



MARMARA UNIVERSITY Faculty of Arts and Sciences

Chemistry Department

SYLLABUS

2015-2016 Fall

Course level: Lisans (First Cycle)

Course Code	Course Name	Course Type	Course Pool (if exists)	Weekly Course		Local Credit	ECTS Credit	Semester
				T	A			
CHEM1113	General Chemistry Laboratory I	Zorunlu			2		3	1

Prerequisite (Ders Kodu ve Adı, Min Harfli Başarı Notu)	Prerequisite to (Ders Kodu ve Adı, Min Harfli Başarı Notu)	Weekly Time & Classroom Schedule (Gün, Saat Aralığı, Derslik)
<Bu dersi bağlayan önceki derslerin kodu, adı, min hb> {Her bir dersi birbirinden noktalı virgülle ayırınız.}	<Bu dersin bağladığı sonraki derslerin kodu, adı, min hb> {Her bir dersi birbirinden noktalı virgülle ayırınız.}	

Course Lecturer	Doç. Dr. Özkan DANIŞ	Teaching Assistants	
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Office hour schedule		Office hour schedule	

Course Objectives	The aim of this course is to introduce students to general laboratory safety, working rules and principal processes in chemistry.
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Textbooks and or References	Course Web page:	
	1.	Chemistry Laboratory Experiments Manual

Course Learning Outcomes	1.	Be able to follow the safety rules when working in the laboratory
	2.	Be able to use principle laboratory techniques
	3.	Be able to analyze experimental data
	4.	Be able to report its observations and results
	5.	Be able to understand chemical processes

Program Outcomes x Course Learning Outcomes Matrix	Program Outcomes															1:Weak; 2:Medium; 3:Strong
	PK1	PK2	PK3	PK4	PK5	PK6	PK7	PK8	PK9	PK10	PK11	PK12	PK13	PK14	PK15	Course Learning Outcomes
			3									3				DK1. Be able to follow th...
			3	3												DK2. Be able to use princ...
					3		3									DK3. Be able to analyze e...
				3	3									3		DK4. Be able to report it...
		3					3									DK5. Be able to understan...
	0	0	3	3	3	3	3	3	0	0	0	3	0	3	0	TOTAL EFFECT

Language of Instruction	Learning Activities and Teaching Methods	Course Presentation Form
	Experiment, Class discussion	Experiment, Class discussion

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CHEM1113	General Chemistry Laboratory I	Zorunlu			2		3	1	
Week	Date	Weekly Course Content				Reference No - Section			
1. Week		Laboratory Safety and General Rules							
2. Week		Introduction to Chemistry Laboratory and Equipments							
3. Week		Principle Lab. Techniques: Weighing, Measuring, Filtration, Decantation							
4. Week		Separation Techniques I: Distillation, Crystalization							
5. Week		Separation Techniques II: Sublimation, Extraction, Precipitation							
6. Week		Separation Techniques III: Paper Chromatography							
7. Week		Conservation of Matter							
8. Week		Midterm Exam							
9. Week		Stoichiometry							
10. Week		Formula of an Hydrate							
11. Week		Determination of Heat of Fusion							
12. Week		Chemical Synthesis and Percentage Yield							
13. Week		Redox Reactions							
14. Week		Blue Bottle Reaction and Briggs-Rauscher Chemical Oscillation							
15. Week		Synthesis of Soap							
16. Week		Study Week							
17. Week		Final Exam							
Evaluation Tool		YSSL (BDS)	BNAL (BDS)	BDKL (BDS)	Calculation of Grade				
Evaluation Tools and Weight %	Evaluation Tools		Quantity	Date	Weight in Total (%)		Weight in Semester Evaluation (%)		
	Final Exam				60,00		100,00		
	Final-Make up Exam (if exists)				60,00		100,00		
	Semester Evaluation Tools					40,00		100,00	
	Midterm Exam(s)				40,00		100,00		
	Quiz(es)								
	Project								
	Homework								
	Laboratory/Atelier								
	Presentation / Seminar / Demo								
	Research / Report / Other								
	Attendance								
Student Workload Calculation									
Tool	Weekly Avr. Hour	Semester Total Hour	Tool	Weekly Avr. Hour	Semester Total Hour	Tool	Weekly Avr.	Semester Total hour	
Theoretical Hours			Midterm Exam and Preparation		10	Atelier and Preparation	1,00	14	
Applied Hours	2,00	28	Quiz and Preparation			Presentation/Seminar/Demo and Preparation			
Pre-class Self Study			Project and Preparation			Research/ Report/ Other and Preparation			
Pre-application/Post-application Self Study	1,00	14	Homework and Preparation			Final Exam and Preparation		10	
Total Student Workload Hours:		76	1 ECTS Credit = 25 Student Workload Hours			Workload Calculation:		Hesap Doğru	