

Course Syllabus  
Chem 352L  
PHYSICO-CHEMICAL MEASUREMENT  
SPRING 2009

Instructor: Francis Fujiwara  
Bilger Addition 005  
956-5409  
[fujiwara@hawaii.edu](mailto:fujiwara@hawaii.edu)

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 (10 experiments)	80%
Final exam or Assignment	10%
Performance in the laboratory (as evaluated by TAs)	10%
  
2. Report Grading

Notebook	15%
Abstract	5%
Introduction	20%
Experimental	5%
Data/results	10%
Calculation/Error Analysis	15%
Discussion	25%
References	<u>5%</u>
	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.

Chemistry 352L Experiment Schedule 1/12/09  
Spring 2009

Week	1	2	3	4	5	6	7	8	9	10	11	12
12-Jan												
19-Jan											All	
26-Jan	A	B	C	D	E							
2-Feb	E	A	B	C	D							
9-Feb											All	
16-Feb	D	E	A	B	C							
23-Feb	C	D	E	A	B							
1-Mar	B	C	D	E	A							
8-Mar											All	
15-Mar						A	B	C	D	E		
22-Mar	S	P	R	I	N	G	-	B	R	E	A	K
29-Mar						E	A	B	C	D		
5-Apr						D	E	A	B	C		
12-Apr						C	D	E	A	B		
19-Apr						B	C	D	E	A		
26-Apr												All

- 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]

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- 6 Experiment 34, Absorption Spectrum of a Conjugated Dye [GL]  
 7 Experiment 39, Absorption and Emission Spectra of I<sub>2</sub> (Absorption only) [CN]  
 8 Experiment 37, Vibrational-Rotational Spectra of HCl and DCl [AT]  
 9 Experiment 31, Magnetic Susceptibility [GL]  
 10 TBD [AT]

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- 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 Gilliland (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 Pruangviriyaya (sec. 2) Gloria Cheong, Uoc Le, Mengxiao Wen

Teaching Assistants:

Lum, Gary  
Bilger 302 / 956-5786  
[glum@hawaii.edu](mailto:glum@hawaii.edu)

Nold, Christopher  
Bilger 302 / 956-5786  
[cpnold@hawaii.edu](mailto:cpnold@hawaii.edu)

General honcho:

Taylor, Andrew  
Bilger 207 / 956-5722  
[amtaylor@hawaii.edu](mailto:amtaylor@hawaii.edu)