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 T	Weekly Course A	Local Credit	ECTS Credit	Semester
CHEM3153	Organic Chemistry Laboratory I	Zorunlu Grup		0	4	5	5	5

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	Prof.Dr. Nilhan Kayaman APOHAN	**Teaching Assistants**	Dr. Emrah ÇAKMAKÇI, Dr. Burcu OKTAY
Office/Room No	C414	**Office/Room No**	C018
Phone+extension	3479641/1498	**Phone+extension**	
E-mail	napohan@marmara.edu.tr	**E-mail**	emrah.cakmakci@marmara.edu.tr burcu.oktay@marmara.edu.tr
Web		**Web**	
Office hour schedule		**Office hour schedule**	

Course Objectives

The aim of this course is to teach students isolation and purification methods of organic compounds and some synthetic techniques.

Textbooks and or References

Course Web page:

1. Denel Organik Kimya Ender ERDİK Ankara Üniversitesi
2. Intrduction to Organic Laboratory Techniques, D. L. PAVIA, D. M. LAMPMAN, G. S. KRIZ
3. Experimental Organic Chemistry, Principles and Patice, Laurence M. HARWOOD, Christopher J. MOODY

Course Learning Outcomes

1. Get detailed information about the laboratory techniques in organic laboratory (PO1, PO4)
2. Use the purifications methods (PO4)
3. Decide the necessary purification methods of the crude organic products. (PO3)
4. Perform the synthesis of some organic compounds. (PO6)
5. Apply the content of this course on current subject (PO9)
6. Follow instructions in the laboratory, write up reports and draw conclusions from experimental observation (PO5, PO6)

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. Get detailed informa...
			3												DK2. Use the purification...
		3													DK3. Decide the necessary...
	3														DK4. Perform the synthesi...
								2							DK5. Apply the content of...
				3	3										DK6. Follow instructions ...
3	**3**	**3**	**3**	**3**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**TOTAL EFFECT**

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				T	A			
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Language of Instruction	Learning Activities and Teaching Methods	Course Presentation Form
	Laboratuary techniques	Experiments

Week	Date	Weekly Course Content	Reference No - Section
1. Week		Laboratory Safety	
2. Week		Crystallization and extraction	
3. Week		Distillation	
4. Week		Chromatography	
5. Week		Drying Techniques	
6. Week		Isolation of caffeine from tea	
7. Week		Make-up	
8. Week		Midterm Exam	
9. Week		Preperation of cyclohexylchloride from cyclohexene	
10. Week		Preperation of cis-1,2-cyclohexanediol from cyclohexene	
11. Week		Preperation of cyclohexanol from cyclohexylchloride	
12. Week		Preparation of cyclohexene from cyclohexanol	
13. Week		Test for carbon-carbon double bonds (Br2 and KMnO4)	
14. Week		Soaps, detergents and perfume 1	
15. Week		Make-up	
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	1		60.00	0.00
Final-Make up Exam (if exists)			60.00	0.00
Semester Evaluation Tools			100.00	100.00
Midterm Exam(s)	1		40.00	40.00
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	0.00	0	Midterm Exam and Preparation	3.00	42	Atelier and Preparation		
Applied Hours	4.00	56	Quiz and Preparation	1.00	14	Presentation/Seminar/ Demo and Preparation		
Pre-class Self Study			Project and Preparation			Research/ Report/ Other and Preparation	1.00	14
Pre-application/Post-application Self Study			Homework and Preparation			Final Exam and Preparation		
Total Student Workload Hours:	126		***1 ECTS Credit = 25 Student Workload Hours***			**Workload Calculation:**	Hesap Doğru	