# Strategies for Sustainability (MGPO-440)

Fall 2019

Dror Etzion

## Course description

Over the past century, technological and economic development have significantly elevated the living standards of many people, yet many more remain in abject poverty, while the scope and scale of negative ecological impacts caused by organized human activity have also increased dramatically. Humankind is, and increasingly recognizes itself to be, a truly global force with the potential for both positive and negative impacts. Concern for these impacts – for ecologically sustainable and socially responsible economic development – is becoming a key strategic issue for nations, industries and firms. The aim of this course is to equip future leaders with conceptual tools for addressing the complex and difficult issues surrounding the formulation and implementation of organizational strategies for success in the 21st century, in which sustainability will no longer be perceived as a "nice to have" and will become a fundamental business imperative.

## Learning Outcomes

This course is designed to provide an introduction to the relevance of sustainability as a framework for driving business value creation. At the end of this course, you will be able to:

1) Understand the systemic nature of sustainability and the challenges it poses for "business as usual".
2) Conceptualize and analyze sustainable development issues as business problems that pose opportunities and threats to a firm's competitive advantage and social legitimacy:
   - Understand the forces establishing the environment, sustainability and sustainable development as important issues for business.
   - List and explain the business logic behind five approaches for employing sustainability as a source of competitive advantage.
   - Recognize and critique the implementation of these approaches by firms in cases discussed in class and cases drawn from current events in the real world.
3) Recognize, understand and develop innovative business models and frameworks for innovation that both foster sustainability and confer competitive advantage, rather than viewing them as trade-offs.
4) Comprehend the linkages between sustainability and economic theory, including common misconceptions, limits and paradigms, both entrenched and emergent.
5) Explain how and why firms might collaborate with governments, rivals, non-governmental organizations (NGOs) and other stakeholders in the process of managing and resolving sustainable development issues.
6) Appreciate and empathize with the perspectives and demands of different stakeholders brought together around sustainable development issues. In attaining this learning outcome, you will practice giving and receiving feedback on nascent business models for sustainability developed by peers in the course.

## Pedagogy

The course is structured around three topical themes:

1. **Introduction** - in which we discuss the linkages between environment, society and the economy, and learn about systems.
2. **Sustainable development and business strategy** – in which we understand several basic strategy templates that can make sustainability tenable in a competitive business context and examine how sustainable development can drive technological and business model innovation.
3. **Economics and sustainability –** in which we understand economic approaches: market based, behavioral, and financial.

We tie these themes together through a developmental, multi-stage, semester long team project in which you will devise a business model that tackles climate change.

In addition to office hours, a tutor will be available to provide consultation, both individually and for the team project. The tutor can help clarify the assignments and provide feedback on your ideas and approaches as you work on your deliverables. If you're ever feeling overwhelmed by the tasks, the tutor can give you some suggestions on how to tackle them. However, the tutor is not there to tell you the "right way" to approach the assignments, because there is none. As well, the tutor will not read your entire papers prior to grading. You'll get the most out of your consultations with the tutor if you arrive prepared, with specific ideas and questions to explore.

## Course materials

Most of the required readings are available on MyCourses, sorted by session. There are two exceptions:

1. In some of our sessions we will be using case studies. You are responsible for obtaining these on your own. I have created a course-page on the Harvard Business Publishing website, listing all the cases. Follow this link: https://hbsp.harvard.edu/import/659893 .

2. You will also need to obtain a copy of the book Drawdown, by Paul Hawken, available at many local booksellers as well as at online retailers. Unfortunately, the library does not yet carry this book as an ebook. Here is the full reference:

   *Hawken, P. (2017) Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming. Penguin.*

On MyCourses, you will also find a folder of supplementary materials that you can use to delve more deeply into the central topics we cover in the course, in particular:

- Business strategy
- Business models
- Systems thinking
- The Drawdown program

## Grade breakdown and timeline[1]

| Deliverable | Format | Due date | Grade component* |
|---|---|---|---|
| Team contract | Team | September 24 | 0% |
| Paper #1 plus feedback guidance | Team | October 8 | 10% |
| Paper #1 peer feedback | Team | October 15 | 0% |
| Midterm | Individual | November 8 | 40% |
| Draft paper #2 plus feedback guidance | Team | November 12 | 0% |
| Paper # 2 peer feedback | Team | November 19 | 10% |
| Presentation | Team | November 26 | 0% |
| Paper #2 | Team | December 5 | 30% |
| Participation and professionalism – peer assessment | Individual | | 5% |
| Participation and professionalism – instructor assessment | Individual | | 5% |

## Deliverables

Sustainability is a team sport. The grading scheme reflects this characteristic, in that 50% of your score is based on individual deliverables, and 50% on team deliverables.

*Individual deliverables (50%)*

Participation and professionalism – instructor assessment (5%):
I will need your cooperation to make our time together interesting and beneficial for us all. Your ongoing commitment, participation and attention are crucial for our success. This shouldn't be too hard, since sustainable development is not a dogmatic topic, and it begs for discussion and analysis. In particular, I will challenge you to closely examine many assumptions, and to think critically about the concepts, tools and practices we will discuss in class. We are very lucky to be a diverse group, with students from many faculties. The knowledge and expertise you have already accumulated in your disciplines can enrich our discussion immeasurably, and I encourage each and all of you to share the views you see from these different vantage points.

Professionalism implies that students are expected to do all the required readings and to come to class prepared to actively and knowledgeably participate in discussions of the ideas and cases found therein. In particular, some of our learning will be facilitated by discussing cases. Case discussion is a highly participative form of learning, and thorough preparation will dramatically improve your contribution to our analysis in class. Please see the appendix for some tips on how to prepare for and participate in case discussion,

Participation is **not** equivalent to speaking often or at length. Facilitative and integrative interventions are as important as direct contributions. Brevity, tact and staying on topic are also hallmarks of quality participation. Punctuality, adherence to timetables, and mutual respect are important facets of professional behavior. It goes without saying that being absent from class will impact your participation grade.

[1] **In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.**

If you are experiencing difficulties in fulfilling course requirements or attending class, do let me know, with supporting documentation if possible. You must however let me know of such issues in advance or as they occur, and **not after the fact**. I will do my best to accommodate reasonable requests.

Mid-term (40%):
A mid-term exam will take place on **Friday, November 8, 12:00 – 14:00**, and will draw upon the content we will have covered by that date. Some sample mid-term questions from prior years are available on MyCourses.

Decisions regarding requests to defer the midterm are the responsibility of the BCom Office. Should a deferral be granted, I will work with you to determine how to accommodate it. If you are seeking a deferral, fill out the form here.

*Team project (50%)*

This semester-long assignment asks you to develop a viable idea for a business that will create some tangible good in the world. Truth be told, my goal here is to encourage you to spend three months developing and then honing a plan to start a business or implement an initiative at a prospective employer that will meaningfully promote sustainability.

The assignment is conducted in teams of four, which you will form on your own. Typically, teams with diverse backgrounds (finance, marketing, arts, engineering, etc.) do well in the assignment, but this is a recommendation, not a requirement.

The starting point for the project is the book Drawdown by Paul Hawken. The book presents what Hawken and his team consider to be the "100 most substantive solutions to reverse global warming, based on meticulous research by leading scientists and policymakers around the world". Your assignment is to pick one of these solutions and develop a strategy proposal for turning it into reality. Some solutions are trickier to tackle through a business approach compared to, say, a policy approach or a development approach. Remind yourself as you read through the solutions that you'll be using purely **business concepts and strategies** to realize your project.

When you have identified some solutions that appear to be appealing to your team, survey some of the academic literature that underlies those solutions as presented in the book. You can get started with academic literature on the Drawdown website itself (www.drawdown.org) by finding the page for the solutions that interest you, scrolling down, and clicking the link for "Technical Assessment References (PDF)". I encourage you to find additional literature on your own to deepen your knowledge. Finally, pick the solution that you find the most enthralling, and that you think will allow you to develop high-quality deliverables for the two papers described below.

> *Paper #1 Initiative selection and analysis (10%)*:
> Using concepts we will have covered in the introduction to the course, identify the system or systems of which your solution is a part. Importantly, at this point do not identify a specific technology or service that you wish to pursue - that will come later. Rather, stay focused on the bigger picture. More concretely, analyze and explain the systemic characteristics (i.e. symptomatic solutions, delays, reinforcing loops), as well as specific economic forces, institutions, norms and other forces that prevail in the system. To help you uncover the issues

that hinder sustainability in the system, think about why the solution hasn't been realized yet. Use diagrams to help explain your thinking, if you wish[2]. Then point to potential leverage points that can plausibly overcome those systemic hurdles. Where and how can one intervene to positively shift the system? Do **not** write a policy paper or a whitepaper:
Maximum word count = 1,500 (+ tables, figures, appendices and references as needed).
**Due date: October 9, with feedback guidance sheet**

*Paper #2 Business model (30%)*:
Using the tools we will have covered in the section on business strategy, develop a business model that will promote sustainability in the domain you identified in Paper #1. Essentially, your starting point for Paper #2 should be the endpoint of Paper #1, meaning the intervention that you think will be effective in promoting the solution you have analyzed. Transform that intervention into a viable business model. Imagine yourself as an entrepreneur seeking funding for a new business, or a manager in an existing company/NGO of your choice trying to make a case to your boss or board of directors. Build on the leverage points you identified, and turn them into components of your business model, explaining how your strategy will be a "win-win", creating both meaningful sustainability impacts as well as financial viability for your organization. Again, do not develop a policy; this is a **business** pitch.
Maximum word count = 2,500 (+ tables, figures, appendices and references as needed).
**Due dates: First draft, with feedback guidance sheet: November 13. Final submission December 5, 23:30. Please note that in effect this is a final exam, in take-home format.**

I am not picky about formatting, but I read the papers on a screen so please make them easy for me to read. Headings are usually helpful for these types of papers, and remember to use page numbers. The rubrics that I use for grading your papers and feedback are available in an appendix, at the end of this document.

How to submit team assignments:

1. Go to groups tab
2. Find a group number that is vacant
3. Sign yourself and your teammates up, or have everyone sign up individually to the same group number
4. Submit the assignments via MyCourses only, in the assignment folders that will now be accessible to your group.
5. For each of your two papers, in the text box, write a feedback guidance sheet that spells out specific issues for which you would particularly like to receive feedback.

Please **do not** send me submissions by email.

In addition to these two papers, there are three other assignments related to the team project.

*Business model feedback (10%):* A critical component of business' sustainability activities is "stakeholder consultation": the solicitation and use of feedback from customers, NGOs, members of local communities and others. In this course, you will learn and practice this important skill by soliciting feedback from another team; by providing feedback to another team; and by using the feedback provided by others in your own projects. You will be asked to write

[2] If you would like to prepare a systems diagram, check out https://kumu.io for software that you can use. Here is an explainer: https://vimeo.com/99685006.

a feedback guidance document (usually just a few bullet points) for each of your paper assignments, to help your feedback providers focus on issues where you desire the most help. We will first practice soliciting and giving feedback to other teams on Paper #1, without grading. Feedback on a draft version of Paper #2 will be graded.
Maximum word count = 750 words.
**Due date: November 20.**

*Presentation (0 % directly, factored into participation grade):* The final presentation should be an "elevator pitch" of about 5 minutes, with Q&A and feedback immediately following. The goal is to elicit additional feedback from your peers, which will help you identify shortcomings in your proposal, aspects that require additional clarification, and other improvements. You are free to be extremely creative in how you present. If you elect to use PowerPoint or other presentation files, they must be emailed to me at least one hour before the beginning of the class in which you present.

*Participation and professionalism – peer assessment (5%):* The first deliverable for the team project is for the team to devise and agree upon a contract, which will allow you to articulate the norms and expectations you have from each other as you work together over the semester. On MyCourses, in the supplementary materials folder, you can find a template for a contract, but you are very much encouraged to develop a tailored contract which you as a team are comfortable with.

At the end of the course you will confidentially assess your teammates' participation and professionalism throughout the term. That may also be a good time to reference the contract again, to make sure your assessment is accurate and evidence-based. Each person's grade will be the average of the scores given by her/his team members.

## Grading policy

Late assignments:

- For graded deliverables, 10% of the maximum score will be deducted from the assignment score for every day an assignment is late, starting from one minute after the submission deadline.
- For deliverables with a grading component of 0%, late submission will lead to a deduction of 3% in the final grade.

Grade adjustments:
I do **not** allow supplemental work and/or re-weighting of the evaluation components of the course in order to mark up a low grade.

Re-grading:
You have the right to consult any written submission for which you have received a grade and the right to discuss this submission with me. If we cannot reach a successful resolution, you can fill out an official Re-Read Request Form. This must be done within 10 days after the graded work or test has been returned to you.

## Coordinates and communications

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|---|---|
| **Instructor:** | Dror Etzion |
| **Office:** | Bronfman 486 |
| **Telephone:** | 514.398.4071 |
| **Email:** | dror.etzion@mcgill.ca |
| **Office hours:** | Tuesdays, 11:00 – 12:00 and by appointment |
| | |
| **Tutor:** | Rachael Atkinson |
| **Office:** | Bronfman 466 |
| **Telephone:** | 613.349.5057 |
| **Email:** | rachael.atkinson@mail.mcgill.ca |
| **Office hours:** | Wednesdays, 11:30 – 12:30 and by appointment |

I am generally good, though not always exceedingly quick, with email. In other words, you can expect me to respond to all emails, and I can generally promise a 48 hour turnaround time, but please don't assume anything better than that. Here is a short video from McGill Teaching and Learning Services about how to write effective email messages to professors.

You are most welcome to drop in unannounced at office hours. If you stop by some other time I may or may not be able to accommodate you right away. But I will try.

## Laptop and Cell Phone Policy

A successful class depends on the active attention and engagement of everyone in the classroom. You cannot be actively attentive and engaged at the same time you are checking email, texting, or surfing the internet. In addition, using your laptop or mobile device is distracting to those around you. Moreover, research provides strong evidence that the use of large screen devices (e.g. laptops, tablets) is more likely to hinder your deep learning rather than enhance it. Writing notes by hand is much more conducive to learning the material. You are encouraged, but not required, to leave your laptop shut, unless required for a class activity. Please turn off your cell phone.

## Fine print

**In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.**

**McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures**

**(see http://www.mcgill.ca/students/srr/honest for more information).**

**Reading schedule**

| # | Date | Topic | Readings |
|---|---|---|---|
| | | **Theme 1: Introduction** | |
| 1 | September 3 | Course overview | None |
| 2 | September 5 | The food system | • Foley, J.A. et al. (2011). Solutions for a cultivated planet. *Nature* 478, 337–342.<br>• Moss, M. (2013). The extraordinary science of addictive junk food. *New York Times*. February 20. |
| 3 | September 10 | Understanding problems | • Rittel H.W.J. & Webber M.M. (1973). Dilemmas in a general theory of planning. *Policy Sciences* 4, 155-169.<br>• Ramani, S.V. (2016). Why it's easier for India to get to Mars than to tackle its toilet challenge. *PSMag.com*. |
| 4 | September 12 | Systems thinking | • Ehrenfeld, J.R. (2008). *Sustainability by design*. Yale University Press. Chapter 2, 10-21.<br>• Salisbury, C. (2017). Paying for health care with trees: A win-win for orangutans and communities. *PSMag.com*. |
| 5 | September 17 | What business can do; what business should do | • Marques , J.C.. & Mintzberg, H. (2015). Why Corporate Social Responsibility Isn't a Piece of Cake. *MIT Sloan Management Review*, 56(4), 8-11.<br>• Hawken, P. (2017). Drawdown: The most comprehensive plan ever proposed to reverse global warming. Penguin. "An opening", 216-217. |
| 6 | September 19 | Impact | • Sheffi, Y. (2019). Removing mini-shampoos from hotel rooms won't save the environment. *The Conversation*. August 23.<br>• Etzion, D. (2018). Management for sustainability. *Nature Sustainability*, 1(12), 744-749.<br>**CASE STUDY: Tesla Motors**. |
| 7 | September 24 | Measuring sustainability; measuring impact | • Zink, T. & Geyer, R. (2016). There is no such thing as a green product. *Stanford Social Innovation Review*. Spring, 26-31.<br>• Andrews, E. (2019). Should we judge Alexandria Ocasio-Cortez by her carbon footprint? *Grist*. March 7.<br>• Russell, S., & Akopian, Y. (2019). Many companies inaccurately estimate the climate benefits of their products. *World Resources Institute*.<br>**DUE: Team contract** |

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| | | **Theme 2: Sustainable development and business strategy** | |
| 8 | September 26 | What is strategy? | • Porter, M.E. (1996). What is strategy? *Harvard Business Review*. 74(6), 61-78.<br>**CASE STUDY: Patagonia.** |
| 9 | October 1 | Differentiation | • Fassler, J. & Cox, K.. (2017). It's the end of "organic" as we know it. https://newfoodeconomy.org/hydroponics-farm-organic-nosb-vote. November 2.<br>• Reczek, R.W., Zane, D., & Irwin, J. (2017). Untrustworthy memories make it hard to shop ethically. *The Conversation*. December 20.<br>**CASE STUDY: Foodchain.** |
| 10 | October 3 | Sustainability and risk | • Client Earth. (2018). Risk unwrapped: Plastic pollution as a material business risk. July.<br>• Litterman, B. (2019). The very high costs of climate risk. *New York Times*. January 29. |
| 11 | October 8 | Government and regulation | • Ambec, S., Cohen, M. A., Elgie, S., & Lanoie, P. (2013). The Porter hypothesis at 20: Can environmental regulation enhance innovation and competitiveness? *Review of Environmental Economics and Policy*, *7*(1), 2-22.<br>• Kahn, G. (2016). Did California figure out how to fix global warming? *Mother Jones.* March/April.<br>**DUE: Paper #1, with feedback guidance sheet.** |
| 12 | October 10 | Collaboration | • Mintzberg, H., Etzion, D. & Mantere, S. (2018). Worldly strategy for the global climate. *Stanford Social Innovation Review* 16(4), 42-47.<br>**CASE STUDY: Unilever.** |
| 13 | October 15 | Ideation | • Furr, N., Dyer, J. H., & Nel, K. (2019). When your moon shots don't take off: How science fiction and other unconventional tools can fire imagination and lead to breakthrough growth. *Harvard Business Review*, 97(1), 112-117.<br>• Robertson, A. (2018). OLPC'S $100 laptop was going to change the world — then it all went wrong. *The Verge*. April 16.<br>**DUE: Paper#1 feedback.** |
| 14 | October 17 | Business models | • Joyce, A., & Paquin, R. L. (2016). The triple layered business model canvas: A tool to design more sustainable business models. *Journal of Cleaner Production*, 135, 1474-1486.<br>• Elkington, J. et al. (2016). Breakthrough business model glossary. *Business and Sustainable Development Commission*. |

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| 15 | October 22 | Social entrepreneurship and the BOP | • Zakaria, R. (2017). The myth of women's empowerment *New York Times*. October 5.<br>• Kaplan, R. S., Serafeim, G., & Tugendhat, E. (2018). Inclusive growth: Profitable strategies for tackling poverty and inequality. *Harvard Business Review 96(2)*, 127-133.<br>• Yunus, M., Moingeon, B., & Lehmann-Ortega, L. (2010). Building social business models: Lessons from the Grameen experience. *Long Range Planning*, 43(2), 308-325. |
| 16 | October 24 | The sharing economy | • Schor, J. (2014) Debating the sharing economy. *Great Transition Initiative*.<br>• Schwartz, A. (2018). Rent the runway wants to lend you your look. *The New Yorker*. October 22.<br>**CASE STUDY: BlaBlaCar.** |
| 17 | October 29 | The circular economy | • McKinsey (2014). Toward a circular economy: Philips CEO Frans van Houten. *McKinsey Quarterly*, February.<br>• Selvefors, A., Rexfelt, O., Renström, S., & Strömberg, H. (2019). Use to use–A user perspective on product circularity. *Journal of Cleaner Production*, 223, 1014-1028.<br>• Reed, S (2018). Fighting climate change one laundry load at a time. *New York Times*. January 1. |
| | | **Theme 3: Leveraging economics, financing sustainability** | |
| 18 | October 31 | Market instruments | • Toomey, D. (2015). How British Columbia gained by putting a price on carbon. *Yale Environment 360*. April.<br>• Gelles, D. (2015). Microsoft leads movement to offset emissions with internal carbon tax. *New York Times*. September 27. |
| 19 | November 5 | The value of ecosystems | • Costello, C., Gaines, S., & Gerber, L. R. (2012). Conservation science: A market approach to saving the whales. *Nature*, 481: 139-140.<br>• Barbier, E. B., Burgess, J. C., & Dean, T. J. (2018). How to pay for saving biodiversity. *Science*, 360(6388), 486-488.<br>• Monbiot, G. (2018). Price Less. https://www.monbiot.com/2018/05/18/price-less/ *The Guardian*. May 18. |
| 20 | November 5 | Midterm review | • Grant, A. (2018). What straight-A students get wrong. *New York Times*. December 8.<br>• Etzion, D. (2019). Strategies for sustainability: Teaching note. |
| | Friday, November 8 | Midterm exam | |

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| 21 | November 12 | Financing Sustainability | • Lewis, E., Pinchot, A. & Christianson, G. (2016). Navigating the sustainable investment landscape. *World Resources Institute*.<br>**DUE: Paper #2, with feedback guidance sheet.** |
| 22 | November 14 | Behavior, economics, and behavioral economics | • Egebark, J., & Ekström, M. (2016). Can indifference make the world greener? *Journal of Environmental Economics and Management*, 76, 1-13.<br>• Attari, S. Z., DeKay, M. L., Davidson, C. I., & De Bruin, W. B. 2010. Public perceptions of energy consumption and savings. *Proceedings of the National Academy of Sciences*, 107(37), 16054-16059.<br>• Langston, E. (2016). The ridiculously simple thing businesses can do to save millions of dollars (and animals!). *Mother Jones*. November 28. |
| | | **Theme 4: Conclusions** | |
| 23 | November 19 | Presenting effectively | • Christiano, A. & Neimand, A. (2018). The science of what makes people care. *Stanford Social Innovation Review*. Fall, 26-33.<br>**DUE: Paper #2 feedback.** |
| 24 | November 21 | Leading change | • Schendler, A. (2009). Getting green done: Hard truths from the front lines of the sustainability revolution. Public Affairs. Chapter 1.<br>• Mayer, D. M., Ong, M., Sonenshein, S., & Ashford, S. J. (2019). To get companies to take action on social issues, emphasize morals, not the business case. *HBR.org*. February 14.<br>• Taylor, A. (2017). We shouldn't always need a "business case" to do the right thing. *HBR.org*. September 19. |
| 25 | November 26 | Presentations | None |
| 26 | November 28 | Wrap up, takeaways, and inspiration | • Stevenson, R. (2011). We need to do more when it comes to having brief, panicked thoughts about climate change. *The Onion*. http://www.theonion.com/articles/we-need-to-do-more-when-it-comes-to-having-brief-p,21295. September 6.<br>• Schendler, A. & Jones, A. (2018). Stopping climate change is hopeless. Let's do it. *New York Times*. October 6.<br>• Hawken, P. (2009). You are brilliant, and the Earth is hiring. *Yes*. http://www.yesmagazine.org/issues/columns/you-are-brilliant-and-the-earth-is-hiring. |

# Appendix 1

## Case preparation[3]

This appendix contains some advice on how to prepare for a case class and how to conduct yourself during the classroom discussion.

*Case teaching*
Case teaching differs from regular lectures in that the bulk of the speaking is done by the students, who discuss a case (a written description of a business problem) bringing their individual experience and their understanding of the relevant literature as presented in the course. Much like in real life, cases are written so that there is no correct solution – you will find that you and your classmates may have radically different ideas about the nature of the described situation and the best way to resolve it. That's fun, and that is where the learning is.

*Preparation*
Case teaching is based on discussion, and if you are going to discuss a case, you will have to come prepared. A typical case has 10-20 pages plus exhibits, so set aside at least three hours per case.

A good procedure to prepare a case is the following:

- First, read the case quickly by yourself, to get an overview and understand the company, industry and exhibits.
- Next, read the case carefully, answering the study questions that come with the case. These questions are designed to highlight salient portions of the case and orient you to the analysis you should do.
- Before class, meet with a study group and discuss the case with them. Chances are, you will find that your preferred solution is but one of many – and that it might require some adjustment.

*In the classroom*
An important thing to remember when in class is that a case discussion is not a competition in who can say the most – rather, it is a collaborative undertaking to bring as much insight as possible towards a problem. To do this, some rules of conduct will have to be observed.

A normal case class may proceed like this:

- A student is asked to open the discussion, giving an overview of the company, the problem to be analyzed, and perhaps his or her solution to the problem.
- When the first student is done, the floor is open for comments and alternative solutions, from as many people as possible.
- It is very important to understand that a case discussion is cumulative – that you should build your comments on other students' comments.
- You may speak only when given the floor. You ask for the floor by holding your hand up, but as soon as someone is given the floor, you should take your hand down and keep it down until the speaker is finished.
- The teacher will take notes on the board and guide the discussion, but ideally almost all the talking should be done by the students.

*Grading*
A portion of your grade will be based on participation, i.e., your contributions in the classroom. Many students worry about having enough "air time" – but remember, the preference is for quality, not quantity. Others would prefer not to speak in class at all – but remember, you are studying to be a manager, which means having to communicate your opinions to others, frequently in a group.

[3] This appendix based on a note prepared by Espen Andersen and Bill Schiano

When determining participation grades, here is what I look for:

- students that are well prepared and have developed good analysis
- students that can generate alternative solutions to problems and argue for them
- students that can take theory and apply it to a problem
- students that can listen to other students' contributions and constructively critique or support them

## Appendix 2

### Grading criteria for project papers

The papers you write for this class should be precise, organized, logical, and appropriately supported[A1]. Thus, I look for the following when I read your assignments:

Evaluation rubric:

| Item | Weight | Excellent | Good | Poor | Weak |
|---|---|---|---|---|---|
| Content | 30% | A large amount and variety of salient material and evidence, including class materials, are presented, accurately and in detail, appropriately sourced. | An adequate amount and variety of salient material and evidence are presented, mostly accurately, appropriately sourced. | Some material and evidence are presented. Not all material is relevant, and detail is lacking. At least some sources are appropriate. | Much of the material and evidence is irrelevant or inaccurate. Details are lacking and appropriate sources are not provided. |
| Reasoning | 30% | Ideas are presented logically, with no gaps in reasoning or claim-making. The building blocks of the argument are compellingly connected together, with excellent flow. There are no internal inconsistencies of non-sequiturs. | Ideas are presented logically, with few gaps in reasoning or claim-making. The building blocks of the argument are mostly connected together, with good flow. There are no internal inconsistencies of non-sequiturs. | Some of the ideas are presented logically, but with one or more significant gaps in reasoning. Flow is jumpy. Substantial portions of the text are irrelevant to the points being made. | Ideas are disorganized and scattershot. Abrupt, unseemly transitions between segments make the text hard to follow. Major inconsistencies make the text logically incoherent. |
| Innovativeness | 10% | Ideas are combined in original and surprising ways to solve a problem. | Ideas are combined in original ways to solve a problem. | Ideas are combined in ways that are derived from the thinking of others. | Ideas are copied from known sources. |

[A1] Developing such writing skills will make you an effective communicator as a professional, and possibly in other life situations as well.

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|---|---|---|---|---|---|
| Applicability and limitations | 10% | The text highlights important weak points in the analysis, including unavoidable yet necessary assumptions. Sensitivity to these assumptions is assessed thoughtfully. | The text mentions relevant weak points but does not meaningfully assess their gravity. | Applicability and limitations of the analysis are generic and lack acuity. | Applicability and limitations of the analysis are missing. |
| Clarity of writing | 20% | The text is clear, well organized, crisply written, unambiguous, easy to follow, grammatically correct, and free of typos, complying with word limits. Tables, figures and graphs supplement and enrich the manuscript. | The text is clear, organized, generally easy to follow, has few typos, and complies with word limits. Tables, figures and graphs supplement some claims in the manuscript. | The text is clear in parts, occasionally hard to follow, can contains typos. Tables, figures or graphs are present but insufficient. | Large parts of the text are unclear. The text is hard to follow and is clearly unedited. Tables, figures or graphs are missing or inadequate. |

Format:
Format your references and bibliography any way you like. I will not be printing the assignments out so please use generous spacing and ample margins to make my life easier. Please upload your work in one file, including images and appendices.

## Grading criteria for peer feedback

Evaluation rubric:

| Item | Weight | Excellent | Good | Poor | Weak |
|---|---|---|---|---|---|
| Actionability | 30% | The feedback highlights weaknesses in the paper, and provides one or more concrete suggestions for improvement for each weakness. | The feedback highlights weaknesses in the paper. Some of the suggestions for improvement are vague or superficial. | The feedback highlights weaknesses in the paper, but provides suggestions for improvement only for some, and they may be hard to implement. | The feedback highlights weaknesses in the paper, but provides meager suggestions for improvement, at an abstract level. |
| Substantiation | 20% | All identified weaknesses and suggestions for improvement are based on course materials and/or credible references. | Most identified weaknesses and suggestions for improvement are based on course materials and/or credible references. | Some suggestions for improvement are based on course materials and/or credible references. | Feedback is not grounded on credible sources. |
| Pertinence | 20% | The feedback explicitly and fully addresses concerns listed in the feedback guidance sheet. | The feedback generally addresses concerns listed in the feedback guidance sheet. | The feedback addresses some of the concerns listed in the feedback guidance sheet. | The feedback addresses few or none of the concerns listed in the feedback guidance sheet. |
| Breadth | 20% | The feedback goes above and beyond the concerns listed in the feedback guidance sheet. Multiple suggestions to improve various aspects of the paper are presented, such as logical weaknesses, absence of evidence, flow, etc. | The feedback extends beyond the concerns listed in the feedback guidance sheet. Several suggestions to improve various aspects of the paper are presented, such as logical weaknesses, absence of evidence, flow, etc. | The feedback is focused primarily on the issues listed on the feedback guidance sheet. | Feedback is limited to responding to the feedback guidance sheet, and does not deeply engage with the paper. |
| Tone | 10% | The tone is empowering and supportive, yet not fawning. Recommendations and suggestions are clearly expressed. Text is well organized, easy to follow, grammatically correct, and free of typos, complying with word limits. | The tone is generally empowering and supportive. Most of the recommendations and suggestions are clearly expressed. Overall, the text is well organized, easy to follow, grammatically correct, and free of typos. | The text is at times deprecating or sycophantic, occasionally hard to follow, and may contain significant errors. | Tone is harsh or fawning, text is hard to follow and contains many errors. |

## Appendix 3

### Additional resources

Books:

Anderson, Ray. (2009). Confessions of a Radical Industrialist: Profits, People, Purpose--Doing Business by Respecting the Earth. St. Martin's Press.

Bloomberg, Michael & Pope, Carl. (2017). Climate of Hope: How Cities, Businesses, and Citizens Can Save the Planet. St. Martin's Press

Chouinard, Yvon (2005). Let My People Go Surfing: The Education of a Reluctant Businessman. Penguin Press.

Delmas, Magali. (2018) The Green Bundle: Pairing the Market with the Planet. Stanford University Press.

Funk, McKenzie (2014). Windfall: The Booming Business of Global Warming. Penguin Press.

Hart, Stuart L. (2010). Capitalism at the Crossroads: Aligning Business, Earth and Humanity, 3rd edition. Prentice Hall.

Lenox, Michael & Chaterji, Aaron (2018). Can Business Save the Earth? Innovating Our Way to Sustainability. Stanford University Press.

Jones, Van. (2009). The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems. HarperOne.

Klein, Naomi (2014) This Changes Everything: Capitalism vs. the Climate

Lovins, Amory (2011). Reinventing Fire: Bold Business Solutions for the New Energy Era. Chelsea Green Publishing.

Matson, P., Clark, W. C., & Andersson, K. (2016). Pursuing sustainability: A guide to the science and practice. Princeton University Press.

McDonough, William & Braungart, Michael. (2013). The Upcycle: Beyond Sustainability--Designing for Abundance. MacMillan.

Raworth, Kate (2017) Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist. Chelsea Green Publishing.

Schendler, Auden. (2009). Getting Green Done: Hard Truths from the Front Lines of the Sustainability Revolution. PublicAffairs.

Online (listservs, blogs, etc):

www.greenbiz.org

www.rmi.org

www.wri.org

www.grist.org (general sustainability news)

In addition to these resources, there is a lot of additional very interesting reading material in articles – both academic and popular – and of course all over the Internet. If you are interested in readings on a specific topic, please let me know and I may be able to help guide you.