Inorganic Chemistry is a vast and varied topic. Briefly, it encompasses the chemistry of all of the elements of the periodic table except carbon! That leaves a lot of areas to investigate. If you take a whole year of chemistry (aka “organic”) on just that one element, imagine how much you could learn about the rest of the elements! In a 3 hr, 1 semester course it will be impossible to study it all. Some of you have been lucky enough to have been exposed to some of this material in Descriptive Inorganic Chemistry (CHE250), but we’ll go deeper here.

PROMISES OF THIS COURSE:
Together we will read, build, play, and interact as we begin to scratch the surface of the broad field of inorganic chemistry. From the broad list of possible topics, we’ll investigate a few more in depth and just get exposed to others. If something interests us as a group along the way, we may get a bit diverted, but in the course catalog, this course is described as:

This course is a one semester survey of modern inorganic chemistry including structure of inorganic compounds, symmetry, coordination chemistry, non-aqueous solvents, and selected inorganic reactions.

WAYS TO FULFILL THESE PROMISES:
Some things will be useful to you on our journey. I’ll list several here.

- **Me, INSTRUCTOR** (Dr. Craig McLauchlan) (ccmlau@ilstu.edu)
  - E-mail is usually the best way to get me, but I can’t promise a reply in under 24 hours.
  - My office is SLB 206 and my lab is SLB 207. I am often there.
  - I’ll hold regular (open) office hours (M3-4, T11-12) … or make an appointment.

- **Course WEBSITE**
  - URL: http://www.ilstu.edu/~ccmlau/che350/index.html

- **TEXT** – Reading is important. I won’t “lecture” you, i.e. read the book at you. Please do the assigned reading outside of class so that we can have a better discussion in class.
  - Inorganic Chemistry, 5th Ed. by Atkins *et al.*
  - Other Materials: Current literature, books on reserve at Milner Library, and in-class handouts

- **CLICKER** – I am a big believer in the power of the clicker to allow us to engage more effectively in class. It offers some anonymity and a chance to think about material and get instant feedback. Oh, and it can be a lot of fun. We use the Turning Technologies XR (or RF is fine, too) student response device.

- **[MODEL KIT]** – These are not required. I have a few sets I’ll bring to class. I recommend these to my gen chem. classes as a long term investment and if you bought one when you had me, you can use it here, too!

WAYS TO UNDERSTAND THE NATURE AND PROGRESS OF STUDENT LEARNING:
Of course you’ll want opportunities for feedback to assess how you are progressing on our journey. To that end we have a number of chances to guage our progress.

- **PAPER:**
  The paper will be a short (5-6 pages) discussion of a particular compound. Shortly, you will receive a handout listing possible compounds to write about and more details about the paper. The paper will be due no later than Friday, May 4 in class and is worth 100 points; papers handed in earlier than that are welcome.
HOMEWORK, PROBLEM SETS, AND CLICKERS:
Homework problem sets for credit will be given in class periodically, and will be discussed the following lecture period. Students will be expected to come to class with the homework completed and be prepared to discuss the problems as a class. They should be turned in by the due date. Late problem sets cannot be accepted because I post the solutions promptly. These problem sets will be graded. You may work on these problem sets in study groups, but as a matter of academic honesty, I ask that you write the names of your study group members on your problem set. The problems are not supposed to be additional obstacles to be overcome after studying the chapters, but are rather an integral part of learning the material as you go. Working the problems as you study helps you understand the material; if you have trouble with them, that helps you identify the areas that need more work before you go on to the next topics. It is usually a mistake to try to master a whole chapter before attempting any of the problems. Studying and problem solving should go hand in hand! Clickers will be used in class to allow you to better integrate the concepts we are learning as we are learning them and to allow instant feedback on our progress. Participation is the key!

EXAMINATIONS:
In class, midterm exams will be given from 10 to 10:50 am on the following days (tentatively):
- Exam 1 Friday, February 17
- Exam 2 Wednesday, March 28
- Exam 3 Friday, April 27

The Final Exam date/time is not yet determined by the registrar. It could be as early as the morning of May 7 or as late as the evening of May 11… plan accordingly.
Watch iCampus ~1 month in to classes.

Programmable calculators may not be used during examinations. Makeup exams will not be given for missed hourly examinations except in serious and documented extenuating circumstances. If you miss one exam with a valid excuse, a grade will be assigned based on your other course work. You should talk to the instructor BEFORE missing you exam to verify your excuse. If you do not have a valid excuse, you will be assigned a zero for that exam.

GRADING SYSTEM:
Grades will be based on the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework &amp; clickers</td>
<td>50</td>
</tr>
<tr>
<td>Paper</td>
<td>100</td>
</tr>
<tr>
<td>Exam 1</td>
<td>100</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100</td>
</tr>
<tr>
<td>Exam 3</td>
<td>100</td>
</tr>
<tr>
<td>Final Exam</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>600</td>
</tr>
</tbody>
</table>

For planning purposes, assume A > 90%, B > 80%, C > 70%, D > 55%, F<55. Grades may be scaled upward a bit (i.e. in your favor) if necessary.

Any student needing to arrange a reasonable accommodation for a documented disability should contact Disability Concerns at 350 Fell Hall, 438-5853 (Voice), 438-8620(TTY).

DISCLAIMER: Any changes to this syllabus will be announced in class, therefore, it is the responsibility of the student to attend every lecture and be aware of any announcements.