CHM 157 Laboratory  
Fall 2006

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Course: CHM 157/147 lab  
CRN: 41580/42082  
Room: 230/240 HHS  
Day: Tuesday  
Time: 8:00 – 11:00 a.m.

Required Items:  
* General Chemistry Laboratory I, 2006-2007 Edition  
* Safety Goggles

The laboratory manual is a part of the textbook packet available in local bookstores. Separate copies are also available in the on-campus bookstore for those who already have a copy of the textbook. You are responsible for supplying your own SAFETY GOGGLES (not safety glasses). These are also available for purchase from the bookstore. You will need to bring both the laboratory manual and safety goggles with you to class.

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**Experiment Schedule**

<table>
<thead>
<tr>
<th>Week of</th>
<th>Expt #</th>
<th>Experiment</th>
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<tbody>
<tr>
<td></td>
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<td><strong>Laboratory Safety &amp; Check-In</strong></td>
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<tr>
<td>9/5</td>
<td>9/12</td>
<td>1 Chemical Reactivity Part I &amp; II</td>
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<td>9/19</td>
<td>2 Copper Cycle</td>
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<td></td>
<td>9/26</td>
<td>3 Conductivity of Solutions</td>
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<td>10/3</td>
<td>4 Acid-Base Titrations</td>
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<td></td>
<td>10/10</td>
<td>5 How Much is Too Much? Part A &amp; B</td>
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<td></td>
<td>10/17</td>
<td>6 Analysis of Copper in Brass</td>
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<td>10/24</td>
<td>7/8 Molecular Structure /Synthesis of Aspirin</td>
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<td></td>
<td>10/31</td>
<td>* 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.</td>
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<tr>
<td></td>
<td>11/7</td>
<td>7/8 Molecular Structure /Synthesis of Aspirin</td>
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<tr>
<td></td>
<td>11/14</td>
<td>12/5 Checkout</td>
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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.
**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.
2. The Procedure needs to be typed or written out. *No photocopies will be accepted.* This is also due at the beginning of the lab period.

**During Lab:**
1. **All data must be recorded in ink.** No pencils or erasable ink pens allowed.
2. Any errors made in the lab should be crossed out with a single line and then the corrected data written next to the error. **DO NOT SCRIBBLE OUT ERRORS!**
   
   e.g. $0.0476 \text{ g}$ $0.476 \text{ g}$
3. Any data recording errors must be initialed by the instructor before you leave the lab. Lab report data sheets submitted with errors not initialed by the instructor will *lose data points.*
4. At the end of the day, **all data MUST be initialed** by the instructor. Data sheets without initials will be given a zero.
5. Reminder: Decimal numbers should include a zero in front of the decimal.

**Lab Reports:**
1. Lab reports are due within 48 hours from the end of your lab period (*Thursday, 11:00 am*)
   
   **Turn in completed lab report to room Hannah Hall Stock Room, 243 HHS. If no one is there, slide your report under the door.**
2. Lab reports should include the following
   - Cover sheet with your name and partner’s name, pre-lab questions, data and observations, any graphs or tables, and post-lab questions
3. Pages should be in numerical order.
4. The lab report should be stapled.
5. Your name on all pages.

Due to the large number of lab reports that are turned in, occasionally pages come loose and are lost during the process of grading. Unfortunately, you may unnecessarily lose points. For us to verify your completed work, **you are encouraged to make a photocopy of your lab report before turning it in.** Without a photocopy we cannot award these missed points.

**Absence Policy**
The general policy for the lab is that each person can miss without penalty one lab session. However, you must get the lab data from your lab partner, and the lab report must be turned in on time to receive full credit. If you miss more than one lab period, the above rule follow, but you will only receive 50% of the total point earned.

**Pre-Laboratory and Laboratory Reports**
Each student will need to complete the corresponding Pre-lab assignment and write out (or type) the procedure before entering the lab. You will not be allowed to work in the lab until these are complete. **If your pre-lab is not done, you will be asked to leave the lab and finish the pre-lab. You are then only eligible for 50% of the total pre-lab points.**

Although you will be working with a partner, each student will submit their own lab report. The lab reports are due within 48 hours from the completion of your lab. **Late lab reports will follow the guidelines listed in the laboratory manual.**
Today:
1. Video
2. Safety Lecture
3. 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.
4. 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
   *Your prelab must be complete when you come to class. If your prelab is not done, you will be asked to leave the lab and finish the prelab. You are then only eligible for 50% of the total prelab points.*
3. Written Experimental Procedure
   This must be written or typed out. PHOTOCOPIES OF THE MANUAL WILL NOT BE ACCEPTED!
4. Read pages
   a. 3-5 Important Information
   b. Experiment 1
   c. Chapter 9 “Laboratory Skills”