

Chemistry 1C/1CL

Summer 2009: June 22 – Aug 29

Chem. 1C (01693)

MWF 11 – 11:50AM

Broida 1640

Instructor: Jimmy O'Dea

jodea@chem.ucsb.edu

Office: (805) 893-7735

Office Hours: MW 12-1, PSBN 2637, and by appointment (call office or email)

Book: Steven S. Zumdahl, *Chemical Principles*, 6th Edition, ISBN: 978-0-618-94690-7

Exams: Two quizzes, two midterms, and a final. *No* make-up quizzes or exams.

Grades: Homework – 10%, Quizzes – 10%, Exam 1 – 20%, Exam 2 – 20%, Final – 40%

Webpage: www.uweb.ucsb.edu/~jodea/chem1c.htm

Lecture Final Exam: Saturday, August 29, 8 – 11AM, Broida 1610

APPROXIMATE LECTURE SCHEDULE

LAB SCHEDULE

Week	Date	Topic	Chapter	Chem. ICL Lab Assignment
1	June 22, 24, 26 HW1	Bonding HW1 due Fri. June 26	13	Check-In Answer Pre-Lab Questions Exp. 15
2	Quiz 1 June 29, July 1 (no class July 3)	Quiz 1 Wed. Jul 1 Covalent Bonding Happy 4th of July	13 14	Exp. 15 Oxidation of Alcohol
3	July 6, 8, 10 HW2	Liquids and Solids HW2 due Fri. July 10	16	Exp. 16 Synthesis of Alum
4	Exam 1 July 13, 15, 17	Exam 1 Fri. July 17 Properties of Solution	17	Exp. 17 Colligative Properties: Freezing Point Depression
5	July 20, 22, 24 HW3	Properties of Solution HW3 due Fri. July 24	17	Exp. 18 <i>Synthesis</i> of Transition Metal Complexes
6	Quiz 2 July 27, 29, 31	Quiz 2 Fri. July 31 Transition Metals and Coordination Chemistry	19	Exp. 18 <i>Analysis</i> of Transition Metal Complexes
7	Aug 3, 5, 7 HW4	Coordination Chemistry HW4 due Fri. Aug. 7	19	Exp. 19 Synthesis of Aspirin and Oil of Wintergreen
8	Exam 2 Aug 10, 12, 14	Exam 2 Fri. Aug 14 Organic	21	Exp. 19 Analysis of Aspirin/Check-out
9	Aug 17, 19, 21 HW5	Aug 17, 19, 21 HW5 due Fri. Aug 21	21	Lab Final Review / Quiz
10	Aug 24, 26, 28 Final Exam	Biochemical Molecules Representative Elements Sat. Aug 29, 8-11AM	21 18	Lab Final Thur. Aug. 27, 7:30-9:30PM

Homework will be completed using WebAssign (www.webassign.net/student.html), an online homework system. To use WebAssign, you must purchase an access code from the UCen bookstore (go to the customer service desk). If you purchased a WebAssign code at the beginning of the year in the text book package, you do not need to purchase another one. To log in to WebAssign, use your perm number as your username and password. Change your password after your first log on. Homework must be turned in by **11:59PM** on the due date listed above.

CHEM 1CL GENERAL CHEMISTRY LABORATORIES

Chem.1CL is meant to demonstrate and reinforce chemical bonding, properties of solution, and synthetic organic and inorganic chemistry (i.e. performing chemical reactions!). The skills and concepts learned in Chem. 1CL have direct applications in biology, medicine, environmental science, physics, and engineering. Pretty much everything. Chem. 1CL is a one-unit course separate from the lecture course but intended to accompany it.

Laboratory Coordinator: Petra van Koppen, PSBN 3670 B. Email: vankoppen@chem.ucsb.edu
Office hours: Wed 3 - 4 PM or by appointment

LAB FINAL Thursday, August 27, 7:30 – 10:30 PM, CHEM 1179

Lab Manual: General Chemistry 1AL/1BL/1CL, Laboratory Manual by Petra van Koppen, Hayden-McNeil Pub. (2008-2009)

Also Required: Safety glasses and a bound, quadrille-ruled, duplicate-page notebook. Both are available in the bookstore.

Safety glasses must be worn in lab AT ALL TIMES. You will not be allowed into lab without them.

At the end of the course (or if you drop the course before the end), you must check out of the lab (i.e. check that you have the required contents in your drawer). If you do not check out, you may be charged for missing equipment and you may receive a zero for your lab technique grade. That would be bad.

NOTE: Chem. 1C and 1CL may *not* be taken P/NP by science and engineering majors because these courses are required in preparation for the major. **REQUIRED LAB FEE:** A non-refundable \$32.00 lab fee is required for this course. It will be charged to your BARC account upon enrollment.

Success in Chemistry 1C

- Slow and steady wins the race. i.e. do a little bit each day.
- Come to class. Read the book.
- Do sample problems while reading book.
- Do WebAssign homework.
- Work additional problems (see below) after reading chapter.
- Ask questions: during lecture, after lecture, office hours, CLAS, TA office hours.
- Recopy your notes (or figure out another way to regularly digest material).
- Do more problems.

Suggested Problems from Zumdahl, 6th Edition

(Doing these problems is key to your success in CHEM 1C).

Chapter 13: 10, 13,14,17,19,20,21,22,23,24,27,37,38,39,40,51,52,54,55,56,59,67,68,69,70,71,72, 75,76,79,89,90,91,98,102

Chapter 14: 12,14,19,20,21,22,23,24,25,26,28,34,35,38,45,47,73

Chapter 16: 7,9,11,12,13,15,17,18,19,20,21,22,23,27,29,33,38,41,43,46,72,75,82,83,84,85,87,92,99

Chapter 17: 13,15,16,17,28,29,30,35,38,40,43,45,47,49,50,51,53,57,58,59,61,66,67,70,73,75,76,107

Chapter 18: 2,28,36,41,44,46,52,69,71,72,77,94,95

Chapter 19: 6,7,16,22,23,24,25,26,27,31,32,33,34,37,39,40,42,43,44,46,47,48,49,52,53,65

Chapter 21: 5,7,8,9,11,12,13,14,15,16,21,25,26,27,28,29,30,37,38,39,40,41,42,43,44,45,46,49,56

57,61,65,69,72,75,76,77,78,84,88,89,93,95,96,99,106,111,112,113,114,116,117,119,132

For additional help, use UCSB's Campus Learning Assistance Services (CLAS)
Drop-in and tutorial schedules here: http://www.clas.ucsb.edu/CLAS_schedules.htm