

McGill University - Desautels Faculty of Management

MGSC 488 Sustainability and Operations Winter 2023

Instructor

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Office Hours and Location: Wednesdays 16:00 to 17:00, Bronfman 528

Course Meetings

Course Meeting Times: Mondays and Wednesdays, 2:30 pm to 4 pm.

Location: Bronfman 310

Course Description and Learning Goals

In this course, we will study how and why companies integrate environmental and social sustainability concerns while managing their operations. You will learn about global regulatory environments (such as carbon taxes, cap-and-trade, and energy-efficiency mandates), certification regimes (ISO 14000, fair-trade labels and other eco-labels), and how firms respond to them. This course will rely on a mix of case-studies to teach practical analytical sustainability frameworks such as life cycle assessment and sustainability disclosure reporting. Adopting a supply-chain perspective, in this course, you will learn about opportunities for companies to implement sustainable business strategies at each stage in a supply chain:

- Green business models and new product development
- Sustainable resource extraction
- Responsible supplier sourcing
- End-of-life product recovery and recycling

How to Prepare for Class Discussions

Read the cases carefully. Be prepared to discuss the details of the case.

Course Pre-Requisites

MGCR 472 (Operations Management) or equivalent.

Course Outline

This syllabus is tentative and subject to change.

Table 1: MGSC 488: Sustainability and Operations Syllabus, Winter 2023

SESSION	DATE	TOPIC
1	Jan. 4	Course Overview
2	Jan. 9	ESG Framework: Sustainability and the Firm
	Module 1	Basics of Environmental Economics
3	Jan. 11	Basics of Environmental Economics I
4	Jan. 16	Basics of Environmental Economics II
	Module 2	Life Cycle Analysis
5	Jan. 18	Life Cycle Analysis I
6	Jan. 23	Life Cycle Analysis II
7	Jan. 25	Life Cycle Analysis Lab I
8	Jan. 30	Life Cycle Analysis III
9	Feb. 1	Life Cycle Analysis Lab II
10	Feb. 6	Case Study 1 – Fiji Water: Carbon Negative?
	Module 3	Sustainable Business Model Analysis
11	Feb. 8	Fast Fashion Industry
12	Feb. 13	Servitization and Sustainable Urban Transportation
13	Feb. 15	Case Study 2 – Water Desalination Plants in the U.S.
	Module 4	Low Carbon Economy
14	Feb. 20	Environmental Management Systems
15	Feb. 22	Renewable Energy and Adoption Incentives
	Module 5	Social Responsibility
16	Mar. 8	Socially Responsible Sourcing
17	Mar. 13	Guest Lecture (Legal Issues)
18	Mar. 15	Global Supply Chains and ESG Issues (Case Study 3 – Rana Plaza: Workplace Safety In Bangladesh)
19	Mar. 20	Guest Lecture (Industry speaker)
	Module 6	Resource Management and Circular Economy
20	Mar. 22	Resource Management I: Mining and Fisheries
21	Mar. 27	Resource Management II: Forestry (Case Study 4 – Sustainability at IKEA Group)
22	Mar. 29	Project Workday
23	Apr. 3	Recycling Common Materials: An Effectiveness Analysis
24	Apr. 5	Final Project Presentations I
25	Apr. 10	Final Project Presentations II

Required Course Materials

ELECTRONIC COURSEPACK CASES (available on myCourses):

- Fiji Water: Carbon Negative?
- Rana Plaza: Workplace Safety in Bangladesh
- Sustainability at IKEA Group

Optional Reading

Elements of Environmental Management, Werner Antweiler, University of Toronto Press, 2018.

Life Cycle Assessment: Quantitative Approaches for Decisions that Matter, Scott Matthews, Chris Hendrickson, Deanna Matthews, LCATextbook.com, 2022.

Grading

- Case Reports and Assignments: 40%
- Quizzes: 10%
- Final Project: 30%
- Final Project Presentation: 10%
- Participation and Classroom Engagement: 10%

Case Study Assignments:

Students are assigned three case studies (Fiji Water, Rana Plaza, IKEA Group) that will be graded. Students are expected to submit a short report numbering no more than five pages that addresses specific questions relevant to the case. These questions will be provided at least two weeks before the due date. The reports are due at 8 AM on the days scheduled for the case discussion (February 6, March 15, March 27, respectively). The reports should be submitted on myCourses.

Either handwritten (scanned) or typed documents will be accepted. Please keep a copy of all homework submitted for reference during class. Homeworks will be graded on a scale out of 100 and will not be accepted late. They must be prepared individually in order to receive credit. Please write clearly or type up your homework.

At Desautels, we strive to create courses that challenge students intellectually and that meet the McGill standards of academic excellence. To ensure fairness and clarity of grading, the grading guideline requires that the average and median scores must fall between 65% and 77.5%. Please see faculty grading regulations for more information.

Final Project and Term Paper:

Potential topics for a final project or term paper will be provided by the instructor. Students are also encouraged to approach the instructor with their own suggestions for possible project or term paper topics.

Regrading

The process of assigning grades is intended to be one of unbiased evaluation. Students are encouraged to respect the integrity and authority of the professor's grading system, and are discouraged from pursuing arbitrary challenges to it. If you believe an inadvertent error has been made in the grading of an assignment or in assessing an overall course grade, a request to re-evaluate the grade may be submitted. You must submit such requests in writing within 7 days of receiving the grade, including a brief written statement of why you believe that an error in grading has been made.

Professional Responsibilities

Participation

In-class contribution is part of your grade and an important part of our shared learning experience. Your active participation helps the instructor evaluate your overall performance. You can excel in this area if you come to class on time, and contribute to the course by:

- Providing strong evidence of having thought through the material.
- Advancing the discussion by sharing insightful comments and questions.
- Listening attentively in class.
- Demonstrating interest in your peers' comments and questions.
- Giving constructive feedback to your peers when appropriate.

Assignments

Late assignments will either not be accepted, or will incur a significant grade penalty (unless due to documented serious illness or family emergency). Exceptions to this policy will only be made when the assignment cannot reasonably be completed prior to the due date and you make arrangements for late submission in advance.

Classroom Norms

Arrive to class on time and stay until the end of the class. Chronically arriving late or leaving class early is unprofessional and disruptive to the entire class.

Mute all electronic devices prior to the start of class. Laptops, cell phones and other electronic devices are a distraction to everyone.

Academic Integrity

Before submitting any work in your courses at McGill University, you must understand the meaning and consequences of plagiarism and cheating, which are serious academic offenses. For more details, please consult Fair Play, the student guide to academic integrity available at www.mcgill.ca/students/srr/honest.

The Code of Student Conduct and Disciplinary Procedures includes sections on plagiarism and cheating. The possession or use of unauthorized materials in any test or examination constitutes cheating. You can find the Code in the Handbook on Student Rights and Responsibilities or at www.mcgill.ca/students/srr/publications.

Equity, Diversity, and Inclusion

As the instructor of this course, I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, please do not hesitate to discuss them with me and with the Office for Students with Disabilities, 514-398-6009.