

Course Syllabus

ISEN 462 Sustainable Supply Chains (1.0 credit) Northwestern University

Instructors: Ian Olson, Senior Director, Global Sustainability at McDonald's Corporation.
ian.olson@northwestern.edu

Potential Guest Lecturers:

- Professor Achal Bassamboo, Charles E. Morrison Professor at Kellogg School of Management, Northwestern University
- Jay Paladugula, Global Head, Supply Chain Strategy & Transformation, Dover Corporation
- John Davies, Vice President and Senior Analyst, GreenBiz Group
- Michael Kobori, Chief Sustainability Officer, Starbucks Corporation
- Danielle Nkojo, Manager, Global Sustainable Products at Kontoor Brands, Inc. (Wrangler and Lee Jeans)
- Will Sarni, Founder and CEO, Water Foundry
- Erin Simon, Head of Plastic Waste + Business, World Wildlife Fund
- Mark Spears, Formerly Chief Sustainability Officer, Consumer Products Division of The Walt Disney Company
- Sister Pat Daly, Interfaith Center for Corporate Responsibility

Office Hours: By appointment

Class Assistant: TBD

Classroom: TBD

Class Timing: Winter Quarter

Course Synopsis:

This course will examine the intersection of sustainability and supply chains as an opportunity to develop more resilient and impactful integrated frameworks. These frameworks will provide a different “lens” for organizations to view existing strategies and identify new opportunities and risks. It will explore various industries and ‘big issues’ that affect supply chains in these industries. This will culminate in the development of a central ‘issue/industry matrix’ to guide assessment and decision-

making in the future. Additionally, an examination of future trends and more conventional theory and supply-chain design principles will be touched on as part of the course.

The course will emphasize qualitative processes and metrics to evaluate; how to 1) evaluate situations from varying perspectives, 2) construct holistic integrated proposals and 3) how to influence and implement strategies. Students will have regular reading assignments outside of class, and should come to class prepared for discussion. As a part of the class, we will have a series of guest lectures from industry experts on various aspects of supply chains. Student presence is expected and active participation is encouraged at all times. Readings are liable to be added mid-quarter, especially for weeks containing guest lectures.

Course Goals: Students should be able to:

- Foundational
 - Defining Sustainability – Develop an understanding of sustainability as a foundational concept and how it is being discussed in business and society.
 - Supply Chain Basics: Learn standard supply chain theory, organization and design practices in order to apply these to the supply chains of the future.
- Core Concepts
 - Supply Chains Are Not All Equal: Develop an understanding of supply chains in different industries to assess different characteristics and more effectively apply integrated sustainability methods and strategies.
 - The Big Issues: Gain an understanding of the pressing sustainability issues for supply chains and how they apply to different industries and different parts of the supply chain.
- Future Trends
 - Supply Chains Moving Forward: Students will learn about collaborative strategies, digitization and other future trends to be aware of in supply chains.

Grading/Assessment:

Grading will be based on all the modes of assessment listed below. Students will receive clear and consistent feedback on their work throughout the quarter, and improvements over the course of the quarter will be noted.

Component	Weight	Details	Due
Participation	15%	<i>Based on attendance, in-class contribution to discussion and engagement outside the class via office hours.</i>	Ongoing

		<i>Valuable contributions are not limited to presenting original thoughts—you are expected to build on, clarify and question the thoughts of your peers. You are encouraged to use the Zoom chat and the ‘raise hand’ feature to this end.</i>	
Case Write-Ups	20%	<i>You will have to submit 2-3 page case write-ups, responding to particular questions about the case study</i>	Week #3 Week #7
Final Report	30%	<i>You are expected to submit an executive summary position statement (no more than 10 sentences) and a 3-4 page report supporting the position statement by the end of the quarter.</i> <i>Imagine you are working for a publicly traded food/agricultural corporation, who are considering various measures to make their supply chain more sustainable. Without appealing to a simple sense of morality (i.e. “it’s just the right thing to do”) or specifically citing the broad concept of climate change, present a convincing business case in favor of investing in and integrating sustainability as part of the supply chain. What are the key components of the strategy, key tactics and overall approach? What would be the first step to launch the strategy? Quantitative metrics are valued, although not necessary,</i>	Week #10
Final Presentation	10% + 20% + 5%	<i>The final presentation will be graded in three parts:</i> <ul style="list-style-type: none"> • <i>10% of your grade is based on a 2-page proposal your group submits at the end of Week 5</i> • <i>20% of your grade is based on the group’s final presentation in Week 10</i> • <i>5% of your grade is based on peer ratings from your group</i> <i>The 2 to 3-page proposal wil be the first step.</i>	Groups assigned the end of Week 1 Proposal: Week #5 Presentation: Week #10

		<p><i>The presentation should analyze the supply chain of a large firm in any industry we discuss in class. Imagine yourselves as a group of outside consultants to the firm. Describe the supply chain, highlighting vulnerabilities, concerns and opportunities as you go along. Suggest solutions and present a convincing argument (economic/ethical) to justify your group's suggestions.</i></p> <p><i>The presentation should be an expansion of the proposal with findings, outstanding issues, rationale for approach, priorities for the firm and recommendations to move forward.</i></p>	
--	--	--	--

All questions and problems regarding grades must be presented in writing within one week after the test, homework, or project has been returned. The grading scale is fixed; please do not wait until the end of the quarter if you are concerned about the direction of your grade. Grades will be assigned based on all the work you have completed during the quarter using the following scale:

A	93.333 to 100	C	73.333 to 76.666
A-	90.000 to 93.333	C-	70.000 to 73.333
B+	86.666 to 90.000	D+	66.666 to 70.000
B	83.333 to 86.666	D	63.333 to 66.666
B-	80.000 to 83.333	D-	60.000 to 63.333
C+	76.666 to 80.000	F	< 60.000

It is expected that all work submitted for this class is original work of the student submitting. All suspected violations will be reported to the McCormick College of Engineering's Dean's Office in accordance with the NU Academic Integrity Policy.

Submitting Assignments: Extensions will only be granted in extenuating circumstances. All assignments must be submitted by 11:59pm on the due date via the Canvas page for the course. In the unlikely event that Canvas fails, email your assignment directly to your instructor.

CLASS OUTLINE

Weekly Topic	Description	Assignments Due
<p>1: Introduction and Defining Sustainability</p>	<ul style="list-style-type: none"> • Introductions, expectations for the course, technology and syllabus read-through. • Central themes and the Industry/Issue matrix. • How do you define sustainability personally? Is there one widely accepted definition of sustainability? • Does the lack of one widely accepted definition help or hurt the ability to engage peers and integrate into organizations? <p>READING: <i>25 Years Ago I Coined the Phrase, Triple Bottom Line. Here's Why It's Time to Rethink It. (HBR) Business Case Study #1: Sustainability at IKEA Group</i></p>	<p>Assign groups for final presentation on Jan. 6th</p>
<p>2: Supply Chain Theory</p>	<ul style="list-style-type: none"> • A brief history and overview of supply chains. • Components of a supply chain: logistics, operations, inventory, transportation, sourcing, risk, sales. • Building a strategic framework to analyze supply chains. • A practitioner perspective on evolving supply chains to incorporate sustainability. <p>READINGS: <i>Chopra and Meindl, Seven-Eleven Japan Case Study pg 61-67 (Not a case study for assignment) McKinsey - Starting at the Source: Sustainability in the Supply Chain HBR Article - A more Sustainable</i></p>	<p>Submit top three companies for group project by Wed. January 13th at 11:59.</p> <p>Approval of company selections will be given to the teams by Friday, January 15th.</p>

	<i>Supply Chain</i>	
<p>3: State of the Sustainability Profession and Supply Chains</p>	<p><i>Note: MLK Day is observed this week.</i></p> <ul style="list-style-type: none"> • Overview and baseline of the Sustainability Profession. • How are companies discussing the issue of supply chain sustainability? • What are the emerging trends or concerns in the profession regarding supply chains? <p>READINGS: <i>GreenBiz State of the Profession Report (pages 3- 11 and 15-21) GreenBiz Supply Chain Transparency Challenge 2018</i></p>	<p>Case Study #1 Due Wed. January 20th 11:59 pm (based on IKEA Case Study)</p>
<p>4: Not All Supply Chains Are Created Equal</p>	<ul style="list-style-type: none"> • Fundamental observation: not all supply chains are the same. • Overview of supply chains in different industries: manufacturing, CPG, food service, technology, apparel/footwear. • Characteristics, challenges, transparency and different analytical approaches. • A practitioners view of different supply chains and how they compare and contrast <p>READINGS: <i>GreenBiz Supply Chain Transparency Summit Report - 2020 Starbucks Corporation: Building a Sustainable Supply Chain (not for write up, reading only)</i></p>	



<p>5: Big Issues: Climate, Energy and Social Equity</p>	<ul style="list-style-type: none"> • Climate as an issue to and opportunity for supply chains. • Moving away from the politicization of climate to drive impact. • What components of the supply chain influence climate and energy decisions? • Social equity and the components of the supply chain. <p>READINGS: <i>MIT - Supply Chain Resilience in the Era of Climate Change</i> <i>McKinsey - Could climate become the weak link in your supply chain?</i></p>	<p>2-page group presentation proposal due. Wed. Feb. 3rd, 11:59 pm</p>
<p>6: Big Issues: Natural Resources and Water</p>	<ul style="list-style-type: none"> • The supply and demand for natural resources and water and how it can inform your approach. • Which supply chain components influence these issues? • How does this issue connect to or impact the different types of supply chains? • Evolving from water stewardship, community implications of the supply chain. • The Water-Climate Nexus and the Real 'Value' of Water. <p>READINGS: <i>Videos - Jason Clay, WWF How Big Brands Can Save Biodiversity, TED Talk Case Study #2 Growing Better Together: General Mills Considers Pre- Competitive Collaboration to Advance Sustainable Supply Chains</i></p>	
<p>7: Big Issues: Human Rights, Working Conditions, Circularity and Packaging</p>	<ul style="list-style-type: none"> • A brief history of working conditions and human rights in an international framework. • Different approaches and the notion of 'human 	<p>Case Study #2 Due Wed. Feb. 17th 11:59pm (based on General Mills Case Study)</p>

	<p>capital’.</p> <ul style="list-style-type: none"> • What supply chain functions can influence the issue? • How does this issue connect to or impact the different types of supply chains? <p>READINGS: <i>HBR - Nike: Sustainability and Labor Practices 1998-2013 (not for write up assignment, reading only)</i> <i>TBC Packaging Reading</i></p>	
<p>8: Designing Sustainability into the Supply Chain</p>	<ul style="list-style-type: none"> • Making the case for a sustainable supply chain. • Introducing materiality analysis and benchmarking. • How do you identify and engage stakeholders? • Defining ‘total value’ and internalizing the externalities. • How do you influence action and integration? What is the role of leadership and governance? • Applying metrics and managing suppliers. <p>READINGS: <i>BSR - Supply Chain Leadership Ladder</i> <i>WBCSD - Sustainability and enterprise risk management: The first step towards integration</i></p>	
<p>9: Future Trends</p>	<ul style="list-style-type: none"> • Resilience: Moving from supply chain sustainability to value-chain resiliency. • Stakeholder collaborations, precompetitive collaborations, cross-industry collaborations. • Waste and materials management. • Public goals to aligned business frameworks. • Impacts of digitization 	

	<p>READING:</p> <p><i>Greening Global Supply Chains Report – The Sustainability Consortium</i></p> <p><i>ERM Report – Building Business Resilience for the Decade of Action</i></p>	
<p>10: Presentations and Conclusion</p>	<ul style="list-style-type: none"> • Group presentations followed by Q&A sessions. • Wrapping up the course: key learnings, reviewing the industry/issue matrix. • The power of shareholder proposals in shaping corporate agendas. • The pressing need for multi-stakeholder collaboration and dialogue. 	<p>Final Reports and Final Presentations due by Sunday, March 7th at 11:59 pm.</p>

COVID-19 Classroom Expectations Statement

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the [COVID-19 Code of Conduct](#). With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.
- No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.
- Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.

If a student fails to comply with the [COVID-19 Code of Conduct](#) or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up.



Class Recording

This class or portions of this class will be recorded by the instructor for educational purpose and available to the class during the quarter. Your instructor will communicate how you can access the recordings. Portions of the course that contain images, questions or commentary/discussion by students will be edited out of any recordings that are saved beyond the current term.

Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact [AccessibleNU](#). Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University’s [Copyright Policy](#), faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

Expectations for Class Participation

Being prepared for class is about more than just showing up, it’s also about making sure you’ve completed the readings, homework, etc. so that you are able to make thoughtful contributions during class. Sitting silently and/or being unprepared can damage your participation grade. When in a virtual class, we expect students to keep their camera and mute on as much as possible. When in the classroom, we expect students to keep their phones off and put away.

Academic Integrity

Academic integrity is taken very seriously at Northwestern. Students are responsible for reading and understanding Northwestern’s Academic Integrity policies. All suspected violations will be reported to the McCormick College of Engineering’s Dean’s Office. These include cheating, plagiarism, fabrication, unfair advantage, unauthorized collaboration, and aiding and abetting of academic dishonesty. Students found in violation of academic integrity may receive a zero on the assignment or a failing grade for the course and may be suspended or permanently expelled from the University. See [Academic Integrity: A Basic Guide](#) for more information.

The Writing Place

When working on writing assignments for this class, I encourage you to visit the Writing Place, Northwestern's peer writing center. You will work with juniors and seniors who have been trained to provide you feedback and assistance on any type of writing at any stage in the writing process. They will not edit your work. Rather, they will work with you to brainstorm ideas, organize or outline an essay, clarify your argument, document your sources correctly, or refine grammar and style.

Accessibility Statement

Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: accessiblenu@northwestern.edu; p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

Illness and Medical Leave of Absence

Review the University's [policy](#) on missing academic work due to illness. Your instructor cannot waive an assignment missed due to illness unless the illness can be verified (e.g., by University Health Services or other licensed health professionals).

Discrimination and Sexual Harassment

Northwestern's Policies on Discrimination, Harassment, and Sexual Harassment apply to all members of the University community, including students, staff, faculty, and third parties. Any student, staff, faculty member, or third party who believes that they have been discriminated against or harassed on the basis of their race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, pregnancy, parental status, marital status, age, disability, citizenship, veteran status, genetic information or any other classification protected by law, should contact the Office of Equity at (847) 467- 6571. Additional information about the University's discrimination and harassment policies, including the campus resources available to assist individuals with discrimination or harassment concerns, is available online on the [Office of Equity Website](#). Students, staff, and faculty who report harassment, discrimination, or sexual misconduct are also protected under the [University's Policy on Non-Retaliation](#).

Sexual Misconduct and Reporting

Northwestern University is committed to fostering an environment where students are safe and free from sexual misconduct. [Confidential resources](#) are available to those who have experienced sexual misconduct. Faculty and instructors are not confidential resources and are required to report incidents of sexual misconduct, whether discussed in your assignments or in person, to the Office of Equity, which can provide information about resources and options. We encourage students who have experienced sexual misconduct to talk with someone to get support. For more information, including how to request interim protective measures and academic accommodations or file a complaint, see the [Get Help page](#).

Other Resources

Students can find useful resources for safety and security, academic support, and mental and physical health and well-being at the [NUhelp website](#).