

1. Course Description

COURSE DESCRIPTION FORM	
Course Code and Title	CHE387- Fire Safety
Course Semester	5
Catalog Description (Content) of the Course	Nature and development of fire; fire extinguisher substances, fire extinguisher equipments and usage techniques; fireman materials used in the place of employment; hazardous points in fire area(fire enlargement velocity, high temperature, the effects to spread of fire compounds, hazardous in fire phases: breath, collapse, explosion, electrical, chemical); fire safety preventions in the place of employments (rules, laws and standards, active and passive preventions); fire safety organizations in the place of employment
Main Textbook	Dennis P.Nolan, Handbook of fire and explosion protection engineering, principles of oil, gas, chemicals and related facilities, 1996, Noyes Pub.,New Jersey
Supporting Textbooks	Shell Int.Petroleum Com.Ltd.,The Petroleum Handbook,Elsevier Science Pub.Co.Inc. Amsterdam,The Netherlands, 1983. Environmental Protection Agency(EPA), US Regulation 40 CFR part 68”Proposed Rule, Risk Management Programs for Chemical Accidental Release Prevention”, EPA,Washington DC.,1983.
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	English
Object and Target of the Course	Importance of engineering in fire safety
Learning Outcomes of the Course	To gain approach to fire engineering
Mode of Delivery	Face to face
Weekly Schedule of the Course	1. week: Nature and development of fire 2. week: Fire extinguisher substances, fire extinguisher equipments and usage techniques; 3. week: Fire extinguisher substances, fire extinguisher equipments and usage techniques; 4. week: Fireman materials used in the place of employment 5. week: Nature of fire (fire enlargement velocity, high temperature) 6. week: Nature of fire (the effects to spread of fire compounds) 7. week: Nature of fire (hazardous in fire phases: breath, collapse, explosion, electrical, chemical) 8. week: Nature of fire (hazardous in fire phases: breath, collapse, explosion, electrical, chemical) 9. week: Nature of fire (hazardous in fire phases: breath, collapse, explosion, electrical, chemical) 10. week: fire safety preventions in the place of employments (rules, laws and standards, active and passive preventions) 11. week: fire safety preventions in the place of employments (rules, laws and standards, active and passive preventions) 12. week: fire safety organizations in the place of employment 13. week: fire safety organizations in the place of employment 14. week: Presentations

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	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		
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
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		1. Prof.Dr. Atilla Murathan, murathan@gazi.edu.tr 2. Prof. Dr. Ayşe Murathan, amurathan@gazi.edu.tr					