

SYLLABUS

SUMA PS5170: Sustainable Operations

Spring 2021 - Thursdays, 6:10 to 8:00 p.m.

Instructor information

Vance A. Merolla

e-mail: vm2467@columbia.edu

Office Hours: by appointment

Faculty Support Assistants (Office Hours to be announced):

TBD

TBD

e-mail:

e-mail:

Course Overview

Leading and advancing sustainability within an organization's operations requires a strategic and balanced approach. Focusing on the integration of a broad range of today's sustainability drivers, in a manner consistent with the organization's culture and business objectives, optimizes the chances for long term success. To that end, this course takes a broad high level approach at systematically analyzing opportunities to integrate sustainability at each step along a complex value chain. Specifically, students will be asked to assume the role of a sustainability professional within a private sector company, tasked with integrating various sustainability strategies, initiatives and tools into the fabric of the business.

Throughout the semester, the entire end-to-end value chain will be examined, however it is not the intent to conduct full in-depth technical analyses of each value chain area, rather we will look at sustainable operations from a high-level strategic management viewpoint, discussing integration opportunities and intersections related to: product design, procurement, distribution, direct operations (e.g. manufacturing, buildings), stakeholder engagement, product/service use and end-of-life disposition.

By considering the organization holistically, we will discuss analytical concepts and industry tools related to life cycle thinking, cost/benefit analyses, corporate sustainability strategies, and risk assessments. In addition to technical sustainability considerations such as climate change, energy, water and waste, students will learn to implement practical sustainability initiatives within operating organizations by carefully considering key stakeholder expectations and overall materiality. Finally, the intersection of sustainability and brand purpose will be explored, helping to find the sweet spot between sustainability science and creative marketing/communication.

Importantly, students will be challenged to think concretely about making choices and balancing elements of sustainability in an overall business context, and communicate in concise written and oral formats to critical internal and external stakeholders.

Key Learning Objectives:

Sustainable Operations is a broad topic, applicable to nearly all sectors and organizations both public and private. This course will focus primarily on the private sector, however in order to address as many cross-sector themes as possible, we will look for meaningful operational sustainability elements applicable to most organizations, public and private. The primary learning objectives for students will include:

- Understand how to integrate business-driven Sustainable Operations across a value chain
- Learn to balance and align varying stakeholder (customers/consumers, NGOs, suppliers, employees and investors) expectations with business realities (both financial and cultural) and materiality
- Utilize life cycle thinking to prioritize sustainability efforts
- Gain practical experience in the application of various real-world sustainability tools related to carbon footprint analysis, energy efficiency, product sustainability, sustainable buildings, water risks and supplier engagement
- Understand the opportunities related to developing a Sustainability Strategy Framework and integrating sustainability into an organization's or brand's purpose, by leveraging both sustainability science and creative marketing
- Learn to communicate Sustainable Operations implications and business benefits in simple, effective and authentic ways, and to present clear business-focused updates to executive management

Course Structure

As a way to help develop practical Sustainable Operations skills, the course will utilize three (3) distinct (fictional) private sector companies in the following business sectors: consumer goods, hospitality and food/beverage. Student teams will be assigned to these business sectors, and will be given real-world scenarios and data to utilize throughout the course. Team-based midterm and final presentations will be required as a way to share ideas and illicit discussion/debate on various strategies.

The course will be structured into the following main sections: **Science, Stakeholders, and Engagement**

- **Science: Understanding Value Chain Impacts:** We will begin by examining end-to-end operational aspects of sustainability through the lens of greenhouse gases (GHG), to help identify potential "hotspots" where focus might bring greatest value. This section will also cover: facility operations & manufacturing, procurement & logistics, and product use & end-of-life. Students will be challenged to complete assignments related to carbon footprint analysis, product sustainability and sustainable buildings (LEED).
- **Stakeholders: Focus on Materiality:** Through critical analysis of various internal and external stakeholder (customers/consumers, employees, NGOs, suppliers, and investors) expectations and material business issues, this section will provide the backdrop to formulate successful sustainable operations strategies. Utilizing the private sector organizations assigned, teams will be challenged to complete activities related to designing and developing more sustainable products, tackle high-impact NGO priorities, assess supplier water and climate risks (using WRI tools), and respond to investor protocols and surveys (e.g. CDP, DJSI, TCFD).

- **Engagement: Communication to Drive Action:** In this final section of the course, we will focus on developing effective sustainability communications and actions built upon the foundational hotspot and material issues identified in sections 1 & 2. Student teams will be challenged to develop a sustainability strategy framework and present it along with clear business-focused sustainability goals, key metrics, and messaging, then “tell their story” in the form of Executive Management team presentations.

GUEST SPEAKERS: As a way to broaden the real-world aspects of the course, various industry practitioners will be invited to provide the class with their Sustainable Operations experiences and perspectives throughout the semester

Course Schedule

- Week 1 (Jan 14) – Introduction to Sustainable Operations

Section 1: Science: Understanding Value Chain Impacts

- Week 2 (Jan 21) – The Value Chain Footprint
- Week 3 (Jan 28) – Facility Operations: Energy & Waste
- Week 4 (Feb 4) – Responsible Sourcing & Supply Chains
- Week 5 (Feb 11) – Product Use and Packaging
- Week 6 (Feb 18) – MIDTERM: TEAM PRESENTATIONS

Section 2: Stakeholders: Focus on Materiality

- Week 7 (Feb 25) – Materiality, Stakeholders & Partnerships
- Spring Recess (Mar 4) - no class
- Week 8 (Mar 11) - NGOs: Tackling high-impact priorities
- Week 9 (Mar 18) – Suppliers: Assessing Water & Climate Risks
- Week 10 (Mar 25) – Investors: Surveys and Standards

Section 3: Engagement: Communication to Drive Action

- Week 11 (Apr 1) - Customers/Consumers: Brand Purpose and beyond
- Week 12 (Apr 8) – Sustainability Strategy and Storytelling
- Week 13 (Apr 15) – Course Summary & Team Communications
- Week 14 (Apr 22) – FINAL EXAM: TEAM PRESENTATIONS (note: class from 6:10-9:00pm)

Method of Grading and Evaluation

1. Individual Assignments – 70%
2. Midterm Presentations – 10%
3. Final Exam Presentations – 20%

Grade Point System: the following identifies how points will be awarded and translated into letter grades for the course, consistent with the SPS program:

A+	100%	to 98%
A	< 98%	to 93%
A-	< 93%	to 90%
B+	< 90%	to 87%
B	< 87%	to 83%
B-	< 83%	to 80%
C+	< 80%	to 77%
C	< 77%	to 73%
C-	< 73%	to 70%
D	< 70%	to 60%
F	< 60%	to 0%

Course Assignments and Point Scoring

✓ Individual Assignments (70 points)

Four (4) individual exercises will be assigned to students as follows:

1. GHG Value Chain Footprint (15 points)
2. LEED Scorecard & TRUE Zero Waste analysis (10 points)
3. Science-based Targets (15 points)
4. Supplier Water Risk Mapping (15 points)
5. Sustainability Strategy Framework (15 points)

✓ Midterm & Final (30 points)

Two (2) team presentations will be assigned as follows:

1. Midterm Team Presentations: Senior Management briefing on Value Chain Analysis (10 points)
2. Final Team Presentations: Sustainable Operations Strategy - Executive Summary (20 points)

Assignment Grading Criteria

A series of technical analyses and written management email memos will be assigned throughout the course. Additionally, two team oral presentations will be required.

Grading Criteria for Written Assignments:

- Evaluated on a scale of 100 points using the following guidelines: 20 points for spelling, grammar, and the overall quality and clarity of the writing. 20 points for adherence to assigned format. 60 points for data analysis (where applicable), persuasiveness and effectiveness in communicating all key messages and meeting the objectives of the assignment.

Grading Criteria for Verbal Presentations:

- The midterm and final team presentations will be graded on a scale of 100 points using the following guidelines: 20 points for technical analysis. 30 points for overall quality and clarity of written materials – including ppt slides. 50 points for overall quality and clarity of the verbal presentation – including adherence to format guidelines, delivering within the prescribed time limit, and presentation effectiveness as related to the assigned objectives.

Course Readings

A variety of sources including journal articles, videos, webinars and websites will be used throughout this course. Documents can be found either on Canvas or electronically. Readings should be completed prior to the appropriate session to help better inform the lecture and discussion.

Late Assignment Policy

Assignments are due on the dates/times identified. One letter grade will be deducted from any assignment submitted after the due date/time. No assignment will be accepted after return of graded results to the class or after in-class review of the assignments, as well as after the deadline for submitting final grades.

Incompletes

As outlined in the School's grading and academic starts policy, "A grade of 'I' (incomplete) is a temporary grade indicating failure to complete assigned work. The mark is given only upon the request of the student and at the discretion of the instructor. The student and faculty member must sign a completed 'Request for Grade of Incomplete Form' before the final class session. The 'I' must be removed within one year after the end of the semester in which the student received the grade. Students seeking an extension of this time limit must have the approval of the instruction and successfully petition of the director of their program. If no petition is made, or if the petition is unsuccessful, the grade is changed to an N-Permanent Incomplete- which remains on the student's permanent record.

Academic Integrity

The School of Continuing Education does not tolerate cheating and/or plagiarism in any form. Those students who violate the Code of Academic and Professional Conduct will be subject to the Dean's Disciplinary Procedures. The Code of Academic and Professional Conduct can be viewed online: <http://ce.columbia.edu/node/217>

Please familiarize yourself with the proper methods of citation and attribution. The School provides some useful resources online; we strongly encourage you to familiarize yourself with these various styles before conducting your research: <http://library.columbia.edu/help/howto/endnote.html>

Violations of the Code of Academic and Professional Conduct will be reported to the Associate Dean for Student Affairs.

Accessibility Statement

Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University's Health Services website: <http://health.columbia.edu/services/ods/support>

❖ Course Schedule Details

Week 1: Introduction to Sustainable Operations

The first class will be dedicated to personal introductions, discussing course approach & objectives, aligning expectations and previewing course materials & assignments.

This Week's Objectives:

- Provide an overview of the Sustainable Operations course and approach
- Align on class objectives, course structure, and grading
- Review business sector organizational profiles & course assignments
- Discuss Ray Andersen TED Talk

Preparation prior to class:

- **REQUIRED:** TED Talk - The Business Logic of Sustainability; Ray Anderson (Feb 2009); 15:54min
http://www.ted.com/talks/ray_anderson_on_the_business_logic_of_sustainability?language=en
- **SUGGESTED:** Review the three (3) fictitious organizational profiles assigned within the Consumer Goods, Hospitality, and Food/Beverage sectors (.xls files posted on Canvas).

No Assignment this Week.

❖ Course Section 1 - Science: Understanding Value Chain Impacts

Week 2: The Value Chain Footprint

We will examine end-to-end operational aspects of sustainability through the lens of greenhouse gases (GHGs), keeping in mind that this approach may also be applied equally to numerous sustainability aspects beyond climate. This exercise will be highlighting a strategy of identifying potential “hotspots” where focus may bring greatest business and environmental value.

This Week’s Objectives:

- Understand the importance of taking a holistic view at an operational footprint (in this case via GHGs) to help identify areas of focus aligned with business goals
- Review how to analyze basic operational energy usage data (e.g. Scope 1 & 2) and convert to GHG emissions
- Appreciate the wide range of impacts associated with end-to-end operational GHGs (e.g. Scope 3 emissions), and gain experience utilizing practical industry approaches and tools (e.g. GHG Protocol and WRI Scope 3 Analyzer)

Preparation prior to class:

- **REQUIRED:** Read Ben & Jerry’s LCA Study overview
<http://www.benjerry.com/values/issues-we-care-about/climate-justice/life-cycle-analysis>
- **SUGGESTED:** Review WRI/WBCSD’s *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard Revised Edition* (Introduction and Chapters 1-4)
<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>
- **SUGGESTED:** Review real-world company sustainability reports & corporate websites in the following business sectors (available on company websites, under Sustainability):
 - Consumer Products: Colgate-Palmolive, Procter & Gamble, Unilever
 - Hospitality: Marriott , Wyndham Worldwide, Xanterra
 - Food/Beverage: Pepsico, Coca-Cola, Mondelez

Individual Assignment #1: GHG Value Chain Footprint (15 points) due Week 4

This assignment will utilize industry accepted practices and tools to develop a topline GHG Footprint analysis for direct (Scope 1), indirect (Scope 2) and other (Scope 3) GHG emissions. Students will use their assigned organization’s energy usage data and GHG factors provided to estimate the total annual GHG emissions associated with Scope 1 & 2 sources. Then, using the online World Resources Institute (WRI) Scope 3 Evaluator tool students will develop estimated GHG emissions associated with all 15 applicable categories of Scope 3 emissions.

Week 3: Facility Operations - Energy & Waste

Focus will be on understanding the importance, from both an environmental and economic perspective, of investing in energy reduction & efficiency, and renewable energy projects for your facility operations. Additionally, we will explore both technical and marketing opportunities related to operational waste reduction and green building strategies, by leveraging the USGBC's TRUE Zero Waste and LEED certification programs.

This Week's Objectives:

- To underscore the criticality of energy efficiency to Sustainable Operations
- Learn strategies to leverage cost to drive energy efficiency and renewable energy projects within an organization's typical ROI
- Analyze a preliminary LEED Scorecard, including technical feasibility and cost implications, related to a newly proposed facility in your organization
- Discuss the USGBC's TRUE Zero Waste certification program

Preparation prior to class:

- **REQUIRED:** Read *Why LEED*: <https://www.usgbc.org/leed/why-leed>
- **REQUIRED:** Read about TRUE Zero Waste Certification: <https://true.gbci.org/sites/default/files/resources/Guide%20to%20TRUE%20Certification%206-2020%20FINAL.pdf>
- **SUGGESTED:** Visit US EPA ENERGY STAR website – Energy Strategies for Buildings & Plants <http://www.energystar.gov/buildings>; and US EPA ENERGY STAR Energy Treasure Hunt Guide http://www.energystar.gov/sites/default/files/buildings/tools/Energy_Treasure_Hunt_Guide_Jan2014.pdf

Individual Assignment #2: LEED Scorecard & TRUE Zero Waste Analysis due Week 5

This assignment has students review a preliminary LEED v4 Scorecard and cost estimates from a LEED consultant, and provide recommendations related to sustainable building practice options for a new facility being built in India. Additionally, a basic review of the USGBC's TRUE Zero Waste program and requirements will be included in the analysis and management recommendations.

Team Assignment #1: MIDTERM TEAM PRESENTATIONS – Value Chain Analysis: Senior Management Briefing due Week 6

Each of the teams will prepare and present a 12-minute Senior Management briefing summarizing their Value Chain GHG Footprint findings, peer benchmarking observations, and recommendations related to sustainable operations areas of focus which would bring greatest business value. The presentations will be followed by a 5-minute question/answer session.

Week 4: Responsible Sourcing & Supply Chains

Organizations engaged in sustainability must think and act beyond the walls of their own operations. Utilizing the results from the GHG footprint exercise conducted for our organizations, we will examine and discuss the opportunities related to suppliers and materials.

This Week's Objectives:

- Review the results of the GHG Footprint exercise assigned in Week 2 with focus on the Supplier aspects
- Discuss the business importance, risks, opportunities, strategies and practicalities of engaging suppliers in sustainability
- Examine CDP Supply Chain as a leading model to engage suppliers

Preparation prior to class:

- **REQUIRED:** Read McKinsey Article - **"Starting at the source: Sustainability in supply chains"**
<https://www.mckinsey.com/business-functions/sustainability/our-insights/starting-at-the-source-sustainability-in-supply-chains>
- **SUGGESTED:** Visit CDP Supply Chain website - <https://www.cdp.net/supplychain>

No Assignment this Week.

Week 5: Product Use & Packaging

The sustainability impacts stemming from the use of disposal of an organization's products and/or services can often be significant. Product design and material/ingredient choices combined with sourcing decisions and transparency choices affect the overall sustainability profile of an organization. Additionally, this can enable/disable the ability of suppliers, manufacturers and consumers to reduce their impacts.

This Week's Objectives:

- Review the LEED Scorecard and TRUE Zero Waste Analysis assignment from Week 3
- Examine product sustainability aspects related to the design, use and disposal of an organization's products and/or services, with a focus on single use plastics

Preparation prior to class:

- **REQUIRED:** Read Article - CNN: 414 million pieces of plastic found on remote Australian islands <https://www.cnn.com/2019/05/16/asia/australia-plastic-islands-intl/index.html>
- **SUGGESTED:** Read Article - Plastic Monsters (Nestle & Greenpeace) <https://www.greenpeace.org/international/story/21822/plastic-monsters-from-around-the-world-return-home-to-nestle/>
- **SUGGESTED:**
- Visit website - Association of Plastic Recyclers <https://plasticsrecycling.org/>
- Visit website - Closed Loop Fund <http://www.closedloopfund.com/>
- Visit website – How2Recycle <http://www.how2recycle.info/>
- Visit website – Sustainable Packaging Coalition <https://sustainablepackaging.org/>

No Assignments this Week.

Week 6: MIDTERM TEAM PRESENTATIONS - Value Chain Analysis: Senior Management Briefing

Each of the 6 teams will present a 12-minute Senior Management briefing summarizing their Value Chain GHG Footprint findings, peer benchmarking observations, and recommendations related to sustainable operations areas of focus which would bring greatest business value. The presentations will be followed by a 5-minute question/answer session.

***Note:** the Senior Management team has allotted only 12 minutes on their agenda for your briefing. Your presentations will be timed and the 12 minute limit will be strictly enforced, so not completing your presentation within the time limit will impact your grading evaluation.*

No Assignment this Week.

❖ Course Section 2: Stakeholders - Focus on Materiality

Week 7: Materiality, Stakeholders & Partnerships

Following our analysis of the value chain in Section 1 of the course, we begin Section 2 with a focus on understanding material issues as well as key stakeholder agendas and expectations. Material issues have potentially significant implications related to a company's risk & opportunities, making them critical elements for decision making, strategy setting and reporting. We will examine some approaches to materiality assessments and begin to integrate insights into our company strategies.

This Week's Objectives:

- Transition from evaluating our footprints to understanding what issues are material to stakeholders both internally and externally
- Discuss Stakeholder Engagement within the context of understanding expectations and balancing with business realities and requirements
- Discuss various approaches to Materiality Assessments (GRI, SASB, IIRC)

Preparation prior to class:

- **REQUIRED:** Read Triple Pundit - "The Business Benefits of Sustainability Partnerships"
<https://www.triplepundit.com/story/2018/business-benefits-sustainability-partnerships/13476>
- **SUGGESTED:** Read *7 BASIC STEPS FOR CONDUCTING A SUCCESSFUL MATERIALITY ASSESSMENT*
<https://us.anteagroup.com/en-us/blog/7-basic-steps-conducting-successful-materiality-assessment>
- **SUGGESTED:** Review SASB Materiality Map
<https://www.sasb.org/materiality/sasb-materiality-map/>

Individual Assignment #3: Science-based Targets due Week 9

This assignment involves the development of a Science-based Target (SBT) for Scope 1, 2 and 3 GHG emissions based on the criteria from the SBT Initiative. Students will be given GHG emissions data and then asked to use real-world modeling tools to estimate emissions reduction goals which are in conformance with leading climate science. Finally, students will propose a SBT statement which complies with all submission and technical criteria.

Week 8: NGOs - Tackling High-impact Priorities

Companies today engage with an increasing array of non-government organizations (NGOs) dedicated to driving various sustainability agendas. This week we will survey the current external NGO landscape, examine the business connections to the value chain, and discuss beneficial NGO engagement strategies.

This Week's Objectives:

- Understand the role of NGOs in driving Sustainable Operations, and survey the current external landscape
- Through examination of our value chain model, discuss which NGO issues are most relevant to Sustainable Operations
- Discuss various strategies in balancing NGO engagement with overall business risks & goals

Preparation prior to class:

- **REQUIRED:** Read Financial Times article - **"P&G urged to match best in class to avoid 'greenwash' label"**
<https://www.ft.com/content/4f807d17-2f95-4572-a7f4-50655fdda00e?shareType=nongift>
- **SUGGESTED:**
 - Visit World Resources Institute (WRI) website; <http://www.wri.org>
 - Visit Environmental Defense Fund (EDF) website; <https://www.edf.org/>
 - Visit Greenpeace website; <http://www.greenpeace.org/usa/>
 - Visit US Green Building Council (USGBC) website; <http://www.usgbc.org/>

No Assignment this Week.

Week 9: Suppliers - Assessing Water & Climate Risks

Sustainable Operations are critically dependent upon understanding and managing the risks throughout the supply chain. This week we will examine approaches to analyzing and addressing water and climate risks associated with key material/service suppliers. An exercise using a real-world tool (World Resources Institute Aqueduct Water Risk Atlas) will be included.

This Week's Objectives:

- Discuss Stakeholder Engagement within the context of how best to partner with suppliers to gather critical input used to inform the assessment of current and future risks
- Understand the criticality of assessing and managing water and climate related risks associated with suppliers
- Learn the application of a real-world analytical tool (WRI's Aqueduct Water Risk mapping) in the supplier evaluation and selection process

Preparation prior to class:

- **REQUIRED:** Read Reuters article: **"An ever-drier world will unleash investment flood"**
<https://www.reuters.com/article/us-global-water-breakingviews/breakingviews-an-ever-drier-world-will-unleash-investment-flood-idUSKBN1Z51MD>
- **SUGGESTED:** Visit WRI Aqueduct website - <http://www.wri.org/our-work/project/aqueduct>
- **SUGGESTED:** Read: NY Times A Quarter of Humanity Faces Looming Water Crises
<https://www.nytimes.com/interactive/2019/08/06/climate/world-water-stress.html>

Individual Assignment #4: Supplier Water Risk Mapping due Week 11

In this assignment, students will utilize WRI's online Aqueduct water risk tool to map out the locations of 3 potential new suppliers in Mexico, obtain water risk data associated with these supplier locations, and then summarize the findings and report back to the Global Procurement team with relevant graphs/tables and recommendations.

Week 10: Investors - Surveys & Standards

As sustainability becomes more deeply embedded into global business practices, the investment community is taking an increasingly active role. This week we will discuss how sustainable operations intersect with investor and shareholder expectations both from risk management and value creation perspectives. We will review some leading investor-facing initiatives (e.g. TCFD), surveys (e.g. CDP, DJSI) and emerging sustainability accounting standards (e.g. SASB) to help frame the discussion.

This Week's Objectives:

- Understand how investors view sustainability from both the risk management and value creation perspectives
- Through review of the CDP investor initiatives, gain an understanding of the breadth and depth of issues related to how institutional investors may act to reduce the long-term risks arising from environmental and social externalities
- Discuss investors as key stakeholders in driving sustainability, as well as how emerging accounting standards help to provide critical governance and support

Preparation prior to class:

- **REQUIRED:** View TED talk *The Investment Logic for Sustainability* 12:19min
http://www.ted.com/talks/chris_mcknett_the_investment_logic_for_sustainability?language=en
- **SUGGESTED:** Read Blackrock letter *A Sense of Purpose*
<https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>
- **SUGGESTED:** View video WSJ and SASB Founder interview 3:53min
<http://www.sasb.org/economics-puts-spotlight-sasb/>
- **SUGGESTED:** Visit website: Sustainability Accounting Standards Board (SASB) website – Principles; <http://www.sasb.org/approach/principles/>

Team Assignment #2: FINAL TEAM PRESENTATIONS – Sustainable Operations Executive Summary due Week 14

(Submit PPT/Slides files on Wednesday Week 14 by 6pm, present to class on Thursday Week 14)

As a more comprehensive followup to the executive briefing conducted in Week 6, each of the 6 teams will present a 20-minute Senior Management update summarizing their Sustainable Operations strategy, findings and recommendations, followed by a 5-minute question/answer session. With the limited amount of time, teams should focus their presentations on high-level learnings, strengths, opportunities and recommendations from the Science, Stakeholders and Engagement work conducted this semester. The audience includes your organization's CEO and COO, as well as management team leaders from finance, procurement, manufacturing/operations, human resources, corporate communications and sustainability.

❖ Course Section 3: Engagement - Communication to Drive Action

Week 11: Customers/Consumers - Brand Purpose and beyond

This week we will listen to what our customers and consumers are telling us about sustainability in terms of expectations and relevance, and discuss how best to integrate those in balance with other business drivers. Additionally, we will explore the connections and opportunities related to integrating sustainability into a brand's purpose.

This Week's Objectives:

- Review Assignment #4 on Supplier Water Risk Mapping
- Utilize the GHG Footprint developed in Section 1 to examine the impacts stemming from Consumer Use of Products/Service
- Discuss customer perspectives and related engagement strategies
- Explore approaches to integrate sustainability into Brand Purpose Models

Preparation prior to class:

- **REQUIRED:** Nielsen - WAS 2018 THE YEAR OF THE INFLUENTIAL SUSTAINABLE CONSUMER?
<https://www.nielsen.com/us/en/insights/article/2018/was-2018-the-year-of-the-influential-sustainable-consumer/>
- **SUGGESTED:** Huff Post - Why is Walmart a Sustainability Leader?
https://www.huffpost.com/entry/why-is-walmart-a-sustainability-leader_b_5a329da5e4b00caf3d59eae8
- **SUGGESTED:** 5 Amazing Examples of Brands Purpose
https://www.huffingtonpost.com/jeff-charles/5-amazing-examples-of-brands-purpose_b_10107212.html
- **SUGGESTED:** Practicing Purpose: How to Turn Social Purpose Into Growth
https://www.sustainablebrands.com/news_and_views/walking_talk/libby_maccarthy/practicing_purpose_how_turn_social_purpose_growth

No Assignment this Week.

Week 12: Sustainability Strategy & Storytelling

As organizations work to develop sustainability strategies and initiatives, utilizing comprehensive frameworks and models can help ensure robust future-proof outcomes. This week we will discuss examples of sustainability strategic models, public reporting, and the importance of meaningful, authentic and transparent brand messaging and storytelling.

This Week's Objectives:

- Appreciate the importance of and transparent public sustainability reporting
- Discuss how to develop a robust sustainability strategy framework
- Look at examples of sustainability marketing done right, and not so right

Preparation prior to class:

- **REQUIRED:** Forbes article - “**Your 2030 Sustainability Targets Are Wrong**”
<https://www.forbes.com/sites/solitairerownsend/2020/06/07/your-2030-sustainability-targets-are-wrong/#3bbcbdd5538c>
- **SUGGESTED:** *The Right Way for Companies to Publicize Their Social Responsibility Efforts* – Harvard Business Review
<https://hbr.org/2018/04/the-right-way-for-companies-to-publicize-their-social-responsibility-efforts>
- **SUGGESTED:** website <https://sustainablebrands.com/>

Individual Assignment #5: Sustainability Strategy Framework due Week 13

In this assignment, you will be asked to develop a Sustainability Strategy framework given a suggested process, format and content. Students will utilize the information provided on the General Company Info tab of their organizational profiles along with perspectives gained from the Science and Stakeholder sections of the course to help inform a meaningful sustainability strategy and positioning. The strategic framework will include a vision, sustainability territory, positioning statement, priority pillars, directional targets/ambitions, and foundational topics. In addition, you will develop a Sustainability Manifesto and strategy “tagline” meant to succinctly summarize the story of your sustainability strategy and ambitions.

Week 13: COURSE SUMMARY & TEAM COMMUNICATIONS - Sustainable Operations

The final class will be dedicated to summarizing key topics and learnings from the course, reviewing original objectives, and having an open class discussion on a selected sustainability “hot” topic and/or case study

Time will also be provided for the teams to work on their final presentations, as well as gather input from the professor and teaching assistants as teams prepare for their presentations next week.

This Week’s Objectives:

- Review Assignment #5 Sustainability Strategy Framework
- Conduct a course overview focused on the original objectives, as well as key learnings
- Open class discussion on a sustainability “hot” topic or case study (based on student survey)
- Discuss expectations for Final Presentations next week, and provide time for Teams to meet in class to prepare, as needed

No Assignment this Week.

Week 14: FINAL TEAM PRESENTATIONS - Sustainable Operations Strategy Executive Summary
*(*extended class time from 6:10pm to 9:00pm)*

Each of the 6 teams will present a 20-minute Senior Management update summarizing their Sustainable Operations strategy, findings and recommendations, followed by a 5-minute question/answer session. With the limited amount of time, teams should focus their presentations on high-level learnings, strengths, opportunities and recommendations from the Science, Stakeholders and Engagement work conducted this semester. The audience includes your organization's CEO and COO, as well as management team leaders from finance, procurement, manufacturing/operations, human resources, corporate communications and sustainability.

Note: *the Senior Management team has allotted only 20 minutes on their agenda for your briefing. Your presentations will be timed and the 20 minute limit will be strictly enforced, so not completing your presentation within the time limit will impact your overall assignment evaluation.*