



The Leon Recanati Graduate School of Business Administration

1231.3018.01 – Measuring Eco-Efficiency in Business Context

First Semester – 2018/19

Section	Day	Hour	Exam date	Lecturer	Email	Telephone
01	Wednesday	15:45-18:30 (First half)	No exam (see below for assignment details)	Dr. Vered Blass	vbllass@post.tau.ac.il	03-640-6739

Teaching Assistant (TA): TBD

Office Hours: by appointment

Course Units

1 course unit = 4 ECTS units

The ECTS (European Credit Transfer and Accumulation System) is a framework defined by the European Commission to allow for unified recognition of student academic achievements from different countries.

Course Description

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 industrial ecology (IE) and examines how to use various IE 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.

Course Objectives

Upon completion of the course, the student will be able to:

1. Understand the basic concepts of eco-efficiency and industrial ecology
2. Understand the main tools of industrial ecology
3. Apply some of the concepts and methods in real cases with emphasize on the business side
4. Analyze the environmental performance of different business activities using variety of tools and methods

Evaluation of Student and Composition of Grade

Percentage	Assignment	Date	Group Size/Comments
25%	Group Assignment 1*	14.11.18	2 per group
25%	Group Assignment 2*	28.11.18	2 per group
50%	Final Individual Assignment Exam	Due 10 days after the course end date or otherwise agreed in class	Individual

* The details of each assignment will be uploaded to the course web site in advance

The course is based on three components: preparatory readings, lectures and discussions in class, and homework. This semester the course is offered in English. Assignments can be submitted in English or in Hebrew.

According to University regulations, participation in all classes of a course is mandatory (Article 5). Students who absent themselves from classes or do not actively participate in class may be removed from the course at the discretion of the lecturer. (Students remain financially liable for the course even if they are removed.)

Course Assignments

During the course you will need to submit three assignments overall as listed above in the evaluation section. The first assignment will be related to the topic of Life Cycle Assessment which you will learn how to perform.

In the second assignment, you will analyze and apply several of the concepts we discuss in class to practice your new knowledge.

The first two assignments are submitted in groups of 2.

The third assignment is a take home individual assignment that serves as the final exam in this course. Each assignment will be published on the course web site and will be explained in details in class.

Students who are unable to complete an assignment or course requirement must notify the TA of the course in advance via email

Grading Policy

In the 2008/9 academic year the Faculty instituted a grading policy for all graduate level courses that aims to maintain a certain level of the final course grade. Accordingly, this policy will be applied to this course's final grades. Additional information regarding this policy can be found on the Faculty website.

<https://coller.tau.ac.il/MBA-students/programs/2018-19/MBA/regulations/exams>

Achieving passing grades in each of the assignments is a condition for a passing grade in the course.

Students that will miss more than 2 sessions will not be able to complete the course.

Evaluation of the Course by Student

Following completion of the course students will participate in a teaching survey to evaluate the instructor and the course, to provide feedback for the benefit of the students, the teachers and the university.

Course Site (Moodle)

The course site will be the primary tool to communicate messages and material to students. You should check the course site regularly for information on classes, assignments and exams, at the end of the course as well.

Course material will be available on the course site.

Please note that topics that are not covered in the course material but are discussed in class are considered integral to the course and may be tested in examinations.

Draft Course Outline (order of topics subject to change)

Week	Date	Topic(s)	Required Reading	Submissions
1	17.10.18	Introduction, class structure and requirements ; intro to industrial ecology	The Best of Both Worlds: A Beginner's Guide to Industrial Ecology, Jonathan Krones, 2007	
		Eco-efficiency: terms, definitions, measurement, examples		
2	24.10.18	Introduction to Life Cycle Assessment, the ISO14040 standard for conducting LCA, data collection, impacts categories, and challenges;	Overview of LCA by UNEP training kit	
		examples; communicating LCA results to the public;		
3	31.10.18	LCA software tools		
		Input output analysis and hybrid LCA		
4	07.11.18	Introduction to the subject of Materials Flow Analysis	Implementing the Results of Material Flow Analysis Progress and Challenges Claudia R. Binder, Ester van der Voet, and Kirsten Sinclair Rosselot, 2009	
		Introduction to industrial symbiosis concepts		

Week	Date	Topic(s)	Required Reading	Submissions
5	14.11.18	Product End of life management I	Supply Loops and Their Constraints: The Industrial Ecology of Recycling and Reuse Roland Geyer Tim Jackson, 2004	Assignment 1 due
		Product End of life management		
6	21.11.18	Design for the environment and cradle to cradle		
		Sustainable Consumption and Use phase		
7	28.11.18	Circular Systems		Assignment 2 due at 23:00
		Current firms' practices and the use of IE tools , IE trends and course summary		

Required Reading

Required reading are added to the course outline and are essential for your course preparation.

Recommended Reading

Every session you will have one or two readings for the class published on the course web site (articles, links, etc). The reading list will be listed on the course web site a week before the relevant class. It is recommended that you read the suggested readings prior to the class date.