# CHM 3610
# Inorganic Chemistry
# Fall 2013, Section 0811
# Lecture MWF 3rd Period – Leigh Hall 207

*Instructor*
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**392-0545 (Program Asst)**
Office Hours: M,W 4th Period CLB 410, and by appointment

*Teaching Assistants*
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Wednesday, Thursday, and Friday period 2

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Monday, period 7; Tuesday period 3; Friday period 7

**Class Web site on Sakai: 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:

"Shriver and Atkins Inorganic Chemistry," ***Fifth*** Edition, W. H. Freeman 2010

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 Sakai. 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:**

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|---|---|---|---|
| Progress Test 1 | October 4, in classroom | | 25% |
| Progress Test 2 | November 15, in classroom | | 25% |
| Final Exam | Exam Group 12B, Dec 12, 10 AM –noon | LEI207 | 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.

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!

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

**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.*