

## Course Syllabus

*This syllabus is designed to be used as a reference throughout the semester. Please keep it with your course materials and consult it when you have questions about administrative matters. \*\*The instructor reserves the right to make changes in the syllabus when necessary to meet learning objectives, to compensate for missed classes, or for similar reasons.\*\**

By remaining enrolled in this class, you agree to the policies and procedures outlined in this syllabus.

### Class Meetings

Chem 103	Section 01	Thursday 1:00-3:55pm
	Section 02	Friday 9:00-11:55am
	Section 03	Wednesday 1:00-3:55pm
	Section 75	Tuesday 7:00pm-10:00pm

### Staff

Instructor: Dr. Lenore Hoyt, 220 Chemistry Building, lenore.hoyt@louisville.edu, 852-2997. Office hours: drop in or make an appointment (preferably by email).

TAs: Cesar Masitas and James Leshner.

Office hours and email address for your TA: \_\_\_\_\_

### Text

*Chemistry for the Curious*, by Mona F. Zady. This laboratory manual can be obtained from the campus bookstore or Gray's bookstore. You must bring your laboratory manual or a copy of the current week's experiment with you to every meeting of the lab. It is also recommended that you bring your Chem 101 text, although this is not required.

**Laboratory Safety Goggles are required** for the lab; you may purchase these from the Chemistry Stockroom or from the University Bookstore. Goggles must have splash protection, so most goggles purchased from hardware stores do not meet safety regulations and will not be permitted. Goggles are also on sale throughout the first week of classes in the chemistry department; information is posted on the doors of most lab rooms in the building.

You will also need a calculator with exponential and logarithmic functions. Any calculator labeled "scientific" will have the capability you need.

### Introduction

Chemistry 103 is an introductory chemistry laboratory course that will allow you to experience hands-on exploration of chemical phenomena.

This laboratory course meets once a week for a three-hour period. See the schedule for the order in which the experiments will be performed. You must attend the lab section in which you are enrolled. You may not attend a different lab section for any reason without the permission of Dr. Hoyt.

**You must be familiar with, and comply with, all safety procedures and policies in the lab.** Your continued enrollment in this course constitutes an agreement to comply with safety procedures and the instructions of your TA. A safety violation on your part (including, but not limited to, failure to wear goggles, food/drink/candy/gum in the lab, inappropriate laboratory attire, tardiness that makes you miss the introduction to the experiment, etc) may result in dismissal from the laboratory and a failing grade for that experiment. A safety quiz will be given following the viewing of the safety video.

### Prelab assignments

You are required to read through the experiment for each week before coming to lab. This is a safety requirement. You are responsible for completing a brief prelaboratory assignment prior to your lab period. Each pre-lab report must contain the following information:

- Your name and the number of the experiment
- Objective of the experiment
- Equipment needed for the experiment
- Chemicals and solutions to be used
- Hazards and safety precautions associated with each chemical solution

The prelab is due before you begin the experiment; if you fail to turn it in before the experiment begins, you are ineligible to earn those points. The prelab assignment must be completed, with or without credit, before you begin the experiment.

### Safety and rules

Policies regarding safety in the laboratory are outlined on page i of your lab manual, discussed in the Safety Video, and covered on the safety quiz. Adherence to these rules is a **non-negotiable** requirement for being allowed in the lab. Students who refuse to comply with a safety rule will be dismissed from the laboratory and assigned a grade of 0 for the experiment. Repeated violations will result in being banned from the lab.

After lab check-in during the first week, you are responsible for all equipment assigned to you. Keep track of your equipment and lock it up at the end of lab each week. Any missing or broken equipment must be replaced before a grade (other than F) will be assigned.

Cell phones, pagers and other communications devices must be silenced and put out of sight during lab. **Eating, drinking, smoking, and chewing gum are never permitted in the laboratory room** (even before and after the experiment.) iPods and other devices with earphones are not permitted. In other questions, not covered by the safety rules or this syllabus, the TA has the authority to make a decision.

The laboratory session will begin promptly on schedule. There may not be time to finish the experiment if you are late, and you will miss important safety information. **You must be on time to lab.** If you are excessively or repeatedly late you will not be permitted to perform the experiment or earn credit for it.

You must submit your own work for credit. You are encouraged to collaborate with other students and will occasionally work in small groups; however, your lab report must be your own interpretation of the experiment. You will be graded on the work you turn in. If a single lab report carries more than one name, the points for the experiment will be divided among the authors.

### Grading

Credit for the course will be earned as follows for each laboratory experiment:

Accuracy of experimental results (report sheet)	50 points
Laboratory safety, participation, clean-up	25 points
Prelab report	25 points

The lowest lab score will be dropped from the total. There are no lab makeups; in most cases a missed lab, even for an excused absence, will be counted as your drop. In some cases, as space and time allows, you may be able to schedule to perform an experiment in a different lab section; permission must be obtained in advance from Dr. Hoyt and is not necessarily granted.

In addition there will be a mid-term and a final exam, each earning 50 points. The exams will be made up of questions related to the laboratory experiments. Each student enrolled in lab must take both exams.

Grades will be assigned as follows. There are a total of 10 experiments, of which 9 will count toward your final grade; with the two exams there are 1000 points available for the semester.

967-1000 A+	867-899 B+	767-799 C+	600-699 D	less than 600 F
934-966 A	834-867 B	734-766 C		
900-933 A-	800-833 B-	700-733 C-		

### Blackboard Website

We are in the process of updating and replacing some of the lab experiments this semester. Many experiments will include additions to the procedures published in the lab manual, and some experiments do not appear in the manual at all. Information, handouts, and procedures, when applicable, will be posted weekly to the Chem 103-01 Blackboard Website. Regular internet access is required for this course. If you do not have internet access at home we will be happy to help you find computer labs on campus where you can access course materials.

You **must** check the Blackboard website before each lab to be aware of changes, additions or replacements of experiments. Changes will usually be posted at least a week in advance.

### Preliminary Laboratory Schedule—version 1/9; updated schedule to follow.

<u>Week of</u>	<u>Exp #</u>	<u>Experiment</u>
1/9		Check-in and safety video
1/16	1	Matter and its Chemical and Physical Properties
1/23	Handout	Density, an Intensive Property (print from Blackboard)
1/30	TBA	
2/6	TBA	
2/13	TBA	
2/20	3 + handout	Paper Chromatography
2/27		<b>Lab Midterm Exam</b> on first five experiments
3/6	5 + handout	Playing with light: The Firefly Reaction (see Blackboard for handout)
3/13		Spring Break—no labs
3/20	12	Acids and Bases in the Home
3/27	TBA	
4/3	TBA	
4/10		<b>Lab Final Exam</b> on last five experiments
4/17		Check-out and review grades

You must check out of lab to receive a grade other than F for the semester.

### Missed work:

**Excused absences from experiments** should be reported to your TA (in advance, if possible.) Normally your first absence for any reason, excused or unexcused, will count as your drop. Proof of excused absence (doctor's note, letter from athletic department, etc.) is required before accommodations can be made. In some cases you may be able to make up an experiment in another section the same week; speak with your TA as soon as possible to arrange this. It may not always be possible. Experiments cannot be made up at times other than the same week, as the equipment will be unavailable. Your TA may refer you to speak with Dr. Hoyt for any reason.

Excused absences from the lab midterm and final should be negotiated directly with Dr. Hoyt.

## Time management worksheet

1. Lecture hours/week (all classes): \_\_\_\_\_
  2. Multiply that number by 2 to calculate out-of-class study hours/week: \_\_\_\_\_
  3. Laboratory hours/week (all classes): \_\_\_\_\_
  4. Add at least 1 hour per laboratory course for laboratory preparation: \_\_\_\_\_
  5. Hours spent at work each week: \_\_\_\_\_
  6. Hours spent commuting each week (include work and school commutes): \_\_\_\_\_
  7. Hours spent with family and in religious/spiritual activities: \_\_\_\_\_
  8. Hours spent at practice for athletic team: \_\_\_\_\_
  9. Hours spent at meetings, clubs, social or service organizations, etc.: \_\_\_\_\_
  10. Hours spent eating: \_\_\_\_\_
  11. Hours spent doing housework, laundry, car and home maintenance, yard work, etc: \_\_\_\_\_
  12. Hours spent watching TV, reading for pleasure, exercising, or other leisure activities: \_\_\_\_\_
  13. Hours spent sleeping: \_\_\_\_\_
  14. Hours spent doing other duties or activities (list): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Total—add all lines: \_\_\_\_\_

There are 168 hours in a week. How does your total add up? Chem 101 alone is going to require at least 3 hours/week in lab, 1-2 hours/week in study time—a total of at least 4-5 hours/week you should expect to spend on this course alone. Some weeks will be heavier than others.

The most common reason for poor academic performance is unbalanced time between work and school. If you work full time (35+ hours/week), don't take more than 6-8 credits. If you plan to go to school full time (12+ credits), don't work more than 20 hours/week.