

Chemistry 425
Fall 2010

Instructor: Dr. Craig M. Jensen, 309B Bilger Hall
Office hours M, W, Th 2:00-3.00 PM or by appointment.

Problem Sets: 5 sets worth 20 points each (100 points)

Examinations: Midterm Exam I, September 27 (100 points)

Midterm Exam II, November 8 (100 points)

Final Exam, 12:00 noon, December 13 (200 points)

<u>Week of</u>		<u>Topic(s)</u>
August	23	Crystal Lattices, Ionic Structures, X-ray Diffraction
	30	Network Solids, Defects
September	6	Molecular Orbital Theory
	13	Three Center Bonding, Compounds of Boron and Aluminum
	20	Hypervalent Compounds, Molecular Orbitals in Extended Systems
	27	Midterm I, Band Theory, Metals
October	4	Semiconductors, Infrared Spectroscopy
	11	Symmetry, Group Theory
	18	Normal Mode Analysis
	25	Normal Mode Analysis (Part II)
November	1	Group Theoretical Treatment of Molecular Orbitals
	8	Midterm II
	15	NMR Spectroscopy of Multi-spin Systems
	22	Second Order Spectra, Magnetic Nonequivalence
December	29	Effects of Quadrupolar Nuclei
	6	NMR Spectra of Fluxional Systems