

1. Course Description

COURSE DESCRIPTION FORM	
Course Code and Title	KM376 Coal
Course Semester	6
Catalog Description (Content) of the Course	Coal formation and classification. Physical and chemical properties of coal. Coal preparation methods. Washing and drying of coal. High temperature processes. Coal combustion processes and their design.
Main Textbook	Kural, O. "Kömür Özellikleri, Teknolojisi ve Çevre İlişkileri", 1. Baskı, İstanbul, 1998.
Supporting Textbooks	<ul style="list-style-type: none"> Kunii, D. and Levenspiel, O. "Fluidization Engineering", 2nd Ed., Butterworth-Heinemann, USA, 1991. Snape, C. "Composition, Geochemistry and Conversion of Oil Shale", NATO ASI Series, Kluwer Academic Publishers, The Netherlands, 1995. Heinsohn, R.J. and Kabel, R.L. "Sources and Control of Air Pollution" 1st Ed., Prentice-Hall, USA, 1999.
Course Credit (ECTS)	3
Prerequisites of the Course (Compulsory attendance should be indicated here.)	There is no prerequisite or co-requisite for this course.
Type of the Course	Elective
Instruction Language of the Course	Turkish
Object and Target of the Course	To give information about coal which is an important energy source for our country including coal preparation, enrichment and production of higher calorific value products from coal starting from the formation of coal. It is aimed that the learners have knowledge about the subjects described.
Learning Outcomes of the Course	Developing new technologic processes which low quality coal is used and designing of coal combustion processes
Mode of Delivery	The mode of delivery of this course is face to face
Weekly Schedule of the Course	1. Week : Introduction to coal 2. Week : Coal formation and classification 3. Week: Physical and chemical properties of coal 4. Week: Physical and chemical properties of coal 5. Week : Coal preparation methods, washing of coal, drying of coal 6. Week : Coal preparation methods, washing of coal, drying of coal 7. Week : Midterm exam I. 8. Week : Coal preparation methods, washing of coal, drying of coal 9. Week : Coking and pyrolysing of coal 10. Week :Coking and pyrolysing of coal 11. Week :Gasification of coal 12. Week :Gasification of coal 13. Week Coal combustion processes 14. Week :Coal combustion processes
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 Mid-Term and Studying for Mid-Term Final and Studying for Final

Assessment Criteria		Quantity	Total Contribution (%)						
	Midterm	2	55						
	Homework	2	5						
	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								
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				
	Reading		13	1	13				
	Searching in Internet and Library		10	1	10				
	Designing and Applying Materials				0				
	Preparing Reports				0				
	Preparing Presentation				0				
	Presentation				0				
	Mid-Term and Studying for Mid-Term		2	7	14				
	Final and Studying for Final		1	6	6				
	Other				0				
	Total work load				85				
	Total work load/25				3.4				
	ECTS of the course				3				
	Course's Contribution To Program	Number	Program Outcomes			1	2	3	4
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.							
2		Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.							
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. (Realistic constraints and conditions may include factors such as					X		

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