture notes	
Week 4	Nov 22 & 24	Value at risk	Read lecture notes	
Week 5	Nov 29 & Dec 1	Application Studies	Class presentations	Presentations
Week 6		no classes, end-of-term paper due 11:59pm on the last day of the exam period		End of term paper due