



CHEMISTRY 1220 LAB – SPRING 2026

General Chemistry II Lab Syllabus

INTRODUCTION

Instructional Team	
Lab Supervisors:	Dr. Bernice Opoku-Agyeman Dr. Camila Fontes Neves da Silva
Lecturer:	Refer to the lecture syllabus
Course Coordinator:	Jennifer Stebick
Office & SLDS Contact:	Holly Wheaton
TA:	(Varies with recitation/lab section)

Please see the “Contacts” page in Carmen for information on your instructors and who to contact for your unique needs.

Lab Supervisor Email:	chem1220labsupervisor@osu.edu All emails should be sent to the email address above contacting the lab supervisors. Emails sent to personal accounts or via Carmen will not be responded to.
Lab Supervisor Office Hours:	Mondays 2 PM – 3 PM; Wednesdays 1 PM – 2P M; Thursdays 10 AM – 11 AM. Note: Lab Supervisor office hours are on Zoom (https://go.osu.edu/labsupohzoom). The link is also available on Carmen. In-person office hours are available upon request. Office hours times and Zoom link can also be found here .
Out of Class Assistance:	Information regarding operation hours of the Chemistry Success Center (CSC) at rooms CE 170 and CE205/305 may be found on Carmen and here . Your TA will reach out during the first week of class to communicate the specific day and time of their shift.

Welcome to CHEM 1220 Lab! We are excited to explore General Chemistry concepts and laboratory skills with you. Our goal is for you to leave this course with an appreciation of how chemistry impacts your everyday lives. We also want to provide you with laboratory skills in chemistry that will facilitate your success in future science courses and careers.

This syllabus outlines the resources, policies, and procedures that will ensure your success in the General Chemistry lab. If you have questions or concerns about the syllabus itself, please contact the lab supervisors at the email address listed at the top of this syllabus.

REQUIRED MATERIALS

LAB MANUAL: You will be using *Chemistry 1220 General Chemistry Laboratory Manual*. Van-Griner Publishing, Inc. New 2025 combination print/e-book Edition. The lab manual is included in CarmenBooks. This means that you are automatically charged for the lab manual when you enroll in the General Chemistry course. The cost of the lab manual will show up as part of the course fees. Therefore, you do not need to purchase the lab manual unless you have opted out of CarmenBooks. Follow this link to learn more about CarmenBooks and information on opting out: [CarmenBooks for Students | Affordable Learning Exchange \(osu.edu\)](#). **Students who opted out of CarmenBooks are required to purchase access to the current version of the lab manual through the Van-Griner website or the University Bookstore.** Physical manuals will be distributed in lab.



VAN-GRINER / LABRIGHT: Your purchase of the lab manual includes access to a digital lab manual, Pre-Labs and Post-Labs on the LabRight platform, and a physical lab manual you will receive in lab. LabRight Post-Labs are used with each experiment to grade your data, calculations, and Post-Lab questions.

Students who opted out of CarmenBooks will be required to complete the LabRight registration form at van-griner.com/osu-chem before January 24th to ensure no lapse in access. Upon registering here, Van-Griner will send you a purchase link and you will need to complete payment. On January 28th, any student who opted out of CarmenBooks and has not registered and paid will lose access to LabRight. To re-gain access (and restore saved work) you will need to register on Van-Griner's website, and they will restore access by 9 AM the business day after payment is received.

Visit <https://van-griner.com/osu-chem> for detailed instructions for accessing and using LabRight. All LabRight links and assignments must be accessed directly through Carmen to ensure your grades and accounts sync.

LAB NOTEBOOK: Students may use the paper copy of the notebook pages provided for each experiment in the lab manual or use a downloaded copy in Notability (or a similar app) on a device that has a digital note-taking capability (such as an iPad, tablet or 2-in-1 laptop/tablet). See page 7 for more information about lab notebooks for this semester.

REQUIRED SOFTWARE: Microsoft Office Suite (specifically Word and Excel). All Ohio State students are eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. See office365.osu.edu for more information.

GENERAL COURSE INFORMATION

WILL YOU MISS MORE THAN ONE LAB?

If you know you will miss more than one in-person laboratory period (for OSU athletic competitions, military training/duties, religious observances, etc.), please see/contact **Holly Wheaton** (wheaton.4@osu.edu) by **Friday, January 16th** in order to move to a laboratory section that minimizes scheduling conflicts, space permitting. Unfortunately, we cannot accommodate more than one lab absence, so we strongly encourage you to plan ahead.

LATE ENROLLMENT OR SWITCHING SECTIONS: If you enroll in the course or switch sections (either lecture or lab) after the semester begins, you must **reach out to the lab supervisors within 48 hours** of making the enrollment or switch. Contacting the lab supervisors within 48 hours will ensure that any transferable grades and/or missed lab work (including retaking any of the Mandatory Quizzes, see page 3) are accommodated appropriately. After 48 hours, requests for make-up assignments and/or deadline extensions are not guaranteed.

COURSE POLICIES: This course adheres to the University policies related to Academic Misconduct, Artificial Intelligence, Religious Accommodations, Disability Accommodations, Intellectual Diversity, Grievances and Solving Problems, and Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct. For more information about any of these policies, please visit the Office of Undergraduate Education [Standard Syllabus Statements webpage](#).

More information about Faith-Related Absences in General Chemistry. In accordance with [Ohio State policy](#), you may be absent from this class for **up to three days** to observe sincerely held religious beliefs and practices, or to participate in organized activities conducted under the auspices of a religious or spiritual organization.

To request a faith-related absence in for CHEM 1220 lab, you must notify genchem@osu.edu IN WRITING of ALL specific dates for which you are requesting religious accommodations **no later than Monday January 26th**.

CARMEN: Lab-related announcements, overview pages for each experiment, and lab assignments will all be found on Carmen. To ensure that you have successful lab experience, we encourage students to carefully read the syllabus to become familiar with the course content, procedures, and grading policies. Please note that information presented in the syllabus, overview pages, and announcements on Carmen supersede any other source and are the most reliable resources to keep you on track to successfully complete your lab-related tasks and assignments.



LAB TEAM COMMUNICATION: The Lab Supervisors will be posting "Announcements" in your Carmen course that outline experiment tips, preparation instructions, and important details. Go to the Announcements area in Carmen to see all these messages. They are never deleted and are searchable. You can also set Carmen to send you an email every time an announcement is posted. Explicit instructions on how to do this are at the following web address: www.go.osu.edu/notificationsettings. Regularly reading announcements posted by the Lab Supervisors on Carmen is highly encouraged for success in the lab.

The lab supervisors are here to support you on your chemistry journey, so please reach out to us with questions and concerns about lab. If you have a question about a policy, procedure, or need clarification, please email the Lab Supervisors at chem1220labsupervisor@osu.edu. You will not receive a response if your message is sent to an incorrect email address or via the Carmen Inbox system. You must use your OSU email account when emailing the Lab Supervisors. Be sure to include the following information in your email to help the Lab Supervisors get back to you faster:

- Your TA's name
- Your Lecturer's name
- The day and time of your lab
- 5-digit lab section number

Please note that emails sent over the weekend or on a holiday may not be answered until after the weekend/ break.

ZOOM OFFICE HOURS: Lab supervisors will hold office hours on Zoom. You can click on this link: (go.osu.edu/labsupoh), or simply type it into your web browser.

To ensure we cultivate a safe and comfortable online learning environment for everyone, we expect professional and respectful behavior when joining office hours on Zoom. Please be mindful of others while online. Links and information posted in the chat window are only available to students who are present at the time the links are posted. Please make sure your first and last name are displayed during online office hours.

OVERVIEW PAGES: This is where to start for every lab! For each experiment, there is an Overview page in the Lab Modules section of Carmen. The Overview pages contain helpful information, experiment videos, and required assignments for each experiment.

MANDATORY QUIZZES

The introductory assignments listed below do not contribute to your course grade but must be completed with a 100% score to pass this course. Please note that any lab assignments you miss because you failed to complete the Introductory assignments will not be re-opened for you.

Complete the **Academic Misconduct Quiz** by **11:59 PM, Sunday, January 18th**. Refer to the lecture syllabus for more information. Please reach out to the **general chemistry office** (genchem@osu.edu). If you have any concerns about this policy.

In addition to the Academic Misconduct Quiz, you are required to complete the following assignments before you can participate in laboratory activities. Please check Carmen for the specific due dates of these assignments. You should complete these assignments **in the order listed below**. You will have unlimited attempts to complete each assignment, if needed, in order to earn the 100% required score.

1. **Lab Safety Statement:** A score of 100% on this assignment is required and will unlock the *Safety and Lab Policies Quiz*. This assignment must be completed before your first in-person lab session.
2. **Safety and Lab Policies Quiz:** A score of 100% on this assignment is required and unlocks the remainder of the lab module. You can only access the *Safety and Lab Policies quiz* after completing the *Lab Safety Statement*.
3. **CAK Post-lab "Introduction to LabRight":** A score of 100% on the CAK Introduction to LabRight linked in Carmen is required and unlocks the remainder of the lab module. It is designed to introduce you to key features of the Post-Lab and Data Analysis Worksheets you will be completing this semester and shows you how to get the most out of them.



EXPECTED LEARNING OUTCOMES

In Chemistry 1220 lab is a significant aspect of your chemistry learning experience in CHEM 1220, and the following are the goals and learning outcomes you will accomplish in the lab:

- Qualitatively and quantitatively examine curriculum presented in lecture, such as atomic and molecular structure, chemical reactivity, thermochemistry, and chemical calculations in an active laboratory setting.
- Practice laboratory methods applicable to chemists of all levels.
- Create, and demonstrate the proper use of a well-prepared laboratory notebook and evaluate the importance of organized scientific data collection and data integrity.
- Demonstrate the ability to interpret data, evaluate conclusions supported and not supported by experimental results, and compare and contrast chemical methods, as communicated through Post-Labs.
- Demonstrate the safe handling and proper disposal techniques for all materials used in the lab.

LABORATORY SCHEDULE

Your laboratory consists of one 2-hour and 55-minute session each week. Work in the laboratory can only occur during your scheduled laboratory period. Students will only work on the experiment listed on the syllabus for that day. The lab schedule on the next page shows the experiment you will be completing each week in lab. Please note that while the lab is 2 hours and 55-minutes long, the last 15 min is designated for cleaning up. Therefore, you must stop all lab work and start cleaning up once it is 15 min to the end of the lab.

If you are unable to finish a laboratory experiment during the designated time, please contact the Lab Supervisor, via email, within **24 hours of the lab start time** so we can discuss the lab make-up process and procedures. Please read details about the supplementary data and make-up policies on pages 9 and 10.

Laboratory Schedule

1220 Laboratory Activity Schedule					
Week of	Monday	Tuesday	Wednesday	Thursday	Friday
Jan 12 – 16	X	X	X	X	X
Jan 19 – 23	MLK Day [†]	Check-In/INK	Check-In/INK	Check-In/INK	Check-In/INK
Jan 26 – 30	Check-In/INK	SOL	SOL	SOL	SOL
Feb 2 – 6	SOL	FPD	FPD	FPD	FPD
Feb 9 – 13	FPD	BAR	BAR	BAR	BAR
Feb 16 – 20	BAR	CLK	CLK	CLK	CLK
Feb 23 – 27	CLK	LCP	LCP	LCP	LCP
Mar 2 – 6	LCP	SAL	SAL	SAL	SAL
Mar 9 – 13	SAL	SST	SST	SST	SST
Mar 16 – 20	SPRING BREAK [†]				
Mar 23 – 27	SST	WST	WST	WST	WST
Mar 30 – Apr 3	WST	BLP	BLP	BLP	BLP
Apr 6 – 10	BLP	VOL	VOL	VOL	VOL
Apr 13 – 17	VOL	Make-Up*	Make-Up*	Make-Up*	Make-Up*
Apr 20 – 24	Make-Up*	X	X	X	X
Apr 27 – May 1	X	READING DAY	FINAL EXAMS		

X = No Lab Day.

[†]= *University Holiday*. Due dates for lab assignments that fall on University Holidays will be extended.

*Students assigned to the end of semester make-up will complete it during their regularly scheduled lab time during their lab on the week of April 14th – 20th depending on their section. The make-up cannot be rescheduled.



PREPARING FOR FIRST DAY OF IN-PERSON LAB

SAFE LABORATORY ATTIRE: The clothing you wear to lab must provide skin protection from chemical spills and splashes. **Ankles and feet must be completely covered.** Please refer to the LABORATORY SAFETY REQUIREMENTS on page 11 for a more detailed discussion.

LAB COATS: Each student is required to purchase a lab coat to wear during General Chemistry labs. We recommend purchasing your lab coat from the Chemistry store to wear during General Chemistry labs as they have been specially selected to protect you from the hazards in the lab. For our general chemistry lab, lab coats should cover the wearer to near the knees. They must be made of a polyester-cotton blend with no less than 35% cotton. Please come prepared with a lab coat for your first in-person lab, otherwise you will unfortunately be sent home from lab. Therefore, please give yourself plenty of time to purchase a lab coat before your first lab session.

Lab Coat Purchase: The Chemistry Store (<https://u.osu.edu/chems/>) is located in 180 Celeste Lab and is open Monday-Friday (closed on university holidays). Their hours vary during the semester, make sure to check their website to get info on the hours of operation. The Chemistry Store is a university-run store and is not affiliated with the Department of Chemistry and Biochemistry. Credit cards, Apple Pay and Buck-ID are currently the only accepted methods of payment at the Chemistry Store. You must have your lab coat by the start of your first in-person lab session. When you purchase your lab coat at the Chemistry Store, you will be provided with a plastic zip-top bag for storage and a lab coat care sheet. If you are re-taking General Chemistry, you will be provided with a new bag in your first lab session.

Lab Coat Etiquette: Lab coats should be fully buttoned up when in the laboratory. We are not able to loan lab coats to students if you forget your own lab coat. You should remove your lab coat before heading home, or to the bathroom or drinking fountain. You may wear your lab coat when obtaining items from the stockroom window. You are not permitted to sit on the benches in the hallway while wearing your lab coat. Never wear your lab coat at home. Always treat your lab coat as if it is contaminated.

GOGGLES: Students who are new to the Columbus OSU campus will be provided with goggles for use in the General Chemistry laboratory during their first in-person lab session. If you previously took General Chemistry, you may use the goggles previously given to you or purchase a new pair from the Chemistry Store.

You will keep your lab coat and goggles between lab sessions. Your TA will walk you through the lab coat protocol during your first laboratory session. At the end of the course, you will keep your lab coat for future lab experiences.

LABORATORY ASSIGNMENTS & GRADING

LAB POINT DISTRIBUTION: The laboratory component of CHEM 1220 is worth 20% of your overall course grade. Therefore, your total points earned (out of the total 1100) will be scaled to contribute this percentage to your overall course grade. For more information, see your lecture syllabus or Carmen gradebook. To ensure you develop the necessary skills and competencies critical for your success in chemistry, **you will need to earn 50% of the total lab points (550/1100) to pass the course.** Regardless of your grades in lecture, if you do not meet this minimum, unfortunately you will be assigned an "E" grade in CHEM 1220.

Point Distribution for Each Lab

Abbreviation	Activity	LabRight Pre-Lab	Notebook	LabRight Post-Lab	Total
–	Introduction to LabRight	–	–	10	10
Check - In /INK*	Introduction to the General Chemistry Laboratory	–	5	55	60
SOL**	An Exploration of Factors Affecting Solubility	15	15	70	100
FPD**	Quantifying Freezing Point Depression	15	15	70	100
BAR**	Determining the Kinetics for the Bleaching of Allura Red Dye	15	15	70	100
CLK**	Exploring the Effect of Temperature on Reaction Rate	15	15	70	100



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LCP	Le Châtelier's Principle	15	15	70	100
SAL	Investigation of the Acid-Base Properties of Salt Solutions	15	15	70	100
SST**	Strong Acid and Strong Base Titration	15	15	70	100
WST**	Weak Acid and Strong Base Titration	15	15	70	100
VOL**	An Exploration of Voltaic and electrolytic Cells	15	15	70	100
BLP	Lab Practical	–	20	80	100
–	End of Semester Surveys	–	–	–	40
Overall Lab Total:					1100

*Students who attend lab in person do not complete a Post-Lab for Check-In and will receive 55 points for lab participation.

**This experiment has a Data Analysis Worksheet; the score is included in the Post-lab assignment on LabRight.

GRADING REVIEW REQUESTS: We are happy to review the grading of your lab assignments, if necessary. However, please note the following guidelines:

- All requests for re-grading (Pre-Labs, Notebook, Post-Labs, etc.) should be made **within 1 week** of receipt of the graded work.
- You are required to discuss the grade with your TA first before contacting the lab supervisors to request for re-grade.
- After receiving your request via email, the lab supervisors will
 - First discuss the grading process with your TA
 - Then re-grade the entire assignment.
- This revised grade will then be final.

DATA INTEGRITY: Data integrity is critical to your success in chemistry. Thus, it is important to remember that data and procedural information in your lab notebook cannot be altered in any way after you have left the lab. The data and written procedures recorded in your LabRight Post-Lab assignment (see below) should match the data and procedures in your lab notebook, so you should be careful when copying procedure or data from your notebook to your LabRight Post-Lab assignment. Changing data or adding detail to a previously written procedure in a LabRight Post-Lab assignment is considered data fabrication. Common examples of data fabrication include adding zeros to values, changing exact values or observations, or adding details to procedures. For more information, review the “A Note About Data Integrity” page on Carmen and the “Standards of Academic Conduct in General Chemistry” below.

LATE SUBMISSIONS: All assignments are due by the date and time listed on Carmen. Pre-Lab assignments close at the start of the lab time and no late assignments will be accepted or graded. Notebook Uploads submitted after 48 hours from the start of the lab time will earn point deductions, as described below.

All LabRight Post-Labs will remain open for three (3) days past the due date listed in Carmen. There will be a 20% deduction per day for Post-Labs that are fully submitted once the due date passes. After the 3-day late submission, the assignment will close and a maximum penalty of 60% will be applied. Post-Labs will **not** be re-opened after this period, and no further submissions will be accepted. Students are strongly encouraged to work ahead on the LabRight Post-Lab assignment so they can contact the lab supervisors before the due date if they encounter issues while working on the assignments. This ensures that there is enough time to provide any assistance needed. The lab supervisors may not be able to help in a timely manner if a student contacts them once the due date of the assignment has passed. The timestamp on your submission in LabRight is the official submission time and date.

Students who miss the deadlines due to extenuating circumstances are required to reach out to the lab supervisors within 24 hours of the missed assignments. The lab supervisors will review your circumstances and make a decision as to whether you will receive an exception to the submission deadline. Regardless of individual assignment due dates, no *Pre-Labs*, *Post-Labs* or *notebook uploads* will be accepted after 11:59 PM on **Friday, April 24th 2026**.

LABORATORY ASSIGNMENT TYPES

Lab supervisors will provide information about each lab assignment in multiple ways. The information may be provided in this lab syllabus, via email, or on Carmen. On Carmen, this can include posted announcements, the overview page



in your laboratory module for each experiment, the instruction box for each assignment, and in some cases, information embedded in the question itself.

PRE-LAB ASSIGNMENTS: To ensure that you are well-prepared to conduct experiments each week, Pre-Labs need to be completed before the start time of your lab. Pre-Labs are available on LabRight and can only be accessed through Carmen. We highly encourage you to read all Pre-Lab instructions carefully before you start the assignment. Only have the Pre-Lab open when you are working on it. If the Pre-Lab has been idle for more than an hour, quit and save your work, and re-open the link from Carmen. Working on more than one Pre-Lab at a time, or opening multiple Pre-Labs in multiple tabs or browsers simultaneously is not allowed and may result in loss of submitted information or other errors with the program.

You can only submit each Pre-Lab once; they cannot be reset for any reason. However, you can attempt each Pre-Lab question twice. After answering a Pre-Lab question, you may click on the "How Did I Do?" button at the top of the question to see which answers are incorrect. You can then review the relevant topics and revise your response(s). Your response(s) will not be graded until you submit the completed Pre-Lab by clicking the "Submit Assignment" button.

Unfortunately, no credit (0) will be given if the Pre-Lab assignment is late. **The assignment closes at the start of the lab time.** Please note that students cannot be excused from Pre-Labs of experiments that have been assigned to them.

LABORATORY NOTEBOOK: LABORATORY NOTEBOOK: The laboratory notebook is a permanent record of purpose, reference source of your procedures, observations, data, and conclusions. As one of our Learning Outcomes, it is important to learn how to create and keep a lab notebook as a General Chemistry student and scientist. You may use the paper copy of the notebook pages provided for each experiment or use a downloaded copy in Notability (or a similar app) on a device that has a digital note-taking capability (such as an iPad, tablet or 2-in-1 laptop/tablet). Please note that laptops cannot be used as lab notebooks. Please also note that no information can be recorded on scratch paper or in other parts of the lab manual during an in-person laboratory session. It is critical to ensure that all information recorded in a lab notebook, whether on paper or digitally recorded, is not altered in any way after leaving the lab.

To ensure a productive in-person lab experience, some part of your notebook should be prepared before the beginning of lab, and you will earn up to 15 points for a well-prepared notebook that has all components. The notebook template has spaces for purpose and procedure. You are expected to add a purpose and summary of procedure in the spaces provided before coming to lab. You will go over how to prepare your lab notebook during the first day of lab. During grading, your TA will assess your notebook prep and its contents and then assign you notebook points. Please note that points will be deducted for missing components. Having a fully prepared notebook will ensure you understand lab procedures, what data is to be collected in the lab, and any relevant safety concerns.

There are some experiments that require you to complete some in-lab activities in addition to collecting data prior to leaving lab. These activities have been designed to provide some conceptual insight into what the experiment is about and to encourage discussions among students and with the lab TA. The In-Lab activities have been included at the end of the notebook pages and you are expected to have all In-Lab activities completed in your lab notebook before leaving lab. Please note that points may be deducted from your notebook score and lab performance points if you are unable to complete these lab activities due to tardiness or lateness. You can read more about lab performance points below.

ALL entries in your lab notebook (or lab manual when applicable) should be recorded in **Blue or Black pen** when using either a digital or physical copy of the notebook. **No white-out or highlighters are allowed to be used in the lab notebook.** Lab notebook guidelines are described in the 'Guide for Success in the General Chemistry Laboratory' section of your laboratory manual (beginning on page xiii). To protect your electronic device from chemical contamination, students should place their device in a plastic bag during lab. You will be provided with one bag at the beginning of the semester. Please do not discard this bag since a replacement bag will not be provided. You may choose to use an electronic writing utensil such as an Apple Pencil or stylus in lab at your own risk. Please note that we do provide any means of protection for your pencil/stylus as we do for your iPads/tablets. If your electronic writing utensil becomes chemically contaminated, it must be disposed of as hazardous waste and will not be replaced.

For all in-person labs, a digital copy of your filled-in lab notebook should be submitted to Carmen within 48 hours **after** the start time of your in-person lab. You can submit your digital copy in one of two ways:

- 1) a PDF exported from Notability or a similar app.



2) Scans/photos of physical notebooks.

Specific instructions for your notebook upload can be found in the relevant Carmen upload assignment.

Please note the following about your Notebook Uploads.

- The only accepted file types for submitting digital copies of notebook pages are docx and PDF.
- You must use the following file naming system: **lastname.#_firstname_semester&year_experimentcode**.
For example, a lab notebook upload for experiment CLK in Spring 2026 would have the file name "Smith.1234_John_SP26_CLK".
- Incorrect file name format will result in points deductions. An exception to the point deduction is the notebook upload assignment for experiment INK, the Check-In lab.

Please submit only a single file. All provided notebook pages containing the purpose, procedure citation, procedure, data to collect and in-lab activity must be in the same file. Unfortunately, if you do not submit a digital copy of your lab notebook on time, your TA will not be able to grade your Post-Lab assignment and you will not receive the 15 notebook points for the lab in question. If a digital copy of your notebook, with all procedure and data included, is not received before the final deadline for lab work (**Friday, April 24th**), you will only earn your performance and/or participation points for your Post-Lab.

Please note that for each specific experiment, you can still submit your lab notebook after the 48-hour window for a 5-point deduction unless the final deadline has passed. Also, note that students cannot be excused from notebook uploads of experiments that have been assigned to them.

Only pdf and docx submissions on Carmen will be accepted for lab notebooks. Submissions only containing links to OneDrive, etc. folders, submissions via email, and submissions via comments in Carmen will not be accepted. Please make sure you submit your notebook pages to the correct assignment dropbox in Carmen. Turning in notebook pages to the wrong assignment dropbox will result in no credit for the notebook or the corresponding LabRight Post-Lab once the final deadline to submit labs has passed on **Friday, April 24th 2026**. If you submit your notebook pages for any experiment within a week of the final deadline, please contact your lab TA and notify them of your submission in order for them to grade your LabRight Post-Lab for that experiment.

We encourage you to review your notebook pages in Carmen after your submission to ensure you have submitted what you intend to submit for that assignment, and that all pages have been fully submitted. We can only accept the work you submit to the appropriate assignment in Carmen.

Please do not re-upload your notebook pages once they have been graded with the intention of getting a higher score unless a file exception has been made, as described below. Since notebooks uploaded after the 48-hour submission window are considered late, re-uploading your notebook pages will result in your notebook grade being reduced by 5 points as a result of a late submission.

Notebook File Exception: For instances where submission requirements are not met, students will be given one exception to resubmit their notebook pages for one experiment in order to have the new pages regraded. If you want to use your exception, you must contact the lab supervisors within a week of your assignment being graded. If your request for file exception is approved, we will waive the policy that prevents you from resubmitting your work for a better grade. **If the lab supervisor grants a file exception, you must send the file to them within 48 hours of them approving the file exception.** Conditions under which an exception will be granted are:

- Submitting the notebook pages for a different experiment
- Submitting the appropriate notebook pages to a different notebook assignment
- Naming the file incorrectly
- Accidentally submitting a blank file or missing any pages in the initial submission
- Correcting any formatting errors
- Request for a late penalty on notebook to be waived.
- Extenuating circumstances as determined by the lab supervisors

Please note that when a file exception is made, you cannot change the data in your previously uploaded notebook. Changing the data will put you in jeopardy of violating our data integrity policy. Additional instances that do not qualify for an exception include but are not limited to forgetting to submit the notebook assignment or submitting notebook pages completed from a previous semester.



LABORATORY PERFORMANCE AND PARTICIPATION: To foster a safe and positive learning environment for all students, each in-person laboratory grade includes 5 points for laboratory performance. In the bullet points below, we discuss some of the items that contribute to your performance points.

- To make sure you (and your lab partner) complete lab in time, we highly encourage you to arrive outside the laboratory before the official start time and wait for the TA to welcome you into the lab room. Arriving after the start time of your lab can result in points deduction.
- You are expected to be prepared. Proper attire must be worn, and safety policies must be followed; see page 11 and the Safety Statement on Carmen for more information.
- As the laboratory is a common space, you are expected to treat all equipment respectfully and use it properly.
- You must follow instructions given in the lab manual and by your TA, and if a mistake is made, adjust your technique or behavior to adhere to these instructions.
- **Cell phones must be put away in a backpack or bag during lab.** Laptops and tablets should never be set directly on the lab bench (due to chemical contamination) before cleaning. Headphone use is strictly prohibited.
- Gloves must be taken off before leaving the lab room. Please do not touch the doorknobs or any food or drink items while wearing gloves.
- You are expected to complete any in-lab activities before leaving lab unless extenuating circumstances apply.
- You must start cleaning up 15 mins before the end of your lab time.
- Make sure your TA checks you out before you leave the lab.

Every student will begin each lab period with all 5 performance points. Your TA will deduct points for not following the above guidelines. "Lab Performance and Participation" is a separate assignment in Carmen for each in-person lab. After each lab, your TA will assign you performance and participation points; you do not need to complete this assignment in Carmen.

Please note that students who are continuously late to lab will be asked to meet with the lab supervisors to chat about the recurring lateness first before they can continue working in the lab.

LABRIGHT POST-LABS: Post-Labs, available on LabRight, will be completed after most experiments and will contain Data Analysis sections for applicable experiments. You can only access the Post-Labs through Carmen. Only have the Post-Lab open when you are working on it. If the Post-Lab has been idle for more than an hour, quit and save your work, and re-open the link from Carmen. Never open more than one Post-Lab at a time, and never open multiple Post-Labs in multiple tabs or browsers simultaneously. Continuing to work on a Post-Lab that has been inactive or after opening a second Post-Lab link may result in data loss and failure to correctly submit your assignment.

You can only submit each Post-Lab once; they will not be reset for any reason. However, you can attempt each Post-Lab question twice. After answering a Post-Lab question, you may click on the "How Did I Do?" button at the top of the question to see which answers are incorrect. You can then review the relevant topics and revise your response(s). Your revised response(s) will not be graded until you submit the completed Post-Lab by clicking the "Submit Assignment" button. If your assignment submits successfully, you should see a **Feedback: Grade Report** page displaying a "Thank you" message, along with a statement indicating that your assignment is complete and the score you received. If the assignment includes manually graded questions, you will also see a note explaining that your final score may change after your instructor has graded those questions.

Post-Labs are due one week after the completion of the experiment by the start time of your lab period. If the due date of a Post-Lab coincides with a University Holiday, an extension will be applied to that assignment. Please note that the due dates will not be extended beyond the final deadline i.e. **Friday, April 24th 2026.**

Data Analysis Section in Post-Labs: Your Post-Lab assessments for experiments SOL, FPD, BAR, CLK, SST, WST and VOL include Data Analysis sections that you will use to analyze the data you collected. For these sections, you will receive targeted feedback as you work up your data. When entering numerical values in a Post-Lab, unless otherwise indicated, be sure to follow the Significant Figure rules outlined in Appendix D of this lab manual. See the General Information below to learn about the LabRight platform.

Students cannot be excused from Post-Labs and Data Analysis Worksheet that have been assigned to them. Only have the assignments open when you are working on it. Failure to purchase access will result in forfeiture of these points. Post-labs submitted after 3 days past the due date will only earn performance/participation points. Note: The lab notebook needs to be submitted in order to receive any credit for the Post-labs. Even if 3 days have not elapsed, assignments will not be accepted after **Friday, April 24th 2026 at 11:59 pm.**



LABORATORY POLICIES

SUPPLEMENTARY DATA POLICY: If you are unable to collect all the data needed in lab, you should email the lab supervisors within 24 hours of the start of lab. **Each student must email the lab supervisors individually for their own data even if they worked in a group.** The lab supervisors will review your circumstances and make a decision as to whether you will be provided with supplementary data to replace the data that was not collected. Depending on the type of data you need, points may be deducted from your Presentation of Data and/or procedure questions in the Post-Lab. Please note that contacting the lab supervisors is not an assurance that you will receive data. In addition, contacting the lab supervisors 24 hours after the start of the lab time may result in no data or point deductions if data is given.

MISSED LABORATORY POLICY: To ensure a successful and productive lab experience, students are required to attend all labs this semester. Students will be allowed to make-up one lab per semester for any reason. No documentation is required to obtain this make-up lab, but the lab supervisors must be notified of the request for a make-up within 1 week of the missed lab date. **These make-up sessions will take place at the same time as your regularly scheduled lab session on the corresponding day and time of your lab during the week of April 14th to April 20th depending on your section. The make-up lab cannot be rescheduled for any reason and students are not allowed to attend different lab sessions to complete their make-up lab.**

Requests for no more than ONE additional make-up lab will be considered and may be approved with no additional penalty in the case of specific university-approved absences (see below). If a second make-up lab is approved without a university approved absence, a 40-point penalty will be applied to the final lab grade. The 40-point grade penalty is applied in a separate column in the Carmen grade book so students can easily see when a grade penalty is applied. If you are approved for a make-up lab for a second missed lab, the make-up will be a digital alternate version of the in-person lab you missed. No additional lab absences will be allowed, except in cases of significant extenuating circumstances. In such cases, the lab supervisors may review the reasons for the first two missed labs when considering the circumstances of a third missed lab.

The 40-point penalty cannot be waived for the following reasons: Lack of preparation, negligence, work schedules, planned vacations, failure to have proper PPE (goggles and lab coat) and/or lab attire, and exams held during regularly scheduled lab sessions.

The 40-point penalty will be waived for the following reasons with proper documentation: Student-athlete commitments, military commitments, religious obligations, medical emergencies, illness (including COVID-19), death of a family member, childcare issues, or SLDS attendance/deadline modifications. The lab supervisors may request some form of documentation to have the 40-point penalty waived. Please be sure to email the requested documentation to the email listed at the front of the syllabus within 1 week of the missed lab. Documents sent after one week of the lab may not be considered for removing the 40-point penalty. If you'll miss a lab due to religious obligations, you must email the lab supervisors by 11:59 PM on **Monday January 26th**. For more information on accommodations for religious observances, refer to the General Course Information on page 2 of this lab syllabus.

If you are registered with SLDS with Intermittent Flex Plan, please refer to the Intermittent Flex Plan Agreement in your Carmen course for specific policies about missed labs.

If you do not attend the lab, please do NOT submit a Post-Lab. If you do not contact the lab supervisors within a week of an in-person missed lab and submit the in-person Post-Lab for that experiment, you will automatically receive a zero on the assignments, including the notebook upload, and will forfeit the opportunity for a make-up assignment for that experiment.

LATE ENROLLMENT: Please note that if you enrolled in Chem 1220 after the semester begins, you are responsible for ensuring that you did not miss any lab assignments. We strongly suggest that you check the Laboratory Modules in Carmen immediately once you are enrolled, and note any assignments you may have missed due to your late enrollment. Then reach out to the lab supervisors *within one week* of your date of enrollment to request make-ups for any lab assignments you have missed.

INCOMPLETE POLICY: While nobody begins the semester anticipating they will receive an incomplete for a course, there are circumstances that may warrant that a student takes an incomplete in the course. In such situations, the Incomplete Policy for General Chemistry Lab will allow you to make-up a maximum of four (4) experiments. All



incomplete requests must be made in writing to the lab supervisors by **Friday, April 24th by 11:59 PM**. Requests made after the final deadline will only be approved in the case of significant extenuating circumstances.

HEALTH AND SAFETY REQUIREMENTS

MEDICAL INSURANCE COVERAGE: Due to the potentially dangerous nature of laboratory work, you are required to maintain medical insurance coverage through the Ohio State student health insurance or a private agency when enrolling in chemistry laboratory courses.

LAB ROOM SANITIZATION: Students will be required to sanitize all equipment and glassware using the supplied 70% ethanol used before leaving lab. Cleaning and sanitizing are part of our regular standard operating procedures that have been approved by the University's Department of Environmental Health and Safety. Failure to clean and sanitize your equipment and glassware will result in loss of performance points for the experiment of the day.

LABORATORY SAFETY REQUIREMENTS: Students are required to read, understand, and implement the safety precautions indicated in the laboratory manual. The precautions are summarized on a safety statement which must be digitally signed on Carmen by all students during their first laboratory period. Until this statement is signed, students are not permitted to participate in laboratory activities. Some particularly important parts are:

1. You must wear department-authorized ANSI code goggles in the laboratory. If your goggles are lost, a new pair must be purchased from 180 Celeste Lab. Students in the lab without goggles will incur a 5-point deduction from their lab performance & participation. Continued violations will result in a more severe point penalty and may result in dismissal from the course. Wearing contact lenses is not recommended.
2. According to University policy, wearing a face covering in lab is optional (<https://safeandhealthy.osu.edu/personal-protection-hygiene>). Students will need to provide their own face mask if they opt to wear a mask. We recommend bringing a second mask to change into after the lab is complete. You should wash any reusable face covering that you wore in lab before wearing again. Please note in the unlikely event your face covering is contaminated by a spill or splash, it may need to be disposed of as hazardous waste. In that case, you will be provided with a disposable mask to complete the day's lab.
3. Each student must wear adequate clothing to reduce the possibility of injury from chemicals or broken glass, including long pants and shoes that cover your entire foot. **Students wearing inappropriate attire - including but not limited to shorts, sandals, slippers, spandex or other thin, skin-tight pants, pants with holes, tank tops, or short skirts, leggings - will be sent home.** These students are expected to change and return to complete the experiment in proper attire. Confine long hair. Your ankles should be completely covered. Please note that this policy is to protect you from chemical burns or spills.
4. When in lab all students must wear closed-toe shoes with a high back or closed-heel. The back or heel of the shoe should measure at least 2 inches from the top of the sole of the shoe or where your heel rests. As a guideline, 2 inches is approximately 3 finger widths. The heel of the shoe should accommodate at least three fingers when measured starting from the sole. Your foot should also be secure in the shoe and should not slip out while walking or moving around the lab space. For further clarification, refer to question Q11 of the Safety & Lab Policies Quiz. Please do not wear shoes that you might trip in.
5. Familiarize yourself with the location of the fire extinguisher and eye wash in the laboratory.
6. Promptly report all accidents, no matter how small, to your lab instructor.
7. Your work area and common glassware must be cleaned before you leave the lab. After cleaning all glassware, you must sanitize your glassware with the provided 70% ethanol solution. Once you have sanitized all glassware, clean your bench with the provided 70% ethanol. This ensures that you, and other students who use the space, will have a clean and sanitized workstation. Clean up spills in the balance room by brushing chemicals into a weighing dish.
8. No unauthorized experiments are allowed. No chemicals may be removed from the lab.

Requirements in this syllabus (assignments, due dates, policies etc.) may be altered ONLY by a Lab Supervisor or the Vice Chair for Undergraduate Studies. Please see the lecture syllabus for pre-requisites, goals and learning outcomes, commitment to diversity, and details about recitation, online homework, and exams. All lecture policies still apply to the laboratory.

ACADEMIC CONDUCT

STUDENT RESPONSIBILITIES: Any graded material submitted in General Chemistry must represent your own work. This includes exams, quizzes, homework, and laboratory assignments, which are to be an individual effort.



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Unauthorized group efforts by students, use of another student's course materials, or assistance from individuals who already have taken the course, could place you in jeopardy of violation of the standards for General Chemistry. In some courses, group work is acceptable on certain activities (as explicitly stated by your instructor). In these cases, it is important that you know and understand where authorized collaboration (working in a group) ends and collusion (working together in an unauthorized manner) begins. Identical answers indicate copying or unacceptable group efforts - always answer questions in your own unique words. It is important that you consult with your instructor for clarification on whether or not collaboration is appropriate on an activity.

You should not assist others in violating academic standards. Students supplying materials for others to "look at" may be charged with academic misconduct. Never allow another student access to your Pre-Laboratory exercises, lab reports, or other assignments – even after completion of the course. "I didn't know they were going to copy my work" is not an acceptable excuse.

Laboratory: Laboratory work is the essence of the science of chemistry. You are expected to perform all parts of the experiments with your own equipment, chemicals, and unknowns. The accumulation of data, calculations derived from that data, and any conclusions or answers to questions associated with that experiment are to be your own work. Academic misconduct involving lab work includes but is not limited to the following:

- Laboratory data may not be altered or "made up. All laboratory work must be done in your assigned laboratory room, during your scheduled time period, and under the supervision of your assigned teaching assistant.
- Plagiarism or the submission of work based on old material is considered to be academic misconduct no matter how small the infraction. Possession of another student's lab report(s) will raise immediate concerns about academic misconduct.
- Evidence of copying or unauthorized "working together" on laboratory course work will be submitted to COAM.
- Individuals retaking the course must complete all work for the course during the current semester, and may not submit any parts of any laboratory assignment from a previous semester (see item #6 in "Ten Suggestions for Preserving Academic Integrity", <http://oaa.osu.edu/coamtensuggestions.html>).
- If you are found in violation, COAM will decide what disciplinary and/or grade sanctions you receive. Additional information about COAM policies and procedures can be found at <https://oaa.osu.edu/academic-integrity-and-misconduct>.

CONCLUSION

We are going to have a great semester learning and experimenting together. We know this syllabus is a lot of information to digest at once but remember that the lab team is there to guide you when you have questions. You can find out more about us and the other General Chemistry team members on the "**Contacts**" page in Carmen, and to find which one of us has the specific expertise to address your unique needs. We cannot wait to meet you!