1231.3922.01 – Measuring Eco-Efficiency in Business Context

Semester A – 2014/2015

Lecturer: Dr. Vered Blass **Tel:** 03-6406739

Lecture Times: Wednesday, 15:45-18:30 **(Second half)**

Office Hours: by appointment

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General Background

The course focuses on understanding the use of tools and approaches for evaluating the environmental performance and eco-efficiency of products, companies, and sectors. The course provides students with the basic concepts of environmental management and industrial ecology and examines the relationship of using various tools in business context. The course exposes the students to quantitative tools and concepts to better deal with environmental performance related issues that are on the rise of firms and stakeholders' attention. The course is taught in English.

Course Structure and Requirements

The course is based on three components: preparatory readings, lectures and discussions in class, and homework. This is a short 7 weeks course in an intensive format.
The weekly reading list will be listed on the course web site a week before each class. It is recommended that you read the suggested readings prior to the class date specified in the course syllabus. Students will submit in writing (in couples) two assignments related to the implementation issues learned in class. The details of each assignment will be uploaded to the course web site in advance

Grading

The grade is based on assignments during the semester, participation in class, and a final exam in the form of individual assignment as follows:

Participation in class discussion	10%
Assignments	50%
Final Individual Assignment Exam	40%
	100%

Achieving passing grades in each of the assignments is a condition for a passing grade in the course. **Students that will miss more than 3 sessions will not be able to complete the course.**

Note: The faculty maintains a policy regarding scores range of grades to balance the difference between the lecturers and students in various courses. This policy applies across the board on all the courses in the Faculty (except for courses with small amount of participants). This policy requires that the course GPA will range between 83 and 87.

Course Program (subject to change):

Session #	Date	Description
1	15/12/14	Introduction, class structure and requirements ; intro to industrial ecology
		Eco-efficiency: terms, definitions, measurement, examples
2	22/12/14	Introduction to Life Cycle Assessment, the ISO14040 standard for conducting LCA, data collection, impacts categories, and challenges;
		LAC software tools, examples; communicating LCA results to the public; examples
3	29/12/14	Input output analysis and hybrid LCA
		Using LCA software
4	5/1/15	Design for the environment and cradle to cradle
		Introduction to the subject of Materials Flow Analysis and MFCA, methodology, application, software, challenges, and examples.
5	12/1/15	Product End of life management – logistics; Extended producer responsibility; example of electronic waste and packaging.
		Product End of life management -efficiency of reverse logistics operations, reuse and recycling.
6	19/1/15	Guest Lecturer: TBD
		Introduction to industrial symbiosis concepts, challenges, worldwide overview, and the example of Kalundborg industrial park
7	26/1/15	Current firms' practices and the use of IE tools
		Course summary

Notes:

- Reading list will be updated on the course web site every week, a week in advance.
- Detailed instructions of the assignments will be discussed in class and posted online
- All course materials will be handled online via the course web site on Moodle