INORGANIC CHEMISTRY I

1	Course Title:	INORGANIC CHEMISTRY I
2	Course Code:	KIM2007
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	4.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	There is no course prerequisite.
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. Veysel Turan Yılmaz
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	vtyilmaz@uludag.edu.tr 02242941749
17	Website:	
18	Objective of the Course:	To teach the basic concepts and use these concepts in Inorganic chemistry.
19	Contribution of the Course to Professional Development:	Make use of theoretical and practical knowledge acquired in the field of Inorganic chemistry.
20	Learning Outcomes:	
	1	Knows the structure of the atom
	2	Use the periodic chart,
	3	Examine the general properties of elements
	4	Examine the types of chemical bonding
	5	Determine the symmetry elements and groups of buildings,
	6	Examine theories explaining the structure and shape of the molecules,
	7	
	8	
	9	
	10	
21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Atomic structure	
2	Many-electron structures, Periodic properties of elements	
3	Atom and ion size, ionization energy, electron affinity, and polarisation	

4	Electronegativity, Dipole moment, metallic character	
5	Bond types, the oxidation step, the formal charge	
6	Lewis formulas, resonance, metallic bond	
7	Symmetry elements and symmetry operations, point groups	
8	Symmetry classification of transactions, character tables	
9	Repetition of previous lessons and midterm	
10	Symmetry and polarization, symmetry and chirality	
11	Lewis theory, the Octet Rule	
12	The thrust of the valence shell electron pair rule	
13	Valence-bond theory, Hybridity	
14	Molecular orbital theory	

22	Textbooks, References and/or Other Materials:	
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Final Exam	1	60.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Measurement and Evaluation Techniques Used in the Course	1	Written exams and multiple-choice tests

24 ECTS / WORK LOAD TABLE

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	4.00	56.00
Practicals/Labs	0	0.00	0.00
Self Study and Preperation	14	4.00	56.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	20.00	20.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			172.00
Total work load/ 30 hr			5.07
ECTS Credit of the Course			5.00

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	5	5	3	4	3	4	1	1	2	3	4	2	0	0	0
ÖK2	5	5	5	3	4	3	4	1	1	2	3	4	2	0	0	0
ÖK3	5	5	0	3	4	3	4	1	1	2	3	4	2	0	0	0
ÖK4	3	3	3	3	3	3	4	1	1	2	2	2	2	0	0	0

ÖK5	3	3	3	3	3	3	4	1	1	2	2	2	2	0	0	0
ÖK6	3	3	3	3	3	3	4	1	1	2	2	2	2	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**