Chemistry 3111- Inorganic Chemistry II

Text Book: Shriver & Atkins Inorganic Chemistry 5th ed. (4th ed. may be used, but order of topic/chapter numbers differ, as do problem numbers). Chapters covered and reading assignments are given in the Course Schedule.

Additional reading assignments will be made from other sources (see Course Schedule), which will be posted at intervals to T-Square.

Software: ChemDraw\textsuperscript{1}
PDF file generator compatible with your word processor

Grades: Reading assignment questions 5%
Problem sets 15%
Hour exams (3) 48%
Final exam 32%

Exam dates: Exam 1, Exam 2, Exam 3, Final exam,

\textsuperscript{1}To obtain the ChemDraw software:
1) Register with the site (button in top left)
2) Once registered, go back to the site license page (http://scistore.cambridgesoft.com/sitelist license.cfm?sid=100), enter your gatech.edu email address. Follow directions to download the software installer ("ChemBioOffice" for a PC; or "ChemBioDraw" for a Mac)
3) Install the software. You will be asked for a verification/activation code during the installation. This will have been emailed to you (your email program might have placed the message in your junk mail box - so check there as well!) Enter the info in the installation
Exam policies
Exams will normally be returned during the next scheduled class period; exams not picked up in class the day that they are returned can be picked up from my office during office hours. Exams will be photocopied prior to their return. Any request for a regrade must be made no later than seven days from the date that the exams are returned in class.

Make-up exams will only be given as required by the Institute's General Catalog, Rules and Regulations, Section 4B3, and then only when arrangements have been made prior to the exam that must be missed because of a scheduled Institute activity.

The final exam must be taken to earn a passing grade in the course. The final exam is scheduled for [insert date] Do not make travel, or any other, arrangements that preclude taking the final exam at this time. All students except those with a conflict as defined by the Registrar must take the final exam at this time.

Learning Disabilities
It is the responsibility of any student with a certified learning disability to request special accommodation if it is desired. Such requests must be made well in advance of the time that the accommodation is required and a letter of documentation from the ADAPTS office must be presented at the time of any request.

Academic Honesty
It is expected that all students are aware of their individual responsibilities under the Georgia Tech Academic Honor Code, which will be strictly adhered to in this class. All information required for exams will be supplied. Consultation with classmates or reference to texts or other documents during exams is strictly forbidden.

Class Attendance
Class attendance is not explicitly required or a specified portion of your grade, but absences will be noted and will take this into account in determining borderline grades at the end of the semester. Missing class does not excuse you from reading assignments or problem sets. Since late problem sets will not be accepted, if you must miss the class when an assignment is due, then it is your responsibility to turn the work in early in order to receive credit.

Getting Help
Please come see me – often, and earlier rather than later, if you are having difficulties. During office hours is best, but if you have a conflict and cannot make the scheduled times, arrange an appointment for another time.
Guidelines for Submitting Answers Reading Assignment Questions

There will be questions related to reading assignment for most class meetings. These will be posted to T-Square a couple of days in advance. Each assignment will have a few questions that you should be able to answer after you have done the assigned reading.

You will receive either 0 or 1 on each assignment; 0 if no assignment is received, a 1 when an assignment is received and a serious effort has been made. If I conclude that you have not made a serious effort on an assignment, I'll warn you (once) that you will receive no credit on future assignments that are unsatisfactory.

You must write your answers in complete sentences and make professional quality illustrations of structures, etc. when required to illustrate your answer.

Answers must be submitted to me as a pdf file attachment to a message to kent.barefield@chemistry.gatech.edu by 7:30 a.m. on the due date. To receive credit you must begin the name of each file submitted with the last three digits of your nine-digit Student ID number.

If the network is down or you're having other technical difficulties, you may print out (or write out, depending on the type of technical difficulty) your answers on paper and turn them in at the beginning of class.

Examples of good answers for each assignment will be posted to T-Square, generally later in the day that the assignment was due.
Guidelines for Problem Sets

Problem sets will consist of questions from the textbook and questions that I have written or taken from sources other than the textbook. The textbook questions should generally be done first to make sure that you understand the techniques and concepts. These exercises will generally be selected so that you can check your answers. The textbook questions will not be collected for grading but the other questions will be rigorously graded for accuracy, completeness and quality of the work (including grammar, formatting, etc.). Each problem will receive a score between 0 and 1. Solutions to the graded questions will be posted.

Rules: (if not followed problem sets will be returned ungraded)

You are encouraged to discuss problems with classmates, but you must turn in a paper that represents your own work.

Your writing must be clear and legible and if done in pen there should be no mark/scratch outs. I recommend that you not turn in your first attempt, but to consider rewriting every problem to ensure that all work is well-written using whole sentences.

Do not use paper torn from spiral notebooks.

Write on only one side of each page.

Staple all pages together in the upper left-hand corner before you come to class (a stapler will not be available in class).

Problem sets will be collected at the beginning of the class period the day that they are due.

LATE PROBLEM SETS WILL NOT BE ACCEPTED
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Assignment</th>
<th>PSet due</th>
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<tbody>
<tr>
<td>20-Aug</td>
<td>M</td>
<td>Introduction/Fundamentals Quiz</td>
<td>review 1.1-1.9, 2.1-2.6</td>
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<tr>
<td>22-Aug</td>
<td>W</td>
<td>Molecular orbitals</td>
<td>2.7-2.10</td>
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<tr>
<td>24-Aug</td>
<td>F</td>
<td>Molecular orbitals</td>
<td>2.11-2.15, Winter Chapter 6</td>
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<tr>
<td>27-Aug</td>
<td>M</td>
<td>Molecular orbitals</td>
<td>more on mo's in polyatomic species</td>
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<td>29-Aug</td>
<td>W</td>
<td>Molecular symmetry</td>
<td>6.1-6.4</td>
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<td>31-Aug</td>
<td>F</td>
<td>Molecular symmetry</td>
<td>6.5-6.7</td>
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<tr>
<td>3-Sep</td>
<td>M</td>
<td>Labor day</td>
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<tr>
<td>5-Sep</td>
<td>W</td>
<td>Molecular symmetry</td>
<td>review 6.1-6.7</td>
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<tr>
<td>7-Sep</td>
<td>F</td>
<td>Molecular symmetry</td>
<td>6.8</td>
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<tr>
<td>10-Sep</td>
<td>M</td>
<td>Organometallic chemistry of Group 13</td>
<td>13.1-13.2, 13.4-13-9, B lit 1-2</td>
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<td>14-Sep</td>
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<td>14.1-14.5, 14.7-14.8, Norman 4.3, Si lit 1-4</td>
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<td>M</td>
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<td>#4 (ng)</td>
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<td>M</td>
<td>d-Block (transition) metals</td>
<td>19.1-19.6</td>
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<td>W</td>
<td>d-Block (transition) metals</td>
<td>19.7-19.11</td>
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<td>F</td>
<td>Introduction to coordination compounds</td>
<td>7.1-7.6</td>
<td>#5 (ng)</td>
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<td>1-Oct</td>
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<td>7.7-7.11</td>
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<td>7.12-7.15</td>
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<td>F</td>
<td>Elect. structure and spect. of coord compds</td>
<td>20.1-20.3</td>
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<td>20.8-20.9, review chapt. 20</td>
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<td>27.5-27.8</td>
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*Last day to drop classes with W grade
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<th>Activity</th>
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<td>27.19-27.22</td>
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<td>review chapt. 27</td>
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<td>10-Dec</td>
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