TEL AVIV UNIVERSITY אוניברסיטת תל אביב

Full Syllabus

Course Title

Industrial Ecology and Its Business Context

Lecturer

Dr. Meiron Zollmann

Semester

B, 2022-2023

Course requirements

Frontal / hybrid instruction in zoom, discussions, assignment (class presentation and written report) and final exam. The course will include 14 sessions of 2 academic hours each. Participation via zoom is only with pre-approval of the lecturer

Final grade components

Attendance according to the university rules (80%) is compulsory.
Grade components: final exam (50%), written report in couples (40%) and class presentation in couples (10%)

Course schedule

Class no. / Date	Subject
1 / 13.3.2023	Introduction, class structure and requirements; intro to industrial ecology
2 / 20.3.2023	Industrial and biological ecology and eco-efficiency
3 / 27.3.2023	Life Cycle thinking and Introduction to Life Cycle Assessment (LCA)
4 / 17.4.2023	LCA methodology and the ISO14040 standard for conducting LCA
5 / 24.4.2023	LCA methodology and examples
6 / 1.5.2023	examples; communicating LCA results to the public
7 / 8.5.2023	LCA software simulation
8 / 15.5.2023	Input output analysis and Materials Flow Analysis
9 / 22.5.2023	Design for the environment and cradle to cradle
10 / 29.5.2023	Industrial symbiosis
11 / 5.6.2023	Use phase and sustainable consumption
12 / 12.6.2023	Product End of life management
13 / 19.6.2023	Circular economy
14 / 26.6.2023	Industrial Ecology trends and course summary
*order of topics subject to change	

Course book

Industrial Ecology and Sustainable Engineering, T.E Graedel and B.R. Allenby