

Chemistry 427
Spring 2014

Instructor: Dr. Craig M. Jensen, 309B Bilger Hall
Office hours Tu,W,Th 3:00-4.00 PM or by appointment.

Text: *Inorganic Chemistry*, Fifth Edition, Gary L. Meisler and Donald A. Tarr

Problem Sets: 10 sets worth 10 points each (100 points)

Examinations: Midterm Exam I, February 21 (100 points)

Midterm Exam II, April 14 (100 points)

Final Exam, 12:00 noon, May 12 (200 points)

<u>Week</u>	<u>Topic(s)</u>	<u>Chapter(s)</u>
January 13	Coordination Compounds: Isomers, ligands, nomenclature oxidation states, Coordination numbers 2-4	9
20	Holiday, Coordination numbers 5 and 6, Crystal Field Theory	9,10
27	High and Low Spin Complexes, Magnetic Susceptibility Jahn-Teller Effect	10
February 3	Electronic Spectra, Non-Octahedral Ligand Fields	11
10	Ligand Substitution Reactions, Electron Transfer Reactions	12
17	Holiday, Review, Midterm I	
24	Bioinorganic Chemistry	16
March 3	Acid-Base, Chemistry	6
10	Hard and Soft Acid and Bases, Supper Acids	6
17	π acids, backbonding	6,13
24	Spring Break	
31	The 18-electron rule, Application of Molecular Orbital	13
April 7	Carbene and Carbyne Complexes, Review	13
14	Midterm II, Oxidative Addition/ Reductive Elimination	14
21	Migratory Insertion, Nucleophilic Attack	14
28	Hydrogenation, Hydroformylation	14
May 5	Olefin Methathesis, Review	14