
SUSM 602 – Theories and Concepts of Sustainability Management

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Meetings:

Online course. All information can be found either in this document or on the course website. No mandatory synchronous meetings.

Office hours:

By e-mail appointment on Skype, Teams, Webex, or Bongo Virtual Classroom. Because of the asynchronous nature of the course I am happy to schedule individual meetings with course participants. Please let me know by email if you need a meeting and I will schedule it. Also use the ‘Ask the Instructor’ discussion board on the course website. I will respond to questions that are posted.

Delivery of course material:

1. According to university policy, the course is mainly delivered asynchronous. However, we will try and explore synchronous options in the first week of the course.
2. Material for this course will be delivered by the D2L system. Go to <https://learn.uwaterloo.ca/>
3. The course outline is available on the course website (through the D2L system).
4. The material will be uploaded on the course website. We will also use the D2L system to deliver information to students in the course. We expect (assume) that you will be checking the course website regularly (at least every working day).

Tips for success:

1. Make a schedule and keep track of the hours you invest in the course.
2. Read, watch, and listen to the material and make notes.
3. Plan ahead: check when assignments are due, and tests are scheduled.
4. Get familiar with the online tools for the course (D2L, Bongo Virtual Classroom, etc.)

Creating an effective learning environment in class:

Because of university policies and to accommodate all course participants, most of the course will be asynchronous. However, research shows that engagement with the material and in discussions increases the learning. Hence, contribute to discussions, watch and listen to student presentations, and try to be active as much as possible. Offering this course on-line is not a choice during the pandemic. Thus, we have to try and make the best of it.

Pre-requisite:

Tuition fees arranged. Be aware that you do not have access to the course website without having arranged your tuition fees.

Calendar description:

'Foundations of Sustainability Management' introduces background, theoretical concepts and applications of sustainability, management, and tools for sustainability management.

Course description:

In this course, theories and concepts such as international sources of sustainability concepts, basic environmental and ecological economics, social and environmental justice, sustainable management and finance, uncertainty, complexity, risk and decision making in sustainability management, etc. will be introduced and discussed. The course is structured in three components 'Sustainability Theories and Background', 'Management', and 'Sustainability Management Tools'. The goal of the course is to achieve a systematic understanding of knowledge and a critical awareness of current problems and new insights of sustainability management, much of which is at the forefront of the interdisciplinary academic research, and will be needed to conduct research in the interdisciplinary field of sustainability management. Students will learn to understand and to use academic papers as basis for their own research. Furthermore, faculty of the School of Environment, Enterprise and Development (SEED) will be interviewed by students to provide information about their research and research opportunities for students.

Course Website and Tools:

Course information will be delivered through the D2L system (<https://learn.uwaterloo.ca>). The system includes Bongo Virtual Classroom that will be used for presentation videos. Furthermore, I will use Teams for meetings. All students have access to MS Office 365. Hence, please setup Teams on you device.

Course assessment:

Discussion (15%): The course has a strong focus on active participation. It is expected that the students will be able to actively contribute to in-class discussions. Participation is not a case of ‘more is better’. Instead, you should strive to make occasional contributions that reveal your ‘engagement’ with the course material. This may be indicated by comments that make new connections among different parts of the material for the course (that is, the readings, the lectures, the discussions, student presentations, etc.), comments that challenge or support positions in readings and/or lectures, comments that link other experiences to material in the course, comments that relate external, world events to material in the course, comments that respond to questions posed in discussions in an informed manner, etc. You are asked to read and think about all of the assigned readings before each meeting; review of ideas and information presented in the corresponding lecture(s) is also required. Do bring your own ideas, arguments and reflections to the class – the quality of these meetings will depend upon students’ preparation. There are also guiding questions in the presentations and in the description of the modules in this document that are triggers for discussion.

Video Assignment I (4%): Create an up to five minutes video on Bongo Virtual Classroom that responds to the following questions: What is your personal and educational (professional background)? Which sustainability management topic interests you most? What research do you plan to do?

Faculty Interviews (10%): Groups of students interview SEED faculty and create a podcast that is shared on the course website. The interviews should be up to 20 minutes and address the following questions: What is your educational (and professional) background? What is your current research topic? How is the research linked to Sustainability Management? The interviews can be extended by the students’ questions. Please see the course website for the allocation of faculty members to students. Interviews can be conducted in MS TEAMS, skype, or other tools that are able to record audio.

Topic Presentation (Total 20%: 10 % presentation, 10 % research paper): Students will present the course topic based on a paper that has been assigned to the student and its connection to Sustainability Management using a PowerPoint presentation. The presentation should include an introduction to the topic and a critical discussion based on the readings. The presentation should consist of the following slides: Title of the paper and Author, Content (Theory, Method, Results, Conclusions of the Paper), Relevance of the Paper for Sustainability Management. Furthermore, the presentation should include two questions (on the last slide) about the topic and its connection to sustainability management that should be answered by the other students in the discussion board. Therefore, I will post the presentation on the course website See the course website (Topic Presentation) for the students and their topics.

Furthermore, each student of the presentation group submits a two pages paper. The two pages research paper should be structured the same as the presentation.

Topic Response (16%): Students respond weekly to the question presented in the respective module through a one page paper. The best 8 out of nine papers will be part of the grade.

Individual Theory Paper (Total 15 %): Pick one of the theories and concepts from the course material or anywhere else that you think is a useful approach to address sustainability problems. Present the theory or concept, and your justification in a two page Research Paper

Final Paper (20%): Present a proposal for a research project addressing a sustainability management issue. The presentation includes background, rationale, theory, research question(s) and expected results. Arguments should be supported by academic references.

Summary of ‘due dates’:

- **Video Assignment:** September 13, 11 pm.
- **Faculty interviews:** October 1, 11:59 pm.
- **Topic presentations:** Due dates for the respective topic presentations are listed on the course website.
- **Topic responses:** One week after the respective module.
- **Individual Theory Paper:** Paper due October 20, 11:59 pm in the dropbox.
- **Final paper:** Due on December 6, 11:59 pm.

Academic Integrity: To maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. <http://www.uwaterloo.ca/academicintegrity/>. Students who are unsure what constitutes an academic offence are requested to visit the on-line tutorial at: <http://www.lib.uwaterloo.ca/ait/>

Research Ethics: Please also note that the ‘University of Waterloo requires all research conducted by its students, staff, and faculty which involves humans as participants to undergo prior ethics review and clearance through the Director, Office of Human Research and Animal Care (Office). The ethics review and clearance processes are intended to ensure that projects comply with the Office’s Guidelines for Research with Human Participants (Guidelines) as well as those of provincial and federal agencies, and that the safety, rights and welfare of participants are adequately protected. The Guidelines inform researchers about ethical issues and procedures which are of concern when conducting research with humans (e.g. confidentiality, risks and benefits, informed consent process, etc.)’ (<http://www.research.uwaterloo.ca/ethics/human/>). Recognise, however, that students are instructed NOT to contact any ‘outside organisations’ to complete their written assignments for this course.

Note for students with disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Religious Observances: Please inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>. When in doubt, please contact your Undergraduate Advisor for details.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline, <http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>. For typical penalties, check Guidelines for Assessment of Penalties, <http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm>

Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals). See: <http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

Consequences of Academic Offences: ENV students are strongly encouraged to review the material provided by the university’s Academic Integrity office (see: <http://uwaterloo.ca/academicintegrity/Students/index.html>).

Course readings:

All readings can be acquired and downloaded through the library, through the course website, or are available in the internet. Please become familiar with the use of University of Waterloo’s library.

Course overview: Theories of Sustainability (Units 1-6), Sustainability Management (Units 7-8), Tools for Sustainability Management (Units 9-10)

Readings that should be integrated into the student presentations are marked with “”

Additional readings are proposals for those who are interested in learning more about a particular topic.

Part 1: Theories of Sustainability (Units 1-6)

Module 1

Learning objective

Know the content and tools of the course, the assignments, and different teaching modes

Lecture Content (Live lecture that will be recorded for remote access)

- Introduction to the course
- Introduction to the course content
- Introduction to the course method
- Introduction to the assignments
- Introduction into academic publishing
- Preparation of exercise for September 15: Which sustainability problem are you most interested in? Prepare to describe the problem and why you think it is important to find a solution for it.

Module 2

Learning objective

Knowing the concept of sustainability and its operationalization

Lecture Content (Audio recorded presentations and connected readings)

- Theoretical concepts of sustainability and sustainable development: General approaches, The Brundtland Definition of Sustainable Development and its operationalization, and strong and weak sustainability
- Sustainable Development Goals (SDG)
- Discussion of sustainability problems

Reflection questions:

- What is the relation between the sustainability concept and business?
- What are benefits and problems arising from the use of the concept in a business context?
- What are strengths and weaknesses of weak and strong sustainability?
- Discuss the values for the countries' sustainability indicators.
- Is it possible for business to take all three issues equally into account?
- What is the main goal of business and how is it linked with sustainable development?
- What are the SDGs about?

Assignments

Topic presentations and papers

Topic response: What are advantages and drawbacks of the Sustainable Development Goals (SDG)?

Core Readings

Kates, R. W., Parris, T. M., & Leiserowitz, A. A. (2005). What is sustainable development? *Environment: Science and Policy for Sustainable Development*, 47(3), 8-21.

Dietz, S., & Neumayer, E. (2007). Weak and strong sustainability in the SEEA: Concepts and measurement. *Ecological Economics*, 61(4), 617-626. doi: <http://dx.doi.org/10.1016/j.ecolecon.2006.09.007>

Vanclay, F. (2004). The Triple Bottom Line and Impact Assessment: How do TBL, EIA, SIA, SEA and EMS relate to each other?. *Journal of Environmental Assessment Policy & Management*, 6(3), 265-288.

Sachs, J. D. (2012). From millennium development goals to sustainable development goals. *The Lancet*, 379(9832), 2206-2211.

United Nations. (2015). Transforming our world: the 2030 agenda for sustainable development (U. Nations Ed.). New York, NY: United Nations.

United Nations. (2018). Global indicator framework for the Sustainable Development Goals. New York: United Nations.

Additional Readings

Ayres, R. U., & Gowdy, J. M. (2001). Strong versus weak sustainability: Economics, natural sciences, and consilience. *Environmental Ethics*, 23, 155-168.

Brundtland, G. H. (1987). *Our Common Future*. Oxford, NY: Oxford University Press.

Elkington, J. (1998). *Cannibals with forks*. Gabriola Island, BC: New Society Publishers.

- Emerson, J. (2003). The Blended Value Proposition: Integrating social and financial returns. *California Management Review*, 45, 35-51.
- Faucheux, S., & Nicolai, I. (2003). From sustainable development to corporate social responsibility: An application to the European aluminum sector. *Int. J. Sustainable Development*, 6(2), 155-169.
- Gibbs, D. C., Longhurst, J., & Braithwaite, C. (1998). Struggling with sustainability: weak and strong interpretations of sustainable development within local authority policy. *Environment and Planning*, 30, 1351-1365.
- Hacking, T., & Guthrie, P. (2008). A framework for clarifying the meaning of Triple Bottom-Line, Integrated, and Sustainability Assessment. *Environmental Impact Assessment Review*, 28(2-3), 73-89. doi: 10.1016/j.eiar.2007.03.002
- Harlow, J., Golub, A., & Allenby, B. (2011). A Review of Utopian Themes in Sustainable Development Discourse. *Sustainable Development*, n/a-n/a. doi: 10.1002/sd.522
- Pearce, D. W., & Atkinson, G. D. (1993). Capital theory and the measurement of sustainable development: an indicator of “weak” sustainability. *Ecological Economics*, 8, 103-108.
- United Nations. (2012). *The Future We Want* (pp. 19). Rio de Janeiro: United Nations.
<http://www.un.org/en/sustainablefuture/>

Module 3

Learning objective

Know economic approaches that address sustainable development

Lecture Content

- Theoretical concepts of sustainability and sustainable development: Economic Approaches, Ecological Economy vs. Environmental Economics, material flows and social metabolism.

Reflection questions for the discussion board

- What are advantages and drawbacks of environmental economics and ecological economics? Justify why one of the concepts is better able to solve sustainability problems than the other.
- What changes are needed to create a sustainable future? Are changes needed? Justify, using arguments from the readings.

Assignments

- Topic presentations and papers

- Topic response: Do current real world economic concepts foster sustainable development or are they a barrier for sustainable development?

Core Readings:

Costanza, R. (1989). What is ecological economics? *Ecological Economics*, 1(1), 1-7. doi:

[http://dx.doi.org/10.1016/0921-8009\(89\)90020-7](http://dx.doi.org/10.1016/0921-8009(89)90020-7)

Daly, H. E. (1990). Toward some operational principles of sustainable development. *Ecological Economics*, 2(1), 1-6. doi: 10.1016/0921-8009(90)90010-r

Pearce, D., Groom, B., Hepburn, C., & Koundouri, P. (2003). Valuing the future. *World economics*, 4(2), 121-141 (see course website for download).

Singh, S.J. & Eisenmenger, N. (2011). How unequal is international trade? A biophysical perspective. *Journal für Entwicklungspolitik (JEP) [Austrian Journal for Development Studies]*. Special issue on Bridging the Social and the Natural in Development Studies. Guest editors: Singh, S.J. & Köhler, B. Vol. 26(4). Mattersburger Kreis: Vienna (see course website)

Krausmann, F., Fischer-Kowalski, M., Schandl, H., & Eisenmenger, N. (2008). The global socio-metabolic transition: past and present metabolic profiles and their future trajectories. *Journal of Industrial Ecology*, 12, 637-656

Wiedmann, T., Schandl, H., Lenzen, M., Moran, D., Suh, S., West, J. & Kanemoto, K. (2013). The material footprint of nations. PNAS Early Edition: www.pnas.org/cgi/doi/10.1073/pnas.1220362110

Wackernagel, M., Onisto, L., Bello, P., Callejas Linares, A., Susana López Falfán, I., Méndez García, J., . . . Guadalupe Suárez Guerrero, M. (1999). National natural capital accounting with the ecological footprint concept. *Ecological Economics*, 29(3), 375-390. doi: [http://dx.doi.org/10.1016/S0921-8009\(98\)90063-5](http://dx.doi.org/10.1016/S0921-8009(98)90063-5)

Additional Readings:

A Synopsis: Limits to Growth: The 30-Year Update: <http://www.donellameadows.org/archives/a-synopsis-limits-to-growth-the-30-year-update/>

Barbier, E. (2011). The policy challenges for green economy and sustainable economic development. *Natural Resources Forum*, 35(3), 233-245. doi: 10.1111/j.1477-8947.2011.01397.x

Costanza, R. (1991). *Ecological economics: the science and management of sustainability*. New York: Columbia University Press.

Costanza, R., D'Arge, R., De Groot, R., Farber, S. and others (1997). The Value of the World's Ecosystem Services and Natural Capital. *Nature*. Vol. 387, p. 253-260.

- Kinzig, A.P., Perrings, C. Chapin, F.S. III, Polasky, S., Smith, V.K., Tilman, D., and Turner, B.L. II (2011). Paying for Ecosystem Services - Promise and Peril. *Science*. Vol. 334 (6056). Pp. 603-604.
- Lovins, A. B., Lovins, L. H., & Hawken, P. (2007). A Road Map for Natural Capitalism. [Article]. *Harvard Business Review*, 85(7/8), 172-183.
- Pearce, D. W., Markandya, A., & Barbier, E. B. (1989). *Blueprint for a green economy*: Earthscan/James & James.
- Robert, K. H., Schmidt-Bleek, B., de Larderel, J. A., Basile, G., Jansen, J. L., Kuehr, R., . . . Wackernagel, M. (2002). Strategic sustainable development - selection, design and synergies of applied tools. *Journal of Cleaner Production*, 10(3), 197-214.
- TEEB (2010). *The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB. (for a link see course website "Downloadable Content")*
- UNEP (2011). Introduction. Setting the Stage for a Green Economy Transition. (for a link see course website "Downloadable Content")
- Unmüßig, B., Sachs, W., Fatheuer, T. (2012). *Critique of the Green Economy. [SEP]Toward Social and Environmental Equity[SEP]*. Heinrich Böll Foundation, Publication Series on Ecology, Vol. 22 (English edition) (for a link see course website "Downloadable Content")
- Victor, P.A. & Jackson, T. (2012). A Commentary on UNEP's Green Economy Scenario. *Ecological Economics*, Vol. 77, pp. 11-15.
- Wackernagel, M., & Rees, W. E. (1997). Perceptual and structural barriers to investing in natural capital: Economics from an ecological footprint perspective. *Ecological Economics*, 20(1), 3-24. doi: [http://dx.doi.org/10.1016/S0921-8009\(96\)00077-8](http://dx.doi.org/10.1016/S0921-8009(96)00077-8)

Module 4

Learning objective

Knowing the advantages and drawbacks of the concepts resilience, adaptation, and other social approaches.

Lecture Content (all lectures with audio PowerPoint)

- Theoretical concepts of sustainability and sustainable development: Resilience, adaptation. Social approaches

Reflection Questions for the Discussions Board

- Do the concepts resilience, adaptation, and social approaches offer useful solutions for sustainability management problems?

Assignment

- Topic presentations and papers
- Topic response: Is resilience a useful concept for addressing sustainability problems?

Core Readings

Folke, C. (2006). Resilience: The emergence of a perspective for social–ecological systems analyses. *Global Environmental Change*, 16(3), 253-267.

Holling, C. S. (1973). Resilience and Stability of Ecological Systems. *Annual Review of Ecology and Systematics*, 4, 1-23.

Walker, B., Holling, C. S., Carpenter, S. R., & Kinzig, A. (2004). Resilience, adaptability and transformability in social–ecological systems. *Ecology and society*, 9(2), 5.

Westley, F., Olsson, P., Folke, C., Homer-Dixon, T., Vredenburg, H., Loorbach, D., . . . van der Leeuw, S. (2011). Tipping Toward Sustainability: Emerging Pathways of Transformation. *AMBIO: A Journal of the Human Environment*, 40(7), 762-780. doi: 10.1007/s13280-011-0186-9

Kubiszewski, I., R. Costanza, C. Franco, P. Lawn, J. Talberth, T. Jackson, and C. Aylmer. 2013. [Beyond GDP: Measuring and Achieving Global Genuine Progress](#). *Ecological Economics* 93:57-68.

Useful Links

Resilience Alliance: <http://www.resalliance.org/>

Ecology and Society Journal (open access): <http://www.ecologyandsociety.org/>

In this unit, we will show a documentary: The Economics of Happiness (film trailer at: <http://www.theeconomicsofhappiness.org>)

- Social Progress Index
 - (for a link see course website “Downloadable Content”)
- Human Development Index (HDI)
 - (for a link see course website “Downloadable Content”)
 - Gross National Happiness (GNH)
- (for a link see course website “Downloadable Content”)
- Maryland’s Genuine Progress Indicator (GPI)

(for a link see course website “Downloadable Content”)

- OECD’s Better Life Index
(for a link see course website “Downloadable Content”)
- Happy Planet Index
(for a link see course website “Downloadable Content”)
- The Happiness Initiative
 - (for a link see course website “Downloadable Content”)

Module 5

Learning objective:

Knowing the intra-generational approach of sustainable development.

Lecture Content

- Theoretical concepts of sustainability and sustainable development: The intra-generational approach, north-south relations and international development, base of the pyramid approach, business approaches to sustainable development.

Reflection

- How to solve the problem of the north-south difference in a sustainable way?
- Sustainable business in China
- Create a proposal for a BOP business.
- Based on the readings prepare to discuss the question: Is BOP business an effective tool to alleviate poverty?
- How do environmental and development issues interact?

Assignment

- Topic presentations and papers
- Topic response: Are business approaches, such as microfinance and BOP, useful to address intra-generational sustainability?

Core Readings:

Hart, S. L., & Christensen, C. M. (2002). The great leap. *Sloan Management Review*, 44(1), 51-56.

Karnani, A. (2007). The Mirage of Marketing to the Bottom of the Pyramid: How the Private Sector can help Alleviate Poverty. *California Management Review*, 49(4), 90-111.

- Weber, O. (2013). Impact Measurement in Microfinance: Is the measurement of the Social Return on Investment an Innovation in Microfinance? *Journal of Innovation Economics (Cairn)*, 11, 149-171. (see course website)
- Weber, O., & Ahmad, A. (2014). Empowerment Through Microfinance: The Relation Between Loan Cycle and Level of Empowerment. *World Development*, 62(0), 75-87. doi: <http://dx.doi.org/10.1016/j.worlddev.2014.05.012>
- Weber, O. (2014). Environmental, Social and Governance Reporting in China. *Business Strategy and the Environment*, 23(5), 303–317. doi:10.1002/bse.1785
- Weber, O. (2017). Corporate sustainability and financial performance of Chinese banks. *Sustainability Accounting, Management and Policy Journal*, 8(3).
- Porter, M. E., & Kramer, M. R. (2011). Creating Shared Value. *Harvard Business Review*, 89(1/2), 62-77.

Additional Readings:

- Akula, V. (2008). Business Basics at the Base of the Pyramid. *Harvard Business Review*, 86(6), 53.
- Chang, H.-J. (2011). 23 things they don't tell you about capitalism: Bloomsbury Press. (62pp, 112 pp)
- Hammond, A. L., Kramer, W. J., Katz, R. S., Tran, J. T., & Walker, C. (2007). The next 4 billion. *innovations*, 2(1-2), 147-158.
- Wang, X., Lin, H., & Weber, O. (2016). Does Adoption of Management Standards Deliver Efficiency Gain in Firms' Pursuit of Sustainability Performance? An Empirical Investigation of Chinese Manufacturing Firms. *Sustainability*, 8, 694(694), 1-18. doi:10.3390/su8070694
- Weber, O., & Lin, H. (2014). CSR reporting and its implication for socially responsible investment in China. In K. Wendt (Ed.), *Responsible Investment Banking* (pp. 417-426). Berlin, Germany: Springer.

Module 6

Lecture Content: Individual theory paper

- Pick one of the academic approaches (concepts or theories) that you think is useful to address sustainability problems. Individual assignment (see the course website and the course outline above for details)

Part 2: Sustainability Management (Units 7 – 8)

Module 7

Learning objective

Know the management process in business.

Lecture Content:

- Management: Introduction, the management process (planning, organizing, motivating, controlling supply chain management)
- Management: business management approaches and theories
- Social enterprise and social innovation

Reflection questions for the discussion board

- A firm that produces products or services that have a negative impact on the environment (oil) or on the society (weapons) cannot be a leader in Corporate Social Responsibility!
- With whom or with what does a business or organization interact while doing business?
- What do managers have to consider, if they want to manage a business or an organization successfully?
- Use institutional theory to explain, why a firm implements a sustainability strategy using the regulative, normative, and cognitive pillar respectively.
- Which resources are needed for a Firm to be Sustainable?

Assignment

- Topic presentations and papers
- Topic response: How do management theories help to address sustainability questions?

Core Readings

Carroll, A. B. (1999). Corporate Social Responsibility - Evolution of a Definitional Construct. *Business & Society*, 38(3), 268-295.

Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review*, 20(1), 65-91. doi: 10.2307/258887

Gladwin, T. N., Kennelly, J. J., & Krause, T.-S. (1995). Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research. *The Academy of Management Review*, 20(4), 874-907.

Magretta, J. 2012. What management is: How it works and why it's everyone's business (2nd Edition; pp. 19-42). New York, NY: Free Press. First Chapter: Value creation: From the outside in (downloadable on the course website).

Mintzberg, H. (1971). Managerial work: Analysis from Observation. *Management Science*, 18(2), B-97-B-110.

Robbins, S.P., DeCenzo, D.A., Coulter, M., & Anderson, I. 2014. Introduction to management and organizations. In *Fundamentals of management* (7th Cdn Ed.; pp. 2-15). Don Mills, ON: Pearson Education Canada (downloadable on the course website).

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534-559.

DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160.

Additional Readings:

<http://www.istheory.yorku.ca/stakeholdertheory.htm>

Beu, D., & Buckley, M. R. (2001). The Hypothesized Relationship Between Accountability and Ethical Behavior. *Journal of Business Ethics*, 34(1), 57-73. doi: 10.1023/a:1011957832141

Chatterji, A. K., Levine, D. I., & Toffel, M. W. (2009). How Well Do Social Ratings Actually Measure Corporate Social Responsibility? *Journal of Economics & Management Strategy*, 18(1), 125-169. doi: 10.1111/j.1530-9134.2009.00210.x

Chih, H.-L., Chih, H.-H., & Chen, T.-Y. (2010). On the Determinants of Corporate Social Responsibility: International Evidence on the Financial Industry. *Journal of Business Ethics*, 93(1), 115-135. doi: 10.1007/s10551-009-0186-x

Dahlsrud, A. (2008). How Corporate Social Responsibility is Defined: an Analysis of 37 Definitions. *Corp. Soc. Responsib. Environ. Mgmt.*, 15, 1-13. doi: 10.1002/csr.132

Freeman, R. E. (1984). *Strategic Management: A stakeholder approach*. Englewood Cliffs, NJ: Prentice-Hall. (p. 1-30)

Freeman, R. E. (1994). The Politics of Stakeholder Theory: Some Future Directions. *Business Ethics Quarterly*, 4(4), 409-421. doi: 10.2307/3857340

Husted, B. W., & Allen, D. B. (2006). Corporate Social Responsibility in the Multinational Enterprise: Strategic and Institutional Approaches. *Journal of International Business Studies*, 37(6), 838-849.

Matten, D., & Moon, J. (2005). Corporate Social Responsibility. *Journal of Business Ethics*, 54(4), 323-337. doi: 10.1007/s10551-004-1822-0

Mintzberg, H., & Westley, F. (2001). Decision Making: It's Not What You Think. *MIT Sloan Management Review*, 42(3), 89-93.

Moon, J. (2007). The contribution of corporate social responsibility to sustainable development. *Sustainable Development*, 15(5), 296-306. doi: 10.1002/sd.346

Pelozo, J. (2009). The Challenge of Measuring Financial Impacts From Investments in Corporate Social Performance. *Journal of Management*, 35(6), 1518-1541. doi: 10.1177/0149206309335188

Porter, M. E., & Kramer, M. R. (2006). Strategy & Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, 84(12), 78-92.

Module 8

Learning objective

Know the contribution of sustainable finance to sustainable development

Lecture Content

- Sustainable finance

Reflection questions

- Does finance support sustainable development?
- What financial products and services might help top address the Sustainable Development Goals?

Assignment

- Topic presentations and papers
- Topic response: Is finance an enabler of or a barrier for sustainable development?

Core Readings

Weber, O., & Feltham, B. (2016). *Sustainable Banking and Finance: Managing the Social and Environmental Impact of Financial Institutions*. Toronto, ON: University of Toronto Press.

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210-233.
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Additional Readings

Bauer, R., & Hann, D. (2010). Corporate Environmental Management and Credit Risk. *SSRN eLibrary*.

Dam, L., & Scholtens, B. (2015). Towards a Theory of Responsible Investing: On the Economic Foundations of Corporate Social Responsibility. *RESOURCE AND ENERGY ECONOMICS*, 41(August), 103-121.
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Scholtens, B. (2008). Corporate Social Responsibility in the International Banking Industry. *Journal of Business Ethics*, 86(2), 159-175. doi:10.1007/s10551-008-9841-x

- Scholtens, B. (2011). Corporate social responsibility in the international insurance industry. *Sustainable Development, 19*(2), 143-156. doi:10.1002/sd.513
- Sievänen, R., Rita, H., & Scholtens, B. (2017). European Pension Funds and Sustainable Development: Trade-Offs between Finance and Responsibility. *Business Strategy and the Environment, n/a-n/a*. doi:10.1002/bse.1954
- Weber, O., & Remer, S. (Eds.). (2011). *Social Banks and the Future of Sustainable Finance*. London: Routledge.
- Hunt, C., Weber, O., & Dordi, T. (2017). A comparative analysis of the anti-Apartheid and fossil fuel divestment campaigns. *Journal of Sustainable Finance & Investment, 7*(1), 64-81.
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- Weber, O. (2006). Investment and environmental management: The interaction between environmentally responsible investment and environmental management practices. *International Journal of Sustainable Development, 9*(4), 336-354.
- Weber, O. (2012). Environmental Credit Risk Management in Banks and Financial Service Institutions. *Business Strategy and the Environment, 21*(4), 248-263. doi:10.1002/bse.737
- Weber, O. (2014). The financial sector's impact on sustainable development. *Journal of Sustainable Finance & Investment, 4*(1), 1-8. doi:10.1080/20430795.2014.887345
- Weber, O. (2014). Social banking: Concept, definitions and practice. *Global Social Policy, 14*(2), 265-267.
doi:10.1177/1468018114539864
- Weber, O. (2016). Equator Principles Reporting: Factors Influencing the Quality of Reports. *International Journal of Corporate Strategy and Social Responsibility*.
- Weber, O. (2017). Corporate sustainability and financial performance of Chinese banks. *Sustainability Accounting, Management and Policy Journal, 8*(3).
- Weber, O., Acheta, E., & Adeniyi, I. (2016). The Impact of Sustainability Codes of Conduct in the Financial Sector (Vol. 92, pp. 18). Waterloo, ON: Centre for International Governance Innovation.
- Weber, O., & Banks, Y. (2012). Corporate sustainability assessment in financing the extractive sector. *Journal of Sustainable Finance & Investment, 2*(1), 64-81. doi:10.1080/20430795.2012.702501

- Weber, O., Diaz, M., & Schwegler, R. (2014). Corporate Social Responsibility of the Financial Sector – Strengths, Weaknesses and the Impact on Sustainable Development. *Sustainable Development*, 22, 321–335.
doi:10.1002/sd.1543
- Weber, O., Fenchel, M., & Scholz, R. W. (2008). Empirical analysis of the integration of environmental risks into the credit risk management process of European banks. *Business Strategy and the Environment*, 17, 149-159. doi:10.1002/bse.507
- Weber, O., Hoque, A., & Islam, A. M. (2015). Incorporating environmental criteria into credit risk management in Bangladeshi banks. *Journal of Sustainable Finance & Investment*, 5(1-2), 1-15.
doi:10.1080/20430795.2015.1008736

Part 3: Tools for Sustainability Management (Units 9 – 10)

Module 9

Learning objective:

Learn to apply sustainability accounting and reporting

Lecture content

- Corporate sustainability accounting and reporting
- Management systems

Reflection questions:

- Imagine you are the owner of a restaurant. What sustainability accounting, management and reporting systems are useful for your business?
- Present the results in an audio Power Point

Assignments

- Topic presentations and papers
- Topic response: Are sustainability accounting, management and reporting systems useful for businesses and sustainable development?

Core Readings

- Melnyk, S. A., Sroufe, R. P., & Calantone, R. (2003). Assessing the impact of environmental management systems on corporate and environmental performance. *Journal of Operations Management*, 21, 329-351.

- Schaltegger, S., & Burritt, R. L. (2010). Sustainability accounting for companies: Catchphrase or decision support for business leaders? *Journal of World Business*, 45(4), 375-384. doi: 10.1016/j.jwb.2009.08.002
- Schaltegger, S., & Burritt, R. L. (2000). Contemporary environmental accounting: issues, concepts and practice. Sheffield: Greenleaf Publishing, pp. 30-42 (e-book)
- Weidema, B. P., Thrane, M., Christensen, P., Schmidt, J., & Løkke, S. (2008). Carbon Footprint. *Journal of Industrial Ecology*, 12(1), 3-6. doi: 10.1111/j.1530-9290.2008.00005.x

Additional Readings

- Fonseca, A., McAllister, M. L., & Fitzpatrick, P. (2013). Sustainability Reporting among Mining Corporations: A Constructive Critique of the GRI Approach. *Journal of Cleaner Production*(0). doi: <http://dx.doi.org/10.1016/j.jclepro.2012.11.050>
- Geobey, S., & Weber, O. (2013). Lessons in operationalizing social finance: the case of Vancouver City Savings Credit Union. *Journal of Sustainable Finance & Investment*, 1-14. doi: 10.1080/20430795.2013.776259
- Global Reporting Initiative. (2008). Sustainability Reporting Guidelines Version 3.0 (pp. 92). Amsterdam: Global Reporting Initiative.
- Goss, A., & Roberts, G. S. (2011). The impact of corporate social responsibility on the cost of bank loans. *Journal of Banking and Finance*, 35(7), 1794-1810.
- International Organization for Standardization. (2010). Discovering ISO 26000 (pp. 8). Geneva: International Organization for Standardization.
- Lee, Y.-C., Hu, J.-L., & Ko, J.-F. (2008). Effect of ISO Certification on Managerial Efficiency and Financial Performance: An Empirical Study of Manufacturing Firms. *The International Journal of Management*.
- Milà i Canals, L., Sim, S., García-Suárez, T., Neuer, G., Herstein, K., Kerr, C., . . . King, H. (2011). Estimating the greenhouse gas footprint of Knorr. *The International Journal of Life Cycle Assessment*, 16(1), 50-58. doi: 10.1007/s11367-010-0239-5
- Page, G., Ridoutt, B., & Bellotti, B. (2012). Carbon and water footprint tradeoffs in fresh tomato production. *Journal of Cleaner Production*, 32(0), 219-226. doi: <http://dx.doi.org/10.1016/j.jclepro.2012.03.036>
- Sanscartier, D., Deen, B., Dias, G., MacLean, H. L., Dadfar, H., McDonald, I., & Kludze, H. (2013). Implications of land class and environmental factors on life cycle GHG emissions of Miscanthus as a bioenergy feedstock. *GCB Bioenergy (see course website for document)*.
- Steger, U. (2000). Environmental Management Systems: Empirical Evidence and Further Perspectives. *European Management Journal*, 18(1), 23-37.
- The Global Reporting Initiative. (2010). Sustainability Reporting Guidelines & Mining and Metals Sector Supplement. (pp. 53). Amsterdam, The Netherlands: The Global Reporting Initiative.

The Global Reporting Initiative. (2011). Sustainability Reporting Guidelines & Financial Services Sector Supplement. Amsterdam, The Netherlands: The Global Reporting Initiative.

Wackernagel, M., & Rees, W. E. (1997). Perceptual and structural barriers to investing in natural capital: Economics from an ecological footprint perspective. *Ecological Economics*, 20(1), 3-24. doi: [http://dx.doi.org/10.1016/S0921-8009\(96\)00077-8](http://dx.doi.org/10.1016/S0921-8009(96)00077-8)

Wackernagel, M., Onisto, L., Bello, P., Callejas Linares, A., Susana López Falfán, I., Méndez García, J., . . . Guadalupe Suárez Guerrero, M. (1999). National natural capital accounting with the ecological footprint concept. *Ecological Economics*, 29(3), 375-390. doi: [http://dx.doi.org/10.1016/S0921-8009\(98\)90063-5](http://dx.doi.org/10.1016/S0921-8009(98)90063-5)

Weber, O. (2007). Factors Influencing the Implementation of Environmental Management Systems, Practices and Performance. In R. Sroufe & J. Sarkis (Eds.), *Strategic Sustainability: the State of the Art in Corporate Environmental Management Systems* (pp. 190-204). Sheffield, UK: Greenleaf.

Wiedmann, T., & Minx, J. (2008). A Definition of 'Carbon Footprint'. In C. C. Pertsova (Ed.), *Ecological Economics Research Trends* (pp. 1-11). Hauppauge, NY: Nova Science Publishers.

Module 10

Learning objectives:

Get to know types of impact assessment.

Lecture Content

- Tools: Impact Assessment

Reflection Questions for the Discussion Board:

Which types of impact assessment are useful for which type of impact?

Assignments

- Topic presentations and papers
- Topic response: What are differences between the impact assessment approaches?

Core Readings

Bond, A. J., Morrison-Saunders, A., & Pope, J. (2012). Sustainability assessment: the state of the art. *Impact Assessment and Project Appraisal*, 30(1), 53-62.

Vanclay, F. (2003). International principles for social impact assessment. *Impact Assessment and Project Appraisal*, 21(1), 5-11.

Morgan, R. K. (2012). Environmental impact assessment: the state of the art. *Impact Assessment and Project Appraisal*, 30(1), 5-14.

Additional Readings

Bond, A. J., & Pope, J. (2012). The state of the art of impact assessment in 2012. *Impact Assessment and Project Appraisal*, 30(1), 1-4.

Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment*, 17(2), 120-136. doi: 10.1002/bse.506

Burritt, R. L. (2004). Environmental management accounting: roadblocks on the way to the green and pleasant land. *Business Strategy and the Environment*, 13(1), 13-32. doi: 10.1002/bse.379

Cheung, Y.-L., Jiang, K., Mak, B. C., & Tan, W. (2013). Corporate Social Performance, Firm Valuation, and Industrial Difference: Evidence from Hong Kong. *Journal of Business Ethics*, 1-7. doi: 10.1007/s10551-013-1708-0

Clark, G. L., & Hebb, T. (2005). Why should they care? The role of institutional investors in the market for corporate global responsibility. *Environment and Planning*, 37, 2015-2031.

Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30(2), 122-144. doi: 10.1016/j.jaccpubpol.2010.09.013

Esteves, A. M., Franks, D., & Vanclay, F. (2012). Social impact assessment: the state of the art. *Impact Assessment and Project Appraisal*, 30(1), 34-42.

Fowler, S., & Hope, C. (2007). A Critical Review of Sustainable Business Indices and their Impact. *Journal of Business Ethics*, 76(3), 243-252. doi: 10.1007/s10551-007-9590-2

Horváthová, E. (2010). Does environmental performance affect financial performance? A meta-analysis. *Ecological Economics*, 70(1), 52-59. doi: 10.1016/j.ecolecon.2010.04.004

Horváthová, E. (2012). The impact of environmental performance on firm performance: Short-term costs and long-term benefits? *Ecological Economics*, 84(0), 91-97. doi: 10.1016/j.ecolecon.2012.10.001

International Finance Corporation. (2012). *IFC Performance Standards on Environmental and Social Sustainability* (pp. 72). Washington, DC: International Finance Corporation.
http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/publications/publications_handbook_pps

Jackson, E. T. (2013). Interrogating the theory of change: evaluating impact investing where it matters most. *Journal of Sustainable Finance & Investment*, 1-16. doi: 10.1080/20430795.2013.776257

- Koellner, T., Suh, S., Weber, O., Moser, C., & Scholz, R. W. (2007). Environmental Impacts of Conventional and Sustainable Investment Funds Compared Using Input-Output Life-Cycle Assessment. *Journal of Industrial Ecology*, 11(3), 41-60.
- Kolk, A. (2004). A decade of sustainability reporting: developments and significance. *Int. J. Environment and Sustainable Development*, 3(1), 51-64.
- The Equator Principles. (2012). *The Equator Principles (III ed., pp. 72)*. Geneva: The Equator Principles.
<http://www.equator-principles.com/index.php/ep3/ep3>
- Gibson, R. B. (2006). Sustainability assessment: basic components of a practical approach. *Impact Assessment and Project Appraisal*, 24(3), 170-182.

Module 11

Learning objectives:

Get to the Scenario analysis.

Lecture Content

- Tools: Scenario analysis

Reflection Questions for the Discussion Board:

For which kinds of future issues are scenario analyses helpful?

Assignment

- Topic presentations and papers
- Topic response: Describe a case that scenario analysis can be applied to.

Core Readings

- Godet, M. (1986). Introduction to La Prospective. Seven Key Ideas and one Scenario Method. *Futures*, 18, 134-157.
- Wiek, A., Binder, C., & Scholz, R. W. (2006). Functions of scenarios in transition processes. *Futures*, 38(7), 740-766. doi: <http://dx.doi.org/10.1016/j.futures.2005.12.003>

Additional Readings

- Devezas, T., LePoire, D., Matias, J. C. O., & Silva, A. M. P. (2008). Energy scenarios: Toward a new energy paradigm. *Futures*, 40(1), 1-16. doi: <http://dx.doi.org/10.1016/j.futures.2007.06.005>

- Scholz, R. W., & Tietje, O. (2002). *Embedded case study methods : integrating quantitative and qualitative knowledge*. Thousand Oaks, CA: Sage Publications (Chapter Formative Scenario Analysis, pp. 79-116), downloadable from the course website).
- Shell. (2013). New Lens Scenarios. <http://www.shell.com/global/future-energy/scenarios/new-lens-scenarios.html>
- Spielmann, M., Scholz, R., Tietje, O., & de Haan, P. (2005). Scenario Modelling in Prospective LCA of Transport Systems. Application of Formative Scenario Analysis (11 pp). *The International Journal of Life Cycle Assessment*, 10(5), 325-335. doi: 10.1065/lca2004.10.188
- Swart, R. J., Raskin, P., & Robinson, J. (2004). The problem of the future: sustainability science and scenario analysis. *Global Environmental Change*, 14(2), 137-146. doi: <http://dx.doi.org/10.1016/j.gloenvcha.2003.10.002>

Module12

Discussion

- What have we learned? (Virtual classroom discussion and discussion board)

Final assignment:

- See the description above and the course website.