1. Course Description

COURSE DESCRIPTION FORM										
Course Code and Title	KM466 PETROCHEMICAL TECHNOLOGY									
Course Semester	8									
Catalog Description (Content) of the Course	Development of petrochemical technology. Raw materials. Production methods of various petrochemicals. Petrochemical industry in Turkey and employed technologies.									
Main Textbook	1) Kimyasal proses endüstrileri, A.İ. Çataltaş (Çev.), İnkılap, İstanbul, 1985 2) Petrochemicals, A.M. Brownstein, Petroleum Pub., New York, 1972 3) Industrial chemicals, W.L. Faith, D.B. Keyes and R.L. Clark, John Wiley & Sons, New York, 1966 4) Petrokimya, DPT-ÖİK Raporu, Ankara, 1994									
Supporting Textbooks	1) Kimyasal proses endüstrileri, A.İ. Çataltaş (Çev.), İnkılap, İstanbul, 1985 2) Petrochemicals, A.M. Brownstein, Petroleum Pub., New York, 1972 3) Industrial chemicals, W.L. Faith, D.B. Keyes and R.L. Clark, John Wiley & Sons, New York, 1966 4) Petrokimya, DPT-ÖİK Raporu, Ankara, 1994									
Course Credit (ECTS)	4									
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 be informed about petrochemical technology. To study production techniques and state of industry.									
Learning Outcomes of the Course	 Knowledge access to any research Individual ability to work 									
Mode of Delivery	Face to face									
Weekly Schedule of the Course	1. Week: Introduction, definition of petrochemical industry, its state in the world and Turkey 2-3. Week: Basic and intermediate petrochemical raw materials; ethylene-propylene, aromatics, styrene, caprolactam etc., definition, usage areas, production technologies 4-5. Week: Distillation of crude oil 6. Week: Distillation of crude oil 7-8. Week: Thermoplastics, low and high density polyethylene, definition, properties, production techniques, state of industry. 9 Week: Polyvinyl chloride, definition, properties, production techniques, state of industry. 10. Week: Polypropylene, definition, properties, production techniques, state of industry 11. Week: Polystyrene and the others, definition, properties, production techniques, state of industry. 12. Week: Plastic auxiliaries, plastifiers, emulsifiers, stabilizers, antioxidants etc. 13. Week: Synthetic fibers and yarn, nylon, polyester etc. 14. Week: Synthetic fibers and yarn, nylon, polyester etc.									
Educative Activities (Credit will be determined based on the time given for these activities. Should be filled carefully.)	Theoretical Study Hours of Course Per Week Mid-Term and Studying for Mid-Term Final and Studying for Final									
Assessment Criteria	Quantity Total Contribution (%)									

	Midterm		0		60						
	Homework Assignment Projects					0					
				0				0			
				0			0				
	Practic	0		0							
	Quiz		0		0						
		bution of In-	-				60				
		tudies to									
		l Grade		0							
		Contribution of Final				40					
	Examination to Overall Grade Attendance										
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	Theore	tical Study l	Hours (of						Sen	nester
		Per Week	110uis (51		12		3			36
Workload of the Course		erm and Stu	dying	for		2		20		40	
Working of the Course	Mid-Te	erm				2		20		40	
	Final a	ınd Studying	g for Fi	inal		1		20		20	
	Total w	ork load								96	
	Total work load/25									3.84	
	ECTS of the course										4
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Course's Contribution To Program			problems.								
			Ability to								
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			solve complex engineering problems; abilit to select and apply proper					X			
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			Abilit	Ability to design							
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		instructions.						
	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 legal consequences of engineering solutions.	X					
	17	Knowledge on standards used in engineering practice.	X					
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