

Course Instructor: Dr. Johnny W. Pang (2070A Young) **Email:** pang@chem.ucla.edu
Office : 2070A Young Hall **Office Hours:** T 10-11am; & W 10-11am in 2070A Young Hall
Lecture(s): Thursday 10 – 10:50am in CS50 **Laboratory Room(s):** 1049 & 1067 Young Hall

Virtual Office Hours: Chemistry 14BL will use the Department of Chemistry's Virtual Office Hour (VOH) for posting report guidelines and office hours on the Internet. The address is <http://voh.chem.ucla.edu/>.

Class Web Site: Go to the 14BL VOH page and you will find a link to the class Web site.

Enforced Requisites: courses 14A (C- or better) and 14B (co-requisite OR if completed C- or better)

Required Texts: (1) Chemistry Experiments for Life Science Majors (2nd Edition) by A.A. Russell, Burgess Publishing (ISBN #: 0808725173)
 (2) Laboratory notebook with duplicate carbon copies (refer to the other side of this syllabus for more details)
 (3) Techniques in Organic Chemistry (1st Edition) by Mohrig, Hammond, Schatz and Morrill.
 ISBN #: 0-7167-6638-8

Recommended Text: Peter Atkins and Loretta Jones, Chemical Principles - The Quest for Insight (3rd Ed) (or any other equivalent general chemistry text)

Grading: To receive a passing grade (C-), you must complete ALL the experiments (including reports) and receive at least 50% of the points in EACH of the following grading category in the course. No student can pass the course without the final exam. NOTE: The instructor reserves the right to modify the 50% rule at the end of the quarter after all the scores are tabulated.

(I) Preparation for labs – Pre-Lab Assignments	95	21%	
(II) Performance in labs - Techniques, Accuracy of Work & Lab Clean up	45	10%	
(III) Documentation of lab work - Lab Reports	140	31%	
(IV) Concepts Reinforcement			
On-Line (CPR) Writing Assignments (2 @ 20 points each)	40	9%	
(V) Conceptual Understandings of Experiments			
Midterm (IN CLASS –see below)	65	14.5%	
Final (IN CLASS – see below)	65	14.5%	
Total Points:	450	100%	

Lecture Schedule:	Sept. 29	Introduction/ Measurements and Errors
	Oct. 6	Theory on Beer's Law & Concentration Units
	Oct. 13	Introduction to CPR & Acid-Base Equilibrium (I)
	Oct. 20	Acid-Base Equilibrium (II)
	Oct. 27	Analysis of Titrations Data
	Nov. 3	Midterm Exam (NO MAKE UP EXAM)
	Nov. 10	Theory on Crystallization
	Nov. 17	Melting Point Theory
	Dec. 1	Chemical Kinetics
	Dec. 8	Final Exam (NO MAKE UP EXAM)

Exam(s) must be taken during the lecture section (or during the lab section if the exam is in-lab exam) in which you are officially enrolled. Any missing exam will count as ZERO. There is NO MAKE UP for missing exams regardless of reasons.

Lab Preparation: You must be prepared for the experiment before you come to lab if you wish to complete the experiment in the time allotted. *The course is impacted; there is neither make-up time in the course nor space for you to work in other sections. If you miss a lab, you MUST discuss the issue with the course instructor to see what other options you may have to complete the experiment.* You must do your lab work in your scheduled period. In

preparation for the lab, you should first study the pertinent sections in the text, review the lecture notes pertaining to the experiment, then view (and possibly review) the appropriate videos (refer to lab schedule for on-line access of the videos) for any new techniques to be used in the experiment. If a pre-lab report is required for the experiment, you **MUST** turn in the pre-lab report to your TA at the beginning of the lab period. Refer to the VOH for the specific report guidelines. **During the lab period, you will also complete the data tables and record any other observations about the experiment.** A copy of the in-lab data is to be turned in to the T.A. at the end of the lab period. Late pre-lab work will count as ZERO.

COURSE INFORMATION (continue)

Post-lab Reports: The remainder of the lab report, - the data analysis, error analysis, and conclusions - are to be completed in the lab notebook after the experiment is completed (check VOH for guidelines). The post-lab report must be turned in to the T.A. on the day of your regular lab section listed under “Due Date” on your lab schedule. Unexcused late post-lab reports will accrue a penalty of FIVE percent of the grade PER DAY. No reports will be accepted after 5:00 p.m. on the last day of instruction.

Bulletin Board: The course bulletin board is located on the wall across from the vending machines on first floor of Young Hall. **Report guidelines will ONLY be available on the 14BL VOH (Virtual Office Hours) homepage.**

Safety Goggles (OSHA APPROVED) and Protective Clothing:

Eye protection **must** be worn in all laboratories whenever any laboratory work is in progress. Recommended safety goggles may be purchased from the Undergraduate Chemistry Fraternity - AXE - Room 1275 Young Hall. A heavy vinyl or rubberized apron or full-length lab coat, closed-toe shoes, and long pants must be worn when doing experimental work. Lab coat can be purchased from AXE. If you wear an apron, your shirt must cover your shoulders and upper arms. Shorts and sandals are NOT allowed in the laboratory. You will be barred from the laboratory if you are not wearing appropriate protective clothing. Latex gloves will be provided for those experiments using chemicals that are hazardous to skin.

Laboratory Notebooks: Laboratory notebooks designed for **duplicate records** are available from the Undergraduate Chemistry Fraternity - AXE - Young Hall 1275 and the student store. All experimental data and complete reports will be recorded in this laboratory notebook.

Note: AXE only accepts personal check or money order when purchasing lab equipment. AXE DOES NOT accept cash or credit card!

Grading Criteria:

Your mastery of the course will be measured through your performance on the exams, reports, experimental accuracy, calculations and analysis of data; and your lab technique. Qualities that will be considered in this latter category include your performance in observing safety regulations such as wearing eye and personal protection in lab, following safe lab procedures, working independently and coming to lab prepared, completing the assigned work within the scheduled laboratory periods, coming to lab on time and turning in assignments promptly, and disposing of waste in proper receptacles.

Chemistry 14BL is graded on a mastery basis. Letter grades are based on the course point ***total***. (Please note these grades are assigned only at the end of the quarter when all items have been graded; the percentage on a portion of the course is not a meaningful measure of your total performance.) Plus and minus grades are frequently assigned, but final decisions to award these grades are not made until the end of the quarter when all the student data have been evaluated. As a rule of thumb, the course grades are assigned as follows:

90	-	100%	=	A
80	-	90%	=	B
65	-	80%	=	C
50	-	65%	=	D
0	-	50%	=	F

Cheating, Plagiarism, Dishonesty:

All cases of cheating, plagiarism, or dishonesty will be reported to the Dean of Students. All work that you submit for grading must be your own work. Group reports must acknowledge the individual contributions of each person, if the work has been shared.