



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			
CHEM1112	GENERAL CHEMISTRY II	Zorunlu		4	0	6	6	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. Suzan Abdurrahmanoğlu	Teaching Assistants	<Unvan, Adı, Soyadı>
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Web		Web	
Office hour schedule	Monday 10.00-12.00	Office hour schedule	

Course Objectives	Aim of this course is to introduce solution equilibria, chemical reaction kinetics and thermodynamics, organic chemistry and nuclear reaction chemistry to students.
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Textbooks and or References	Course Web page:	
	1.	GENERAL CHEMISTRY, PRINCIPLES AND MODERN APPLICATIONS, PETRUCCI R.H., 11th EDITION, PEARSON

Course Learning Outcomes	1.	Determine the differences between various chemical bonds
	2.	understand the physical properties of solutions
	3.	learn solution chemistry and solution equilibria
	4.	Define the energetics of chemical reactions (thermodynamics and electrochemistry)
	5.	Predict kinetics of chemical and nuclear reactions
	6.	Learn basic concepts in organic chemistry

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 x Matrix	3		2											2		DK1. Determine the differ...
		2	2			2								2		DK2. understand the physi...
	2	2	2											2		DK3. learn solution chemi...
	2	3	2			2								2		DK4. Define the energetic...
	3	2	2			2								2		DK5. Predict kinetics of ...
	3					3	2							2		DK6. Learn basic concepts...
	3	2	2	0	0	2	2	0	0	0	0	0	0	2	0	TOTAL EFFECT

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Language of Instruction	Learning Activities and Teaching Methods			Course Presentation Form				
İngilizce	Discussion, quiz, homework, recitation.			blackboard, power-point presentation				
Week	Date	Weekly Course Content				Reference No - Section		
1. Week		Introduction						
2. Week		Intermolecular forces				Chapter 12		
3. Week		Solution and their physical properties				Chapter 13		
4. Week		Solution and their physical properties						
5. Week		Chemical Kinetics				Chapter 14		
6. Week		Chemical Equilibrium				Chapter 15		
7. Week		Overview of the chapters before the Midterm exam						
8. Week		Midterm Exam						
9. Week		Acids and Bases Equilibria				Chapter 16		
10. Week		Additional aspects of acids and bases equilibria				Chapter 17		
11. Week		Solubility equilibria				Chapter 18		
12. Week		Spontaneous Change				Chapter 19		
13. Week		Electrochemistry				Chapter 20		
14. Week		Nuclear Chemistry				Chapter 25		
15. Week		Organic Chemistry				Chapter 26		
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	0,00		
	Final-Make up Exam (if exists)				60,00	0,00		
	Semester Evaluation Tools				40,00	100,00		
	Midterm Exam(s)				20,00	50,00		
	Quiz(es)							
	Project							
	Homework				20,00	50,00		
	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	4,00	56	Midterm Exam and Preparation	2,00	28	Atelier and Preparation		
Applied Hours	0,00	0	Quiz and Preparation			Presentation/Seminar/Demo and Preparation		
Pre-class Self Study	1,00	14	Project and Preparation			Research/ Report/ Other and Preparation		
Pre-application/Post-application Self Study			Homework and Preparation	1,00	14	Final Exam and Preparation	2,00	28
Total Student Workload Hours:		140	1 ECTS Credit = 25 Student Workload Hours			Workload Calculation:	Hesap Doğru	