



# Full Syllabus



<b>Course Title</b>	
EWB (Engineers without borders) – challenges in developing countries	
<b>Lecturer</b>	
Prof. Alexander Golberg and Dr. Opher Mendelsohn	
<b>Semester</b>	
A	
<b>Course requirements</b>	
Attendance and active participation, independent material reading, presentation, class report and submission of seminar paper	
<b>Final grade components</b>	
As part of the seminar, students will be divided into groups covering various angles of the project such as applied scientific / technological / social / educational/ economic. Each student will prepare a specific seminar paper related to the topic of their group. The seminar paper should be based on at least 10 peer reviewed papers and include a clear reference to the group angle and its relevance to improving the quality of life in developing countries. By the end of the seminar, the seminar paper will be submitted in accordance with university rules till 12:00 on Sunday, 16.04.2023.	
<b>Course schedule, subject to changes</b>	
<b>Date &amp; Leading lecturers</b>	<b>Subject and Requirements (assignments, reading materials, tasks, etc.)</b>
<b>27.10.2022</b> Dr. Opher Mendelsohn Michal Dolev Hashimshony Shir Halevi	Course structure and requirements (schedule, works structure, grades). Presentation of EWB and its activity in communities in developing countries to promote sustainable adoption of adapted technologies.
<b>03.11.2022</b> Dr. Dorit Adler Dr. Opher Mendelsohn Maya Savir Michal Dolev Hashimshony	Food security in general and specifically in developing countries. Food security solutions in developing countries Spirulina Guided work in groups
<b>10.11.2022</b> Zoom meeting with pupils and staff of a school in Nakuru, Kenya and a Kenyan student Dr. Mark Poli Dr. Opher Mendelsohn Michal Dolev Hashimshony	Acquaintance with the local conditions and people in the project area  Duckweed Guided work in groups
<b>17.11.2022</b> Dr. Galia Sabar	Kenya, It's people, culture and local governance



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Dr. Opher Mendelsohn Michal Dolev Hashimshony	Guided work in groups
<b>24.11.2022</b> Dr. Amir Givati Dr. Opher Mendelsohn Michal Dolev Hashimshony	Water management and climate change Guided work in groups
<b>1.12.2022</b>	A visit to the "Greenhouse" education center in Ein- Shemer
<b>8.12.2022</b> Dr. Vered Blass  Dr. Opher Mendelsohn Michal Dolev Hashimshony	Environmental impacts on sustainable technological solutions in view of EWB activity Guided work in groups
<b>15.12.2022</b> Inbar Yaffe Representative of the Israeli embassy in Kenya Dr. Opher Mendelsohn Michal Dolev Hashimshony	Sustainable water supply Work with the embassy and foreign office  Guided work in groups
<b>22.12.2022</b> EWB-US project manager operating in Africa Dr. Opher Mendelsohn Michal Dolev Hashimshony	EWB implementation strategies Guided work in groups
<b>29.12.2022</b> Dr. Opher Mendelsohn Michal Dolev Hashimshony	Guided work in groups
<b>04.01.2023</b> Dr. Opher Mendelsohn Michal Dolev Hashimshony	Guided work in groups
<b>12.01.2023</b> Dr. Opher Mendelsohn Michal Dolev Hashimshony	Individual project presentations
<b>19.01.2023</b> Dr. Opher Mendelsohn Michal Dolev Hashimshony	Individual project presentations

## Required course reading

**Rafael Pérez-Escamilla** (2015) Food Security and the 2015-2030 Sustainable Development Goals: From Human to Planetary Health: Perspectives and Opinions,  
**Akubue, A.** (2000). JOTS v26n1 - Appropriate Technology for Socioeconomic Development in Third World Countries. 1–20.  
**Alim, et al.** (2020). Suitability of roof harvested rainwater for potential potable water production: A scoping review. Journal of Cleaner Production, Vol. 248. <https://doi.org/10.1016/j.jclepro.2019.119226>  
**B. Amadei,** (2009) A model for sustainable humanitarian engineering projects.



TEL AVIV אוניברסיטת תל אביב  
UNIVERSITY תל אביב

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## Comments

Changes may be made to the composition of instructors and lecturers