

Instructor: Prof. George Wiger

NSM C-305

243-3419

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Students should use email as the primary means of communicating with the instructor.

Do not leave voicemails

WWW: <http://chemistry.csudh.edu/faculty/george/>

Office Hours Office Hours: TuTh 9:15-10:00am

Also available from TuTh 1:30-3:20 in NSM C352

Textbook: **Inorganic Chemistry**, Fourth Edition

Huheey, Keiter and Keiter

Course Schedule

Week of	Topic	Chapters
Jan 26, Feb 2	Introduction, Atomic Structure	1,2
Feb 9	Symmetry	3
Feb 16	Bonding	4,5
Feb 23	Structure(Exam 1)	6
Mar 2	Solids	7
Mar 9	Forces	8
Mar 16	Acids/Bases	9
Mar 23	Chemistry in Solution	10
Mar 30	Spring Break	
Apr 6,13, 20	Coordination Chemistry(Exam 2)	11,12,13,14
Apr 27, May 4	Organometallics	15
May 11	Oral Reports, (Exam 3)	

It is expected that the student has had thorough courses in general chemistry, quantitative analysis, organic and physical chemistry(may be taken concurrently). The student should be familiar with the topics below and should review as necessary:

1. Chemical bonding (valence bond and MO theory)
2. Lewis theory and VSEPR
3. Equilibrium and kinetics
4. Acids and bases
5. Thermodynamics (1st and 2nd laws)
6. Inorganic nomenclature

Grading:

Quizzes(Best 5 of 6)	20%
Exams(three, 20% each)	60%
Paper and Oral Report	15%

Homework $\frac{5\%}{100\%}$

Quizzes:

Announced quizzes will be given approximately biweekly. It is expected that six quizzes will be given. The best four of six scores will be counted. There will be no make-up quizzes. Based upon class performance there may be fewer or more quizzes given.

Exams:

There will be three exams, each covering approximately one third of the course. The tentative dates for the exams are the weeks of: Feb 25, April 7 and May 12. Be aware that although each exam and quiz will have specific points of emphasis, every exam or quiz is also cumulative.

Homework:

Homework assignments will be given periodically, utilizing modules present on the WWW. Performance on these modules will be evaluated at the conclusion of the semester.

Paper

Each student will prepare a term paper dealing with an area of inorganic chemistry and will also, at the end of the semester, make an oral presentation to the class. Failure to give the oral report will result in a grade of "F" for the course.

Guidelines

Everyone is to select an element (or family) to be the general area of study. As the paper develops, you will develop a finer focus. In preparing the final paper, use the following timetable and guidelines.

Paper Structure

1. 3-5 pages in length, typed and double spaced. This does not include space for figures, tables or the bibliography.
2. Make certain that your topic can be covered in the allowed space. Focus as tightly as possible.
3. References. Paper must contain at least five literature references only one of which can be a book. Your references must contain at least one review article relevant to the paper topic. In addition, you must find at least one WWW site which contains information and reference it by providing the complete URL. This reference will be checked.. Any of the assignments below, except the final paper, may be submitted via email, using attachments as needed.

Time line:

1. Tuesday, Feb. 9-Element identified
2. Tuesday, Mar. 2-"Preliminary" title-just so you have some focus
3. Tuesday, Apr. 6-Annotated bibliography due. You may add additional references after this date
4. Tuesday, May 4-One paragraph abstract due-these will be distributed prior to the oral presentations
5. Tuesday, May 11-All reports will be collected-Make sure you make a photocopy for yourself.

Oral reports-Names will be randomly selected. 10 minutes max.

