

## LAB CHEM 1212 SPRING 2016

**Instructor:** Dr. Tracy Kerr  
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**Office #:** Courtland North #215  
**Office Hours:** M 12-3pm and W 12-2pm

Lab Lecture: W 4:00 – 4:50 pm, 169 Petit Science Center

Laboratory: W 4:50 – 7:00 pm, 355 Petit Science Center

### **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. This is an 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. Quizzes may be announced or unannounced and will be closed book.
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.
5. **Safety glasses required at all times in the lab.**
6. **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. Students must exit the lab by 5:00pm.
7. 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
8. No food and drinks allowed in the lab. Failure to follow safety rules will result in **expulsion from the lab with no make-up allowed.**
9. **No cell phones** are to be used in the laboratory. Even the TAs will abide by this. If you need to use your phone, you will wash your hands, and then go into the hallway. All cell phones must be on silent if they are in the lab.

10. **Students must present 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 presented 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. The tentative dates for these to be completed are:

% Halide.....	Due beginning of lab lecture Day 6
Molarity HCl.....	Due beginning of lab lecture Day 7
% NH <sub>3</sub> .....	Due beginning of lab lecture Day 9
Molarity Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> .....	Due beginning of lab lecture Day 10
% Co.....	Due beginning of lab lecture Day 11

**To pass the lab:** Students **MUST**

(1) **Take the lab final on Wednesday April 20**

(2) **Turn in the lab report due Wednesday April 20**

(3) **Turn in notebook due Wednesday April 20.** 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 1<sup>st</sup> 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 11:** Preparation and determination of the formula for a cobalt-amino-halide complex and determination concentration of unknowns.

**Session 13 - Wednesday April 20:** Final exam and check out.

**Wednesday April 20:** Final report and lab notebook will be due at this time.

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.**

**I reserve the right to make changes to this syllabus during the semester with appropriate class notification.**

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I have read the entire syllabus and understood the grading system and all the additional information provided in it, including the following:

1. No make-up tests or quizzes will be given.
2. Students may need to show their GSU Panther I.D. card when taking exams and quizzes.
3. The instructor reserves the right to assign seating during exams and quizzes.
4. Cell-phone calculators and programmable calculators are not allowed.
5. Cell-phones need to be kept either in purses or book-bags during exams or quizzes; of course, they should be turned off at all times.
6. **The preparation/handling of concentrated acids or ammonia solutions must be carried out under the hood. Unused concentrated acids or ammonia solutions must be diluted by adding them to water, under the hood. The amount of water to be used in the dilution depends on the amount of reagent needed to be diluted so it will not fume (about 1 in 10 dilution). The diluted solutions will be discarded in the waste drum located in the lab. Glassware used for the preparation/handling of concentrated acids or ammonia solutions must be rinsed with enough water, under the hood, and the combined rinses must then be placed in the waste drum.**
7. Preliminary reports on all calculations, **in ink**, must be presented at the time of the completion of each experiment, and they must be included in the appendix section of the final report; otherwise, 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.
8. The clock schedule for the lab must be followed. Students are not to enter occupied labs before the scheduled start time of the lab itself. For each scheduled lab section, clean-up must be completed by the end time of the lab so as not to disrupt the next class.
9. There are no make-up labs unless student has a legitimate excuse for having missed two lab sessions. A lab make-up session is scheduled for the 12<sup>th</sup> lab session. Any authorized make-up lab session will not take place until after 03/01/2016. A written authorization signed by the instructor is required.
10. **A lab apron or coat and goggles are required at all times.** Students will not be allowed in the lab wearing shorts, sandals or open-toe shoes, or tops that expose shoulders.
11. **Notebooks:**
  - A. The student must bring to lab the write-up for the experiment to be performed on each session; this must include "bullets" of the procedure(s) to be carried out and data tables to be filled out.
  - B. The student must have the lab notebook signed by the TA or instructor at the conclusion of the lab. We do not accept any other options of records keeping.

Name (print in ink): \_\_\_\_\_

Signature (in ink): \_\_\_\_\_

Date: \_\_\_\_\_