Lecture Schedule

CHEM 460/560-0001

Spring Semester 2016

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 20 - February 12

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 18: No Classes (Martin Luther King’s Birthday)

February 12: (EXAM I)

February 15 – March 11

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

March 13-20: SPRING BREAK

March 21 – April 08

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

April 08: (EXAM II)

April 11 – May 04

Friday, May 6: No Classes (READING DAY)

Part 4: Advanced Topics-3 (Organometallic, Bioinorganic & Environmental Chemistry Chapters 13 - 15)
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 9, 2016; 10:00 – 11:50 AM

GRADING: EXAM I (100PTS) EXAM II (100 PTS) FINAL (200PTS) PRESENTATION (100PTS)

In-Class Presentation on the Topic Assigned in Advance for a TOTAL 100 points (worth a grade of ONE exam) must be given during the lecture hour. There will be ABSOLUTELY no make-up Exams. Exam Grades will not be curved!

TOTAL: 500 POINTS

Grading Scale: A > 90% (450 pts.), B > 80% (400 pts.), C > 70% (350 pts.), D > 60% (300 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 Resource Center (DRC) authorizing your accommodations is usually needed before accommodations can be granted.