

## Chem 9: General Chemistry I Laboratory

### Course Assignments:

<b>Pre</b> <i>Pre-lab assignment</i>	<b>You must be in lab on time in order to complete these assignments.</b> Pre-lab assignments will be administered at the beginning of the lab period to assess student preparation for lab. This may take the form of a brief quiz to assess your understanding of the required reading materials for the lab (handouts, sections in the lecture text, and any other recommended materials). These reading materials cover the concepts and calculations needed to perform and understand the experiment and are to be <i>read and understood prior to coming to the laboratory</i> .
<b>NB</b> <i>Notebook Pages</i>	<b>You must turn in the copies of your notebook pages at the end of the lab period unless otherwise directed by your instructor.</b> Notebook pages should be clear, thorough, and organized. Your instructor will provide information on the general format of the lab notebook. <i>All</i> data, observations and calculations for experiments will be written directly into the laboratory notebook using non-erasable ballpoint ink. At the end of the lab period, students will turn in the duplicated copies of the notebook pages. The white pages that contain the original data entries will remain in the notebook to be used at the end of the semester to take the lab notebook exam.
<b>Post</b> <i>Post-lab quiz</i>	Two post-lab quizzes will be used to assess the thoroughness of your notebook pages for the following two-week experiments, given the week after completion of the experiment:  <b>Experiment</b> Water Analysis Parts A-D Spectroscopic Analysis Parts I, II  You will only be permitted to use your lab notebook during these quizzes. In addition to the post-lab quiz, your instructor may grade portions of the notebook pages for these experiments to verify that all pertinent observations, data, results, and conclusions were included. You <u>must</u> complete the two-week experiments in order to take the post-lab quizzes.
<b>WS</b> <i>Worksheets</i>	For two experiments ( <i>Introduction to Spectroscopy</i> and <i>Lewis Structures and VSEPR Theory</i> ), the handout consists of worksheets that will be completed during the lab period. These worksheets will be submitted in place of notebook pages and a short lab quiz may be given at the end of lab based on the worksheet material.
<b>SS</b> <i>Spreadsheet</i>	The data from the Spectroscopic Analysis experiment will be entered into a spreadsheet and evaluated using linear regression. A copy of the spreadsheet will be submitted at the conclusion of this lab.
<b>GR</b> <i>Graph</i>	The graph of the data from the Spectroscopic Analysis experiment, including the line of best fit and any unknown data points, will also be submitted with the spreadsheet for the experiment. Students should refer to the guidelines in the handout for Expt. 7.
<b>Exam</b> <i>Final Lab Notebook Exam</i>	This exam is cumulative and will assess the thoroughness and organization of your notebook, and how well you understand what you recorded. This exam will be given on the final day of lab. Only lab notebooks and worksheets will be used during the exam (lab handouts or other resources will not be allowed).

### Course Rules and Regulations:

<b>Attendance</b>	Students are required to attend all laboratory sessions for their specified section. If students miss a lab, it must be for a valid reason (i.e. intercollegiate athletic competitions, medical emergencies, etc.) and the instructor must be notified <b>ahead of time</b> so that alternate arrangements can be made.
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<b><i>Safety</i></b>	Students must follow the safety rules and will sign a safety contract in order to work in the lab. Protective eyewear (which will be provided), appropriate leg coverings (long pants or skirts – no shorts above the knee), and appropriate footwear (closed-top shoes or boots) are mandatory <i>at all times</i> . No food or beverages (including water) will be permitted in the laboratory at any time. Depending on the offense, failure to follow the safety policies of the department and laboratory instructor will lead to deduction of points from your lab grade, and may also lead to expulsion from the laboratory.
<b><i>Cleanliness</i></b>	Students are responsible for maintaining a clean and safe lab environment. Balances must be kept clean at all times, so spills must be cleaned up immediately. Lab benches and hoods must be cleaned before the end of each lab session. Shared glassware and equipment must be cleaned and properly stored before the end of each lab session. Failure to keep the lab space clean will result in deduction of points from your lab grade, at the discretion of the instructor.
<b><i>Academic Honesty</i></b>	It is particularly important when recording data and reporting results that scientists accurately and unambiguously indicate the sources of their data, experimental procedures, and literature values. Therefore, students should carefully reference these sources, which may take the form of lab handouts, the lecture textbook, SMC faculty members, or other students. Students are expected to work <i>independently</i> on all graded assignments, even when the experimental work pertaining to these assignments was performed by groups of students working together. All instances of plagiarism or academic misconduct will be prosecuted according to the SMC Academic Honor Code.
<b><i>Late Work</i></b>	The penalty for late work is 25% per day, and work more than two days late will not be accepted. (Weekends count as 2 days.)
<b><i>Withdrawal</i></b>	The lab course <i>must</i> be taken concurrently with the lecture course. If a student withdraws from Chem 8, he/she must also separately withdraw from Chem 9.
<b><i>Blackboard</i></b>	A Blackboard site has been set up for all sections of Chem 9. On this site, you can access instructor and general course information, and extra copies of all handouts.