

COURSE DESCRIPTION FORM	
Course Code and Title	KM366 Environmental Pollution
Course Semester	6
Catalog Description (Content) of the Course	Air, water and soil pollution. Negative effects of environmental pollution. Economic, legal and social effects. Environmental pollution prevention techniques.
Main Textbook	Wastewater Engineering, Treatment, Disposal and Reuse, Tchobanoglous G. & Burton F.L., Third Edition, Mc. Graw Hill, 1991.
Supporting Textbooks	- Air Pollution, Faiph W.L.Jhon Willey, 1972. - Industrial Wastewater Management, Jorgensen, SE., Elsevier, 1978. - Çevre Mühendisliğinde Kimyasal Prosesler, O Tunay, İTÜ yayınları, 1996.
Course Credit (ECTS)	3
Prerequisites of the Course (Compulsory attendance should be indicated here.)	-
Type of the Course	Elective
Instruction Language of the Course	Turkish
Object and Target of the Course	To learn the economic and social effects of pollution of air, water and soil and to be aware of environmental pollution.
Learning Outcomes of the Course	- To give information about air, water and soil pollution and its reasons. - Introduction of environmental pollution prevention methods - To give information about economic, social effects and legal regulations of environmental pollution.
Mode of Delivery	Face to face
Weekly Schedule of the Course	Week Introduction; environmental pollution problems in the world and Turkey, atmospheric pollution, atmospheric pollutants, Atmospheric pollution from industrial activities and combustion. Week Introduction; environmental pollution problems in the world and Turkey, atmospheric pollution, atmospheric pollutants, Atmospheric pollution from industrial activities and combustion. Week Introduction; environmental pollution problems in the world and Turkey, atmospheric pollution, atmospheric pollutants, Atmospheric pollution from industrial activities and combustion. Week Introduction; environmental pollution problems in the world and Turkey, atmospheric pollution, atmospheric pollutants, Atmospheric pollution from industrial activities and combustion. Week Introduction; environmental pollution problems in the world and Turkey, atmospheric pollution, atmospheric pollutants, Atmospheric pollution from industrial activities and combustion. Week Water pollution, treatment of domestic and industrial wastewater, chemical and biological methods. Week Water pollution, treatment of domestic and industrial wastewater, chemical and biological methods. Week Water pollution, treatment of domestic and industrial wastewater, chemical and biological methods. Week Water pollution, treatment of domestic and industrial wastewater, chemical and biological methods. Week Soil pollution, resources, prevatation, collection and storage of solid wastes. Week Soil pollution, resources, prevatation, collection and

	storage of solid wastes. 12. Week Soil pollution, resources, prevatation, collection and storage of solid wastes. 13. Week Economic, social impacts of environmental pollution and legal regulations. 14. Week Economic, social impacts of environmental pollution and legal regulations.			
Educative Activities <i>(Credit will be determined based on the time given for these activities. Should be filled carefully.)</i>	Theoretical Study Hours of Course Per Week Reading Searching in Internet and Library Preparing Reports Preparing Presentation Presentation Mid-Term and Studying for Mid-Term Final and Studying for Final			
Assessment Criteria		Quantity	Total Contribution (%)	
	Midterm	2	50	
	Homework	3	10	
	Assignment	0	0	
	Projects	0	0	
	Practice	0	0	
	Quiz	0	0	
	Contribution of In-term Studies to Overall Grade		60	
	Contribution of Final Examination to Overall Grade		40	
	Attendance		70	
Workload of the Course	Activity	Total Week Count	Weekly Duration (in hour)	Total Workload in Semester
	Theoretical Study Hours of Course Per Week	14	3	42
	Practicing Hours of Course Per Week	0	0	0
	Reading	4	1	4
	Searching in Internet and Library	4	1	4
	Designing and Applying Materials	0	0	0
	Preparing Reports	2	2	4
	Preparing Presentation	1	3	3
	Presentation	1	1	1
	Mid-Term and Studying for Mid-Term	2	3	6
	Final and Studying for Final	1	3	3
	Other	0	0	0
	Total work load			67
	Total work load/25			2.68
	ECTS of the course			3

Course's Contribution To Program	No	Program Outcomes	1	2	3	4	5
	1	Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied information in these areas to model and solve engineering problems.			x		
	2	Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.			x		
	3	Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.			x		
	4	Ability to devise, select, and use modern techniques and tools needed for engineering practice; ability to employ information technologies effectively.			x		
	5	Ability to design and conduct experiments, gather data, analyze and interpret results for investigating engineering problems.					
	6	Ability to work efficiently in intra-disciplinary teams.		x			
	7	Ability to work efficiently in multi-disciplinary teams;	x				
	8	Ability to work individually.			x		
	9	Ability to communicate effectively in Turkish/English, both orally and in writing; Ability to write effective reports and comprehend written reports, make effective presentations,				x	
	10	prepare design and production reports, give and receive clear and intelligible instructions.	x				
	11	Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.			x		
	12	Awareness of professional and ethical responsibility.	x				
	13	Information about business life practices such as project management, risk management, and change management.	x				
	14	Information about awareness of entrepreneurship, innovation, and sustainable development.		x			
	15	Knowledge about contemporary issues and the global and societal effects of engineering practices on health, environment, and safety.		x			
	16	Knowledge about awareness of the	x				

		legal consequences of engineering solutions.					
	17	Knowledge on standards used in engineering practice.	x				

Name of Lecturer(s) and Contact Information	1. Assoc. Prof. Dr. S. Ferda MUTLU, sfmutlu@gmail.com