General Chemistry Laboratory II

CHEM 162L

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Bilger 213

<u>All online Format</u>

How to communicate with us: Email is best, mine is above and your TAs can be found on the UH chemistry department webpage (<u>http://manoa.hawaii.edu/chem/position/teaching-assistant/</u>), also on laulima.

The General Chemistry II lab is designed to continue to introduce you to basic concepts of quantitative and qualitative measurement, with a heavier emphasis on quantitative measurement than in CHEM 161L.

The laboratory manual is through the UH Manoa bookstore, contact them for details.

Laboratory schedule: the Schedule for laboratories is posted at the bottom of this document.

How we communicate with you: Your TA or I will communicate with you through Laulima and/or email to your hawaii.edu email address. It is your responsibility to monitor that address. If you wish to respond, please do this from your hawaii.edu email address so that your message does not end up in the SPAM folder.

Laboratory Safety: In order to be able to conduct the lab safely, there are a few rules:

It's all online! So this section doesn't really apply, but normally...

No horseplay! If we catch you fooling around, you'll be kicked out of the day's lab with a score of ZERO. I will decide whether the infraction warrants further punishment.

You are required (<u>no exception</u>, don't even dream of asking) to come to lab with proper attire, which includes ALL of the following: knee-length pants or skirts (I decide what constitutes knee-length, not you. My decision is final), close-toed shoes, safety goggles (to be worn at all times inside the lab), long hair tied back, tops & shirts that cover the shoulders and mid-riff.

No cell phone use in the lab, no cell phones on the lab benches. Your cell must be switched off and stowed away for the duration of the lab.

How the lab runs: We run many labs concurrently on a tight schedule. In order to get you through in a timely fashion, so we do this "one size fits all" and it is your responsibility to adjust your schedule to that of the lab or withdraw from the course. BE ON TIME, BECAUSE WE START ON TIME.

The lab starts with a brief quiz covering questions from the previous week's lab and of the day's lab. You should therefore have read and understood the manual/videos/etc. The TA may also go through some lecture material that the CHEM 162 lecture instructors have provided.

Quiz: Your TA will distribute the quiz in a way that works best (usually an email) which you then have 20 minutes to do it while leaving your video cam on and/or screen shared. Login into zoom at the start of class (same day and time as listed on the schedule of classes that you signed up for) then you email your TA back your answers.

Your TA will give a brief presentation on the days' lab include tips, pitfalls, common problems, etc. Then it's your time to shine and "do" (WATCH) the experiment. Normally this the time you must do the lab (watch the video), but I want to point I think it is best to watch the videos ("do the lab") before and then you can ask your TA questions live, right then, similar to a in class environment. Your TA will give you data to perform the post lab calculations.

Grading: The lab report is due at the beginning of the following lab period (a week later), submit electronically, scan, typed, photograph, etc, ask your TA about their preference.

Late reports will be marked down 20%/day. The lab reports will be graded and returned to you for you to track where you stand and to improve your work if necessary.

The final grade will be computed on the basis of the following distribution:

Quiz 20%

Homework 20%

Experiment, Lab Report, and TA points 60%

<u>Absences, make-up labs</u>: Unexcused absences will yield a score of ZERO for the week. There will be NO MAKE-UP labs for ANY reason. If you miss more than two labs you will not earn a passing grade, NO EXCEPTIONS. Excused absences (court date, funeral, professional trip, athletic event) require <u>DOCUMENTION</u> (some kind of official paperwork, NOT a boarding pass) PRIOR authorization by me. I decide what constitutes an excuse. <u>Think of each lab as an exam in your lecture courses!</u>

This is really only the quiz since we are online.

ACADEMIC DISHONESTY: I have a zero tolerance for plagiarism and any other form of submission of the work of others as your own. If we catch you, you will be getting a grade of "F" for the entire course.

Lab Schedule below

Lab Schedule

| Week | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------|---------------------|---------------------|---------------------|---------------------|----------------------------------|
| Jan 11 – 15 | No Lab |
| Jan 18 - 22 | MLK Day (Holiday) | Safety | Safety | Safety | Safety |
| Jan 25 – 29 | Safety / BLT | Basic Lab Tech. | Basic Lab Tech. | Basic Lab Tech. | Basic Lab Tech. |
| Feb 1-5 | Freezing Pt. Dep. |
| Feb 8 – 12 | Rate Law 1 |
| Feb 15 – 19 | Pres. Day (Holiday) | No Lab | No Lab | Rate Law 2 | Rate Law 2 |
| Feb 22 - 26 | Rate Law 2 | Rate Law 2 | Rate Law 2 | Weak Acids/Bases | Weak Acids/Bases |
| Mar 1-5 | Weak Acids/Bases | Weak Acids/Bases | Weak Acids/Bases | Acid-Base Titration | Acid-Base Titration |
| Mar 8 - 12 | Acid-Base Titration | Acid-Base Titration | Acid-Base Titration | Diss. Constant (Ka) | Diss. Const (Ka) & Hydrolysis |
| Mar 15 – 19 | Spring Break |
| Mar 22 - 26 | Hydrolysis | Hydrolysis | Hydrolysis | Hydrolysis | Kuhio Day (Holiday) |
| Mar 29 - Apr 2 | Diss. Constant (Ka) | Diss. Constant (Ka) | Diss. Constant (Ka) | No Lab | Good Frid(Holiday) |
| Apr 5 - 9 | Solubility Product |
| April 12 – 16 | Vit. C Titration |
| April 19 - 23 | E-Cells | E-Cells | E-Cells | E-Cells | E-Cells |