

UCSD Extended Studies
Business, Science and Technology Department
Sustainability Reporting
BUSA40726

Course Syllabus

Basic Information:

David A. Bainbridge

Associate Professor, Marshall Goldsmith School of Management, Scripps Ranch

Email: sustainabilityleader@gmail.com

For an appointment or additional information – please email.

Spring 2009

- 3 units
- Thursday, University Extension Complex 151, 6:30-9:30 PM
- April 9 to June 4

Course Description:

Sustainability reporting is a rapidly evolving area of management, accounting and finance. It enables an organization and its stakeholders to evaluate performance across a range of economic, social and environmental measures. This can improve profitability, reduce waste and reduce risk. This information can also help improve relations with employees, stockholders, regulators and other stakeholders. This course will introduce stakeholders and organization managers (accounting, stakeholder relations, strategic management, and EH&S) to sustainability reporting, for strategic, operational and policy uses. Also helpful for environmental and social policy NGOs.

Goals and Objectives:

The goal of this course is to help students develop a good understanding of the current approaches for sustainability reporting. About 10,000 reports are now prepared worldwide, but few in the U.S. Emphasis is placed on improved accounting for all costs and adding value to products, services and operations. The most common formats and content will be introduced. Students will analyze and critique sustainability reports to hone their skills. By the end of the course students should be prepared to start a sustainability report for their organization.

Student/Course Requirements:

Class activities may include lecture and discussion, individual and group projects, research, video, on-line assignments, role playing, and simulations of meetings involving complex management problems. Skill development in research, analysis, and communication are key elements of this course. Assignments are described in greater detail on the C D section marked assignments.

Assignment #1. Cv&footprint

10%

April 16

A cv and resume are critical parts of a professional tool kit. These are increasingly computer scanned so use simple fonts (no italics), simple layout (• no bullets), and no color. This must be crisp and carefully edited. Any mistake on a resume can cost you a job interview – so this assignment requires perfection for the full 10 points. This is a curriculum vitae or Cv, a resume is shorter and focused on a specific job. This will help me target the

course to student skills and experience. A suggested format for the Cv is on your course CD. Additional questions explore ecological footprints and impacts.

Assignment #2. 10% April 30

You will prepare a short review of a corporate sustainability report (2-3 pages). You can find these by going through the GRI database or searching on the web, you may find it helpful to choose a shorter (40 page) report rather than a 200 pager. Use the Pacific Sustainability Index form and the GRI Sustainability Report outline for grading. Give the report a grade for the following categories: organization description, boundary setting, financial, environmental and social costs and benefits. Describe strengths and weaknesses. Grading will be based on: content 4 points, clarity 2 points, and critical thinking 4 points.

Assignment #3. 20% May 14

You will develop an outline and introduction to a sustainability report based on GRI for an organization or company that currently does not have one. Look around San Diego for a good candidate, it could be where you like to eat, where you have your car repaired or the company where you work. Or pick a company in the field you work in now – or want to work for in the future. This is expected to be professional level, as if you were starting a consulting firm. It might be only 5 pages – but very carefully written and proofed for errors. The goal is to develop a paper you could hand to a prospective employer. Grading will be based on: outline 4 points, comprehensive review of environmental, social and financial issues including identification of possible costs and benefits (you will not be expected to calculate these) 12 points, clarity 2 points, and identification of value adding propositions from reporting, 2 points. This can be revised and resubmitted by May 28 for additional points.

Assignment #4. Presentation 10% May 21 draft/June 4 final

Your short talk will introduce your sustainability report outline and introduction. Expect to talk for 11 minutes exactly (time may be adjusted depending on class size). Turn in your ppt (printed 6 slides per page). Work with slide layout and slide design, include pictures or diagrams. Your time as presenter is valuable - make sure it counts. We only remember about 10 percent of what we read, 20 percent of what we hear, 30 percent of what we see, but 50 percent of what we hear and see. And more if we get to touch! General goal: 6-7 lines per page (10 lines max), only 6 to 7 words per line. Expect to have at least 12 slides with some photos or illustrations. Grading: content 6 points, clarity 2, connection with audience 1, presentation timing and confidence 1

In class 20% of grade Any day

Thinking fast, research, writing and communicating clearly are required for successful sustainability reporting. In class assignments will include case studies and analysis of problems that are likely to occur in sustainability reporting.

Midterm 10% May 7

Midterm – in class. Open book & open web. Problem solving, fill in the blanks and mini-essays on key sustainability reporting issues.

Final Exam 10% June 4

Final exam due. Take home exam on the full subject matter of the course will be given on May 28, due on June 4.

Participation

10%

Every day

Participation is critical for success. Attendance is taken at the start of class. But simply being in your seat is not enough, take part in discussions and role playing. The conflicts of time, family and work will be acknowledged, but try to make it every day.

10 points possible with one missed evening, 9 points with 2, 8 points with 3 with active participation in class. No missed classes with limited participation in class discussion could be as low as 7 points.

Course Materials:

Required materials will be provided on disk or on web.

Bainbridge, D. A. 2009. *Rebuilding the American Economy*. Rio Redondo Press, SD.

Additional Suggested Reading:

GRI. 2009. *Sustainability Reporting Guidelines* and materials. Global Reporting Initiative. www.globalreporting.org (follow updates)

Bainbridge, D. A. 2007. True cost accounting for the post-autistic economy. *Post Autistic Economic Review*. 41:23-28.

Bainbridge, D. A. 2006. Adding ecological considerations to “environmental” accounting. *Bulletin of the Ecological Society of America*. October. 8(4):335-340.

Morhardt, J.E. 2002. *Clean Green and Read All Over*. ASQ. <http://qualitypress.asq.org>
Environmental Management Accounting. International Federation of Accountants.

A Manual for the Preparers and Users of Eco-efficiency Indicators v1.1. ISAR [Intergovernmental Working Group of experts on International Standards of Accounting and Reporting] United Nations Conference on Trade and Development. UN.

Schaltegger, S. and R. Burritt. 2000. *Contemporary Environmental Accounting*. Greenleaf Publishing, Sheffield, UK.

Rikhardsson, P.M., M. Bennett, J.J. Bouma and S. Schaltegger, eds. 2005. *Implementing Environmental Management Accounting*. Springer, Dordrecht, NL.

Burritt, R., T. Hahn and S. Schaltegger. 2002. Towards a Comprehensive Framework for Environmental Management Accounting - Links Between Business Actors and Environmental Management Accounting Tools." *Australian Accounting Review* (July) v i pages http://www.uni-lueneburg.de/eman/pdf_dateien/Burritt-Hahn.pdf.

Håk, T., B. Moldan and A. L. Dahl. 2007. *Sustainability Indicators*. Island Press, Washington, DC.

Hibbitt, C., and D. Collison. Corporate Environmental Disclosure and Reporting Developments in Europe. *Social and Environmental Accounting Journal*, CSEAR (24)1: pages

Robert, K.-H., B. Schmidt-Bleek, J. Aloisi de Larderel, G. Basile, J.L. Jansen, R. Kuehr, P. Price Thomas, M. Suzuki, P. Hawken and M. Wackernagel. 2002. Strategic sustainable development – selection, design and synergies of applied tools. *Journal of Cleaner Production*. 10(2002):197-214.

Graedel, T.E. and B.R. Allenby. *Industrial Ecology*.

Key Journals:

Sustainable Industries Journal, *Greener Management International*, *J. of Cleaner Production*, *J. of Industrial Ecology*, *J. of Ecological Economics*. Visit their web sites.

WEB

Global Reporting Initiative	www.globalreporting.org
US Society for Ecological Economics	www.ussee.org
International Society for Sustainability Professionals	http://sustainabilityprofessionals.org
International Society for Industrial Ecology	www.yale.edu/is4ie/
Environmental Management Accounting Research and Information Center	www.emawebsite.org
Environmental Management Accounting Network-EU	www.emanu-eu.net
International Federation of Accountants	www.ifac.org
International Chamber of Commerce Sust. Dev. Business and sustainable development	www.iccwbo.org/index_sdcharter.asp http://iisd.ca/
USGBC – LEED format	www.usgbc.org
World Business Council Sust. Dev, 2000	www.wbcscd.ch/
Ecolabel organization	www.ecolabelling.org
The Carbon Trust	www.carbontrust.co.uk

Grading System:

- See notes on assignments.
- Grading scale A-F

A wifi compatible laptop will be helpful but is not required. If you have it – bring it.

Course Structure

Structure and organization may change depending on student interests and experience. Please check your emails for announcements starting in week 2.

Week 1. Introduction to true cost accounting and sustainability reporting. The triple bottom line – economic, social and environmental accounting. True cost, life cycle cost (LCCA), MIPS, and ecological footprints and indicators. GNP v/s ISEW and GNH. Global change and investing for the future. Internal and external costs and benefits, perverse incentives, social traps, subsidies and market distortion. The value of sustainability reporting. Reading Chapter 1&2

Week 2. The Global Reporting Initiative Process as an emerging standard. What does it include? How is it done? What value does it have? The relation between sustainability reporting and environmental management systems -- EMAS in the EU, ISO14000. Would sustainability reporting have averted the financial meltdown? Reading Chapter 3, 4, also review GRI guidelines **A1.CV/footprint due.**

Week 3. Stakeholder involvement in sustainability reporting. Who? Why? How? Working with stakeholders, when they are friendly or when they are not. Transparency and accountability – benefits and risks. Evaluating sustainability reports, what is missing? What is incomplete or questionable? Reading Chapter 5, 9 review Pacific Sustainability Index

Week 4. Sustainability accounting and reporting methods and challenges. Legal frameworks and institutional objectives. New global warming gas reporting requirements in California. Data management and mining. Material flow analysis. Accounting for materials and resources – where do they come from? Where do they go? Extended product responsibility. Integrated product development policy. Sector reporting guidelines from GRI. Minerals, metals, wood, agriculture, fish, water, energy. MIPS and cradle to cradle, dematerialization or green materialization. Reading Ch 6,7, skim Australia small firm guidelines **A2: SR review due.**

Week 5. Sustainability reporting for operational decision-making and strategic planning. Enterprise and activity accounting, refining overhead allocation and other considerations for profit and non-profit organizations. How do you get started? Case studies. How would you use sustainability reports to help select a subcontractor? Managing and building facilities. LEED and other evaluation systems for buildings and facilities. Adding value to organizations with sustainability reporting.

Reading – Chapter 8

Week 6. Environmental management reporting for financial purposes. IFAC and others, opportunities and challenges. Accounting for and reducing liability and risk. Accounting for cleanup and restoration costs (UK). Accounting for environmental impacts such as global warming gases, ozone depleting substances, hazardous materials (ISAR, REACH). How would you get started? Sustainability reporting in the U.S. today. Sarbanes-Oxley, GAAP and SFAS considerations and guidelines. Voluntary versus required reporting. The cost and benefit of improved sustainability reporting. A review of corporate NGO, and governmental reporting efforts and guidelines.

Review Sigma guidelines, Bent ppt

A3.SR draft 3 due.

Week 7. Environmental management reporting for public relations, marketing, policy development and evaluation. What value does certification offer? Reputation and regulatory relief. NGO and governmental policy applications of environmental management reporting. Review ecolabel web, skim Accountability report.

A4.Draft presentation due.

Week 8. Including sustainability report information in management of the economy. The Genuine Progress Indicator (GPI), National Well-Being Index (NWI), Index of Sustainable Economic Welfare (ISEW). Review of course materials for take home exam.

Policy effectiveness and sustainability reports.

Reading Chapter 11, read GPI description.

A3.Revised EMR due.

Week 9. Sustainability reporting, potential and potential problems in the U.S. and around the world. Discussion of SR issues in San Diego. Global warming and global change – threat and opportunity.

A4.Student presentations.

David A. Bainbridge Bio

David A. Bainbridge was educated at the University of California in San Diego, Earth Sciences, and U.C. Davis in Ecology and Environmental Planning. He has published many books and book chapters in restoration, resource management and building, and more than 300 articles, papers and reports, for audiences ranging from Tree Planter's Notes to the Wall Street Journal.

He started his first company while he was in graduate school, becoming one of the first consultants involved in developing environmental impact analysis and reports in California. His interest in environmental planning led to a position at an innovative design firm called Living Systems in Winters, California. This led to work in research and development of passive solar systems for space heating and cooling and water heating and guidelines and workshops on energy efficient development. He was then recruited by the California Energy Commission, where he won a special commendation for his work on solar tax credits. He later created the

Passive Solar Institute and published books and taught workshops on passive solar design. This helped lead to the best-selling book on straw bale construction, *The Straw Bale House*, Chelsea Green 1994. He was honored as a passive solar pioneer for his research by the American Solar Energy Society in 2004 and is currently working on a book on Integrated Design and a pocket reference guide on passive solar design for the International Solar Energy Society.

Frustrated by outrageous subsidies, regulations and incentives that favored fossil fuels and nuclear power instead of renewable energy he turned his attention to the problems of the sustainable resource management of dry lands. This led him to the Dry Lands Research Institute at U.C. Riverside, where he was coauthor of the groundbreaking guide to information on *Sustainable Agriculture for California* in 1991. His work on desert restoration began at UCR, then moved to San Diego State University and finally to Alliant International University, culminating in the book *A Guide to Desert and Dryland Restoration*, Island Press 2007.

His long term interest in economics and the drivers of management decisions has led him to focus on sustainability, sustainability reporting, resource management and environmental accounting in recent years, and in 2009 *Rebuilding the American Economy with True Cost Accounting* was published. He has developed and taught courses at the Marshall Goldsmith School of Management on sustainability reporting, sustainable management, project management, environmental economics, sustainable resource management, ecotourism, and ecopreneurship. He also coordinates the new concentration in “sustainable management” for the MBA and MIBA programs and the Bright Green MBA. He has received awards for teaching, service and scholarship.