## CHM 3610 Inorganic Chemistry Fall 2011, Section 0811 Lecture MWF 3rd Period – Leigh Hall 207

Instructor David E Richardson, CLB 410 der@chem.ufl.edu

**392-0545** Office Hours: M,W 4<sup>th</sup> Period CLB 410, and by appointment

*Teaching Assistant* Gianna Di Francesco, CLB 409 gndifran@ufl.edu Office Hours: T, Th 9:30 - 11:30 AM, and by appointment

Matias Pascualini, CLB 417 matiaspascualini@ufl.edu Office Hours: W, F 2- 4 PM, and by appointment

Class Web site on Sakai: http://lss.at.ufl.edu/

**Course Objectives and Goals:** This class will cover the fundamental concepts of inorganic chemistry at the undergraduate level. The goal is to prepare students for the study of the chemistry of inorganic compounds, particularly in areas covered by the topics listed below.

# **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 D. A Tarr, Fourth Edition, Prentice Hall 2011

#### **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)

Many of the materials used in lectures, such as visual aids, pictures, tables, 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 solving problems. However, please note that if you do not fully understand the homework assignment solutions 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	TBA (late September), in class	25%
Progress Test 2	TBA (mid November), in class	25%
Final Exam	Exam group 16B: 10 AM – noon, 12/16/2011	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.)

Grading will be in compliance with the UF grading policies. Please see the catalog web page: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

## **Classroom Etiquette and Attendance:**

Please do not disrupt the class, in particular by using cell phones or talking to one another during the lecture. Please do not be late to the class. Food and drink are prohibited. Asking questions during class is *always* encouraged!

It is expected that students will attend all lectures. Although attendance is not recorded, students are responsible for material presented in lecture.

#### Accommodations:

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 <u>https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx</u> 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.