

ESG Measurement, Disclosure and Applications

ACCT3630, Spring 2025

Course Syllabus (Jan 23 version)

Instructor: Prof Kevin Chen (acchen@ust.hk)

- Date : Monday, Feb. 3 to May 10 (except for holidays)
 - Time : 12pm-2:50pm
 - Venue : Rm 1007, LSK Building
 - Office hours : by appointment
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Course Description

Environment, Society and Governance (ESG) are three pillars in the emerging field of sustainable finance. This course will cover topics such as the concepts of ESG factors, their importance in business management and investing decisions, how to measure and evaluate ESG risks and opportunities, the global ESG disclosure frameworks, ESG ratings, and how to integrate ESG considerations into investment strategies and design financial products. In addition, the course will cover the concepts, measurement and reporting of climate risk and greenhouse gas emissions.

About the Instructor

Kevin Chen is the Chair Professor of Accounting at HKUST. He received his PhD in accounting from the University of Illinois at Urbana-Champaign and had taught at Rutgers University prior to joining HKUST. His research areas include the interpretation of accounting information by capital market participants and the role of accounting information in corporate governance. He has taught financial accounting and managerial accounting in both UG, MSc and MBA programs.

Course Learning Outcomes

On completion of the course, students will be able to:

- Understand the background and history of sustainable development goals and sustainable finance

- Assess the company's ESG risks and performance from sustainability reports
- Measure and verify the information of greenhouse gas emissions
- Analyze the company's climate risks and performance from climate-related reports
- Use ESG ratings to measure the company's ESG risks and performance
- Incorporate ESG information in investing decisions
- Use ESG information to influence firm's ESG performance
- Evaluate the value and limitations of ESG in management and investing

Reading Materials

- PowerPoint slides will be provided on Canvas (<https://canvas.ust.hk>) the day before class or earlier.
- Textbook (recommended):
P. Dechow and R. Sloan (D&S), *Business Sustainability Reporting & Analysis*, Cambridge Business Publishers, 2025, ISBN: 978-1-61853-6-556.
- The specific reading materials for each topic are provided in the course schedule. Most of them can be accessed online and some of them will be provided on Canvas prior to class.

Grading & Assessments

Students taking this course will be assessed by class participation, in-class exercises, case assignments, exam, a final group project (presentation and written report), and peer evaluation of their contributions to the group works. Weightings allocated to different modes of assessment are as follows:

Class Participation	5%
In-class interactive exercises	10%
Case Assignments	16%
Midterm exam	35%
Quiz (cover last 4 lectures)	15%
Final project	15%
Peer evaluation	<u>4%</u>
	<u>100%</u>

Class Participation will be assessed by students' involvement in class discussion. The in-class exercises will be done from the second week using the online interactive presentation platform

Mentimeter. You need to submit your responses in class and answer 80% or more of the questions correctly to get the 1% credit for each class.

There will be four case assignments throughout the course. They will be collected on group basis, and due by noon of the day before the designated class. Each of them will be evaluated on a scale of 0 to 4, based the completeness and reasonableness of the analysis. One group will be designated to present one of the assignments.

The final project will be group based and presented in the last week of class. In principle, three students will be assigned to a group to do the assignments. Peer evaluation for all the group members about their overall contribution to the group work will be conducted at the end of semester. The instructor has the final decision rights when disputes arise between group members regarding the peer evaluation score.

The exam and quiz will be on an individual basis.

Late submission of the assignment or project is not allowed, except when prior approval is given by the instructor.

Class Schedule, Spring 2025 (Jan 23, 2025 version)

Week/ Date	Topics and readings	Assignment
1. Feb 3	<ul style="list-style-type: none"> • Concepts and history of environment, society, and corporate governance (ESG) • UN Sustainable development goals (SDGs) <p><i>Reading: D&S Ch. 1</i></p>	
2. Feb 10	<ul style="list-style-type: none"> • Overview of sustainability reporting • Global sustainability disclosure frameworks • Sustainability disclosure regulation in HK and Mainland • Concept of materiality <p><i>Reading: D&S Ch. 2</i></p> <ul style="list-style-type: none"> • SmartHead Introduction of GRI. Available at: https://www.besmarthead.com/en/blog/post/a-short-history-of-gri. • GRI 1: Foundation 2021 (focus on pages 8-9) • SASB Conceptual Framework ED (focus on page 30) • IFRS S1: General Requirements (focus on pages 6-8) 	
3. Feb 17	<ul style="list-style-type: none"> • Concept of climate risks • Climate report <p><i>Readings:</i></p> <ul style="list-style-type: none"> • <i>D&S Ch. 3 (Sections 1-3); Ch. 4</i> • How to Count Your Carbon, Brightest. Available at: https://www.brightest.io/carbon-accounting-methods • Overview of the TCFD, Task Force on Climate-related Financial Disclosures, May 2022. Available at: https://www.fsb-tcfd.org/publications/ • The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. World Business Council for Sustainable Development. 2004. Available at: https://ghgprotocol.org/corporate-standard 	
4. Feb 24	<ul style="list-style-type: none"> • Measurement of green-house gas emissions • Other environmental issues and metrics <ul style="list-style-type: none"> ○ Renewable energies, Air Emissions, Water, Waste, and Biodiversity <p><i>Readings:</i></p>	Climate report

	<ul style="list-style-type: none"> • <i>D&S Ch. 3 (Sections 4-8), Ch. 5</i> 	
5. Mar 3	<ul style="list-style-type: none"> • Social issues and metrics • Reporting on social impacts • Materiality assessment of ESG issues <p><i>Readings:</i></p> <ul style="list-style-type: none"> • <i>D&S Chs. 6 and 7</i> 	ESG report (E-issues)
6. Mar 10	<ul style="list-style-type: none"> • ESG Ratings • Construction of ESG indexes <p><i>Readings:</i></p> <ul style="list-style-type: none"> • <i>D&S Ch. 12 (12.1-12.5)</i> • ESG Ratings Methodology. MSCI ESG Research LLC. April 2023. Available at: https://www.msci.com/documents/1296102/34424357/MSCI+ESG+Ratings+Methodology+%28002%29.pdf 	
7. Mar 17	<ul style="list-style-type: none"> • Governance issues • Disclosure of corporate governance • Economic impacts <p><i>Readings:</i></p> <ul style="list-style-type: none"> • <i>D&S Ch. 8</i> 	ESG report (S-issues)
8. Mar 24	<ul style="list-style-type: none"> • Midterm exam 	
9. Apr 7	<ul style="list-style-type: none"> • Rating of governance • Nature and limitations of ESG rating <p><i>Readings:</i></p> <ul style="list-style-type: none"> • ESG ratings: Status and key issues ahead, in ESMA Report on Trends, Risks and Vulnerabilities No. 1, 2021, pp. 105-115. Available at: https://www.esma.europa.eu/sites/default/files/trv_2021_1-esg_ratings_status_and_key_issues_ahead.pdf 	
10. Apr 14	<ul style="list-style-type: none"> • ESG Investing • ESG Investment Products and examples <p><i>Readings:</i></p> <ul style="list-style-type: none"> • <i>D&S Ch. 13, Ch. 12 (12.6-12.7)</i> 	MSCI ESG ratings

	<ul style="list-style-type: none"> PRI (2023) Introductory Guides to Responsible Investment. Available at: https://www.unpri.org/investment-tools/introductory-guides-to-responsible-investment 	
11. One of Apr 23~25 or May 7~9	<ul style="list-style-type: none"> ESG assurance Activist investors and ESG Carbon credit market <p><i>Readings:</i></p> <ul style="list-style-type: none"> <i>D&S Ch. 9</i> 	
12. Apr 28	<ul style="list-style-type: none"> Evaluation of ESG Investing <ul style="list-style-type: none"> ESG and investment performance Shareholder capitalism vs. stakeholder capitalism ESG and politics <p><i>Readings</i></p> <ul style="list-style-type: none"> <i>D&S Ch. 14</i> Valuing ESG: Doing Good or Sounding Good? Bradford Cornell and Aswath Damodaran. <i>The Journal of Impact and ESG Investing</i>. August 2020. Available on Canvas. A Friedman doctrine: The Social Responsibility of Business Is to Increase Its Profits. Milton Friedman. <i>The New York Times</i>, Sept. 13, 1970. Available at: https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html The Rise And Fall Of ESG. Forbes, April 23, 2024. Available at: https://www.forbes.com/sites/prakashdolsak/2024/04/23/the-rise-and-fall-of-esg/ 	
13. May 19 (tentative)	<ul style="list-style-type: none"> Quiz (45 minutes) Final project presentations 	