

Chem 1212K Laboratory

Course Syllabus

Instructor: Dr. Grace Ong

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Email is the best way to communicate with the instructor. While sending an email, write the name of the course, and then the subject. For example, if you want to write about arranging an appointment, the subject should be "1212 - appointment". Please send email from GSU email.

Phone: (404) 413 – 5603

Office: Courtland North 210

Office Hours: Mondays 12:15 pm – 1:00 pm
Wednesdays 12:30 pm – 2:30 pm
(Other times are available by appointment)

Lab Sections: Tuesdays 2:00 pm – 5:00 pm (PSC 362 & 355) Lab lecture begins at 2pm.
Wednesdays 3:00 pm – 6:00 pm (PSC 362 & 355) Lab lecture begins at 3pm.

Text: GSU Lab manual (will be handed out at first lab lecture)
A course outline, schedule of activities, grading, etc., is included in the lab manual.

Comments on Lab:

1. Individualized project-type lab.
2. Lab notebooks should be kept up to date. **Bound notebook required.** Leave three pages blank at the front of the notebook for a Table of Contents. All pages must be numbered and dated. All data must be recorded in this notebook **in ink**.
3. A second note-taking book during lab lecture is also required. During lab lectures, students take notes to prepare for labs/quizzes.
4. Before lab each week, students are responsible to read and write in their lab notebooks about each experiment beforehand (refer to schedule on page 10 in lab manual). **A summary in your own words (numbered/bullet points) about the experiment including purpose, materials, and experimental methods must be written in the notebook before beginning experiment.** TAs will check the notebooks before entering lab, and students without written notes in their notebook will not be allowed to enter. During lab, students are expected to **record data in ink into the notebook.** Data must NEVER be recorded in pencil/or on other books/papers, and later transferred to the notebook. At the end of lab, notebooks must be checked and signed by TAs at the conclusion of each lab session. **NO SIGNATURE, NO CREDIT.**
5. Safety glasses required at all times in the lab.

6. Dress appropriately. Students will not be allowed in the lab without appropriate clothing.
 - a. No open-toe shoes (flip-flops, sandals, crocs, etc.)
 - b. No shorts/ short skirts
7. No food and drinks allowed in the lab. THIS INCLUDES CHEWING GUM!
8. Failure to follow safety rules will result in **expulsion from the lab with no make-up allowed.**
9. Cleaning up is part of the lab session. Students should stop working and begin cleaning up their work area, including their hood space, 25 minutes before the conclusion of the lab session.
10. When cleaning glassware: Step 1: Pour out chemicals from glassware into appropriate waste bin. **Step 2: Rinse the glassware and pour the rinse into appropriate waste bin, NOT THE SINK.** Failure to obey this rule will result in lab technique point deduction.
11. **Preliminary reports on all calculations, in ink,** must be submitted at the time of the completion of each experiment (due dates below), and they must be included in the appendix section of the final lab report.

One week after the due date, if you still have not submitted the preliminary reports, you will be assigned the minimum amount of points for those experiments not submitted (if you have supporting data in your lab notebook). Preliminary report forms are found in the last pages of the lab manual, one for each experiment needing calculations.

% Halide.....	Due beginning of lab lecture Week 7
Molarity HCl.....	Due beginning of lab lecture Week 8
% NH ₃	Due beginning of lab lecture Week 9
Molarity Na ₂ S ₂ O ₃	Due beginning of lab lecture Week 10
% Co.....	Due beginning of lab lecture Week 11
H ₂ O ₂	Due end of lab Week 11

12. No make-up lab till after Spring Break. Each student may have up to 2 make-up lab sessions. Authorization is needed from instructors before making up lab.
13. To pass the lab, students MUST take the lab final and turn in the lab report. Grading point distribution is on page 6 in lab manual. Lab report is due on Week 13 at the beginning of lab lecture, but may be turned in earlier (Week 12) for extra credit. It is important that students work on the lab report as experiments progress during the semester. Lab report instructions/samples are on page 62 in the manual.

Session 1: Safety, check-in and weight of crucibles.

1. Students should maintain a Table of Contents for the lab notebook. The page in the lab manual that has the heading "CRUCIBLES WEIGHT" should be attached as Page 1 to the lab notebook. **Note: Page 1 comes immediately after Table of Contents.**

2. The page in the lab manual with the heading "Determination of the weight of the crucibles" should be attached as page 2.

Sessions 2 through 12: Preparation and determination of the formula for a cobalt-amino halide complex, and the hydrogen peroxide experiment.

Session 13: Final exam and check out. Final report (including the LAB REPORT FORM in the lab manual) and lab notebook are due at this time. Graded lab notebooks may be picked up from the lab instructor within one week following completion of the lab after which time they may be discarded. Graded final exams and final reports can be viewed at the instructor's office but will not be returned to the students. **No grades will be given via e-mail or by phone.**