### CHEM 101L Schedule – Spring 2013

**Week Of** | **EXPERIMENT** | **ASSIGNMENTS**
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1/14 | Orientation/Check-In Lab Safety Training* | Software Installation Lab Safety Quiz (60 pts)
1/21 | No Lab | 
1/28 | Exp 1 – Software Tutorial | Exp 1 Template Due at the END of the lab period
2/4 | Exp 2 – Scientific Measurements | 
2/11 | Exp 3 – Density | Exp 2 Template
2/18 | Exp 4 – Aqueous Reactions | Exp 3 Template
2/25 | Exp 5 – Conductometric Titration | Exp 4 Template
3/4 | Exp 6 – Thermochemistry | Exp 5 Template
3/11 | Spring Break – No Lab | 
3/18 | Exp 7 – Beer's Law | Exp 6 Template
3/25 | Exp 8 – Spectroscopy | Exp 7 Template
4/1 | LAB CHECKOUT / FINAL REVIEW | Exp 8 Template
4/8 | FINAL EXAM* | 

*NOTE: Attendance during your scheduled lab period is MANDATORY for Lab Check-In and Lab Safety Training. You will be dropped from the lab if you do not attend these sessions.

### Description of Laboratory Assignments

**Lab Safety Quiz (60 pts)**
- Quiz that reviews safety material presented during the lab safety training session.

**Laboratory Notebook (8 Mini-Reports due by beginning of the next lab period; 80 pts each)**

**Pre-Lab Notebook Setup**
- Record the date, experiment number, experiment title and page numbers in the Table of Contents on the front cover of the notebook.
- **TITLE:** Each new experiment should start on a new page with the title of the experiment, citation of the source of the experiment, and your lab partner’s name (1 pt)
- **INTRODUCTION:** A brief (2-3 sentences) summary of the goals of the experiment as well as how they will be achieved. This section must also include a sketch of the experimental setup and balanced chemical equations for all reactions performed in the experiment. (8 pts)
- **PROCEDURE:** Procedure flowchart that summarizes the experimental method you will perform in lab. It is NOT necessary to summarize the computer setup. (8 pts)
- **DATA:** Prepare labeled data tables based on the experimental procedure. (3 pts)

**Notebook Usage During Lab**
- Fill in data tables and record any other important observations.
- Both you and your TA should sign and date the bottom of each page in your notebook at the end of the experiment. Any blank space on a page should be marked out with an X.
- Turn in the carbon copy of your notebook pages to your TA at the end of the lab period.

**Post-Lab Notebook**
- **CALCULATIONS:** Complete all calculations described in the data analysis portion of the experiment in the lab manual

**Online Template**
- **CONCLUSION:** A brief summary (3-4 sentences) of the most important findings and conclusions.
- **Figures:** Any required figures as dictated by the online template file.
- **Tables:** Any required tables as dictated by the online template file.
- **Additional Writing:** The online template may require writing in addition to items listed above.
Lab Performance (80 points, 10 pts per experiment)
- The teaching assistant will assign a grade to each student based on his/her perception of the student's performance in the lab. This will include use of the laboratory notebook, attitude, independence, technique, and lab safety.

Lab Final (200 pts)
- A comprehensive examination will be given on the last day of lab. The exam is worth 200 points. Questions are multiple choice, matching and fill in the blank. The exam is designed to include information from learning devices, experimental procedures, calculations, and data analysis.

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<tr>
<td>POSSIBLE POINTS</td>
<td>60</td>
<td>640</td>
<td>80</td>
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<td>980</td>
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