

# FIN4720 SUSTAINABILITY AND FINANCE

Semester: Semester 2 AY 2023/2024 Instructor: Associate Professor Zhang Weina Department: Department of Finance Office: BIZ1 #07-47 Email: <u>bizzwn@nus.edu.sg</u> Contact Number: + 65-65168120

## **MODULE DESCRIPTION**

This module is an advanced finance module that aims to provide integrated perspectives on the topic of sustainability in the domain field of finance. Specifically, the course will cover the value implications of sustainability practices adopted by firms and those demanded by investors and financial institutions. Regulators, not for profit organizations (NGOs) and other intermediaries are also part of the ecosystem. Various financial valuation and investment tools and methodologies are modified and adapted for use.

#### LEARNING OUTCOME

The students are expected to

1. Understand and learn how the traditional investment principles and techniques are modified to value sustainable projects and financial products related to sustainable returns;

2. Understand and learn how finance concepts and theories are modified for entities with sustainability considerations;

3. Understand and learn how to evaluate the latest and relevant financial innovations and products that are related to sustainability.

4. Understand the landscape of various stakeholders in the development of sustainability and their relevance for policymakers, financial intermediaries and investors.

## PREREQUISITES

FIN3101/FIN3701 Corporate Finance FIN3102/FIN3702 Investment Analysis and Portfolio Management

## **COURSE MATERIALS**

This module will consist of lecture notes, readings, case studies and relevant materials that will be available via canvas.

## ASSESSMENTS

	Total	100%
4.	Final Test:	30%
3.	Group Project:	30%
2.	Group Homework:	20%
1.	Class Participation:	20%

## 1. Class Participation (20%)

Credits will be given for active participation in class. During the homework presentation and case discussions on the weekly basis, all non-presenting students are expected to raise questions and discuss.

## 2. Group Homework (20%)

Students will work in groups on four group homework starting from week 3 onwards. There will be questions given for the group, and the group will prepare and share their answers with the class when called during the class in the following week.

The objective of the homework is to cultivate regular and progressive learning of all students to actively think through the relevant contents to be discussed before class and be more participative in class discussion. The evaluation of the homework will be based on the critical thinking and reasoning of the understanding and recommendations if any.

## 3. Group Project (30%)

There will be a final group project to be given at the beginning of the semester. The presentation will be done in Week 12 in class.

## 4. Final Test (30%)

There will be one final test in week 13.

## **CONSULTATION HOURS**

Friday 2-4pm.

#### **MAIN TOPICS**

- 1. Introduction to Sustainable Finance
- 2. Socially Responsible Investment
- 3. Sustainable Investment in Equities
- 4. Sustainable Investment in Bonds
- 5. Microfinance Institutions
- 6. Green Project Financing
- 7. Sustainable Project Financing
- 8. Investment in Carbon Market
- 9. Sustainable Investment by SMEs

## SCHEDULE (TENTATIVE AND SUBJECT TO CHANGES)

Week	Contents	
1	Topic 1: Introduction to Sustainable and Green Finance	
2	Topic 2: Socially Responsible Investment	
3	Topic 3: Sustainable Investment in Equities (I)	
	Case: OpenInvest (HBS: 218064-PDF-ENG)	
4	Topic 3: Sustainable Investment in Equities (II)	
	Case: WaterEquity: Alternative Investment (IVEY: 9B20N016)	
5	Topic 4: Sustainable Project Financing (I)	
	Case: FoodXervices and Food Bank: A Call for Integration (IVEY: 9B19M067)	
6	Topic 4: Sustainable Project Financing (II)	
	Case: Samsui: Social Return on Investment (HBS: W19402-PDF-ENG)	
Recess B	Break	
7	Topic 5: Green Project Financing	
	Case: Green Energy Project in Cyprus: A Financial Appraisal (Case No: 122-0034-1)	
8	Topic 6: Sustainable Investment in Bonds	
9	Topic 7: Microfinance Institutions	
10	Topic 8: Investment in Carbon Market	
11	Topic 9: Sustainable Investment by SMEs	
12	Presentation of the Group Project	
13	Final Test	

## **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.

Artificial Intelligence (AI) tools such as ChatGPT do not require specialist knowledge to use. Many of these AI tools are commonly used in social media, for example, to create content and disguise and refine content created from programmes like ChatGPT. We understand that students will be drawn to using these AI Tools, as they would for any other electronic aid.

However, to be clear, normal academic rules still apply. As noted in the Code of Student Conduct: "The University takes a strict view of cheating in any form, deceptive fabrication, plagiarism and violation of intellectual property and copyright laws. Any student who is found to have engaged in such misconduct is subject to disciplinary action by the University."

With respect to AI tools (e.g., ChatGPT and image generation tools), your instructor will clarify whether the use of these tools as inputs into your assignment development process is acceptable. AI is a technology that requires skill to use, and knowledge about when and how to use it. If you use ChatGPT or any other such AI tool in your work, you must provide a proper representation of how you used the tool and what prompts you used to generate output. Failure to cite its use constitutes academic misconduct.

Further, as with any information source, be aware that minimal efforts yield low quality results. You will need to refine your work and fact check the output, as you would double-check information from any source. Further, you should be selective in how and when you use such tools instead of using it for each and every assignment you create.

To summarise:

- 1. Always check with your instructors on what are the permitted uses of AI tools.
- 2. Have a discussion at the start of a course about the use of AI.
- 3. Where permitted, acknowledge your use of AI.
- 4. You remain responsible for the quality of your work and its appropriate representation.
- 5. Failure to follow the above steps can lead to a concern about plagiarism (academic dishonesty).

As always. 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 entirely your own work. This is a minimum standard.

Additional guidance can be found at:

Admission Condition: <u>http://www.nus.edu.sg/registrar/administrative-policies-procedures/acceptance-record#NUSCodeofStudentConduct</u>

NUS Code of Student Conduct: <u>http://nus.edu.sg/osa/resources/code-of-student-conduct</u>

Academic Integrity Essentials: <u>https://libguides.nus.edu.sg/new2nus/acadintegrity#s-lib-ctab-22144949-4</u>

Guidelines on the Use of AI Tools For Academic

Work: https://libguides.nus.edu.sg/new2nus/acadintegrity#s-lib-ctab-22144949-3