



Department of Finance
NUS Business School
National University of Singapore

FIN 3714 Financial Risk Management
TERM 1 2021/2022

Course Information

Day and Time: Wed 3PM-6PM
Location: TBA
Module Credit: 4

Instructor Information

Instructor: Sungjune Pyun
Office Hours: To be held virtually by appointment
There will be one long office hour few days before the final test
Office : BIZ1 7-61

Communication

E-Mail: sjpyun@nus.edu.sg

Email is the best way to contact me. Any questions directly related to course materials are to be written on the Q & A section of our course web page on LumiNUS. I subscribe to the forums, so there is no need to worry that your questions may be ignored. Any questions received by email may be ignored. Personal or administrative questions/requests should be sent by email and will generally be answered within two days (Please put course number [FIN3714] in the subject).

Textbooks

There are several recommended textbooks. I may provide supplementary material to read. I assume you have access to 1-3.

1. A financial calculator (e.g., Texas Instrument BA II Plus, **Required**)
2. Elements of Financial Risk Management (Second Edition), Peter Christoffersen (**C**) :
<http://www.sciencedirect.com/science/book/9780123744487>
3. The textbook used in your investment class
4. Risk Management and Financial Institutions, 5th edition, by Hull, Wiley (**H**)
5. Financial Institutions Management (A Risk Management Approach), 9th edition, by A. Saunders and M.Cornett, McGraw-Hill (**SC**)
6. Options, Futures, and Other Derivatives (Ninth Edition), by Hull, Pearson (**HD**)

Final Grades

Your class grade will be calculated based on the following weights:

One Test (Last week of class)	30%	
Weekly Task (Homework, Report, or Quiz)	35%	(weighted equally)
Group Project	25%	
Class Participation	10%	

Test (30%)

There will be one final open-book test on the last week of the semester (on the scheduled class time) and cover the entire material, including student presentations. Communication between students, as well as usage of the internet is disallowed. Exact details will depend on the university policy regarding Covid-19 as well as government restrictions. Details will be announced later in the semester.

Weekly Task (35%)

In this class, we will have weekly assignments. The nature of the assignments will be a combination of 1) an online quiz, 2) individual problem sets, or 3) a group report following a discussion of a pre-assigned topic. The primary goal of these assignments is primarily to engage in student participation. Hence, these assignments will be mainly graded based on whether sufficient effort is exerted for each topic. The nature of the assignment will be announced at least four days before the deadline. Expect about ten tasks total, which will be weighted equally. Also, note that at least half of the tasks will be on an individual basis.

Group Project (25%)

The group project consists of a presentation and a report. The project may be 1) a mini-case on recent risk management failures, 2) a subject of interest that is not covered in this class but is of your interest that you want to share with the rest of the class, or 3) an empirical analysis of the data applying the key concepts covered in this class. The presentations will take place in weeks 11 and 12. The exact details of the presentation will depend on the situation. Students should also be prepared to record your presentation and upload on LumiNUS, present it live on Zoom, or present it in class. Further details will be announced later in the semester.

Class Participation (10%)

Your presence (either online or offline) and participation in class are essential for gaining mastery of the material. Participation mainly consists of the sum of the following. 1) In-class or online engagement, including answering or asking questions 2) involvement in the online forum on LumiNUS, which will be quantified at the end of the semester 3) missing both offline and online lectures. Please do not come to class if you feel unwell. You will not be penalized for attending online zoom lectures, and there is no need to submit proof of missing a face-to-face lecture. Students are responsible for all missed work, regardless of the reason for the absence. It is also the absentee's responsibility to get all missing notes or materials.

Academic Integrity:

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge

the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

The University and School will not condone plagiarism. Students should adopt this rule - You have an obligation to make clear to the assessor, which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. Even if you are allowed to work with your classmates, you should give your classmates credit if you worked together. Plagiarism may result in a 'fail' grade, even when you did extremely well in other components. Additional guidance is available at:

<http://www.nus.edu.sg/registrar/administrative-policies/acceptance-record.html>

<http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct>

Online Module on Plagiarism:

<http://emodule.nus.edu.sg/ac>

Tentative Course Outline:

1. : Introduction to Financial Risk Management H.1, C.1, SC.7
2. : Stock and Bond Markets C.1, H.12
3. : Value-at-Risk Basics C.1, H.12, HD.22
4. : Monte-Carlo Simulations C.2, H.12,14, HD.22
5. : Historical Simulations and Backtesting C.2, H.12-13, HD.22
6. : Default Risk Basics H.6, 18-21, SC.10-11,24, HD.8,24-25
7. : Futures and Options Basics H.5, HD.19
8. : Risk Management Using Option Greeks H.8, 14, HD.19
9. : Case Study on Recent Crises