

# Course Outline

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<b>Program</b>	: BBA
<b>Course Code</b>	: FIN3702A
<b>Course Title</b>	: Investment Analysis and Portfolio Management
<b>Class Date</b>	: From 16/1/2025 To 25/4/2025
<b>Semester</b>	: 2, Academic Year 2024-25
<b>Faculty</b>	: A/P Emirhan İlhan
<b>Department</b>	: Finance
<b>E-mail</b>	: <a href="mailto:ilhan@nus.edu.sg">ilhan@nus.edu.sg</a>
<b>Office Hours</b>	: By Appointment
<b>Office</b>	: BIZ1 #07-77B
<b>URL</b>	: <a href="https://emirhanilhan.github.io">https://emirhanilhan.github.io</a>
<b>Time</b>	: Thu 12:00 – 15:00 (Section 1) Thu 15:00 – 18:00 (Section 2)
<b>Venue</b>	: BIZ1 #03-02

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## 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.<sup>1</sup>

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

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<sup>1</sup>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.

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.

### 3 Assessment

Your final grade will be based on your performance in class participation (10%), homeworks (20%), a midterm test (20%), a final test (30%), and a flipped class project (20%). The table below summarizes the different components accordingly.

Assessment	Weight
Class Participation	10%
Homeworks	20%
Flipped Class Project	15%
Midterm Test	25%
Final Test	30%
Total	100%

#### 3.1 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.

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

#### 3.2 Homeworks (20%)

I will assign four homeworks throughout the semester on Canvas. You will have around one week to complete each homework and submit your answers by 11:59pm of the due date.<sup>2</sup> The planned due dates for each homework are shown in the schedule section below.

- These homeworks serve the purpose of ensuring that you keep up with the materials covered in the class and prepare you for the upcoming tests. Each homework will primarily consist of numerical problems as well as multiple choice questions.
- While these homeworks are designed for you to individually complete, feel free to discuss the questions with your classmates if you think it will improve your learning experience.

<sup>2</sup>The exact due dates and length are subject to change.

- Note that you will only have *one chance* to submit these homeworks and your submissions are final. However, there is no time limit on the homeworks. You can start them on Canvas and come back to them as you wish before the due date, but it's also a good idea to keep a log of your workings and answers offline.

### 3.3 Flipped Class Project (15%)

You will prepare a report as a group centered around a news piece or an academic article broadly related to the topics we cover in class. The main goal of the report is for you to teach us (your peers/me) something. Thus, only repeating what we discussed in the class or picking articles closely resembling the articles we covered in the classroom is not necessarily a good strategy to score high points. Instead, this assignment is an opportunity for you to demonstrate that you have become conversant in the topics and concepts we discussed in class and developed your critical thinking skills.

This is a creative exercise and it can take many different forms. It could be a straightforward report, or take the form of a forum topic where a student asks a question and others comment on it (e.g., Reddit or Stackoverflow post), a SeekingAlpha article and comment section, an X thread, a blog post, or else. Use your imagination.

- In the beginning of the course, I will activate the Canvas module for forming groups and will ask you to form groups of 5-6 people.
- Next, you will find a news article, an academic paper, a video, or the like that you can use as a springboard in your report.
- The report will be due before the final test (tentatively April 16th). However, you can submit your report when it's ready and given that you may be busy with homeworks and preparing for the final test, I recommend that you start working on this report as soon as you are able during the semester.
- I will post a detailed rubric about the formatting of your report and how I will grade it. In short, your report needs to be double-spaced with a font size of 11 and you need to use Aptos, Calibri, or Helvetica as the font type. You are allowed 200 words per person in your group but all else equal, the shorter the better.<sup>3</sup>
- Each report should have a title page that includes a title, the names of each student in the group, and their NUS ID number starting with A.
- Please ensure that your submissions are in **PDF format**. I will ignore submissions in any other format.

As a final note, you should do yourself a favor and try your best to start working on this project ***as soon as possible***. If you leave it to the end of the course, you will feel overstressed because of many assignments and tests you will have in and around week 13.

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<sup>3</sup>I will not be very strict on the word limit, but this should not be an invitation to be grossly over this limit.

### 3.4 Midterm and Final Tests (25% + 30%)

There will be two closed-book tests. The midterm (final) test is tentatively scheduled to take place on the 7th (13th) week. The midterm test will include questions from all topics covered in the class up until that point whereas the final test will be cumulative but will emphasize topics covered after the midterm test. The tests will include a combination of numerical questions, true-false questions, multiple choice questions, and essay type questions. The exact location and timing of the tests are yet to be finalized and I will announce them on Canvas when the scheduling is finalized.

Each test will be conducted over Exemplify and therefore, you should bring your own device with Exemplify installed on the test day.<sup>4</sup> You will have access to a calculator and a spreadsheet on Exemplify, but you can also bring a calculator of your own if you wish. You are also allowed to bring 1 sheet of A4 paper as a cheat sheet and you can fill both sides of this sheet.

## 4 Schedule and Outline

Below is a tentative schedule for the course. Each homework is due each on Friday of the week outlined by 11:59pm. The flipped class project report is due by April 18th. Both the report and the peer review should be submitted on the aforementioned dates before 11:59pm.

Week	Date	Topic	Due
1	16 Jan	Introduction	
2	23 Jan	Portfolio Theory	
3	30 Jan	<b>No Class (Chinese New Year)</b>	HW #1
4	6 Feb	The Capital Asset Pricing Model	
5	13 Feb	The Efficient Market Hypothesis	HW #2
6	<u>TBD</u>	<b>Midterm Test</b>	
	27 Feb	<b>No Class (Reading Week)</b>	
7	6 Mar	Anomalies and Multifactor Models	
8	13 Mar	Performance Measurement	
9	20 Mar	Fixed Income, Part I	HW #3
10	27 Mar	Fixed Income Part II + Derivatives Part I	
11	3 Apr	Derivatives Part II	
12	10 Apr	Review and Q&A	HW #4
13	<u>TBD</u>	<b>Final Test</b>	Project Report

## 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.

<sup>4</sup>See [here](#) for instructions on how to install it.

## 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.