

General Chemistry Laboratory II

CHEM 162L

Instructor: Daniel Brayton

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Bilger 213

In person (hopefully)

How to communicate with us: Email is best, mine is above and your TAs can be found on the UH chemistry department webpage (<http://manoa.hawaii.edu/chem/position/teaching-assistant/>), 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 (**no exception**, don't even dream of asking) to come to lab with proper attire, which includes ALL of the following: knee-length pants or skirts (No booty shorts!), 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%

Absences, make-up labs: 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 DOCUMENTATION (some kind of official paperwork, NOT a boarding pass) PRIOR authorization by me. I decide what constitutes an excuse. Think of each lab as an exam in your lecture courses!

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 10 – 14	No Lab	No Lab	No Lab	No Lab	No Lab
Jan 17 - 21	MLK Day (Holiday)	No Lab	No Lab	No Lab	No Lab
Jan 24 – 28	No Lab	No Lab	No Lab	No Lab	No Lab
Jan 31- Feb 4	Safety	Safety	Safety	Safety	Safety
Feb 7 – 11	Freezing Pt. Dep.	Freezing Pt. Dep.	Freezing Pt. Dep.	Freezing Pt. Dep.	Freezing Pt. Dep.
Feb 14 – 18	Rate Law 1	Rate Law 1	Rate Law 1	Rate Law 1	Rate Law 1
Feb 21 – 25	Pres. Day (Holiday)	No Lab	No Lab	No Lab	Rate Law 2
Feb 28 – Mar 4	Rate Law 2	Rate Law 2	Rate Law 2	Rate Law 2	Weak Acids/Bases
Mar 7 – 11	Weak Acids/Bases	Weak Acids/Bases	Weak Acids/Bases	Weak Acids/Bases	Acid-Base Titration
Mar 14 – 18	Spring Break	Spring Break	Spring Break	Spring Break	Spring Break
Mar 21 – 25	Acid-Base Titration	Acid-Base Titration	Acid-Base Titration	Acid-Base Titration	Kuhio Day (Holiday)
Mar 28 - Apr 1	Hydrolysis	Hydrolysis	Hydrolysis	Hydrolysis	Hydrolysis
Apr 4 – 8	Diss. Constant (K_a)	Diss. Constant (K_a)	Diss. Constant (K_a)	Diss. Constant (K_a)	Diss. Constant (K_a)
April 11 – 15	Solubility Product	Solubility Product	Solubility Product	Solubility Product	Good Fri (Holiday)
April 18 - 22	Vit. C Titration	Vit. C Titration	Vit. C Titration	Vit. C Titration	Solubility Product
April 25 - 29	E-Cells	E-Cells	E-Cells	E-Cells	Vit. C Titration/E-cell