

**MARMARA UNIVERSITY Faculty of Arts and Sciences****Chemistry Department****SYLLABUS****2015-2016 SPRING****Course level:** Lisans (First Cycle)

Course Code	Course Name	Course Type	Course Pool (if exists)	Weekly Course		Local Credit	ECTS Credit	Semester
				T	A			
CHEM1114	General Chemistry Laboratory II	Zorunlu			2		3	2

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	
Office/Room No	C016	Office/Room No	
Phone+extension	02163464553-1334	Phone+extension	
E-mail	odanis@marmara.edu.tr	E-mail	
Web	kmy.fef.marmara.edu.tr	Web	
Office hour schedule		Office hour schedule	

Course Objectives	The aim of this course is to teach students to prepare solutions and giving skill to calculate concentration of solutions and give information about the common analysis
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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 prepare solutions from liquid and solid materials and calculate its concentrations

Program Outcomes	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
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...
	2	2				3										DK5. Be able to prepare s...
Matrix	2	2	0	3	3	3	0	3	0	0	0	3	0	3	0	TOTAL EFFECT

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Language of Instruction		Learning Activities and Teaching Methods			Course Presentation Form				
		Experiment, Class discussion			Experiment, Class discussion				
Week	Date	Weekly Course Content				Reference No - Section			
1. Week		Solutions I: Calculating the Concentration							
2. Week		Solutions II: Preparation from liquids and solids							
3. Week		Chemical Equilibrium							
4. Week		Factors on Reaction Rates: Effect of Type of Matter							
5. Week		Factors on Reaction Rates: Effect of Concentration							
6. Week		Factors on Reaction Rates: Effect of Temperature							
7. Week		Factors on Reaction Rates: Effect of Catalyst							
8. Week		Midterm Exam							
9. Week		Hydrolysis							
10. Week		Acid base Titrations							
11. Week		pH and Indicators							
12. Week		Titration of Vinegar							
13. Week		Buffer Solutions							
14. Week		Determination of Water Hardness							
15. Week		Equivalent Weight of a Matter							
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	