Course Outline

Program	: BBA
Course Code	: FIN3702A
Course Title	: Investment Analysis and Portfolio Management
Semester	: 2, Academic Year 2025–26
Faculty	: A/P Emirhan İlhan
Department	: Finance
E-mail	: ilhan@nus.edu.sg
Office Hours	: By Appointment
Office	: BIZ1 #07-77B
URL	: https://emirhanilhan.github.io
Time	: Fri 12:00 – 15:00 (Section 1) Fri 15:00 – 18:00 (Section 2)
Venue	: BIZ1 #03-01

1 Overview

This course is designed to provide a sound foundation for the fundamental concepts in investments. Students who master the course material will acquire the analytical tools and financial theory necessary for making investment decisions and understanding the paradigms by which financial securities are valued. You will learn about portfolio optimization, equilibrium asset pricing models, efficiency of capital markets, and how to value financial securities such as equities, bonds, futures, and options.

Some parts of the course are highly quantitative and rely heavily on analytical tools and economic theory developed throughout. When appropriate, I will be sharing applications of concepts we talk about in Excel and Python throughout the semester. I will review any Excel needed for the class, but some prior experience with Excel will definitely be useful.[1]

I will go over certain concepts as reminders throughout the course when necessary. Nonetheless, it is highly recommended that students enrolled in this course should have successfully already completed courses such as FIN2704 – Finance, ACC1702 – Financial Accounting, and BZ1008 – Statistics.

2 Course Objectives

The overarching objective is for you to become conversant in how to think about investments and portfolio management by the end of this course. You will also develop competence in how to collect data related to different asset classes and analyze them, use such analysis to identify the "optimal" portfolio for a given investor, and evaluate such portfolios' performance. More generally, the topics covered in this course will overlap with some of the topics for the Chartered Financial Analysts (CFA) exams and more generally, they should prove useful for the management of your personal investments.

[1] Prior experience with Python would also be useful as it would make your learning experience richer, but any use of Python for the course is strictly optional.

3 Assessment

Your final grade will be based on the following assessment components:

Assessment	Weight
Homeworks	20%
In-class Quizzes	20%
Final Exam	45%
Class Participation	10%
Ethics Quiz (Online)	5%
Total	100%

3.1 Homeworks (20%)

There will be four homework assignments posted on Canvas throughout the semester. Each homework will be open for approximately one week, and must be submitted by 11:59 p.m. on the stated due date.

- The purpose of the homeworks is to help you stay current with the course material and prepare for upcoming assessments. Assignments will typically include numerical problems and multiple-choice questions based on lecture content.
- Homeworks are intended to be completed independently, but you are welcome to discuss concepts with your classmates if it enhances your understanding.
- You will have ***one attempt only*** for each homework, and all submissions are final. There is no time limit once you open the assignment; you can save your work and continue editing until the deadline before you click '*Submit*', but you cannot reopen an assignment after submission.

  It is strongly recommended that you keep your calculations and answers in a separate file or notebook as a backup.

3.2 In-class Quizzes (20%)

There will be **four quizzes** throughout the semester, held during our regular lecture time, Tentatively, they are scheduled for Week 3, Week 6, Week 9, and Week 12. I will remind you in class or on Canvas one week in advance.

Only your ***best two quiz scores*** will count toward your final grade. This rule is designed to give you flexibility in case you are unwell or otherwise unable to attend a quiz. For example, if your scores are 100, 80, 80, and 90, we will keep 100 and 90 as the valid scores, giving you 19%[2] out of the 20% allocated to quizzes. There are *no make-up quizzes*, without exception.

- Each quiz will consist of one question (likely with subparts), completed on paper provided in class.
- You may use only pen/pencil, paper, and a calculator of your choosing. **No cheat sheets** or other materials are allowed.

[2] Calculated as $\frac{(100+90)}{2} \times 0.2 = 0.19$.

- Questions will be primarily **conceptual**. If calculations are required, **all necessary formulas will be provided** on the quiz.
- You will have approximately **15-20 minutes** to complete each quiz.
- Quizzes will occur **during the lecture** and may begin **at the start or mid-lecture**. Please arrive on time.

3.3 Final Exam (45%)

The closed-book final exam is scheduled for Monday, 04 May 2026, at 1:00 p.m. The exam venue will be announced later in the semester.

- The exam will last 2 hours and will cover all material taught in the course.
- The exam will include a mix of:
  - numerical problems,
  - true/false questions,
  - multiple-choice questions, and
  - short essay or short-answer questions.
- The style and difficulty of questions will be similar to those encountered in homeworks and quizzes.
- You may bring one *A4 cheat sheet* and you may use *both sides*.
  - The sheet may be printed, handwritten, or a combination of both. Completely up to you.

The exam will be conducted over Examplify and therefore, you should bring your own device with Examplify installed on the test day.[3] You will have access to a calculator and a spreadsheet on Examplify, but you can also bring a calculator of your choosing if you wish.

- Note that the Examplify spreadsheet are Excel-like, but only includes functions that come with Excel by default.
- Also note that the copy–paste functionality is disabled on Examplify spreadsheets. Meaning, you cannot copy your answer from the spreadsheet into a number box within the question.

3.4 Class Participation (10%)

I want you to actively participate in class discussions. Your active participation will transform the course into a great learning experience for you, your peers, and myself. Participation can range from asking clarifying questions to making insightful comments, leading the discussion forward. While I will not formally keep track of attendance, it goes without saying that the lack of attendance can be detrimental to your class participation grade, but attendance alone will not necessarily convert into a favorable class participation grade either.

I also encourage you to use the '***Discussions***' function on Canvas. More often than not, a question you may have about the course content is a question many will have. Both our teaching assistant and I will

[3] See here for instructions on how to install it.

monitor the Discussions tab on a regular basis and I view your interactions with your classmates in this manner favorable for your class participation grade.

Note that points awarded are at my discretion and based solely on my opinion of your contribution to class discussions.

3.5 Ethics Quiz (5%)

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

You will receive an email during the semester at some point about these materials and the quiz. That said, I am not personally in charge of the materials or the quiz.

4 Schedule and Outline

The lectures will take place on every Friday in BIZ1 #03-01. Lectures will start at 12:00 for section 1 and at 15:00 for section 2.

- 3 April 2026 is Good Friday and as such, we will not have a lecture on this date.
- We will cover 7 topics, each taking approximately one or two lectures. These are:
  - Prerequisites and introduction.
  - Portfolio theory.
  - The capital asset pricing model (CAPM).
  - The efficient market hypothesis, anomalies, and multifactor models.
  - Performance measurement.
  - Fixed income.
  - Derivatives (futures and options).

5 General Guide & Reading

The reference textbook will be Bodie, Kane and Marcus (2021) (henceforth, BKM). The slides I use will closely follow the textbook, but there will still be extra material we cover in the slides and lectures overall. While I endeavor to make the slides as complete as possible, taking notes in the class is still going to be very important as the slides are inevitably incomplete. Homeworks and all other course materials will be posted on Canvas and therefore, you are expected to regularly check any updates and files on Canvas.

6 Course Format

The lectures will focus on the major points introduced in the textbook. They will provide general background information on the topics covered and may not necessarily be specific to the homework problems and cases assigned. Prior to class you should read the relevant material in the textbook, the slides, and any additional assigned readings. 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. However, I will not be taking attendance. If you're missing a class because of medical reasons or otherwise, you do not have to send me a medical certificate or reasons for your absence. That said, you are expected to catch up through self-study in those cases.

You are expected to access the course page on Canvas for course related information including announcements and slides of the lectures.

7 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.

It is also important to highlight that the lecture materials, including any sort of assessments provided to students and the University takes a strict view of violation of intellectual property and copyright laws as stated in the NUS Student Code of Conduct. Any student found in violation of such misconduct may be subject to disciplinary action by the University.

Additional guidance is available at: Acceptance Record and NUS Student Code of Conduct.

References

Bodie, Zvi, Alex Kane, and Alan J. Marcus. 2021. Investments 12th Edition. McGraw-Hill.