

CHM 130IN Laboratory Schedule – Spring 2009

Laboratory experiments are downloaded from <http://www.chymist.com/chem%20130.html> (This is the CHM 130 page of the web site.) You are required to read each experiment before class. At least one individual in your lab group must download the experiment before class.

If you are not prepared for lab, you may be asked to leave and will receive a grade of zero for that laboratory experiment.

Reports are due no later than **one week** after the experiment is completed.

Laboratory reports are graded on a 10 point scale based on neatness, completion of data, and answers to questions. Missed or incomplete experiment reports may be graded as a zero.

Date	Experiment
Jan. 22	Safety Lecture
Jan. 27	Safety Test and Check-in
Jan. 29	Mystery Powders
Feb. 3	An Experiment in Alchemy: Copper to Silver to Gold
Feb. 5	Economics of a Chemical Product
Feb. 10	Ink Analysis: An Experiment in Paper Chromatography
Feb. 12	Chromatography: The Extraction and Identification of Artificial Colors From Foods – Part 1: Extraction of food color
Feb. 17	Chromatography: The Extraction and Identification of Artificial Colors From Foods – Part 2: Identification by paper chromatography
Feb. 19	Rodeo Rays – College closed – no classes
Feb. 24	Exam 1
Feb. 26	Energy of a Peanut: An Experiment in Calorimetry
Mar. 3	Nuclear Chemistry
Mar. 5	Empirical Formula of a Compound
Mar. 10	Testing the Waters: How Good is That Bottled Water and How Effective is Your Water Filter – Part 1: Water testing
Mar. 12	Testing the Waters: How Good is That Bottled Water and How Effective is Your Water Filter – Completion of testing and Part 2: Water tasting
Mar. 16 – 22	Spring Break – No classes

Mar. 24 or Mar. 26	Exam 2 Hydrates:
Mar. 31	Molar Mass by Freezing Point Depression
Apr. 2	Osmosis and Dialysis – Part 1
Apr. 7	Osmosis and Dialysis – Part 2
Apr. 9	Chemical Reactions
Apr. 14	Synthesis of Zinc Iodide: Tracking a Chemical Reaction
Apr. 16	Alum from Waste Aluminum Cans. Part 1. Preparation of Alum
Apr. 21	Alum from Waste Aluminum Cans. Part 2. Verification of Alum and Grow an Alum Crystal
Apr. 23	Exam 3 (No lab experiment)
Apr. 28	Plop, Plop, Fizz, Fizz, Limiting Reagents and Determination of NaHCO ₃ in Alka Seltzer Tablets
Apr. 30	Standardization of a Basic Solution and Analysis of Stomach Antacid Tablets – Part 1: Preparation of solutions
May 5	Standardization of a Basic Solution and Analysis of Stomach Antacid Tablets – Part 2: Analysis of stomach antacid tablets
May 7	Check-out
May 12	No lab experiment

Note: Dates of exams are tentative and may change.

LABORATORY SAFETY

Laboratory safety is a major component of working in a chemical laboratory. At the beginning of the semester, you are given a safety lecture and a safety exam. You are required to pass the laboratory exam with a grade of 90% or better.

You must abide by the safety rules during the semester. This includes wearing safety goggles when working with chemicals, wearing closed shoes, not sandals or flip-flops, appropriate dress, and following proper methods of chemical disposal. Non-compliance may result in you're being asked to leave the laboratory with a grade of zero for that day.