

## **Annexe A: New/Revised Course Content in OBTL+ Format**

### **Course Overview**

The sections shown on this interface are based on the templates [UG OBTL+](#) or [PG OBTL+](#)

If you are revising/duplicating an existing course and do not see the pre-filled contents you expect in the subsequent sections e.g. Course Aims, Intended Learning Outcomes etc. please refer to [Data Transformation Status](#) for more information.

|  |                           |
|--|---------------------------|
| Expected Implementation in Academic Year                   | AY2024-2025               |
| Semester/Trimester/Others (specify approx. Start/End date) | Semester 1                |
| Course Author<br>* Faculty proposing/revising the course   | Matthew Dearth            |
| Course Author Email  | matthew.dearth@ntu.edu.sg |
| Course Title   | Sustainable Finance       |
| Course Code  | BF2228                    |
| Academic Units   | 3                         |
| Contact Hours  | 39                        |
| Research Experience Components                             | Not Applicable            |

## Course Requisites (if applicable)

|                       |                            |
|-----------------------|----------------------------|
| Pre-requisites        | AB1201 or BU5201 or BU8201 |
| Co-requisites         |                            |
| Pre-requisite to      |                            |
| Mutually exclusive to |                            |
| Replacement course to |                            |
| Remarks (if any)      |                            |

## Course Aims

This is an introductory course on Sustainable Finance. The course discusses the fundamental concepts to understand how sustainability issues have become relevant to the investment decisions by corporate managers, professional investors, and any participant in the market. This course aims to provide basic understanding and analytical skills in sustainable finance to students interested in a career in finance and prepare them to take other advanced finance courses. Students will learn how ESG (environmental, social, and governance) factors affect the various sectors in finance, how to interpret these metrics of companies to access financial returns, and how to measure risks associated with sustainable issues such as climate change. Sustainable investing is now a common practice in the financial markets. This course also covers basic knowledge of impact investing and sustainable and responsible investment by investment firms. Students will learn how to apply their knowledge and skills to real-world sustainable issues in finance.

## Course's Intended Learning Outcomes (ILOs)

Upon the successful completion of this course, you (student) would be able to:

|       |   |
|-------|---|
| ILO 1 | Apply the key sustainable finance concepts to real world sustainability-related issues in finance                           |
| ILO 2 | Interpret financial reports and sustainability reports for Singapore and international contexts                             |
| ILO 3 | Describe the basics of ESG factors and their applications   |
| ILO 4 | Analyze the impact of recent policy and regulatory changes on sustainable finance   |
| ILO 5 | Assess corporate sustainable risks and the impacts of risk on stakeholders  |
| ILO 6 | Examine how sustainability issues affect decisions by corporate managers and investment decisions by professional investors |

## Course Content

1. Introduction to Sustainable Finance
2. Case For Change: Climate Change and Other Issues
3. Corporate Social Responsibility
4. ESG and Sustainability Reporting
5. Green and Sustainable Finance
6. Sustainability and Financial Returns
7. ESG Ratings
8. Sustainable Investing Strategies in Public and Private Markets
9. Portfolio Construction with Sustainability

## Reading and References (if applicable)

Seminar notes will be provided prior to the start of seminar session. Academic papers, industry studies and publications, news articles, and other relevant readings will be supplemented to address the issues in sustainable finance. These will be posted on NTULearn.

References, including but not limited to those below, will be posted on NTULearn.

1. Hong, H. & Kacperczyk, M. The price of sin: The effects of social norms on markets. JFE 93, 15–36 (2009).
2. Geczy, C., Jeffers, J. S., Musto, D. K. & Tucker, A. M. Contracts with (Social) benefits: The implementation of impact investing. JFE 142, 697–718 (2021).
3. Flammer, C. Corporate green bonds. JFE (2021).
4. Bolton, P. & Kacperczyk, M. Do investors care about carbon risk? JFE 142, 517–549 (2021).

## Planned Schedule

| Week or Session | Topics or Themes   | ILO  | Readings                                  | Delivery Mode | Activities  |
|-----------------|--|------|---|---------------|---|
| 1               | Course Introduction<br>The Case For Change:<br>Climate Science and Social Issues | 1    | *Seminar notes will be posted on NTULearn |               |   |
| 2               | Maths and Statistics Review<br>Corporate Sustainability I                        | 1, 2 | *Seminar notes will be posted on NTULearn |               | *Group Case Study Assigned                        |
| 3               | Corporate Sustainability II  | 1-4  | *Seminar notes will be posted on NTULearn |               |   |
| 4               | Sustainability Reporting   | 1-4  | *Seminar notes will be posted on NTULearn |               |   |
| 5               | Financing Sustainability:<br>GSS+ Bonds and Other Instruments                    | 1-4  | *Seminar notes will be posted on NTULearn |               | *Quiz 1 (weeks 1-4)                               |
| 6               | Corporate Greenwashing and Regulation  | 1-4  | *Seminar notes will be posted on NTULearn |               |   |
| 7               | Group Case Study Presentations   | 1-5  |   |               | Group Case Study Due ,<br>*Final Project Assigned |
| 8               | Sustainability, Valuation, and Investment Returns ESG Ratings                    | 5, 6 | *Seminar notes will be posted on NTULearn |               |   |

| Week or Session | Topics or Themes  | ILO | Readings                                  | Delivery Mode | Activities           |
|-----------------|---|-----|---|---------------|----------------------|
| 9               | Introduction to Investment Management Industry Sustainable Investing Strategies | 3-6 | *Seminar notes will be posted on NTULearn |               | *Quiz 2 (weeks 5-8)  |
| 10              | Public Markets Screening and ESG Integration                                    | 3-6 | *Seminar notes will be posted on NTULearn |               |                      |
| 11              | Private Markets Thematic and Impact Investing                                   | 3-6 | *Seminar notes will be posted on NTULearn |               |                      |
| 12              | Portfolio Construction Investor Greenwashing and Regulation                     | 3-6 | *Seminar notes will be posted on NTULearn |               | #Quiz 3 (weeks 9-12) |
| 13              | Final Project Presentation  | 1-6 |   |               | Final Project Due    |

## Learning and Teaching Approach

| Approach       | How does this approach support you in achieving the learning outcomes?   |
|----------------|--|
| Seminars       | The seminar sessions will be interactive (including cold-calling) with ample opportunities for open discussion on the conceptual questions raised in the class. This promotes critical thinking and helps the instructor ensure that targeted learning outcomes are being achieved |
| Quizzes        | I will design the quizzes to help you understand reading assignments and deepen your analytical skills to apply the concepts and materials in the course.  |
| Group projects | Some learning outcomes for this course are skills which are practical in nature and cannot be achieved by reading and writing. The achievement of such learning outcomes requires hands-on experience, in-class activities provide such opportunities.                             |

# Assessment Structure

Assessment Components (includes both continuous and summative assessment)

| No. | Component   | ILO   | Related PLO or Accreditation  | Weightage | Team/Individual | Rubrics  | Level of Understanding |
|-----|---|-------|---|-----------|-----------------|----------|------------------------|
| 1   | Continuous Assessment (CA):<br>Class Participation(Class Participation) | 1-6   | Oral Communication, Written Communication   | 15        | Individual      | Holistic | Multistructural        |
| 2   | Continuous Assessment (CA):<br>Test/Quiz(Quizzes)                       | 1,3-6 | Critical Thinking, Acquisition of Knowledge   | 30        | Individual      | Analytic | Multistructural        |
| 3   | Continuous Assessment (CA):<br>Report/Case study( Group Case Study)     | 1-5   | Problem Solving & Decision Making, Critical Thinking, Oral Communication, Teamwork and Interpersonal Skills | 15        | Team            | Holistic | Multistructural        |
| 4   | Continuous Assessment (CA):<br>Project(Group Final Project)             | 1-6   | Critical Thinking & Creative Thinking, Teamwork & Interpersonal Skills, Oral & Written Communication        | 40        | Team            | Analytic | Multistructural        |

## Description of Assessment Components (if applicable)

C1. During seminars, you are expected to participate in in-class activities and discussions. Class participation includes your responses to the instructor's cold call. After each session, a short feedback survey will be distributed for credit; your responses are due within 24 hours of the session. Absence from class will affect your class participation scores. Please refer to Annex B4.

C2. At the beginning of two sessions, I will distribute a short quiz that tests your understanding of the pre-class reading assignment and the materials covered in the previous lectures. You will have 30 minutes for each quiz, and the quiz is closed book with multiple-choice and/or short answer questions. The quiz aims to test whether you have understood the concepts in the previous lectures and whether you have finished your reading assignment. I will distribute the graded quiz in the next class for your review. If you miss the quiz and your absence is not excused by the university rules, then your numerical grade for the quiz is zero. If you miss the quiz and your absence can be excused by the university approved reason, you should email the instructor before the quiz to schedule an alternate quiz date and time for you.

C3. The case study is a group project. Each group comprises around 4-5 students randomly assigned by the

instructor for a total of ~10 groups in the course. For the analysis, each group will be asked to evaluate the sustainability performance of a company from a short list of candidates provided by the instructor. Specific guidelines and assessment criteria will be provided. Each group is required to present their work in class. All group members are required to complete a peer evaluation for each team member and will receive the same group score. If the peer evaluation indicates that you have not contributed enough to the project, your group score will be adjusted based on your average ratings from the peer evaluation. Please refer to Annex B1 for assessment criteria and Annex B3 for peer evaluation.

C4. The final project is a team project. Each group comprises around 4-5 students randomly assigned by the instructor for a total of ~10 groups in the course. In the final project, each group will develop a sustainable investing strategy. The presentation slides should be submitted prior to the presentation date. Specific guidelines and assessment criteria will be provided. Each group member is required to present for the individual presentation scores. All group members are required to complete a peer evaluation for each team member and will receive the same group score. If the peer evaluation indicates that you have not contributed enough to the project, your group score will be awarded based on your average ratings from the peer evaluation. Please refer to Annex B2 for assessment criteria and Annex B3 for peer evaluation.

#### Formative Feedback

Feedback is central to this course. In addition to your scores, you will receive summative group feedback on each quiz and homework assignment. For the group case study and the final project, I will ask for digital copies of your written report/presentation so that I may provide feedback on both style and content.

## NTU Graduate Attributes/Competency Mapping

This course intends to develop the following graduate attributes and competencies (maximum 5 most relevant)

| Attributes/Competency | Level        |
|-----------------------|--------------|
| Care for Environment  | Advanced     |
| Care for Society      | Intermediate |
| Collaboration         | Intermediate |
| Decision Making       | Advanced     |
| Problem Solving       | Intermediate |



# Course Policy

## Policy (Academic Integrity)

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values. As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the academic integrity website for more information. On the use of technological tools (such as Generative AI tools), different courses / assignments have different intended learning outcomes. Students should refer to the specific assignment instructions on their use and requirements and/or consult your instructors on how you can use these tools to help your learning. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

## Policy (General)

- You are expected to complete all assigned pre-class readings and activities, attend all seminar classes punctually and take all scheduled assignments and quizzes by due dates. You are expected to take responsibility to follow up with course notes, assignments and course related announcements for seminar sessions they have missed. You are expected to participate in all seminar discussions and activities.
- Given the uncertain nature of pandemic situation, the course requirements, deadlines, and meeting arrangements are subject to sudden change. The instructor will communicate any adjustments using university email, verbal and written content during seminars, and announcements on NTU Learn.
- No late submission for homework assignment will be accepted. Late submissions for group projects will receive half credits.

## Policy (Absenteeism)

- Absence from class without a valid reason will affect your overall course grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies.
- If you miss a lecture, you must inform the course instructor via email prior to the start of the class.
- If you miss the quiz/individual presentation and your absence is not excused by the university rules, then your numerical grade is zero. No make-up quiz/individual presentation will be provided.

## Policy (Others, if applicable)

Last Updated Date: 02-07-2024 05:47:09

Last Updated By: Angie Low