



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Organic Reaction Mechanisms-I							
Course Code		KİM621		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	10	Workload	250 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		Learning to synthesis methods, predict to by-product and new synthesis method for the carbon compounds.							
Course Content		Investigation of basic mechanism in the organic chemistry							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Problem Solving					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Assignment	4	20

### Recommended or Required Reading

1	Organik Kimya: Solomon
2	Organik Kimya: Fessenden
3	Carey, F.A., Sundberg, R.J., Advanced Organic Chemistry: Part A and B, Plenum Press, N.Y., 1991
4	Miller, B., Advanced Organic Chemistry: Reactions and mechanisms, Prentice Hall, N.J., 2004.

Week	Weekly Detailed Course Contents	
1	Theoretical	Radical reaction mechanisms: Displacements
2	Theoretical	
3	Theoretical	
4	Theoretical	
5	Theoretical	
6	Theoretical	
7	Theoretical	
8	Theoretical	
9	Intermediate Exam	
10	Theoretical	
11	Theoretical	
12	Theoretical	
13	Theoretical	
14	Theoretical	
15	Theoretical	
16	Final Exam	

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	4	0	22	88
Reading	14	0	4	56
Midterm Examination	1	30	2	32



Final Examination	1	30	2	32
Total Workload (Hours)				250
[Total Workload (Hours) / 25*] = ECTS				10
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Comprehension of the behavior of the basic chemical functional groups
2	Knowledge of the basic reaction mechanism
3	Ability to usage of the spectroscopic data in the mechanism
4	Critically investigation to new reaction mechanism in the literature
5	to be able to identify base, acid, nucleophilic and electrophilic properties

### Programme Outcomes (Chemistry Doctorate)

1	Depending on the master degree competences, develops, insights and innovates current and advanced knowledge and/or research in proficiency level.
2	Gains high skill levels in using research methods in the field of his/her study.
3	Comprehends the interaction between disciplines related to his/her field. Reaches to original results using his/her expertise in order to analyze, synthesize and evaluate new and complicated ideas.
4	Enlarges the boundaries of his/her field of knowledge by publishing at least one research paper in national and/or international peer-reviewed journals.
5	Defends his/her original opinions related to his/her field before authority and communicates effectively illustrating his/her competence.
6	May communicate and debate written, orally and visually in European Language Portfolio level C1.
7	Follows the developments in computer software and information and communication technologies developed for his/her research area and uses these in order to solve research problems.
8	Collaborates for scientific research with national and international research teams.
9	Contributes to the course of creation and maintenance of knowledge based society and by introducing the scientific, social and cultural developments to the society he/she is living in.

### 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	5	5	5	5	5
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	5	5	5	5	5
P5	5		5	5	5
P6	3	3	3	3	
P7	3	3	3	3	
P8	5	5	5	5	

