

Chemistry 1C, Summer 2016

Mondays, Wednesdays, and Fridays, 9:30AM-12:00PM

Location: Physical Sciences Building 110

Professor Ilan Benjamin

Overview

Chemistry 1C is the third part of a three quarter general chemistry series. The topics covered in this class include thermodynamics, electrochemistry, liquid, solids and solutions and nuclear chemistry. See below for a detailed syllabus.

Prerequisite:

Chemistry 1A

High school algebra (must be proficient with the material in appendix 1 and 2 of the book)

Required text/Materials:

Chemical Principles, 7th edition, by Steven S. Zumdahl

Scientific calculator

Missing an exam:

If you miss an exam because of illness or other extenuating circumstance (travel for family matters is not considered to be an extenuating circumstance), you must contact the instructor as soon as possible **before the exam date.**

Disability accommodations:

If you have a disability that requires an accommodation, please consult with the Disability Resource Center, 459-2089. If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization from the DRC to me during my office hours or after Lecture within the first two weeks of the quarter.

Internet access:

You may use the instructor's and the TA's email addresses to ask questions about the material. Information about the course, announcements, homework sets, etc, will be available here on the web.

Grading

Course Credit will be assigned as follows:

Homework: 10% (All 4 sets are required, each problem set = 2.5%)

First exam: 40% (110 PSB, July 8, 9:30AM)

Second exam 50% (110 PSB, July 22, 9:30AM) Bring calculator, ID and one page formulas

To pass the course you must score at least 50% of the total possible points.

Key: A+: 97-100; A: 89-96; A-: 85-88; B+: 80-84; B: 70-79; B-: 65-69; C+: 60-64; C: 50-59.

divider

Course Syllabus

Month				Reading	Topics
	<i>Mon.</i>	<i>Wed.</i>	<i>Fri.</i>		
<i>June</i>	20	22	24	Chapters 9, 10*	1st and 2nd laws of thermodynamics
<i>June/July</i>	27	29	1	Chapter 10*, 11	2nd law and electrochemistry
<i>July</i>	4 No class	6 Review	8 first exam	Chapter 11	Electrochemistry
<i>July</i>	11	13	15	Chapters 16,17	Liquids&Solids, Solutions
<i>July</i>	18	20 Review	22 second exam	Chapter 20	Nuclear Chemistry

* Excluding section 10.2

divider

divider

Problem Sets

These problems are assigned from the 7th edition of the book, but must be taken **online** by the deadline specified in the homework website and also given below.

Note that the numerical problems are personalized to each student. **The solutions posted below (after the deadline) are for the numerical version in the textbook.**

The homework website is: www.webassign.net

Click on the login link on the upper right to register by using the following class key:

The Class Key for Chem 1C Summer 2016 is: ucsc 1475 7459

Access to the online homework site must be purchased.

If you purchase the textbook independent of WebAssign, you must obtain an access code either from the Bay Tree Bookstore or from WebAssign website.

Set number	Chapter	Problems	Due date
1	9	32, 34, 40, 51, 62, 64, 70, 76	6/27/2016 11:59PM
2	10	18, 23, 30, 39, 42, 45, 46, 53, 62, 68, 77, 82, 106, 128	7/7/2016 11:59PM
3	11	20, 22, 24, 40, 48, 49, 54, 70, 114	7/14/2016 11:59PM
4	16,17	ch. 16: 15, 24, 38, 86, 92 ch. 17: 20, 28, 32, 40, 44, 46, 59, 66, 69, 84	7/21/2016 11:59PM

Problem sets grading

The grading is done automatically once you submit the answer. You have got 7 tries per numerical question (If the question has multiple parts, you get 7 tries for each part.) Some multiple choice questions have smaller number of tries and some questions that require writing balanced reactions have larger number of tries.

It is best to submit the answer to each question or part of a question once you are done with it.

Correct answer should be within 2% of the true value. So avoid round-off errors!! **Keep a couple more significant figures during intermediate steps to avoid round-off errors.**

Try to supply the correct number of significant figures (but you will not be penalized if you don't).

The number of points you get for each question varies depending on how many parts each question has and its difficulty.

You can improve your problem solving skills using the practice key on WebAssign (click on “Practice Another Version”, if available.)

divider

Discussion Sections

Sections begin on the first week of classes.

They are designed to help you understand and master the material and get help with the homework.

Attending section is good preparation for exams, and you should plan to attend your section.