CHEM 322 Syllabus

Course Code	Course Name	Credits	Prerequisite(S)	Classification				
CHEM 322	Inorganic Chemistry- 2	3	CHEM 221	Department Requirement				
Course Description	Inorganic Chemistry 2 is a mandatory course for all Chemistry students. It aims to introduce students to fundamental knowledge of coordination compounds, Molecular symmetry, and basic group theory.							
Class Scheduling	Classes are held 2 time minutes.	s/week each fo	r 75 minutes OR 3 times/	'week each for 50				
Textbook	 1- Inorganic Chemist Pearson 2014. 5th ed. 2-Principles of Coordin Center, King AbdulAziz 	ry, Gary L. Mies ation Chemistry University, 201	ssler, Paul J Fischer and D , Ahmad Omar Baghlaf, S 7.	onald A. Tarr, Scientific Publishing				
Course Coordinator	Dr. Mehvash Zaki Dr. Bandar A.M. Babgi							

Relationship	1	2	3	4	5	6	
to SOs	x					x	

CLOs CLO1. Identify coordination compounds by knowing their structures, nature of ligands, types of isomers, coordination number and magnetism. (SO1)

CLO2. Apply the understanding of the basic principles and concepts of symmetry and group theory to solve chemical problems. (SO1)

CLO3. Apply IUPAC nomenclature rules, stability factors and bonding theories in coordination compounds. (SO1)

CLO4. Calculate the magnetic moment of coordination compounds. (SO1)

CLO5. Explain the electronic spectra of coordination compounds by applying the selection rules for electronic spectroscopy. (SO1)

CLO6. Share experiences and understandings with Team Homework and during Assignments. (SO6)

Contents

List of Topics	No. of Weeks	
Course introduction and revision of fundamental concepts		
Molecular Symmetry and Point Groups		
Coordination Chemistry I: Structures, Isomers and Reactions		
Coordination Chemistry II: Stability of coordination compounds		
Coordination Chemistry III: Bonding	3	
Coordination Chemistry III: Magnetic Properties	2	