

CHEMISTRY 213 - LABORATORY SCHEDULE

Fall 2016

TEXT/MATERIALS: Laboratory worksheets and POGIL handouts are available on the Blackboard website. Lab manual: *CHEM 213*, Fountainhead Press (2016); ISBN 978-1-68036-296-1.

REQUIRED EYE PROTECTION: Students must wear the approved goggles issued by the department *at all times in the laboratory*—**NO EXCEPTIONS**.

Week of:	EXPERIMENT
1. Aug. 22 nd	CHECK-IN / SAFETY ORIENTATION : Safety in the Laboratory; Glassware & Equipment/Data Representation and Recording
2. Aug. 29 th	Determining Solubility of an Unknown Salt at Various Temperatures
3. Sept. 5 th	LABOR DAY (Holiday – no lab meetings for the week.)
4. Sept. 12 th	Colligative Properties of Solutions - Freezing Point Depression
5. Sept. 19 th	Reaction Kinetics – Determining a Rate Law
6. Sept. 26 th	Chemical Equilibrium and Le Chatelier's Principle
7. Oct. 3 rd	Determining K_{eq} for Iron Thiocyanate by Spectrophotometry
8. Oct. 10 th	LAB MIDTERM EXAM
9. Oct. 17 th	Determining the Acid Dissociation Constant, K_a , for a Weak Acid
10. Oct. 24 th	Determining K_{sp} of Lead(II) Iodide
11. Oct. 31 st	Qualitative Analysis of a Group of Anions
12. Nov. 7 th	Estimation of Absolute Zero
13. Nov. 14 th	Electrochemical Cells and the Nernst Equation / CHECK OUT
14. Nov. 21 st	THANKGIVING BREAK
15. Nov. 28 th	LAB FINAL EXAM

***FAILURE TO CHECK OUT MAY RESULT IN A FAILING GRADE FOR THE ENTIRE SEMESTER.**

Grading: The overall lab grade is a weighted average, and is calculated using the formula below:

$$(\text{Lab average} \times 0.70) + (\text{Midterm Exam} \times 0.15) + (\text{Final Exam} \times 0.15) = \text{lab grade}$$

Letter grades are assigned based on the overall lab grade compared to the following cutoffs:

90% = A; 80% = B; 70% = C; 60% = D; <60% = F