

FIN3702C – INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT AY2024/2025 Semester 2

COURSE DESCRIPTION

This is an introductory course in financial investments and portfolio management. It provides a comprehensive coverage of basic concepts, theories, applications and decision-making rules in financial investment. Topics 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

- FIN2704 or FIN2704X
- Basic understanding of Excel Spreadsheet functions and/or the use of a financial calculator.

INSTRUCTOR

Mr. Winston Low
Office: BIZ2 #02-17

Email: winstonlow@nus.edu.sg

COURSE MATERIALS

Recommended Texts:

Investments (13th Edition) by Bodie, Zvi, Alex Kane & Alan Marcus, 2024
McGraw ISBN 978-1-264-41266-2.

Investments Analysis & Management (14th Edition) by Jensen, Jones 2019
Wiley ISBN 978-1-119-66756-8

All other course materials and information will be posted on Canvas. You are expected to check any updates and files on the Canvas system on the regular basis. You are encouraged to read the financial news regularly.

COURSE ASSESSMENT

| | |
|---------------------|-------------|
| Class Participation | 10% |
| Online Quizzes | 10% |
| Test 1 | 30% |
| Test 2 | 20% |
| Group Project | 25% |
| Ethics | 5% |
| Total | 100% |

I. Class participation (10%)

Both class preparation and participation are important. The classroom is a great place to test and enhance your understanding of the material by asking and answering questions. It will be hard to contribute to the discussions if you are unprepared. I strongly encourage you to prepare for class.

Class participation, from clarifying questions to insightful comments, is greatly encouraged. Your active participation will transform this class into a great learning experience for everyone, including myself.

II. Online quizzes on Canvas (10%)

There will be online quizzes posted on Canvas each week as a means of reviewing the material covered for that topic.

Marks are accorded as long as students attempt each quiz on time.

III. Group Project (25%)

Each group will complete **ONE** project and submit an *Excel* workbook and a presentation deck in *PPT/PDF* document. The project deliverables shall be submitted through Canvas electronically. Please zip all deliverables into a folder and label it in the following format: "Group#_Case#" with the section number, group number and case number. The final presentation is scheduled on week 13.

Each group member is expected to make a significant contribution to the solution of the project and will receive the same grade for the assignment. Peer appraisals will be done to get feedback of each team member's contribution.

More details will be provided in class before the term recess.

IV. Test 1 (30%) and Test 2 (20%)

A closed-book digital assessment will be held in **Week 7 and Week 12 (TBC)**

You may bring up to **TWO** calculators and **ONE double-sided A4-sized help sheet** for these tests. The examinable syllabus of each test will be finalized closer to each test date.

V. Investment Ethics (5%)

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

Lecture 1: Introduction (BKM Chapter 1–5)

1. Different asset classes
2. How securities are traded
3. Risk & Return

Lecture 2: Portfolio Theory (BKM Chapter 6–7)

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

Lecture 3: Asset Pricing Models (BKM Chapter 8–10)

1. CAPM
2. APT
3. Single Index Model
4. Multi-Factor Model

Lecture 4: Efficient Market Hypothesis & Behavioral Finance (BKM Chapter 11, 12.1)

1. Forms and Tests of Market Efficiency
2. Passive Investment and Active Investment
3. Behavioral Biases and Limits to Arbitrage

Lecture 5: Performance Evaluation (BKM Chapter 24)

1. Performance Measurement for Passive Investment and Active Investment
2. Style Analysis

Lecture 6: Security Analysis (BKM Chapter 17–18 & 12.2)

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

Lecture 7: Introduction to Bonds (BKM Chapter 14–16)

1. Bond features, pricing and yields
2. Term Structure theories

Lecture 8: Bond Portfolio Investment (BKM Chapter 14–16)

1. Duration and Convexity
2. Bond Portfolio Investment Strategies

Lecture 9: Options & Futures (BKM Chapter 20–23)

1. Futures and Forwards mechanics and pricing
2. Investment with Futures and Forwards
3. Options strategies
4. Options valuation

Tentative Schedule (Subject to Change):

| Week | Lesson | Topic | Deliverable |
|--------------------|--------------------------------|--|---|
| 1 (16/1) | Lecture 1 | Introduction | |
| 2 (23/1) | Lecture 2 | Portfolio Theory | |
| 3 (30/1) | No lesson (CNY holiday) | | |
| 4 (6/2) | Lecture 3 | Asset Pricing Models | |
| 5 (13/2) | Lecture 4 | Efficient Market Hypothesis & Behavioral Finance | |
| 6 (20/2) | Lecture 5 | Performance Evaluation | |
| <i>Recess Week</i> | | | |
| 7 (6/3) | No lesson | Test 1 | <i>Lectures 1-5</i> |
| 8 (13/3) | Lecture 6 | Security Analysis | |
| 9 (20/3) | Lecture 7 | Introduction to Bonds | |
| 10 (27/3) | Lecture 8 | Bonds Portfolio Investment | Group Project (27 th Mar 5pm) |
| 11 (3/4) | Lecture 9 | Options and Futures | |
| 12 (10/4) | No lesson | Test 2 | <i>Lectures 6-9</i> |
| 13 (17/4) | Group Presentations | | |

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>

<https://nus.edu.sg/osa/docs/default-source/osa-doc/resources-and-policies/code-of-student-conduct.pdf>