

1. Course Description

COURSE DESCRIPTION FORM	
Course Code and Title	KM386 Environmental Management Systems
Course Semester	6
Catalog Description (Content) of the Course	Development of environmental management, ISO 14000 Standard Series, Application of ISO 14001 to any factory; preparation of instructions and procedures, preparation of forms and the other documents, preparation of environmental handbook
Main Textbook	Culley, W.C., Environmental and Quality Systems Integration, CRC Press LCC, 1998
Supporting Textbooks	<ul style="list-style-type: none"> • ISO 14001, Environmental Management Systems - Specification with guidance for use, International Standard Organisation, Switzerland., 1996 • Kuhre, W.L. , ISO14000 Certification Environmental Management Systems, Prentice Hall International Series, 1995
Course Credit (ECTS)	3
Prerequisites of the Course (Compulsory attendance should be indicated here.)	no prerequisite
Type of the Course	Elective
Instruction Language of the Course	Turkish
Object and Target of the Course	To teach the environmental management systems
Learning Outcomes of the Course	Importance of environmental management, development of systematic working capabilities
Mode of Delivery	Face to face education
Weekly Schedule of the Course	1. week: Introduction: what is the environmental management. development of environmental management: Historical development, standardization, effectiveness 2. week: Introduction: what is the environmental management. development of environmental management: Historical development, standardization, effectiveness 3. week: ISO 14000 Standard Series: ISO 14001, ISO 14004 and the others. 4. week: ISO 14000 Standard Series: ISO 14001, ISO 14004 and the others. 5. week: ISO 14000 Standard Series: ISO 14001, ISO 14004 and the others. 6. week: ISO 14000 Standard Series: ISO 14001, ISO 14004 and the others. 7. week: ISO 14000 Standard Series: ISO 14001, ISO 14004 and the others. 8. week: Application of ISO 14001 to any factory,preparation of instructions and procedures, preparation of forms and the other documents, 9. week: Application of ISO 14001 to any factory,preparation of instructions and procedures, preparation of forms and the other documents, 10. week: Application of ISO 14001 to any factory,preparation of instructions and procedures, preparation of forms and the other documents, 11. week: Application of ISO 14001 to any factory,preparation of instructions and procedures, preparation of forms and the other documents, 12. week: Application of ISO 14001 to any factory,preparation of instructions and procedures, preparation of forms and the other documents 13. week: Presentations 14. week: Presentations
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 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	40							
	Homework									
	Assignment									
	Projects	1	20							
	Practice									
	Quiz									
	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								
		Reading	8	2	16					
		Searching in Internet and Library	8	1,5	12					
		Designing and Applying Materials								
		Preparing Reports	1	3	3					
		Preparing Presentation	1	2	2					
		Presentation	1	0,5	0,5					
		Preparing Homeworks								
		Mid-Term and Studying for Mid-Term	2	3	6					
		Final and Studying for Final	1	3	3					
		Other								
		Total work load			84,5					
		Total work load/25			3,38					
	ECTS of the course			3						
Course's Contribution To Program	No	Program Learning 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.				X				
	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 legal consequences of engineering solutions.			X		
	17	Knowledge on standards used in engineering practice.				X	
Name of Lecturer(s) and Contact Information		<ol style="list-style-type: none"> 1. Prof.Dr. Atilla Murathan, murathan@gazi.edu.tr 2. Prof. Dr. Ayşe Murathan, amurathan@gazi.edu.tr 					