

REACTION MECHANISMSIN INORGANIC

1	Course Title:	REACTION MECHANISMSIN INORGANIC	
2	Course Code:	KIM6026	
3	Type of Course:	Optional	
4	Level of Course:	Third Cycle	
5	Year of Study:	2	
6	Semester:	4	
7	ECTS Credits Allocated:	6.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	none	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. RAHMIYE AYDIN	
15	Course Lecturers:	Yok	
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü Tel: 0 224 29 41729 e-posta: rahmiye@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	Learning the synthesis mechanisms of inorganic compounds	
19	Contribution of the Course to Professional Development:	It provides theoretical and practical knowledge in the field of reaction mechanisms in inorganic chemistry.	
20	Learning Outcomes:		
		1	Students will learn about Substitution Reactions.
		2	Students learn about bond strength and reaction speed.
		3	Students will be able to analyze Oxidizer Addition Reactions.
		4	Students will learn basic information about inorganic photochemistry.
		5	Students gain the ability to understand the Speed and Mechanisms of Redox Reactions in Metal-Ion Complexes.
		6	
		7	
		8	
		9	
		10	
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Fundamental principles of chemical kinetics		
2	Ligand Substitution Reactions		
3	Substitution in Tetrahedral Compounds		
4	Substitution in Square Plane Compounds		
5	Substitution in Compounds with a Coordination Number of Five		

6	Substitution in Octahedral Compounds	
7	Substitution in Octahedral Compounds	
8	Repetition of previous lessons and midterm	
9	Stereochemical Changes	
10	Bond Strength and Speed of Reaction	
11	Oxidizing Addition Reactions	
12	Inorganic Photochemistry	
13	Rate and Mechanisms of Redox Reactions in Metal Complexes	
14	Rate and Mechanisms of Redox Reactions in Metal Complexes	

22	Textbooks, References and/or Other Materials:	<p>1. Anorganik Kimya, D.F. Shriver, P.W. Atkins, C.H. Langford, (Çeviri Editörleri: Özkar, S., Çetinkaya, B., Gül, A., Gök, Y.) Bilim Yayıncılık-Ankara, 2003.</p> <p>2. İnorganik Kimya, G. L. Miessler, and D. A. Tarr, Çeviri Editörleri: N. Karacan ve P. Gürkan, Palme Yayıncılık, 2002.</p> <p>3- Inorganic and Organometallic Reaction Mechanisms, Jim D. Atwood; VCH Publishers Inc., 1997.</p>
----	---	--

23	Assesment
----	-----------

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course	Written exams and presentation	

24	ECTS / WORK LOAD TABLE
----	-------------------------------

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	1.00	14.00
Homeworks	2	12.00	24.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	40.00	40.00
Others	0	0.00	0.00
Final Exams	1	60.00	60.00
Total Work Load			220.00
Total work load/ 30 hr			6.00
ECTS Credit of the Course			6.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	2	4	4	3	4	1	4	2	4	0	0	0	0	0	0
ÖK2	5	2	4	4	3	4	1	4	2	4	0	0	0	0	0	0
ÖK3	5	2	4	4	3	4	1	4	2	4	0	0	0	0	0	0
ÖK4	5	2	4	4	3	4	1	4	2	4	0	0	0	0	0	0
ÖK5	5	2	4	4	3	4	1	4	2	4	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			