

## NATIONAL UNIVERSITY OF SINGAPORE

Department of Finance

### FIN3118/FIN3714: Financial Risk Management

(Semester 2, AY2021/2022)

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#### Consultation Hours

By appointment only. Please check the available appointment slots on LumiNUS Consultation.

#### Class Arrangement

The class will be arranged according to the policies and arrangements of NUS and NUS Business School.

#### Course Objectives

This module is an introduction to financial risk management (FRM). It covers basic concepts, techniques and practices with an aim of establishing a holistic understanding of the subject. It also serves as a preparation for more advanced study in subfields of FRM for those who wish to pursue graduate study or a professional career in FRM.

#### Prerequisites

- FIN3702/FIN3102 (Investment Analysis and Portfolio Management)
- Introductory-level familiarity with probability and statistics
- Basic understanding of Excel spreadsheet functions
- Financial calculator

#### Course Materials and Reference Books

The lecture notes will be posted on LumiNUS and the course content will be conveyed primarily through lectures. You are expected to check any updates and files on the LumiNUS system on a weekly basis. You are encouraged to use LumiNUS Forum for your questions and comments.

Reference books (in the order of author's name):

- Christoffersen, P. (2012). *Elements of financial risk management* (2<sup>nd</sup> edition). Academic Press.
- Hull, J. (2018). *Risk management and financial institutions* (5<sup>th</sup> edition). John Wiley & Sons.
- Saunders, A., Cornett, M. M., & Erhemjamts, O. (2021). *Financial institutions management: A risk management approach* (10<sup>th</sup> edition). McGraw-Hill Education.

These reference books (or earlier edition) are available at NUS Libraries, either via e-resource or in hard copy.

**Assessment: 100% Continuous Assessment (CA)**

(Subject to change if the pandemic situation changes)

CA Component	Weight
Class Participation	10%
Individual Tasks	30%
Group Project	30%
Term Test	30%
<b>Total</b>	<b>100%</b>

**1) Class Participation**

Class participation, from clarifying questions to creative and insightful comments, is greatly encouraged. Your active participation will transform this class into a great learning experience for everyone, including myself. Marks will be awarded not based on quantity but how much one contributes to the learning of the class. Contributions on *LumiNUS Forum* will also be rewarded with participation marks.

**2) Individual Tasks**

Individual tasks will be assigned through the semester, giving students the opportunity to practice the quantitative techniques and concepts presented. Students should complete these tasks independently.

**3) Group Project**

This project is group based. The deliverables of the project consist of a written report and a final presentation. 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 of your interest applying the key concepts covered in this class. 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.

**4) Term Test (in class)**

Term test covers all topics taught in the module. Students are to make sure that they are available to sit for the test.

### Academic Honesty & Plagiarism

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.

Plagiarism is “the practice of taking someone else's work or ideas and passing them off as one's own” (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule – You have the 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. In case of any doubts, you should consult your instructor.

Additional guidance is available at:

<https://www.nus.edu.sg/registrar/administrative-policies-procedures/undergraduate/acceptance-record#NUSCodeofStudentConduct>

Online Module on Plagiarism: <http://emodule.nus.edu.sg/ac/>

### Lesson Schedule **(Tentative)**

Week	Topic and Activity	Deliverable (end of week)
1	Risk Management: An Overview	
2	Market Risk: How Traders Manage Their Risks	
3	Volatility and Correlations	
4	Value at Risk and Expected Shortfall	
5	Simulations and Model-Building Approach	
6	Scenario Analysis and Stress Testing	
<b>Term Break</b>		
7	Credit Risk	
8	Operational Risk and Liquidity Risk	
9	Financial Crises and Regulatory Policy	
10	Wrap up	Project Report
11	<b>Term Test (in class)</b>	
12	<i>Project Presentation</i>	
13	<i>Project Presentation</i>	