TA: Sarah Muliadi Email: smuliadi@chem.ucsb.edu Office Hours: Tuesday noon-1 PM

Lab Sections: Mon 5 - 8:50 PM / Wed 5 - 8:50 PM (both in PSBN 2638)

Class website: http://chemlabwithsarah.tumblr.com/ (for handouts, quiz keys, and TA announcements)

Chem. 1CL Website: https://gauchospace.ucsb.edu/ (for grades and announcements from Dr. van Koppen)

<u>Required Materials</u>: General Chemistry Laboratory Manual; Laboratory Notebook – duplicate pages, quad-ruled; Calculator; Safety goggles or safety glasses; and your lab coat

<u>Appropriate clothing</u>: It is absolutely mandatory that you dress appropriately for lab. Safety glasses and a lab coat must be worn by all students in the laboratory at all times. Long hair must be pulled back. Lab Coats, Long Pants and Closed Shoes are required (no sandals allowed). If you do not wear your safety glasses and a lab coat, you will be asked to leave the lab and you will receive a zero for that lab.

NO EATING OR DRINKING IN THE LAB!

Please put your name in your lab manual, your lab notebook and on your calculator.

ATTENDANCE/ ABSENCE: It is imperative that you attend every lab. No make-up labs will be given and failure to show up will result in a zero for that week's lab. Excusable absences (emergencies only) will have to be discussed with the TA at least one day before the scheduled lab. In cases where your attendance is <u>required</u> at a University-sponsored event (field trips, sports, etc.), you must arrange to attend another TA's section during a given week: **Prior arrangements must be made**, and a letter from your professor or coach must verify your required absence on the day of the scheduled lab section. The TA must sign your lab notebook at the end of the lab make-up. The TA will grade your make-up quiz, indicate the class average on the quiz, and give it to your lab TA. Two missed labs will require you to drop the course except under EXTREME circumstances. (See Class Policies; page vi – vii of the lab manual). **NO SWITCHING LAB SECTIONS!**

Week	Date	Chem. 1CL Lab Assignment
1	June 25 – 29	Check-In / Syllabus / Safety Answer Pre-Lab Questions Exp. 15
2	July 2 – 6 Holiday Wed. July 4	No Labs this week
3	July 9 – 13	Exp. 15 Oxidation of Alcohol
4	July 16 – 20	Exp. 16 Synthesis of Alum
5	July 23 – 27	Exp. 17 Colligative Properties: Freezing Point Depression
6	July 30 – Aug. 3	Exp. 18 Synthesis of Transition Metal Complexes
7	Aug. 6 – 10	Exp. 18 Analysis of Transition Metal Complexes
8	Aug. 13 – 17	Exp. 19 Synthesis of Aspirin and Oil of Wintergreen
9	Aug. 20 – 24	Exp. 19 Analysis of Aspirin/Check-out
10	Aug. 27 – 31	Lab Final Review / Quiz Lab Final Thursday Aug. 30, 7:30-9:30 PM, Chem. 1179

Grading:			
Lab Reports	50%		
Quizzes	20%		
Lab Technique	10%		
Lab Final	20 %		
Total	100%		

LAB FINAL Thursday

August 30 7:30 – 9:30 PM Chem. 1179

Taking the Lab Final is required to complete the course. If you do not take the lab final, you will fail the course. The lab final is worth 20% of your grade. If you fail the lab final your grade in lab will drop an entire grade.

LABORATORY REPORTS: There are five Lab Reports. Each Lab Report is worth 20 points

Grading Rubric: Use the grading rubric as a guide to write your lab report. Staple the grading rubric to the front of your lab report.

Pre-Lab will be checked at the beginning of each lab session.

- 1. Title, Date, and Name (your name, the name of your partner, the name of your TA)
- 2. Introduction: State the problem or question and method used to answer the question in your own words. The introduction should be very brief only a couple sentences.
- 3. Draw the set-up used in the experiment. Label the type of glassware (including the volume). Identify contents of the solution in the flask and in the burette (include the chemical formula, volume and concentrations for solutions). Include the balanced equation for the net ionic reaction that takes place.
- 4. Answer Pre-Lab questions (get help during TA office if needed)

Observations: Keep a record of the experiment as it progresses. Did it change color? Did it get hot, or cold? Try to understand what is happening. Include balanced equations for chemical reactions.

Results: Include any data, calculations, graphs, etc.

Discussion: Use the grading rubric provided for each experiment to write your discussion (must be typed). You can hand-write the equations and reactions in a typed discussion. A discussion should NOT include: The size of your beaker; How difficult the procedure was; The purpose of the experiment; References to test tube numbers; etc.

HELP: If you need help writing your discussion, you can see any TA during office hours.

Review Questions All questions should be answered completely and correctly in your lab notebook.

Report Quality: Lab reports must be legible. **Original data must be included with the lab report. Original Data:** Original data written in your quad-ruled duplicate-page lab notebook including tables of data, observations, etc. must be stapled to your lab report.

Quizzes: Quizzes will be given at the beginning of each lab. Be prepared for a quiz every lab period. The quizzes will cover the current experiment (pre-lab information) as well as previous experiments (fundamental ideas and techniques, and review questions). No make-up quizzes will be given. If you are late to lab you must finish the quiz in the amount of time set out for the other students. It is in your best interest to be on time.

Academic Dishonesty: Lab experience encourages students to work together, but all lab reports must show individual work and thought. Plagiarism will result in a zero for that assignment. Evidence supporting any act of cheating will result in a zero. A second incident of dishonesty will result in the student being taken to the student conduct committee on campus and to the Dean of Students.

Technique: Points given by the TA at the end of the quarter.

Points will be determined by lab safety, lab clean-up during and at the end of class (this includes putting away your drawer and locking the cabinet), experimental performance, and participation in lab discussion. Before leaving, I will inspect your station for proper clean-up.

Check-out on the last day of lab is very important! To check-out you must clean all the glassware, replace missing or broken glassware from the stockroom; discard trash or broken glassware in appropriate waste containers. Organize all glassware and equipment on the counter for the TA to check. Organize the glassware and equipment in a clean bin and return it to your locker. Failure to check-out on the last day of class will result in zero points for your technique grade.

Laboratory Coordinator: Petra van Koppen, PSBN 3670 B. Email: vankoppen@chem.ucsb.edu

Office hours: Monday 3:30-5 PM or by appointment