

Department of Chemistry
CHEM 1211K Laboratory Syllabus

Fall 2019
CRN 84945, 94422

Instructor: Dr. Markus W. Germann
Office: 412 NSC
Email & Phone: mwg@gsu.edu 404 413 5561
Office Hours: WR 11:30 am– 12:30 pm or by appointment
Pre-Lab Lecture: Thursday 1:00 pm - 1:45 pm in 218 NSC
Lab: Thursday 1:55 am - 4:00 pm in 234 NSC

IDO NOT CURVE. YOU WILL BE ASSIGNED THE GRADE YOU EARN

Comments on Lab:

- 1) Goggles/safety glasses and a lab apron must be worn all time during lab.
- 2) Bound stitched composition notebook
Notebooks should be kept up to date; bound composition notebook required. Leave the first two pages of the notebook blank for Table of Contents. All pages must be numbered, dated and initialed at the top right corner. All data must be recorded in ink directly in the notebook during lab. Do not write on other pieces of paper and transfer data to the notebook. Do not tear out pages, or whiteout/markout data. Instead cross-out the incorrect data and present corrected data on another blank page.
Notebooks must be signed by TA's or lab instructor at the beginning and conclusion of each lab session.
- 3) There will be a quiz on every lab day before the pre-lab lecture starts (from the 3rd week onward). Quizzes and final exam are closed-book.
- 4) Cleaning up is part of the lab session. Students should stop working and begin cleaning up their work area no later than 20 minutes before the conclusion of the lab session. Students must exit the lab by 4:30 pm
- 5) Students must turn in reports on density, melting point, molarity of NaOH and HCl, and Equivalent Weight of unknown after the conclusion of each of these experiments.

Session 1	Introduction, safety video, check-in
Session 2	Density experiment
Session 3	Recrystallization
Session 4-12	Characterization and Identification of an unknown carboxylic acid
Session 13	Final exam and check out. Final report and lab notebook due at this time.

Tentative lab schedule; deviations may be necessary.

Date	Week	Experiment
09/05/19	1	Introduction, safety video, check-in check-out the density unknown
09//12/19	2	safety quiz, density experiment
09/19/19	3	recrystallization of an unknown compound check-out the unknown organic acid density data sheet due , quiz 1
09/26/19	4	%yield of the recrystallization unknown, solubility and melting point of the unknown carboxylic acid, prepare ~ 1M NaOH solution, quiz 2
10/03/19	5	KHP titrations unknown acid melting point and solubility data sheet due , quiz 3
10/10/19	6	HCl titrations, quiz 4
10/17/19	7	equivalent weight titrations NaOH and HCl molarity data sheet due , quiz 5
10/24/19	8	computer search equivalent weight data sheet due , quiz 6
11/07/19	9	pKa titrations, final report format submit copy of computer search , quiz 7
11/14/19	10	pKa titrations, quiz 8
11/21/19	11	pKa titrations (and Na fusion) work on the lab report, submit copies of pKa titration plots , quiz 9
11/28/19		Thanksgiving Break
12/05/19	12	complete unfinished work, check-out from lab, quiz 10
12/12/19	13	*Final Exam at 9:00 am in 218 NSC *Submit the lab report and the notebook

October 15th, 2019 is the semester mid-point and the last day to drop the course with a 'W'. If you drop the lecture, you have to drop the lab as well.

Lab final exam is on December 12th, at 1:00 pm. No make up exams. Exam cannot be taken earlier or later than the assigned day.

***Required to pass the lab.**

Quizzes and the lab reports can be viewed at the instructor's office but **WILL NOT** be returned to the students.

****No grades will be discussed or provided by e-mail or phone.**