ILT 529 MEMBRANE PROCESSES				ADVANCED TECHNOLOGIES				
Semester	Teaching and Learning Methods (Hours per Semester)						Credits	
	Lecture	Recit.	Projects	Homework	Other	Total	Local Credit	ECTS Credit
1-2	42	-	-	40	106	188	3	7,5

Language	Turkish
Compulsory / Elective	Elective
Prerequisites	None
Catalog Description	Introduction to Membrane and Membrane Processes, Types of Membranes, Membrane Synthesis Classification of Membrane Processes According to Driving Force: Pressure Driven Membrane Processes, Concentration Driven Membrane Processes, Thermally Driven Membrane Processes, Electrically Driven Membrane Processes, Application of Membrane Processes in Various Industries, Membrane Processes in Waste Water Treatment, Applicability of Membrane Processes.
Course Objectives	To introduce the basic concepts of membranes and membrane processes and to investigate the applicability of membrane processes in various industries.
Course Outcomes	• To learn the basic concepts of membranes and different membrane processes • To have information about the application of membrane processes in different industries • To have ability to investigate the applications of different membrane processes in current industry by the help of given projects.
Textbook and /or References	• Mulder, M., Basic Principles of Membrane Technology, Kluwer Academic Publisher, 1996. • Baker, R.W., Membrane Technology and Applications, Chichester ; New York : J. Wiley, 2004 • Ho, L., Sirkar, W. (Editors), Membrane Handbook, Chapman Hall Book Co., 1992.

Assessment Criteria		**If any,mark as (X)**	**Percentage %**
	Midterm Exams	**X**	
	Quizzes	-	
	Homeworks	-	
	Projects	**X**	
	Term Paper	-	
	Other	-	
	Final Exam	**X**	

* The weights of the assessment criteria are determined by the instructor in the beginning of the semester and announced to the students.

Instructors	Asst.Prof. Ceren Oktar Doğanay / September 2009

Week	**Subject**
1	Introduction to Membranes and Membrane Processes
2-3	Types of Membranes and Membrane Synthesis
4-5	Pressure Driven Membrane Processes
6-7	Concentration Driven Membrane Processes,
8	Thermally Driven Membrane Processes,
9	Electrically Driven Membrane Processes,
10	Midterm Exam
11	Application of Membrane Processes in Various Industries
12	Membrane Processes in Waste Water Treatment
13-14	Presentations