# LABORATORY INSTRUCTOR

Name: Office Hours: Phone: (562) 860-2451 ext.

Office: Email address: Web Address: http://

Tutoring: Chem 95A # 26870 Time: M 11:00-1:00 p.m. T & Th: 4:30-5:30 p.m. Room: S-227

### **TEXTS & MATERIALS**

## Available at the bookstore:

- Chemistry 100 Laboratory Manual\*, Third Edition, Romer. These copyrighted materials are illegal to photocopy.
- Goggles: ANSI Z87.1-1989 and which have splash protection.
- Plastic Lab Apron
- Simple Calculator (You may not use graphing calculator for lab quizzes or lecture exams)
- Safety in the Chemistry Laboratory and Practice for the Safety Quiz. http://www.cerritos.edu/chemistry/.

#### **EXPERIMENTS**

You will be doing the experiments in the order in which they are listed in the laboratory schedule, which you will find on the back of this paper. You are responsible for reading the assigned experiment **before** coming to lab. (The lab quiz may contain one or two questions about this experiment.)

**Safety:** All safety procedures specified in <u>Safety in the Chemistry Laboratory</u> must be followed at all times in the laboratory. Failure to work safely in accordance with those as well as any other safety procedures presented to you in the safety film, in written experiment instructions, or verbal instructions from your lab instructor, can result in your being removed from the lab. Failure to wear safety goggles can result in your being removed from the lab.

**Lab Make-Up:** If you miss an experiment you may not make it up but you should take the quiz on that experiment. (Prepare for the quiz by reading the experiment.) If you miss more than two experiments, your Chem 100 grade will be no higher than D.

### **GRADING STRUCTURE**

**Summary Sheets:** (10 points each): Experiment Summary Sheets are found at the back of each experiment. Be sure to have your experiment Summary Sheet initialed by your lab instructor before you leave the lab. You *do not* have to fill out the Summary Sheet in order to get the instructor's initials. Your lab instructor will not sign a Summary Sheet that has been torn out of the manual, nor one that has been photocopied. Your lab instructor will answer any questions that you have about your completed Summary Sheet before you turn it in at the *beginning* of class on its due date. Late Summary Sheets will be discounted one (1) point per lab period. Summary Sheets turned in more than 2 weeks late will receive no credit. You will receive no credit for your work if there are no instructor initials. At the end of the semester your lowest Summary Sheet score will be dropped. Remember: if you fail to receive a score (credit) for more than 2 Summary Sheets, your grade in Chemistry 100 can be no higher than a D.

**Quizzes:** (20 points each): One quiz will be given for each experiment. The quiz will be given on the same day that the Summary Sheet for that experiment is due. There will be NO MAKE-UP QUIZZES given. You may, however, take a quiz ahead of time at a place and time arranged by your lab instructor. At the end of the semester your lowest quiz score will be dropped.

**Safety Quiz:** (20 points) A Safety Quiz will be given on the date indicated in the laboratory schedule. You will prepare for this quiz by reading <u>Safety in the Chemistry Laboratory</u> found on the chemistry main page <a href="http://www.cerritos.edu/chemistry/">http://www.cerritos.edu/chemistry/</a>. You **must** get 90% or more on the quiz. If you do not receive a satisfactory score, you will be allowed to retake the quiz <u>once</u>, at a place and time arranged by your lab instructor. If you do not get a satisfactory score when you retake the quiz you will receive an F grade for the laboratory portion of the course. (If you choose not to drop the class but to remain, knowing that the lab grade and therefore the course grade will be an F, you will NOT be allowed to do any experiments.) The points you receive for the safety quiz will be the score you got on your first attempt. The safety quiz score will not be dropped, even if it is the lowest quiz score of the semester

**Lab Grade:** Your lab grade will be computed by taking the sum of the points you earned, dividing by the total points possible, and multiplying by 100 to give a percent grade. Your lab grade will account for 25% of your overall grade in the course. Do not underestimate the importance of your lab grade. If your lab grade is not 50% or higher, you will not pass the course, even if you have an A in lecture.

### **LEARNING OUTCOMES:**

- Analyze the fundamental features of inorganic chemistry as it applies to organic and biochemistry including measurement, mathematical interconversion of physical properties such as mass, volume, density, temperature, solutions, concentrations.
- Demonstrate knowledge features of inorganic chemistry as it applies to organic and biochemistry including physical and chemical properties, naming and writing chemical formulas of commonly occurring inorganic compounds and evaluating chemical reactions.
- Differentiate typical acid and base formulas, compare/contrast the behavior associated with acids, bases and buffers.
- Construct and name structures containing common mono-functional organic molecules and differentiate functional groups when they appear in an organic structure, relate the physical and chemical properties of compounds containing to the functional groups.
- Distinguish various roles of four major classes of biomolecules in living cells, distinguish and construct key structural features and common reactions of these classes of biomolecules.