AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Advanced Organic Chemistry								
Course Code	KİM521		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	9	Workload	225 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Moleküler yapı, adlandırma, izomerlik, tautomerlik ve rezonans, tepkime mekanizması ve çok basamaklı sentez tasarımı yapabilmeyi kavramaya yönelik temel ilkeler ve örneklemeler								
Course Content	Molecular structure, nomencalture, isomerism, tautomerism and resonance, mechanism and learn basic of sysnthesis technique								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Problem Solving								
Name of Lecturer(s)	Assoc. Prof. Fatih EYDURAN								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Assignment	7	20

Recommended or Required Reading	
1	Organik Kimya: Solomon
2	Organik Kimya: Fessenden

Week	Weekly Detailed Course Contents	
1	Theoretical	Theories of chemical bonding
2	Theoretical	Ionic reactions: Substitution
3	Theoretical	Ionic reactions: Substitution
4	Theoretical	Ionic reactions: addition
5	Theoretical	Radicalic reactions: Substitution
6	Theoretical	Radicalic reactions: addition
7	Theoretical	Aromatic electrophilic subtitution reactions
8	Theoretical	Aromatic nucleofilic subtitution reactions
9	Preparation Work	An overview of the course topics.
	Intermediate Exam	midterm exam
10	Theoretical	Rearrangement reactions
11	Theoretical	Condensation reactions
12	Theoretical	Condensation reactions
13	Theoretical	Oxidation reactions
14	Theoretical	Reduction reactions
15	Theoretical	Pericyclic reactions
16	Preparation Work	An overview of the course topics
	Final Exam	Term exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	7	13	0	91
Reading	14	0	2	28
Midterm Examination	1	30	2	32

Final Examination	1	30	2	32
			Total Workload (Hours)	225
			[Total Workload (Hours) / 25*] = **ECTS**	9
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	to be able to identify base, acid, nucleofilic and electrophilic properties
2	to be able to recognize the basic chemical behavior of functional groups.
3	to be able to use the spectroscopic data
4	to be able to use spectroscopic data
5	to be able to recognize the multi step reactions.

Programme Outcomes *(Chemistry Master)*	
1	To be able to gain proficiency in depths and analysis by statistical methods in the same or a related area depending on the undergraduate competence,.
2	To be able to use the knowledge of his/her field and the skills to solve problems and/or applications in interdisciplinary research.
3	To be able to adopt to evaluate the information and skill his/her field by critical approach.
4	To be able to evaluate the effect of important persons, case and fact on his/her field applications.
5	To be able to gain the ability to discuss write and orally present to a group of literate listener.
6	To be able to communicate orally and written in a foreign language at least at European language B2 level.
7	To be able to use computer programs related to his/her field and have skills for informatics communication.
8	To be able to be careful in protecting social, scientific and cultural ethics in collection data, application and presentation.
9	To be able to develop strategic, political and application plans in his/her field and may evaluate the outcomes in quality periods.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	3	3	3	3	3
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	3	4	4	4	4
P5		4	4	4	4
P6		2	2	2	2
P7		5	5	5	5
P8	4	4	4	4	4
P9	3	5	5	5	5