



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Chemistry of Nonmetals and Semimetals							
Course Code		KİM634		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	8	Workload	199 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		This course encompasses a comprehensive survey of the chemistry and properties of the Chemistry of nonmetals and semimetals. Topics include syntheses, structures and reactivities of important compounds. In addition, alternative bonding theories which have been used to explain the unique properties of these compounds are critically examined.							
Course Content		This course covers the elements of hydrogen, boron, carbon group and the elements formed by these elements. In the periodic table, the properties and reactions of 5,6,7, 8 / A group elements are examined.							
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	40
Final Examination	1	60

Recommended or Required Reading

1	G. Earnshaw, Chemistry of Elements(second edition),Elsevier Butterworth Heinemann,1997
2	D.F. Shriver, P. W. Atkins, C. H. Langford, Inorganic Chemistry(Second edition), Oxford University Press, 1994.
3	J.E. Huheey, E.A. Keiter, R.L. Keiter, Inorganic Chemistry: Principles of Structure and Reactivity (Fourth Edition), Harper Collins College Publishers, 1993
4	Chemistry of the Elements; N.N. Greenwood and Earnshaw, second edition, Elsevier Science Ltd. 1997.

Week	Weekly Detailed Course Contents	
1	Theoretical	
2	Theoretical	
3	Theoretical	
4	Theoretical	
5	Theoretical	
6	Theoretical	
7	Theoretical	
8	Theoretical	
9	Intermediate Exam	
10	Theoretical	
11	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	7	10	0	70
Project	6	0	7	42
Midterm Examination	1	0	15	15



Final Examination	1	0	30	30
Total Workload (Hours)				199
[Total Workload (Hours) / 25*] = ECTS				8
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	
2	
3	
4	
5	
6	

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	L6
P1	4	4	5	4	4	4
P2	4	4	5	4	4	4
P3	4	4	5	4	4	4
P4	4	4	4	4	4	4
P5	4	4	4	4	4	4
P6	4	4	4			
P7	4	4	4			
P8	4	4	4			
P9	4	4	4			

