

FIN3102/FIN3702: INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

FIN3102A/FIN3702A	FIN3102B/FIN3702B
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Session: Semester 1, 2020/2021

Course objectives

The objective of this course is to develop key concepts in investment theory from the perspective of a portfolio manager, and to apply such concepts using real financial data. Topics to be covered include portfolio optimization and asset pricing theories, as well as their applications to problems in modern financial practice. This course also explores the application of various financial instruments in investment management and introduces the basic techniques of portfolio performance evaluation.

Prerequisites

- Finance (FIN2004)
- Statistics (BZ1008/ST1131A)
- Basic understanding of Excel Spreadsheet functions
- Financial calculator

Course textbook

The reference noted below has been placed in the RBR section in HSSML:

Bodie, Zvi, Alex Kane, Alan Marcus and Ravi Jain, 2014, *Investments: Asia Global Edition*, McGraw Hill, ISBN 978-007-126228-6.

Alternatively, **Bodie, Zvi, Alex Kane, Alan Marcus, 2021, *Investments: 12th International Student Edition*, McGraw Hill, ISBN 978-1-260-57115-7.**

All other course materials, journal articles, data files, and information pertaining to FIN3102/FIN3702 will be posted on the LumiNUS. You are expected to check any updates and files on the LumiNUS system on the regular basis. You are encouraged to use LumiNUS discussion forum for your questions and comments. I encourage you to read regularly the financial news from Wall Street Journal or the Financial Times.

Given the onset of the COVID-19 pandemic, face-to-face lectures might be cancelled or shifted to online teaching via ZOOM in compliance with the government and school policies. Please pay attention to the announcements made in LumiNUS during the semester. Students who attend the physical class are required to take their temperature before entering into the classroom and wear a mask throughout. Students who do not abide to these rules will not be allowed to enter into the classroom. Students are strongly encouraged to bring a laptop for hybrid learning in class.

Assessment Methods

Class Participation	10%
Group Homework	20%
Group Project	25%
Test 1 (3 October 2020)	20%
Test 2 (13 November 2020)	20%
Ethics	5%
Total	100%

I. Class participation (10%)

Credits will be given for active participation in class. Students will also be prompted with questions on any additional topics and issues discussed in class.

II. Group Homework (20%)

Group homework assignments will be given to students. The submission details are given in the schedule section. Groups will be selected to present their answers in class in the specified tutorial week. Please include a cover page for the submitted assignment with student names, section, group and assignment number (i.e., "A1_Group1_Homework1"). Peer evaluation will be conducted.

III. Group Project (25%)

Group project is an online trading game from Week 2 to Week 11. Each group shall submit the following three components. 1) One-page initial report on the opening of trading account and the initial positions in Week 3 in class. 2) One-page progress report about the interim trading positions held and profits/losses made in Week 8 in class. 3) The PowerPoint slides (not exceeding 10 slides) by Friday noon (at 12pm) in Week 11 via LumiNUS. Week 12 will be the presentation week. Each group will be given 10 minutes for the presentation and 5 minutes for Q&A. Peer evaluation will be conducted.

IV. Test 1 (20%)

A 2-hour test will be held on **3 October (Saturday) from 4pm to 6pm**. The contents of Test 1 cover the materials from Topic 1 to Topic 6.

V. Test 2 (20%)

A 2-hour test will be held on **13 November (Friday) from 6pm to 8pm**. The contents of Test 2 cover the materials from Topic 7 to Topic 9.

VI. Investment Ethics (5%)

There will be online materials for study of Ethics and a quiz on the materials in LumiNUS. This is in compliance to NUS being a CFA affiliated institution. More details will be posted on LumiNUS.

Consultation Hours

To be determined.

Main Topics:

Topic 1: Introduction (Chapter 1 to 5)

1. Investment environment
2. Different asset classes
3. How securities are traded
4. Investment companies
5. Risk & Return

Topic 2: Portfolio Theory (Chapter 6 to 7)

1. Determine risk tolerance
2. Measure portfolio risk and return
3. Identify investment opportunity set
4. Optimal asset allocation

Topic 3: Equilibriums Asset Pricing Models (Chapter 8, 9 & 10)

1. CAPM
2. APT
3. Applications

Topic 4: Efficient Market Hypothesis and Behavioral Finance (Chapter 11 & 12)

1. Forms of Market Efficiency
2. Tests of Market Efficiency
3. Implications of Efficient Capital Markets
4. Behavioral Finance and Empirical Evidence

Topic 5: Portfolio Management (Chapter 24)

1. Passive investment
2. Active investment
3. Performance measure

Topic 6: Security Analysis (Chapter 17 & 18)

1. Macroeconomic Analysis
2. Industry Analysis
3. Fundamental Analysis
4. Technical Analysis

Topic 7: Bond Investment (Chapter 14, 15 & 16)

1. Bond features
2. Bond pricing and yields
3. Interest rate determinants
4. Term structure theories
5. Duration
6. Convexity
7. Bond investment

Topic 8: Options & Futures (Chapter 20, 21, 22, & 23)

1. Overview of derivatives
2. Options and Futures
3. Investment with derivatives

Topic 9: Investment in Singapore

Schedule:

Time	Contents
Week 1	Topic 1
Week 2	Topic 2
Week 3	Topic 3 One-page initial report for the group project is due in class.
Week 4	Topic 4
Week 5	Topic 5
Week 6	Topic 6 Homework 1 is due on 18 September 2020 (Friday) 12 noon in hard and soft copies (via LumiNUS).
Recess Break	
Week 7	Tutorial 1 and Review for Test 1 Test 1 is on 3 October 2020 (Saturday) from 4pm to 6pm.
Week 8	Topic 7 (I) One-page interim report for the group project is due in class.
Week 9	Topic 7 (II)
Week 10	Topic 8 (I)
Week 11	Topic 8 (II) and Topic 9 Project PowerPoint slides are due on 30 October 2020 (Friday) 12 noon (via LumiNUS).
Week 12	Project Presentation Homework 2 is due on 6 November 2020 (Friday) 12 noon in hard and soft copies (via LumiNUS).
Week 13	Tutorial 2 and Review for Test 2 Test 2 is on 13 November 2020 (Friday) from 6pm to 8pm.

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:

<http://nus.edu.sg/osa/resources/code-of-student-conduct>

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