AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Transition Metal Chemistry						
Course Code		KİM631		Couse Level		Third Cycle (Doctorate Degree)		
ECTS Credit	8	Workload	204 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to give basic information about properties, nature, methods, reactions, compounds and usage areas of industry.						
Course Content		Physical properties of metals, theories related to metal binding (free electron theory, valence bond theory, molecular orbital theory), conductors, semiconductors and IB-VIIIB group metals, properties, natural occurrences, methods of obtaining, reactions, compounds with other elements properties and usage areas.						
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	Malcolm Gerloch, Edwin, C. Constable, Transition Metal Chemistry.
2	P. W. Atkins, Inorganic Chemistry, D.F. Shriver; Oxford, 1999
3	Tezcan, H., Tezcan, R. Metaller Kimyası Nobel Yayın Dağıtım, 2007.

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	
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	20	0	80
Reading	14	2	0	28
Midterm Examination	1	25	2	27

Final Examination	1	25	2	27
			Total Workload (Hours)	204
			[Total Workload (Hours) / 25*] = **ECTS**	8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	
2	
3	
4	
5	

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	4	5	4	5	5
P2	4	5	4	5	5