



**DUQUESNE
UNIVERSITY**

**A. J. Palumbo School of Business Administration
John F. Donahue Graduate School of Management**

SMBA511 – Sustainable Theories & Models (Fall 2008)

Professor: **Robert Sroufe**

Office/Hours: RH 809/T & Th 12:00 to 3:00

When: typically 1:40 – 4:20 check fall schedule weekly

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Classroom: RH 509

Objectives of the course include enabling students to acquire and in-depth knowledge of sustainability; to think critically about sustainability topics; integrate different streams of knowledge; develop qualitative and quantitative analysis of business management situations; teamwork; and personal development.

Learning Objectives	Assessment
Conduct research utilizing current periodicals, library e-resources, and websites, students will identify theories, frameworks, and decision models most involved with sustainability	Class Participation; Topic Presentations, Vision and Action Plans
Find the business case for sustainable development and the co-alignment among business, society, and the environment.	Class Participation; Case Analysis
Identify societal trends and drivers impacting organizational decision making processes and business situations.	Government and NGO Deliverables
Develop, analyze, and evaluate alternatives for more sustainable products and services.	Class Participation; LCA Exercise
Identify and analyze sustainability dilemmas in terms of specific stakeholder perspectives, and potential barriers in decision making.	Class Participation; Topic Presentations, Govt. Regulation and NGO Assignments
Communicate reasoning when resolving dilemmas, listen to other individuals' opinions and decision alternatives when resolving TBL dilemmas and enable this listening to affect the student's personal opinions, reasoning processes and decision alternatives.	Class Participation, Topic Presentations, Vision and Action Plans
Identify and analyze sustainability dilemmas in terms of implementation methods as well as possible implementation obstacles.	Class Participation, Topic Presentations; Hot Topics, Final Exam

Textbooks/Course Materials

- *The Sustainability Handbook*, by W. Blackburn, Eli Press
- *The Sustainable Company* by C. Lazlo, Island Press

Readings

- Available via the class web site (Blackboard)
- Cases: within course textbooks or available on-line

Performance/Evaluation Opportunities:

1 st Team Topic Write-up/Presentation	15%	Individual Participation	20%
2 nd Team Topic Write-up/Presentation	15%	Individual Vision and Action Plans	5%
Team LCA Results/Reports/Presentations	15%	Individual Hot Topics	5%
		Individual Final Exam	25%

Participation

Attendance does not equal participation. Class participation and preparation are fundamental aspects of this course and reflect on your professionalism. Your classmates should be treated no differently than a valued client, coworker, or employee. Students are required to not only attend class, but to have read the necessary materials (text chapters, case studies, and readings) prior to each class as well as developing and sharing practical examples of the particular topic under consideration from professional and personal experiences. Class discussion is strongly encouraged, and all students will be evaluated based on their individual level of substantive contribution. Each day after class I review each student's contribution to the class and assign from 0 to 5 points noting absences and tardiness. Students who say nothing get 0; those who make multiple, particularly valuable, insightful, in-depth contributions get 5. At the end of the course I sum the daily points and rank the class by these totals. I use these scores to evaluate participation, where to make breaks between the extremes, and trends. Details regarding participation evaluation can be found on the class Blackboard site.

Teams/Topics

The class will be divided into teams for the purpose of topic preparation and presentation. Each team will be required to lead a thirty minute class discussion/presentation in their assigned topic(s), provide presentation slide handouts, and to submit a written report (maximum length 2 pages, excluding appendices – the report should be single spaced, 12-point font 1 inch margins). Teams should include any information they feel is relevant to the topics and support for why the information is relevant. Reports are to emailed to the instructor on the day of the presentation and have the following structure: (1) Key issues for management in the topic; (2) Key sustainability issues for the topic; (3) Prepare an evaluation of the alternatives that are available to management; (4) Suggest a plan for management including details on how to implement the plan; (5) Provide a backup plan.

Any student lead sessions evaluation will be assessed on presentation/report content, style, originality, communication, development of coherent argument, and application of relevant theory. For all deliverables, follow Modern Language Association citation guidelines, single spacing, size 12 font and one inch margins. Typos or grammatical mistakes in written documents and presentation slides indicate lack of attention to detail, are unprofessional, and grounds for a lower performance evaluation. Thus, check each other's work.

All other teams not presenting should consider themselves as either upper-level management and executives who answer to the Board of Directors (which pursues the best interests of stockholders – long term profitability of the firm), or stakeholders that include employees, residents, interest groups, government, third parties... The participatory responsibilities of the non-presenting teams include the formation of two take aways from the topic readings and two issues or questions the topic has generated. The takeaways & issues must be turned in by email before 10:00 AM the day of class in which the topic is presented. Upper level management or stakeholders are expected to voice approval/concern, when appropriate, during topic presentations. Note: for the non-presenting teams there is no formal graded component to your in-class roles, though it will be considered in the participation component of the course grade.

Life-Cycle Analysis: Choose one company's product. Identify the key environmental issues that relate to its product design and manufacturing. Sketch out a life-cycle analysis of the product. Although you are not expected to quantify all of this analysis, you should: (1) Identify as many of the stages and potential environmental risks as possible, and (2) provide some ranking and prioritization. (3) What is the current state of the art in terms of product or manufacturing design? (4) Which companies appear to be leaders and laggards? Finally, (5) what, effect if any does this appear to have on firms in the industry or supply chain? LCA deliverables include a 1/3 weight on the presentation and 2/3 weight on a five page report from each team. Guidelines and evaluation criteria are posted on Blackboard.

Vision and Action Plan: Each of you will be asked to prepare a **personal vision and action plan** describing how you plan to connect business and sustainable development in your own career. Specifically you will write a paper enunciating: (1) your personal point of view on the role of business in the world for the new millennium; and (2) your personal action plan for using commerce as a tool to foster a more sustainable world. Personal vision statements should be no longer than *2 pages* (single-spaced, 12 font, normal margins), exclusive of any exhibits or attachments you choose to include. Performance evaluations will be based on clarity of ideas, quality of writing, seriousness with which you approach the assignment, creativity, and insights.

Hot Topics: Find a sustainability topic you are interested in that, was not already covered in class, is not already taken by another student, develop a one page summary of the topic. The deliverable should include information as to why this topic is relevant, impacts on business and sustainability, and what Company is doing this. Topics are first come first serve. The list will be posted to Blackboard.

Final Exam: We will have an essay based exam during Finals Week. Preparing for and taking the final exam will provide the opportunity to reflect on the class material, and integrate and internalize the concepts and methods discussed in the course. Pay attention to tips of the day and takeaways during or at the end of each class.

Team Member Evaluation: At the end of the semester, you will evaluate each team member's contribution to team deliverables. You will be asked to allocate a special \$100,000 bonus among your team based on individual contribution to the success of the team.

Schedule and Topics

Week	Topics	Readings	Additional info/In Class Exercises
1-W 8/27	<p>Sustainability Communications and Blackboard familiarization; Preventing Plagiarism; Teams</p> <p>Introduction to Sustainability</p>	<p>SOBA Code of Ethical Behavior</p> <p>Blackburn Chapter 1: Addressing the confusion about Sustainability: A Typical Executive View</p>	<p>What do CEOs say about sustainability: http://globalreporting.blogspot.com/2007/07/what-do-ceos-say-about-sustainability.html</p> <p>Introduce information on semester sustainability consulting projects 521-PROJ</p>
2-W 9/3	<p>Sustainability & Business</p> <p>Theory of the Firm</p> <p>Stakeholder Theory</p> <p>Defining Sustainability: <i>What is it?</i></p> <p>Responsibility of the Firm as a Moral Agent</p>	<p>Friedman, (1970) <i>The New York Times Magazine</i></p> <p>Kofi Annon's call for Global Compact, January (1999)</p> <p>Blackburn Chapter 2: Determining Scope: An Operational Definition of Sustainability</p> <p>Lazlo Chapter 2: The New Ethics and Chapter 5: The Stakeholder Mindset</p>	<p>Social responsibility of business is...?</p> <p>In class exercise (Friedman vs. Kofi Annon)</p> <p>United Nations Global Compact: http://www.unglobalcompact.org/AboutTheGC/index.html</p> <p>Team schedule confirmed</p>
3-W 9/10	<p>Sustainability: Why Bother?</p> <p>Development of environmentalism through to sustainability & CSR</p> <p>Risk Management</p> <p>Corporate Citizenship</p> <p>Evidence Based Management Case: Patagonia: (Lazlo Chpt. 6)</p>	<p>Economy and Lieberthal, (2007) Scorched Earth: Will Environmental Risk in China Overwhelm its Opportunities, <i>Harvard Business Review</i></p> <p>Blackburn Chapter 3: The Value of Sustainability</p> <p>Lazlo Chapter 1: Toward an Integrated Bottom Line</p> <p>Hart (1997) Beyond Greening: Strategies for a Sustainable World, <i>Harvard Business Review</i></p>	<p>Environmental resource availability, should we be worried?</p> <p>Read about sustainability and climate change at http://sustainer.org/climate_change/index.html</p> <p>Ex. Sum. of the 2008 Env. Sust. index Report: http://sedac.ciesin.columbia.edu/es/esi/</p> <p>For background on the difference between sustainability and corporate citizenship see http://www.conference-board.org/knowledge/citizenshipcenter/ccs_faq.cfm</p>

<p>4-W 9/17</p>	<p>Sustainability Models 1 of 4 Industrial Ecology Cradle-to-Cradle Life Cycle Analysis</p> <p>LCA: Sustainable Production Strategy</p>	<p>Note on Life Cycle Analysis, Svoboda, National Pollution Prevention Center, Univ. of Michigan</p> <p>Video Presentation - Video of William McDonough's talk at the TED Conference (4 part 20 minute video, intention and design, strategy of hope, growth is good, new Chinese cities)</p> <p>Erkman, Industrial Ecology: an Historical View</p>	<p>Student team 1 presents Industrial Ecology, Cradle and LCA Models</p> <p>For more info on IE or Cradle to Cradle: http://www.is4ie.org/ http://www.epea.com/ http://www.mcdonough.com/writings_c2c_case_studies.htm</p> <p>LCA exercise in class with products, student deliverables in three weeks</p>
<p>5-W 9/24</p>	<p>Sustainability Models 2 of 4 Natural Capitalism; Ecological Economics;</p> <p>Case: ARCO (Lazlo Chapter 7)</p>	<p>Lovin, Lovin, and Hawkin, (2007) A Roadmap for Natural Capitalism, <i>Harvard Business Review</i></p> <p>Brennen, Discounting the Future: Economics and Ethics, <i>Resources</i>, 1995</p>	<p>Student team 2 presents Natural Capitalism and Ecological Economics Models</p> <p>Natural Capitalism: http://www.natcap.org/</p> <p>Ecological Economics: http://www.ussee.org/</p> <p>True Cost: http://www.trucost.com/</p>
<p>6-W 10/1</p>	<p>Sustainability Models 3 of 4 Natural Step; Natural Sustainable Value Clusters; Systems Conditions</p> <p>Sustainability Models 4 of 4 Triple Bottom Line, Economy, Society, and Environment</p> <p>Case: The Co-operative Bank (Lazlo Chapter 8)</p>	<p>Natrass and Altomare, (1999) <i>The Natural Step for Business</i>, Chapters 2 A New Framework for Management Chapter 3 Scientific Background to the Natural Step</p> <p>Savitz, <i>The Triple Bottom Line</i> Chapter 2 Sustainability Sweet Spot Chapter 4 Business Responds Chapter 5 Embracing Accountability</p>	<p>Student team 3 presents Natural Step Model</p> <p>For more on the Natural Step: http://www.naturalstep.org/</p> <p>Student team 4 presents Triple Bottom Line Model</p> <p>Triple Bottom Line discussion list: http://www.greenbusiness.net/triple-bottom-line.html</p>

7-W 10/8	Attributes of a Sustainable Operating System - Environmental Management Systems	Blackburn Chapter 4: Building an SOS Chapter 6: Strategic Planning	LCA Deliverables, Presentations, Papers Older view - EH&S: http://www.naem.org/# Newer view – EMS: http://www.epa.gov/EMS/ Topics debriefing
8-W 10/15	Standards and Regulations ISO 9000 and 14000, EMAS, BS 7750 WEEE/RoHS/REACH Case: The WEEE Challenge INSEAD Global Initiatives through various stakeholder relationships: GRI	Blackburn Chapter 5: SOS Standards Selin and VanDeveer, (2006) Raising Global Standards, <i>Environment</i> Take a look at GRI and G3 before coming to class:	Each student finds a governmental regulation or policy that addresses sustainability and summarizes it for the group (no duplicates) ISO web site: http://www.iso.org/iso/en/ISOOnline.frontpage EMAS: http://ec.europa.eu/environment/emas/index_en.htm Global Reporting Initiative: http://www.globalreporting.org/Home
10/20	Joint Session with Ethics	1:40 – 2:55	TBD

<p>9-W 10/22</p>	<p>Investing: Ethical, Social, and Green investing; Shareholder resolutions and activism; Role of institutional investors? Sustainable Development and Your Pension Fund Transparent Reporting</p>	<p>Lydenberg, 2005 <i>Corporations and the Public Interest</i> Chapt. 4, 1st Step; Data & Disclosure Chapt. 5, 2nd Step; Analysis & Debate Blackburn Chapter 10: Transparent Sustainability Reporting Baxter 2006 Annual Report</p>	<p>Student team 1 presents Show Me the Money in Sustainable Investing Green Investing: http://www.sustainablebusiness.com/progressiveinvestor/ Ethical Investing: http://www.ethicalinvesting.com/ Social Investing: http://www.socialinvest.org/ Some Top pics: http://www.csrwire.com/News/9240.html Institutional Investing: http://www.institutionalshareowner.com/article.mpl?fArticleId=2335 Baxter Report: http://www.baxter.com/about_baxter/investor_information/annual_report/index.html</p>
<p>10-W 10/29</p>	<p>Communication: Obstacles & Opportunities</p>	<p>Lazlo Chapter 8: The Eight Disciplines Chapters 10: The Toolkit Esty and Winston (2006) <i>Green to Gold</i>, Chapter 10, Why do Environmental Initiatives Fail? Sexton et al, (1991) <i>Better Environmental Decisions</i>, Chapter 21 Strategies for Integrated Decision Making</p>	<p>Vision and Action Plan Deliverable Institute for Sustainable Communication: http://www.sustaincom.org/ Communication in the workplace: http://www.greenbiz.com/feature/2005/08/01/inside-out-sustainability-communication-begins-workplace</p>
<p>11/4</p>	<p>Joint Session with Environmental Science</p>	<p>3:05 – 4:20</p>	

<p>13-Tu 11/18</p>	<p>Governments: mechanism of regulation, roles and responsibilities, economic analysis, best practices,</p> <p>Communities: Infrastructure, decision making, partnerships, growth</p> <p>Smart Growth: a different look at community development</p>	<p>Blackburn Chapter 14 Approach to Sustainability for Government Organizations</p> <p>Lydenberg, Chapter 7 Government's Role and the Road Ahead</p> <p>Finnegan and Sexton, Chapter 16 Community-Based Environmental Decisions: Analyzing Power and Relationships</p> <p>Take a look at the Smart Growth web site</p>	<p>See what is happening in Oregon or Australia at: http://www.sustainableoregon.net/govt/ or http://www.sustainability.dpc.wa.gov.au/index.cfm?function=about.overview</p> <p>local governments for sustainability: http://www.iclei.org/index.php?id=636</p> <p>Student team 3 presents information on community engagement</p> <p>For more on sustainable community development see: http://globalgreen.org/greenbuilding/</p> <p>For more on Smart Growth see: http://www.smartgrowth.org/Default.asp?res=1280</p>
<p>14-Tu 12/2</p>	<p>Role of NGOs in Sustainability What are they and how do they contribute to sustainability efforts</p> <p>Examples: -Global Environmental Management Initiative -United Nations Global Compact -World Resources Institute -Aspin Institute -Global Reporting Initiative</p>	<p>Blackburn Chapter 11 Stakeholder Engagement: The Role of NGOs Chapter 13 Approach to Sustainability for NGOs</p> <p>Rondinelli & London, (2003) How Corporations and Environmental Groups Collaborate, <i>Academy of Management Executive</i></p> <p>Long and Arnold (1995) <i>The Emergence of Environmental Partnerships</i></p>	<p>Each student finds an international NGO that address sustainability and summarizes it for the group (no duplicates). Focus on 1.audience of NGO, 2.members of organization, 3.definition of sustainable development 4. tools of influence.</p> <p>Can't choose an NGO you have worked for.</p> <p>UN Global Compact: http://www.unglobalcompact.org</p> <p>Global Environmental Management Initiative: http://www.gemi.org/</p> <p>WRI : http://www.wri.org/</p> <p>21st Century NGOs at http://www.sustainability.com/insight/research-article.asp?id=51</p>

<p>15-Tu 12/9 3:05-4:20</p>	<p>Business Models for Bottom of the Pyramid (BOP) microfinance, microsavings and microcredit</p> <p>Case: Grameen Telecom's Village Phone Programme in Rural Bangladesh</p>	<p>Prahalad and Hart (2002) The Fortune at the Bottom of the Pyramid</p> <p>Additional readings To Be Announced:</p>	<p>Student team 4 presents BOP Concepts and Model</p> <p>Ecology and the Politics of Survival, Shiva, (2001) Introduction: http://www.unu.edu/unupress/unupbooks/80a03e/80A03E00.htm</p> <p>Info on the microfinance industry: http://www.mixmarket.org/</p> <p>Directory of organizations: http://www.devdir-microfinance.org/</p>
<p>12/9</p>	<p>Joint Session with Operations</p>	<p>4:30 – 5:45</p>	<p>TBD</p>
<p>15-Th 12/11</p>	<p>Hot Topics</p>	<p>3:05 – 4:20 Millennium Project's futures scenarios: http://www.acunu.org/millennium/scenarios/index.html</p>	<p>Hot Topics Deliverable</p>
<p>16-Tu 12/16</p>	<p>FINAL EXAM</p>	<p>Starts at 12:15</p>	