Lecture Schedule

CHEM 460/560-001  Spring Semester 2014

Professor Narayan Hosmane, Room: 305 Faraday Hall, Phone: 753-3556, e-mail: hosmane@niu.edu


Classes are met every MWF in FW 201 (La Tourette Hall) from 10:00 - 10:50 AM
Office Hours: MWF from 11:00 – 12:00 NOON

January 13 - February 07

Part 1: Foundations (Concepts in Chemical Bonding and Stereochemistry; Chapters 1-5)
Special emphasis on Molecular Orbital Theory, Molecular Symmetry and the Symmetry Groups.

January 20: No Classes (Martin Luther King’s Birthday)

February 07: (EXAM I)

February 10 – March 07

Part 2: Advanced Topics-1 (Introduction to Ligands and Complexes; Chapters 6, 9 & 10)
Ligand Substitution Processes with emphasis on Square-Planar Substitution and Octahedral Substitution Reactions in Inorganic Chemistry.

March 09-16: SPRING BREAK

March 17 – April 04

Part 3: Advanced Topics-2 (Fundamental Concepts: Transition Metal Complexes, Chaps. 11 & 12)
Special emphasis on Crystal-Field and Ligand-Field Theories, Electronic States and Spectra.

March 19: (EXAM II)

April 07 – May 02

Part 4: Advanced Topics-3 (Organometallic, Bioinorganic & Environmental Chemistry Chapters 13 - 16)
Synthesis, Structures, Bonding, and Reactivity of Organometallic & Bioinorganic Compounds including Carboranes and Metallacarboranes, and their Applications in Catalysis, Medicine and Pollution Control.

FINAL EXAM: MONDAY, MAY 5, 2014; 10:00 – 11:50 AM

GRADING: EXAM I (100PTS) EXAM II (100 PTS) FINAL (200PTS) SURPRISE QUIZZES (200PTS)

TOTAL: 600 POINTS

Grading Scale: A > 90% (540 pts.), B > 80% (480 pts.), C > 70% (420 pts.), D > 60% (360 pts.), F < 60%

Any student who may need an accommodation due to a disability, please make an appointment to see me during my office hours, or when convenient. A letter from Disability Support Services (CAAR) authorizing your accommodations is usually needed before accommodations can be granted.