## **Inorganic Chemistry (Chemistry 351)**

Spring 2008, 3a, Olin 101, Professors Marion Cass and Gretchen Hofmeister

Optional Text: <u>Inorganic Chemistry 3<sup>rd</sup> Edition</u>, Housecroft and Sharpe Required Text: <u>Molecular Symmetry and Group Theory</u>, A. Vincent

**General Schedule of Topics:** (Updates and Daily Assignments can be found on our Moodle Site)

March 31, April 2, 4: The Periodic Table, Periodic Properties and Acids and Bases

April 7, 9, 11, 14: Bonding, Intro to Molecular Orbital Theory, Ligand Field Theory/Crystal Field Theory

April 16, 18, 21, 23, 25, 28: Symmetry, Group Theory, and MO Theory in Coordination Complexes

April 30, May 2, 7, 9, 12: Spectroscopy and Magnetism in Coordination Complexes

(May 5, Midterm Break)

May 14: Reaction Mechanisms of Coordination Complexes

May 16, 19: Bioinorganic Chemistry

May 21, 23, 26, 28, 30, June 2, 4: Organometallic Chemistry, Catalysis, and Reaction Mechanisms

Requirements for the Course:

Your grade in the course will be based on homework and "Ligand of the Week" Assignments (20%), two take home midterm exams (20% each), 3 Quizzes (20%) and a final exam (20%).

Dates: April 11: Quiz 1

April 21: First Take Home Midterm is due

May 2: Quiz 2

May 14: Second Take Home Midterm is due

May 23: Quiz 3

Finals Week: Final Exam