Lecture: 8:00-9:47 am TTh 388 SEB  
Instructor: C. Taylor 269 SEB 370-2333 taylor@oakland.edu  
Office Hours: By appointment  
CRN: 17513  
Textbook and other materials:  
- A set of lecture notes (handouts).  
Prerequisite: CHM 362 or equivalent.  
General course Description: This course is a continuation of CHM 362. CHM 463 will focus on the chemistry of the d-transition elements, the f-block elements, and an introduction to bioinorganic chemistry. Topics to be covered include the electronic structure, shape, symmetry, and stereochemistry of transition metal coordination compounds and complexes; interpretation of the magnetic and spectral properties of these complexes using Crystal Field Theory (CFT), Ligand Field Theory (LFT) and Molecular Orbital Theory (MO); an examination of rates of substitution reactions and electron transfer reactions; organometallic chemistry; and the use of selected transition metal complexes as homogeneous catalysts for a variety of important processes. The overall objective of this course is to give the student an in-depth treatment of the chemistry of the d-block elements (30 elements, in all) as well as illustrate the diversity of the chemistry that occurs for these species. CHM 463 will conclude with a brief discussion of the chemistry of the f-block elements as well as an introduction to bioinorganic chemistry.  
Examinations: There will be 3 examinations, tentatively scheduled for the following dates; February 5, March 13, and April 8. The Final will be a two part exam, Part I will only cover material not covered on the third exam. The standardized ACS Inorganic Chemistry exam will constitute Part II of the final. The Final will be from 8:00 –11:00 am on Thursday, April 24.  
Homework: You will be given homework assignments periodically which will enable you to test your understanding of the material and help you do well on the exams. The homework assignments will be collected and graded. Assignments turned in late will be penalized 10%/late day.  
Grading: Your final grade in CHM 463 will be computed based on a total of 600 points: each hour exam is worth 100 points, and the final is worth 200 points equally divided between Parts I and II, and a set of homework assignments will constitute 100 points.
Policy on attendance and missed exams:
1. Attendance for lectures is optional.
2. Missed exams will be given a grade of zero unless there is a valid excuse that can be substantiated in writing. In these cases you must make arrangements with the instructor to make up the missed exam.

Withdrawals: March 17 is the last day for official course withdrawal.

Winter Recess: February 23-March 2

Attendance: Your attendance is expected at all scheduled lecture periods. Material presented in the lecture is the core of this course and it is this material that will be heavily emphasized in the examinations.

Closing the University: If the University is officially closed on a day a test is scheduled, the test will be given during the next scheduled class meeting.

Students with Disabilities: Students with disabilities are encouraged to bring this to the attention of the instructor as soon as possible so that the appropriate accommodations can be arranged. Further information is available from the Office of Disability Support Services located in 106 Foundation Hall; 370-3266 (voice); 370-3268 (TDD).