FIN3102C/FIN3702C: INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

Instructor: Mr. Winston Low
BIZ2 #02-18
Email: bizljhw@nus.edu.sg

Session: Semester 1, 2019/2020

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/FIN2704)
- Basic understanding of Excel Spreadsheet functions
- Use of 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.

All other course materials, journal articles, data files, and information pertaining to FIN3102C/FIN3702C will be posted on LumiNUS. You are expected to check any updates and files on the LumiNUS system on the regular basis. You are encouraged to read the financial news from Bloomberg or The Financial Times regularly.

Assessment Methods

Class Participation	10%
Group Homework Assignments	10%
Group Project	25%
Test 1 (17 September 2019)	20%
Test 2 (12 November 2019)	30%
Ethics	5%
Total	**100%**

I. Class participation (10%)

Credits will be given for active participation in class. (*Warning: Zero mark will be given for non-participation throughout the course.)* Students will also be prompted with questions on any additional articles discussed in class.

II. Group Homework Assignments (10%)

A total of two assignments will be given to students. All groups will submit their answers in class in the specified week. Please put a cover page on the assignment to include student names, group number and assignment number (i.e., "Group#_Assignment#").

III. Group Project (25%)

Each group will complete a 10-page report (inclusive of appendices) and a 2-page journal detailing the challenges faced and lessons learnt in **Word/PDF** document (with font size 12), and also a 15-slide presentation deck in **PPT/PDF** document. The cover page (including student names and group number) is not within the page limit. The project deliverables shall be submitted through LumiNUS electronically. Please zip all deliverables into a folder and label it in the following format: "Group#_Case#" with the group number and case number. The final presentation is scheduled on week 11. Each group will have 15 minutes for their presentation.

IV. Test 1 (20%)

A 100-minute closed-book test will be held on **17 September 2019 (Tuesday).** You are allowed to bring two calculators and a <u>one-sided A4-sized Note</u> for Test 1. The examinable syllabus of Test 1 covers everything up to Topic 4.

V. Test 2 (30%)

A 2-hour closed-book test will be held on **12 November 2019 (Tuesday)**. You are allowed to bring two calculators and a <u>two-sided A4-sized Note</u> for Test 2. The examinable syllabus of Test 2 covers everything taught in the entire course.

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.

Main Topics:

Topic 1: Introduction (BKMJ 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 (BKMJ 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: Equilibrium Asset Pricing Models (BKMJ Chapter 8, 9 & 10)
1. CAPM
2. APT
3. Applications

Topic 4: Efficient Market Hypothesis and its Applications (BKMJ Chapter 11 & 12)
1. Forms of Market Efficiency
2. Tests of Market Efficiency
3. Implications of Efficient Capital Markets
4. Technical Analysis

Topic 5: Portfolio Management (BKMJ Chapter 24)
1. Passive investment
2. Active investment
3. Performance measure

Topic 6: Security Analysis (BKMJ Chapter 17 & 18)
1. Macroeconomic Analysis
2. Industry Analysis
3. Fundamental Analysis

Topic 7: Bond Investment (BKMJ 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

Schedule:

Week 1 (13/8):	Topic 1
Week 2 (20/8):	Topic 2
Week 3 (27/8):	Topic 3
Week 4 (3/9):	Topic 4
Week 5 (10/9):	Assignment 1 & Test 1 Review
Week 6 (17/9):	**Test 1**
(21/9 – 29/9):	*Recess Break*
Week 7 (1/10):	Topic 5
Week 8 (8/10):	Topic 6
Week 9 (15/10):	Topic 7
Week 10 (22/10):	Assignment 2
Week 11 (29/10):	Project Presentations
Week 12 (5/11):	Final Review
Week 13 (12/11):	**Test 2**

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

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