

Module Outline

Module Code : FIN 3702 / FIN 3102
Module Title : **INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT**
Class Date : From 11/5/2020 To 30/6/2020
Semester : Special Term 1, Academic Year 2019-2020
Faculty : Emir Hrnjic, PhD
Department : Finance
Email : emir@nus.edu.sg
URL : <http://www.emirhrnjic.com>

Overview

This is an introductory course in investment analysis. It will focus on the analysis of stocks, fixed income securities (such as bonds), and options.

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. 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

Module Objectives

The course should help to lay the foundation for careers in financial analysis, financial planning, investment banking, and portfolio management. The topics covered in this course will overlap with some of the topics for the Chartered Financial Analysts (CFA) examinations. More generally, this course should prove useful for the management of your personal investments.

Assessment Components	Weightage
Class participation (individual)	10%
Case critiques and tutorials (group)	15%
Case Analysis and Presentation (group)	25%
Test 1 (individual)	20%
Test 2 (individual)	30%

Tentative Schedule and Outline (There might be deviations from the schedule)

		Readings/Topics	Reminders:
1	May 12	Course overview Risk, return, and cost of capital (Ch. 5)	
2	May 14	Portfolio theory and CAPM (Ch. 9) In-class exercise: Lyxor	Bring a laptop to class Submit in-class exercise 24 hours after the end of the class
3	May 19	Investment Companies (Ch. 4) Portfolio Performance Evaluation (Ch. 24)	
4	May 21	Portfolio Performance Evaluation (Ch. 24) – cont'd Review for Test 1	• <u>Tutorial 1</u>
5	May 26	TEST 1	
6	May 28	Bond Prices and Yields (Ch. 14) The Term Structure of Interest Rates (Ch. 15)	
7	June 2	Managing Bond Portfolios (Ch. 16) Options Markets: Introduction (Ch. 20)	Assignment due 24 hours before the beginning of the class: • <u>Case 1</u> (upload a soft copy to LumiNUS). Case reports to be made available to all non-presenting student groups.
8	June 4	Option Valuation (Ch. 21) In-class exercise (<i>if time permits</i>)	Assignments due 24 hours before the beginning of the class: • <u>Case 2</u> (upload a soft copy to LumiNUS). Case reports to be made available to all non-presenting student groups.
9	June 9	Case 1 presentation and discussion	Assignments due 24 hours before the beginning of the class: • <u>Case 3</u> (upload a soft copy to LumiNUS). Case reports to be made available to all non-presenting student groups. • <u>Critique of Case 1</u> from all non-presenting student groups.
10	June 11	Case 2 presentation and discussion	• <u>Critique of Case 2</u> from all non-presenting student groups.
11	June 16	Case 3 presentation and discussion	Assignments due 24 hours before the beginning of the class: • <u>Critique of Case 3</u> from all non-presenting student groups. • <u>Tutorial 2</u>
12	June 18	TEST 2	

Textbook and Other Resources

Required textbook: Zvi Bodie, Alex Kane, Alan J. Marcus, *Investments*, 12th Edition, McGraw-Hill.

The readings from the text will be supplemented by other materials such as case studies, relevant news articles, and academic journal articles. To get the most out of the course, students should make an effort to be well-informed about current developments in the financial markets by reading publications such as *The Wall Street Journal*, *Financial Times*, or the business section of *The Straits Times*.

Course Format

The lectures will focus on the major points introduced in the textbook. The lectures will provide general background information on the topics covered and may not necessarily be specific to the homework problems and cases assigned. You are encouraged to ask questions and to be an active participant in class. You are expected to attend class regularly and to come to class on time.

Students are expected to access the course page on LumiNUS for course related information including announcements and PowerPoint slides of the lectures.

Contact

I encourage you to contact me through email for relatively straightforward queries. For more in-depth discussion, you may meet me in my office. But to ensure that I am available for consultation, I recommend that you make an appointment via email.

List of Major Topics

The following is a list of the major topics that are proposed to be covered in this course. Based on the progress of the class, minor changes (additions or deletions) may be made to this list.

- Basics of financial investments
 - ◆ How securities are traded
 - ◆ Implications of efficient capital markets
 - ◆ Portfolio theory
- Portfolio Management
 - ◆ Mutual funds, hedge funds, and other investment companies
 - ◆ Passive and active portfolio management
 - ◆ Portfolio performance evaluation
- Analysis of fixed income securities
 - ◆ Bond prices and yields
 - ◆ The term structure of interest rates
 - ◆ Bond duration and convexity
 - ◆ Managing bond portfolios
- Analysis of derivative securities
 - ◆ Introduction to options
 - ◆ Option strategies
 - ◆ Option valuation using binomial option pricing and Black-Scholes

Attendance and Class Participation

You are expected to attend each class and you are responsible for all materials and announcements made in class. All students should display name sign during the class.

Simply attending the class is not enough to get a favourable class participation grade. In evaluating class participation, I will look for comments that are thoughtful and lead the discussion forward. Participation during case studies is extremely important.

Even though the “real world” can sometimes be less forgiving, the classroom is a laboratory whose raison d'être is to serve your learning needs. This means that you should definitely ask questions during class if something is not clear.

In line with the “laboratory” theme, some of the more quantitatively involved topics will be introduced in a learning-by-doing manner. That is, after I demonstrate how to tackle a sample problem, you will get the chance to work one out for yourselves during class time.

Tests

Tests will be a combination of multiple-choice questions and problems. Tests will cover all assigned readings and problems as well as material covered and discussed in class. The best way to prepare for the tests is to do the readings and the assignments and attend class. All questions will be designed to test your analytical and problem-solving skills as well as your knowledge of conceptual and qualitative material.

The second test will be cumulative.

You are allowed to have a calculator, a reference sheet, writing material (e.g., pens, pencils), and nothing else at your desk for the tests. The reference sheet should be **8”x11”**, and you are allowed to write anything you want on both sides of it.

If you miss test 1, you will not be given a make-up test – your test 2 will have a cumulative weight of two tests.

Case Studies:

We will utilize case studies to further explore topics presented in the lectures as well as to introduce new ones. Case studies aim to document a real-life business challenge, where the reader is presented with much of the relevant information needed to make a decision, but also with the kinds of superfluous references, ambiguity, and incompleteness one encounters in the real world.

Prior to discussing each case in class, you will be given a list of questions that will guide your preparation. You should come to class prepared to engage in a meaningful discussion.

Neither lecture notes nor Excel spreadsheets will be posted for the case studies after the in-class discussion. It is your responsibility to take notes during the in-class discussion.

Case presentations and discussions

Each class will be divided into (up to) 9 groups for case assignments. We will cover 3 case studies during the semester. Out of the 9 groups, there will be 3 primary groups for each case. Groups 1A, 1B, and 1C will take on the primary responsibility for case 1; groups 2A, 2B, and 2C for case 2; and groups 3A, 3B, and 3C for case 3. The 3 primary groups for the case will each submit a comprehensive report **NOT** exceeding overall total of **15 pages including cover page, main body, tables, references, and appendices** by the due date in both hard and soft copies. When one group is presenting (for example, 1A), other primary groups (1B and 1C) are not allowed to attend. **Case studies' reports are due 8 days before the presentation.** For example, case 1 submission is due on June 1 at 6 pm.

The report must be typewritten, A4 size paper, double-spacing, font 12, normal margins. The soft copies will facilitate distribution of reports to the other 6 non-primary groups. The 6 non-primary groups are each required to submit a short critique of the reports. The critique is limited to two pages (A4 sized, font 12, double spacing) and the hard copy must be submitted.

During the case presentation, the 3 groups with primary responsibility will be given 15-20 minutes each to present their analysis plus 10-15 minutes for discussion and Q&A. All students are expected to actively participate in the case discussions.

Group members will be asked to evaluate other members of their group through peer review forms.

The groups' assignment is as follows:

Case	Presenting (Primary) Group	Critique (Non-Primary) Group
1	1A	2A, 3A
1	1B	2B, 3B
1	1C	2C, 3C
2	2A	1A, 3A
2	2B	1B, 3B
2	2C	1C, 3C
3	3A	1A, 2A
3	3B	1B, 2B
3	3C	1C, 2C

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:

1. <http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct>
2. Online Module on Plagiarism: <http://emodule.nus.edu.sg/ac/>