CHM 157 Laboratory  
Fall 2007

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Required Items:
- Printed Experimental Data/Observation Sheets and Post Laboratory/Summary Sections  
The experiments used in CHM 157/147 labs are available to you in your Moodle account.
- Safety Goggles (not safety glasses). These are also available for purchase from the bookstore.

You will be responsible for printing your own data sheets weekly. You are responsible for supplying your own SAFETY GOGGLES. You will need to bring both the printed data sheets and safety goggles with you to every class.

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**Experiment Schedule**

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<tr>
<th>Date</th>
<th>Expt #</th>
<th>Experiment</th>
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<tr>
<td>9/11</td>
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<td>Laboratory Safety &amp; Check-In</td>
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<td>9/18</td>
<td>1</td>
<td>Chemical Reactivity Part I &amp; II</td>
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<td>9/25</td>
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<td>Part III</td>
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<td>10/2</td>
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<td>Copper Cycle</td>
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<td>10/16</td>
<td>3</td>
<td>Conductivity of Solutions</td>
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<td>10/23</td>
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<td>Acid-Base Titinations</td>
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<td>10/30</td>
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<td>How Much is Too Much? Part A &amp; B</td>
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<td>11/6</td>
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<td>11/13</td>
<td>6</td>
<td>Analysis of Copper in Brass</td>
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<td>11/20</td>
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<td>11/27</td>
<td>7/8</td>
<td>Molecular Structure /Synthesis of Aspirin</td>
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<tr>
<td>12/4</td>
<td>7/8</td>
<td>Molecular Structure /Synthesis of Aspirin/Check-out</td>
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*Last day for Official Withdrawal is November 6, 2007. If you drop this course, please come in and check out of the lab drawer. You will be charged a check-out fee ($10.00) and a key replacement fee ($15.00) if you don’t check out of your drawer. The last day to check-out of your drawer is Tuesday December 4, 2007.

* If the lab is split into 2 rooms, then students in 230 HHS will do Expt. 7 and the students in room 240 HHS will do Expt. 8 the first week. The following week the rooms will switch assignments.
Purpose: The laboratory combined with the lecture is designed to reiterate the chemistry concepts learned in the classroom through hands-on experience. The laboratory portion of this class will familiarize one with basic laboratory techniques. In many instances the experiments demonstrate how these basic chemistry concepts relate to everyday life.

Laboratory Expectations:

Before Lab:
1. Pre-lab assignment: This is due at the beginning of the lab period. The pre-lab is submitted with your lab report, so even if you have not covered the material in lecture, you are still responsible for making an attempt at ALL of the pre-lab problems before class. The questions are usually listed before the procedure section in the lab.
2. Procedure: The Procedure needs to be typed or written out. No photocopies or printouts will be accepted. This is also due at the beginning of the lab period.
   - You will not be allowed to work in the lab unless your Pre-lab and procedure are complete. If your Pre-lab assignment or procedure is not complete when you enter the lab, you will be asked to leave the lab to finish this assignment in the hallway. You are then only eligible for 50% of the pre-lab and/or procedure assignment points for that lab.
3. Chapter 9 “Laboratory Skills”: Read any sections that may pertain to the day’s experiment.
4. Data Sheets: Print a copy of the data sheets for the day’s experiment. (You will need these for class.) If you do not have the data sheets with you, you will be required to go print out these pages before you can begin the lab.

During Lab:
1. You are expected to be on time for lab. Students who are late to lab will not be given additional time to complete the lab.
2. You should conduct yourself in a manner that would provide a safe working environment in the lab for all students. Students acting in such a manner that would jeopardize the safety of any student will be asked to leave the lab and will receive a zero for the day’s work.
3. You should work efficiently with your lab partner. All labs are designed to be completed within the 3 hour lab period. No additional lab time will be given.
4. If you make a data entry/recording error, the following procedure for correcting that error is as follows.
   a. Any errors made in the lab should be crossed out with a single line and then the corrected data written next to the error where there is space. DO NOT SCRIBBLE OUT ERRORS!
      e.g. 0.0476 g 0.476 g
   b. Any data recording errors must be initialed by the instructor or TA before you leave the lab. Lab report data sheets submitted with errors not initialed by the instructor will lose data points.
5. At the end of the day, all data MUST be initialed by the instructor. Data sheets without initials will be given a zero.
6. Additional Lab notes:
   a. All data must be recorded in ink. No pencils or erasable ink pens allowed.
   b. Reminder: Decimal numbers should include a zero in front of the decimal.
   c. No shorts or open toe shoes.
   d. The use of cell phones in the lab is prohibited.

Lab Reports:
1. Lab reports are due at the beginning of your next lab period (Tuesday, 8:00 am)
   - Turn in completed lab report to your instructor and sign sheet verifying submission of lab report.
2. Lab reports should include the following.
   - Coversheet with your name and partner’s name, pre-lab questions, procedure, data and observations, any graphs or tables, and post-lab questions
3. Pages should be in numerical order or in the order of how it is listed on the coversheet.
4. The lab report must be stapled (five point deduction for turning in a report not stapled)
5. Your name should appear on all pages.
   - Due to the large number of lab reports that are turned in, occasionally pages come loose during the process of submission and grading.
Absence Policy
There is a NO MAKE-UP LAB POLICY. If you are absent or planning on missing any labs, please notify your lab instructor.

Laboratory Reports
Although you will be working with a partner, each student will submit their own lab report. The lab reports are due within 1 week from the completion of your lab. Late lab reports will follow the guidelines listed in the laboratory manual. (10% per day late) Whether your lab report is one minute, one hour, or one day late, it is still considered late and the above mentioned guidelines will apply.

Lab reports will not be returned to students after they are submitted and graded. Lab reports scores will be available to you on Moodle. Upon request, students will be allowed to review their graded lab report the week after they are submitted. If the graded lab report is not returned to the instructor, they will receive a zero score for that lab.

Academic Conduct:
Students are expected to uphold the academic standards set by Oakland University. The work submitted by any student should be their own work. Students suspected of academic misconduct (Examples of academic misconduct are the submission of labs containing data that has been falsified, copying any part of your lab from a previously graded lab report, copying from other students, plagiarism, changing answers on your lab report after the report has been graded, the use of materials not authorized by the instructor, obtaining copies of old lab reports or answer keys, or another student completing the lab for you), will be reported to the academic conduct committee. Students found guilty of academic misconduct for the laboratory will receive a zero grade for the lab. For further details see Academic Conduct Policies section (p. 93 – 94) in the 2007 – 2008 Undergraduate Catalog.

Today:
1. Attendance/Lab waiver
2. Video
3. Safety Lecture
4. Check-in
   a. Make sure everything listed on check-in sheet is in your drawer.
   b. Lock your drawer
   c. Sign Check-in sheet
   d. Write your name on drawer label
   e. Take your drawer key with you.
5. Before you leave, you need to turn in:
   a. Drawer Check-in sheet
   b. Safety lecture sheet

For Next Time:
1. Graphing Exercise
2. Prelab Experiment 1 part I & II
3. Written or typed Experimental Procedure
4. Printed Data sheets for experiment
5. Read pages
   a. 3-5 Important Information
   b. Experiment 1
   c. Chapter 9 “Laboratory Skills”