

**CHM 3610**  
**Inorganic Chemistry**  
**Spring 2015, Section 0780**  
**Lecture MWF 5th Period – Leigh Hall 207**

*Instructor*

**David E Richardson, CLB 410, TURL 2014**

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**392-0780 (Admin Asst)**

Office Hour: Friday 6th Period CLB 410, and by appointment

*Teaching Assistants*

**Christopher Beto**

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Periods TBA

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**Class Web site on CourseSmart: <http://lss.at.ufl.edu/>**

**Course Objective**

Develop a broad knowledge and understanding about the principles of bonding, structure, and reactivity of the elements and their compounds

**Topics (approximate order):**

Introduction to Inorganic Chemistry  
Atomic Structure & Periodic Properties of the Elements  
Symmetry, Point Groups, Group Theory  
Structure & Bonding in Molecules/ Molecular Orbitals  
Acids and Bases / Donor-Acceptor Chemistry  
Structure and Bonding in Solids  
d and f Metal Chemistry/Coordination Chemistry  
Organometallic Compounds  
Oxidation and Reduction Chemistry  
Reaction Mechanisms for Inorganic Transformations  
Catalysis  
Bioinorganic Chemistry

**Required Text:**

"Inorganic Chemistry," G. L. Miessler and P.J. Tarr *Fifth* Edition, Prentice Hall 2013,  
Print or e-text

**Other resources:**

Any General Chemistry text (may provide useful alternative presentations of material – not required, but this is often the most valuable supplement you can use). Most of the materials used in lectures, such as PowerPoints, etc., will be posted on the class Web site.

### Homework:

Homework **will** be graded and is worth 15% of your grade. Assignments will be posted on the course Web site. You are encouraged to work with others for homework and for studying in general, since cooperative work is an effective way to enhance understanding of difficult concepts and to solve problems. However, please note that if you do not fully understand the homework assignment solutions by working through them yourself you will have significant difficulty on exams. The teaching assistants are available to assist with homework problems and explanations of concepts, but please make strong effort individually to attempt problems before consulting the assistants.

### Evaluation:

Progress Test 1	February (date/time TBA), in classroom	25%
Progress Test 2	April (date/time TBA), in classroom	25%
Final Exam	Exam Group 30C, April 30, 12:30 – 2:30	35%

Progress Tests and the Final Exam will have a mix of question types and problems. (Note: a portion of the final exam will be on "new" material and remainder will be cumulative.)

UF grading policies are at: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

### Attendance and Make-up Exams:

I do not take attendance; however, the lectures will define the topics that you will be responsible for in this class. The text has far too much information in it and cannot be used exclusively to learn the material required to succeed in this class. Significant amounts of material outside of the text will appear in lectures and class resources. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Make-up exams will be offered for legitimate reasons on a case by case basis. Please contact me to arrange as soon as possible prior to scheduled exams.

### Classroom Etiquette:

Please do not disrupt the class, in particular by using cell phones (texting or otherwise) or talking to one another during the lecture. Please do not be late to the class. Asking questions during class is *always* encouraged!

### Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### Course Evaluations

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when

they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

**The UF Student Honor Code** (see <https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx> for details):

*We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.*