

CHEMISTRY LAB II CHEM 1212 spring 2015

Instructor: Dr. Hamed Laroui
Office #: PSC 522
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Office Hours: **Thursday** 1-1.45pm PSC522 (email before)
Pre-Lab Lecture: **Thursday** 2 pm in PSC 362
Lab: **Thursday** 2-5 pm in PSC 357

REQUIRED TEXT and LABORATORY MATERIALS needed on the first day of lab:

(1) Chem. 1212 Lab Manual (**available free during first lab**, includes course outline, schedule of activities, grading) (2) Stitched composition notebook (3) Safety glasses/goggles

GRADING see page 6 of 1212 Lab Manual

Comments on Lab:

1. 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.**
2. Quizzes will be announced and closed book.
3. 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.
4. **Safety glasses required at all times in the lab.**
5. **Cleaning up is part of the lab session.** Students should stop working and begin cleaning up their work area, including their hood space, 20 minutes before the conclusion of the lab session.
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!** Failure to follow safety rules will result in **expulsion from the lab with no make-up allowed.**

Students must turn in reports on all calculations following the conclusion of each experiment (pp 73-83 of lab manual).

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.

% Halide.....	Due beginning of lab lecture Week 6
Molarity HCl.....	Due beginning of lab lecture Week 7
% 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 beginning of lab lecture Week 12

No make-up lab till after semester mid-point. Each student may have up to 2 make-up lab sessions. Authorization is needed from instructors before making up lab.

To pass the lab: Students **MUST** (1) **take the lab final** on **April 23** (2) **turn in the lab report** due **Friday April 24 before noon** and (3) **turn in notebook** due **Friday April 24 before noon**. It is important that students work on the lab report as experiments progress during the semester. Grading distribution is page 6 of lab manual. Lab report instructions/samples are on page 62 in the manual.

First Session: Safety, check-in, crucibles weight experiment (pp 69 and 71 of the lab manual) *Students should remove page 71 of the lab manual and affix it to the lab notebook as page 1, (not on 1st page!) following the table of contents.*

Students should remove page 69 of the lab manual and affix it to the lab notebook as page 2. This experiment must be dated, and its format should apply to the rest of the experiments to be performed during the semester.

Sessions 2 through 12: Preparation and determination of the formula for a cobalt-amino-halide complex and determination concentration of unknowns.

Session 13: Final exam and check out.

Session 13: Final report and lab notebook will be due at this time.

Graded lab notebooks may be picked up from the lab instructor on this 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.

Lab schedule Spring 2015 (Dr Laroui)

Week 1	January 22:	Check in and crucibles weigh
Week 2	January 29:	Synthesis part 1
Week 3	February 5	Synthesis part 2; crucibles done
Week 4	February 12	% halide Cl or Br
Week 5	February 19	% halide Cl or Br
Week 6	February 26	prepare HCl stock sol'n
Week 7	March 5	% amine NH ₃
Week 8	March 12	% amine NH ₃
	March 19 Spring Break (No lab)	
Week 9	March 26	prepare Na ₂ S ₂ O ₃ stock sol'n
Week 10	April 2	% cobalt Co ⁺³
Week 11	April 9	% cobalt Co ⁺³ ---% H ₂ O ₂ (not related to synthesis)
Week 12	April 16	Makeup lab---% H ₂ O ₂ (not related to synthesis)
Week 13	April 23	Final exam and Check out
Deadline	April 24	notebook and final report due by noon in hand at PSC522