

CHEMISTRY 213 - LABORATORY SCHEDULE

Summer 2015

TEXT/MATERIALS: Laboratory worksheets and POGIL handouts are available on the Blackboard website. Lab manual: *CHEM 213*, Fountainhead Press (2014); ISBN 978-1-59871-923-9.

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

Day:	EXPERIMENT
June 15	CHECK-IN / SAFETY ORIENTATION : Safety in the Laboratory; Glassware & Equipment/Data Representation and Recording
June 17	Determining Solubility of an Unknown Salt at Various Temperatures
June 22	Colligative Properties of Solutions - Freezing Point Depression
June 24	Reaction Kinetics – Determining a Rate Law
June 29	Chemical Equilibrium and Le Chatelier's Principle
July 1	Determining K_{eq} for Iron Thiocyanate by Spectrophotometry
July 6	LAB MIDTERM EXAM
July 8	Determining the Acid Dissociation Constant, K_a , for a Weak Acid
July 13	Determining K_{sp} of Lead(II) Iodide
July 15	Qualitative Analysis of a Group of Anions
July 20	Estimation of Absolute Zero
July 22	Electrochemical Cells and the Nernst Equation / CHECK OUT
July 27	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:

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