Course Syllabus
Chem 352L
PHYSICO-CHEMICAL MEASUREMENT
SPRING 2009

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Text: Experiments in Physical Chemistry
(Eighth Edition)

Author: Garland, Nibler, Shoemaker
Publisher: McGraw-Hill (2007)

Course description:
Chemistry 352L is a Writing Intensive laboratory course that couples experimentation with scientific writing. The course focuses on the understanding of physical chemical principles, the use of scientific instrumentation and the organizing and explaining of results in laboratory reports.

Grading:

1. Overall Point Assignment
   - Written Reports and Notebooks 80%
     (10 experiments)
   - Final exam or Assignment 10%
   - Performance in the laboratory 10%
     (as evaluated by TAs)

2. Report Grading
   - Notebook 15%
   - Abstract 5%
   - Introduction 20%
   - Experimental 5%
   - Data/results 10%
   - Calculation/Error Analysis 15%
   - Discussion 25%
   - References 5%
     100%

3. Report revision
   The first two reports must be resubmitted after they have been graded. The revisions must address the points of the critique. If the rewritten report earns a higher score than the original submission, the score of the rewrite will supersede the score for the original report. Due dates for revised reports will be specified in class.

4. Due dates
   Lab notebooks must be initialed by your TA before you leave the laboratory. A photocopy of the relevant pages of the laboratory notebook must accompany the report for each experiment. All reports are due at 1:30 PM exactly one week after the completion of the experimental work.
   Reports are to be handed in to the TA, not the grader or the professor. Late reports not handed in by the due date will be assessed a penalty of 5% per weekday late.
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1. Experiment 6, Heats of Combustion [CN]
2. Experiment 18, Temperature Dependence of emf (handout supplement) [CN]
3. Experiment 15, Binary Solid-Liquid Phase Diagram (7th ed.) [GL]
4. Experiment 12, Chemical Equilibrium in Solution [AT]
5. Experiment (28), Second-Order Reaction Kinetics [AT]
6. Experiment 34, Absorption Spectrum of a Conjugated Dye [GL]
7. Experiment 39, Absorption and Emission Spectra of I₂ (Absorption only) [CN]
8. Experiment 37, Vibrational-Rotational Spectra of HCl and DCl [AT]
9. Experiment 31, Magnetic Susceptibility [GL]
10. TBD [AT]
11. TBA
12. Laboratory Cleanup/ Course Evaluation/ Take Home Final

A = (sec. 1) Alysia Osugi, Shigeki Ochiai, Krystle Sze (sec. 2) Lara Berger, Sedef Maloy
B = (sec.1) Connie Chee, Michael Brito, Christine Nguyen (sec. 2) Kelli Takaki, Seung Ju Lee
C = (sec.1) Daniel Choe, Regina Gilliand (sec. 2) Henry Workman, Sharon Chi
D = (sec. 1) Susannah Lee, Chelsea Murabayashi, Christy Gilman (sec. 2) Tanya Taumua, Jennifer Nagamine, Chao Wang
E = (sec. 1) Clayton Lee, Sirimon Pruangviriya (sec. 2) Gloria Cheong, Uoc Le, Mengxiao Wen
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