

1. Course Description

COURSE DESCRIPTION FORM	
Course Code and Title	CHE385 Laboratory Management
Course Semester	5
Catalog Description (Content) of the Course	Laboratory safety. the laboratory operating principles. chemical waste collection, storage and disposal
Main Textbook	
Supporting Textbooks	1. Richarson J., Risk Analysis and Safety Monitoring, 2. Tolley'health and Safety Work Handbook, 1998. 3. Environmental Protection Agency(EPA), 4. US Regulation 40 CFR part 68 "Proposed Rule, Risk Management Programs for Chemical Accidental Release Prevention", EPA,Washington DC.,1983. 5. TSEN ISO 17025, 2010 MSDS Forms.
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	English
Object and Target of the Course	To introduce the laboratory management systems and to gain the ability to serve as Laboratory Responsible. To give information about the laboratory operating principles, Material Safety Data Sheet(MSDS), chemical waste collection, storage and disposal, first aid, laboratory accreditation (TS EN ISO 17025).
Learning Outcomes of the Course	1. Importance of chemical engineering in laboratory management 2. To provide an approach to fire engineering
Mode of Delivery	The mode of delivery of this course is face to face
Weekly Schedule of the Course	1. Week Laboratory safety, calibration of equipment, environmental conditions, working conditions 2. Week Laboratory safety, calibration of equipment, environmental conditions, working conditions 3. Week Laboratory safety, calibration of equipment, environmental conditions, working conditions 4. Week Laboratory safety, calibration of equipment, environmental conditions, working conditions 5. Week Measurement uncertainty calculations, validation, the laboratory operating principles, Material Safety Data Sheet(MSDS), 6. Week Measurement uncertainty calculations, validation, the laboratory operating principles, Material Safety Data Sheet(MSDS), 7. Week Measurement uncertainty calculations, validation, the laboratory operating principles, Material Safety Data Sheet(MSDS), 8. Week Measurement uncertainty calculations, validation, the laboratory operating principles, Material Safety Data Sheet(MSDS), 9. Week Measurement uncertainty calculations, validation, the laboratory operating principles, Material Safety Data Sheet(MSDS),

	10. Week chemical waste collection, storage and disposal, First Aid ,Laboratory Accreditation (TS EN ISO 17025), 11. Week chemical waste collection, storage and disposal, First Aid ,Laboratory Accreditation (TS EN ISO 17025), 12. Week chemical waste collection, storage and disposal, First Aid ,Laboratory Accreditation (TS EN ISO 17025), 13. Week chemical waste collection, storage and disposal, First Aid ,Laboratory Accreditation (TS EN ISO 17025), 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 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			
	Searching in Internet and Library	2	4	8
	Designing and Applying Materials			
	Preparing Reports	2	4	8
	Preparing Presentation	2	4	8
	Presentation	1	2	2
	Mid-Term and Studying for Mid-Term	2	5	10
	Final and Studying for Final	1	5	5
	Other	1	1	1
	Total work load			84
	Total work load/25			3,36
	ECTS of the course			3

Course's Contribution To Program	Number	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.	X				
	6	Ability to work efficiently in intra-disciplinary teams.				X	
	7	Ability to work efficiently in multi-disciplinary teams;					
	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	X				

	engineering practice.										
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