

CEV4362 MEMBRANE BIOREACTORS

2018–2019 Fall Semester

Time and Room: **Daytime:** Wednesday 11:00 – 12:50, FZ-082

Instructor : Prof. Dr. Özer ÇINAR, C Blok 1-010
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Course Objectives

To learn the design criteria and the application of membrane bioreactors by using the basic information regarding the wastewater treatment

Scoring

1 Midterm Exam (1 x 30%)
12 Quizes (30%)
1 Final Exam (%40)

Required Materials

- Hee-Deung Park, In-Soung Chang, Kwang-Jin Lee, (2015) Principles of Membrane Bioreactors for Wastewater Treatment, CRC Press

Course Content

Membranes, Modules, and Cassettes / Membrane Fouling / MBR Operation / Design of MBR / Case Studies

Course Plan

Week	Date	Subject
1	13 Feb 2019	Introduction
2	20 Feb 2019	Membranes, Modules, and Cassettes – QUIZ (75-86)
3	27 Feb 2019	Membranes, Modules, and Cassettes – QUIZ (86 – 122)
4	6 March 2019	Membranes, Modules, and Cassettes – QUIZ (122 – 143)
5	13 March 2019	Membrane Fouling – QUIZ (147-170)
6	20 March 2019	Membrane Fouling – QUIZ (171-197)
7	27 March 2019	Membrane Fouling – QUIZ (197-222)
8	3 April 2019	MBR Operation – QUIZ (231-250)
9	8/12 April 2019	(Mid-Term Exam)
10	17 April 2019	MBR Operation – QUIZ (250-283)
11	24 April 2019	Design of MBR – QUIZ (306-327)
12	1 May 2019	LABOR HOLIDAY
13	8 May 2019	Design of MBR – QUIZ (327-340)
14	15 May 2019	Case Studies – QUIZ (398-415)