



# Full Syllabus



<b>Course Title</b>	
Seminar in water and wastewater technologies	
<b>Lecturer</b>	
Dr. Ines Zucker	
<b>Semester</b>	
Spring	
<b>Course requirements</b>	
None	
<b>Final grade components</b>	
Progress presentations/journal clubs: 30% Final presentation of seminar project: 30% Seminar report: 40% <b>(Submission on Sep 12)</b>	
<b>Course schedule</b>	
<b>Class no. / Date</b>	<b>Subject and Requirements (assignments)</b>
1. 29/5/24	Course introduction. Introduction to water terms and units. Topics for seminar project.
2. 5/6/24	Introduction to water and wastewater challenges. How to search for research papers? Guest lecture on seawater desalination (Eyal).
3. 19/6/24 recorded	Introduction to water and wastewater challenges (cont). How to critically read a research paper? Guest lecture on micropollutants in wastewater (Adi).
4. 26/6/24	Traditional water treatment technologies. <a href="#">(Presentations of research topic)</a> Guest lecture on biodegradation technologies (Liron).
5. 3/7/24 recorded	Tutorial on literature review, outline, and a report Guest lecture on filtration technologies (Razi).
6. 10/7/24	Advanced water treatment technologies. <a href="#">(Journal club 1)</a> Guest lecture on bio-based solutions (Shira).
7. 17/7/24	Water in Israel as a case study. Water laws, regulations, and trends. <a href="#">(Journal club 2 or progress report)</a> Guest lecture on nanoadsorption (Amanda).
8. 24/7/24	<a href="#">(Submission and evaluation of seminar project outlines)</a> Guest lecture on micro- and nano plastics (Andrey).
9. 31/7/24	<a href="#">Presentation of seminar projects</a> Guest lecture on advanced oxidation (Yaal).
10. 7/8/24	<a href="#">Presentation of seminar projects</a>
11. 12/8/24	<a href="#">Presentation of seminar projects</a>
<b>Reading materials</b>	



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1. Wastewater Engineering Treatment and Reuse, Metcalf & Eddy, fourth ed. (2003), McGraw
2. Siegel S.M., (2015). Let There Be Water: Israel's Solution for a Water-Starved World. Thomas Dunne
3. Whitesides, G. (2004), Whitesides' Group: Writing a Paper. Adv. Mater., 16: 1375-1377. <https://doi.org/10.1002/adma.200400767>
4. Shannon, M., Bohn, P., Elimelech, M. et al. Science and technology for water purification in the coming decades. Nature 452, 301–310 (2008). <https://doi.org/10.1038/nature06599>

## Comments

Order of the lessons is tentative and subject to change depending on the progress of the class.