



15.992 LABORATORY FOR SUSTAINABLE BUSINESS “S-LAB” (H2)

Spring 2009
Tuesday, Thursday 2:30-4 pm
E51-325

Professors: Richard Locke, John Sterman, Sarah Slaughter, and Rebecca Henderson
Teaching Assistants: TBA
Office Hours by appointment

Introduction

Sustainability offers new opportunities to transform markets, systems, and countries, and the prospect that firms and organizations can operate in sustainable ways and also play a positive role in the regeneration of the planet and the support of human health and welfare. Building on the understanding of sustainability strategies in **15.990 (H1- prerequisite)**, in this course the S-Lab student teams will work with host organizations on their actual sustainability projects.

The course focuses on the term project – a “live” project during which participants will work in groups of three to four people with an organization that has requested the Sloan School’s help in thinking through an issue related to sustainability. Prior projects have included work with large companies like Disney, Intel and Nike, smaller companies like Good Energies, GoLoCo and Green Fuel Technologies and NGOs like Clinton Climate Initiative, US Business Council for Sustainable Development, and MiBanco. Past projects have developed new tools or approaches, structured new strategies for organizational sustainability, and assessed market opportunities.

Logistics

The requirements for the course and the contribution of each towards the final grade are:

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| 1. | Class Participation & Attendance | 30% |
| 2. | Project Work Plan | 30% |
| 3. | Final Report | 40% |

We will post the list of potential host organizations and projects on the course web site in January 2009, and students will be expected to review the proposals and post their project preferences and interests during H1 to initiate team formation. There will be a **project mixer in early March** to form teams for the projects, and **Projects Bids are due on March 10, 2009**. We expect that if you submit a project bid you are committing to stay in the course. If you don’t submit a project bid, we will assume that you are dropping the course.

Each team will have a faculty member serve as the advisor for all aspects of the project. It is your team’s responsibility, however, to negotiate and manage all aspects of the work plan and the

project. **A detailed work plan is due on April 7, 2009.** We will provide you with samples of previous work plans and a template to help guide you.

The goal of each project is for your team to professionally and effectively deliver analysis, advice and recommendations that are immediately useful to your host organization. You will make a formal presentation to your host near the end of your project and provide them with supporting written analysis and data as appropriate. You will deliver a **draft of your Final Report to your host organization and faculty advisor by May 7, 2008.** Your team will also create a **poster that describes your project for the May 12 S-Lab Day** for presentation to the MIT community and host organizations. The **Final Report is due on May 14, 2008,**

The final written report should describe the objectives of the project, all background information and analyses, and results (including methodologies and tools developed by the team). If confidential information is included in the deliverable to the host organization, a version of the Final Report without this information should be delivered to your faculty advisor as well, for public release. The final report should be no more than 20 double-spaced pages of text, plus any tables and appendices that help the reader. The final report can be in a form that can be used effectively as a teaching case in MBA classes. We encourage this approach but do not require it.

Classes

The classes will focus on the team projects, covering topics on sustainability methods, tools, and project management, and will include guest speakers from organizations to talk about their experiences in developing and implementing sustainability initiatives. The semester will provide opportunities for the teams to discuss their projects and to present to their approaches and progress to their peers.

Missing Class

We have designed this class as an integrated whole, and if you miss class it makes it very difficult to maintain a coherent conversation. You'll miss ideas and concepts – many of them raised by your colleagues -- and you'll have a more difficult time contributing to the discussion. If for some reason you are forced to miss class, please let the teaching assistants know in advance. If you miss one class, you will get 10% of your grade deducted; 2 classes, 20% of your grade reduced; 3 absences = automatic failure. Of course, for illness, family emergencies, job interviews, etc., we would grant an excused absence, in which case you will have to write a 300 word contribution to the S-Lab discussion pages on the current topics to replace your contribution in class.

- I. Sustainability Metrics and Methodologies**
 - Embodied Energy and Life Cycle Assessment
 - Ecological Footprint
 - Material Flow Analysis
 - Material Input per Unit Service
 - Reporting Indices

- II. Experiences from the Field**
 - Guest speakers – Sustainability initiative development and implementation

- III. Team Project Presentations**

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