



UC SANTA BARBARA
Bren School of Environmental
Science & Management

Creating Value through Environmental Solutions
ESM 231, Winter 2025

Class: W 12:30-1:45 pm
BH 1414

Instructor: Emily Cotter
Office Hours: By appointment (see booking calendar)
Office: BH 3406
Email: ecotter@bren.ucsb.edu

Course Description

ESM 231 is designed for students to gain experience integrating ESG or sustainability factors into business strategy and operational decisions, in preparation for working on ESG, innovation, product, or sustainability teams. In this practicum, students explore environmental challenges faced by a specific company and identify opportunities to improve environmental impact through business model innovation. Working on a team with an industry advisor, students evaluate the financial potential, expected social/environmental impact and innovation risks of their ideas.

Course Objectives

- Gain practical experience through an "Innovation Journey," exploring new business ideas and developing a portfolio map to visualize and analyze the new ideas being explored.
- Develop analytical and critical thinking skills through the process of identifying and defining opportunities to integrate ESG/sustainability factors into business strategy.
- Gain experience communicating how ESG or sustainability opportunities create value.

Course Software

Canvas – Learning Management System
Slack – Messaging Application

Students should register for an account with Slack and join the **esm231w25** workspace. See Canvas for the invitation link.

Required Reading

Harvard Business Publishing Coursepack
Cases are listed in the schedule below. See course entitled "Creating Value through Environmental Solutions (ESM 231, W25)" on Harvard Business Publishing site at:

<https://hbsp.harvard.edu/import/1249469>

All the readings are listed under the Harvard course entitled "Creating Value through Environmental Solutions (ESM 231, W25)." Each Harvard reading costs \$4.50-4.95. The total approximate cost for the coursepack is \$32.85 (paid directly to Harvard Business Publishing).

All other required reading will be made available via download on Canvas.

Optional Reading

The Invincible Company
 Alexander Osterwalder, Yves Pigneur, Fred Etienne and Alan Smith
<https://www.strategyzer.com/books/the-invincible-company>

Course Assessment

Assessment	Individual Contribution	Team Contribution
Attendance and Participation <ul style="list-style-type: none"> • Class Attendance • In-Class Discussions • In-Class Presentations 	300 points (15%)	
Innovation Journey Project:		
Student Profile Survey	100 points (5%)	
Team Project Proposal		100 points (5%)
Sprint 1 Progress Report		100 points (5%)
Sprint 1 Presentation		200 points (10%)
Sprint 2 Progress Report		100 points (5%)
Interview Summaries (Sprint 1 & 2)	400 points (20%)	
Final Presentation (Sprint 1 & 2)		400 points (20%)
Final Portfolio Map		200 points (10%)
Individual Contribution to Team Project, Based on Peer Evaluation	100 points (5%)	
TOTAL	900 points (45%)	1,100 points (55%)

GRAND TOTAL 2,000 points (100%)

Attendance and Participation

Students are expected to attend every class. Attendance and participation will account for 15% of your grade (max. 300 points). Participation is evaluated in several ways. Obviously, participation is correlated with attendance. It is impossible to earn participation points if a student is not in class. Students remain responsible for submitting work due even if absent. Students should e-mail the instructor prior to any missed class. Students remain responsible for the material covered and assignments given during an absence. Attendance at all class sessions is critical to the learning process and the participation component of the course. Entrepreneurship is a collaborative and interactive process. Entrepreneurs find opportunities, adapt, and improve themselves by listening and learning from others. Please come to class prepared to participate in the day's activities.

The deadline is at the beginning of class (i.e., 12:30 pm) on the due date listed for each assignment,

unless otherwise instructed. Assignments submitted after the deadline but within 24 hours will lose 5% of the total points; after that, an additional 5% for each day that the assignment is late.

Innovation Journey Project

Working on an Innovation Journey team, students will choose a specific company and industry advisor. Teams will work collaboratively to identify the company's biggest environmental challenges or material ESG/sustainability issues, explore new business ideas, and develop a portfolio map to visualize and analyze the new ideas being explored (at least four ideas). Discovery Teams should be comprised of three to six people. Teams are encouraged to select a Project Manager who will be responsible for helping the team perform at its highest level. This involves removing any impediments to progress, facilitating meetings, and making sure the team is organized and working efficiently during each sprint. Each team will have a private channel on Slack for communication and collaboration.

The Team Formation Deadline is 12:30 PM on Mon 10/16/23.

During the quarter, students will conduct research in two 3-week long "sprints," as follows:

	<u>Sprint Period</u>	<u>Sprint Length</u>	<u>Presentation Date</u>
Sprint 1:	1/22/25 to 2/11/25	21 days	2/12/25
Sprint 2:	2/12/25 to 2/4/25	21 days	3/12/25*

**The Innovation Journey Project Final Presentation will be given to a panel of business leaders, innovators, and sustainability experts at the end of Winter Quarter.*

The goal of these sprints is to "get out of the building" and talk to industry experts, stakeholders or potential customers face-to-face (or via Zoom). Students should set milestones for each sprint (e.g., interview 5 industry experts and 5 potential customers during Sprint 1). During each sprint, teams should aim to interview at least 10-15 industry experts, stakeholders and/or potential customers. The required minimum for each student will be 3 interviews per sprint or 6 interviews per project over the six weeks.

Students will also gather secondary research to analyze the environmental problems, material ESG/sustainability issues, regulatory environment and existing solutions. Additionally, teams will research and analyze industry and market dynamics to provide supporting context for their business ideas.

On each presentation day, students will report what they learned through primary research. Students will also share other research and analysis that supports the team's Portfolio Map.

Description of Course Assignments

All assignments will be submitted on Canvas, unless stated otherwise.

Student Profile Survey

The purpose of a Student Profile is to provide the instructor and your classmates with some insight into your background and to help in the formation of compatible project teams. Note: Your responses will be shared with the entire class. A Google Form survey link will be provided on Canvas.

Your Student Profile must be completed by 5:00 PM on Fri 1/10/25. The Student Profile will account for 5% of your grade (max. 100 points).

Team Project Proposal

On the Team Formation deadline, each team will create a "Team Project Proposal." This 1-page initial proposal should provide the team's chosen company name, industry advisor, and the name of each team member. In a brief paragraph, explain why the team came together and address the following questions:

- Is there a particular environmental challenge or ESG/sustainability issue that the team wants to explore through this project? Alternatively, list the possible environmental challenges or ESG/sustainability issues the team expects to explore. Explain why.
- Is there a particular industry sustainability challenge that interests all the team members? Is there a trend in a specific industry that may represent an opportunity for the chosen company? Is there a particular industry that interests all the team members? Alternatively, list the possible industries the team expects to explore. Explain why.
- Has the team identified a potential customer/user, based on observations of a pain point or problem to be solved, that the company should target with a new business model? What data, evidence or observations support this hypothesis?
- Is there an observation from prior work experience, internships, academic research, or Master's Project work that has prompted the team's company choice and/or research direction?

The Team Project Proposal must be submitted on Canvas by 12:30 PM on Wed 1/22/25. This Team Project Proposal will account for 5% of your grade (max. 100 points). These points will be the same for each team member.

Interview Summaries

Students will demonstrate their analytical skills and their ability to perform qualitative research through interviews with industry/sustainability experts, stakeholders or potential customers. Each student is required to participate in and submit Interview Summaries for at least 6 interviews over the six-week project.

An interview summary should be submitted for each interview conducted by the team. It is a brief report of the key insights from an interview, not a full interview transcript (e.g., transcribed interview from Zoom). Be sure to list all students who participated as interviewees. Examples will be posted on Canvas.

Interview Summaries will be submitted by students on Canvas. Students should try to spread out interviews over the six-week project and strive for at least 3 interviews in Sprint 1. Interview summaries must be completed by 12:30 PM on Wed 3/5/25 for grading purposes. Interview Summaries will account for 20% of your grade (max. 400 points).

Progress Reports

At the end of each sprint, a Progress Report will be submitted by each team. The Progress Report will state the research focus and goals for the reported sprint, then summarize what was learned through research and the team's key takeaways. The Progress Report should include an analysis of any new or abandoned ideas on the team's Portfolio Map.

A progress report for Sprint 1 must be completed by 12:30 PM on Wed 2/12/25. This Progress Report

will account for 5% of your grade (max. 100 points). These points will be the same for each team member.

A progress report for Sprint 2 must be completed by 12:30 PM on Wed 3/5/25. This Progress Report will account for 10% of your grade (max. 200 points). These points will be the same for each team member.

Presentations

Each team will give one Sprint Presentation in class on Wed 2/12/25 and one Final Presentation to an expert panel on Wed 3/12/25. The Final Presentation will be judged by a panel of experts (business leaders, innovators, and sustainability experts). Specific guidelines for the Sprint Presentation and Final Presentation will be posted on Canvas.

A soft copy of the Sprint Presentation must be uploaded onto Canvas by 12:30 PM on Wed 2/12/25. The Sprint Presentation will account for 10% of your grade (max. 200 points). These points will be the same for each team member.

A soft copy of the Final Presentation must be uploaded onto Canvas by 11:00 AM on Wed 3/12/25. The Final Presentation will account for 20% of your grade (max. 400 points). These points will be the same for each team member.

Please use the following format for submission of your team's presentations:

Sprint Presentation_(Team Name)

Final Presentation_(Team Name)

Final Portfolio Map

At the end of this course, each team will submit a Final Portfolio Map, which may incorporate any feedback received from the panel of experts during the Final Presentation. A written summary of each idea will be submitted with the Final Portfolio Map, explaining the position of each idea on the map. Specific guidelines for the Final Portfolio Map will be posted on Canvas.

A Final Portfolio Map must be completed by 12:30 PM on Wed 3/19/25. This Final Portfolio Map will account for 10% of your grade (max. 200 points). These points will be the same for each team member.

In addition, 5% of your grade (max. 100 points) will depend on your individual contribution to the team, as evaluated by your teammates. An evaluation form will be completed at the end of the quarter to provide these peer evaluations.