Chemistry 1C, Winter 2018

Instructor: Professor Ilan Benjamin; ilan@ucsc.edu

Office Hours: Mondays, Tuesdays, 9:30am-11am, 338 Physical Sciences Building

Additional office hours before the final exam: Thursday 9:30am-11:30am

Lecture time and location: MWF 12:00 – 1:05PM, Humanity Lecture Hall

Prerequisite: Chem 1A, high school algebra

Required text: Chemical Principles, 7th Edition by S. S. Zumdahl

Course Credit will be assigned as follows:

10%: Homework. Online using WebAssign (see link above). These problems are taken from Zumdahl, 7th Ed

20%: First Exam: Wednesday 1/24/18, covers Chapter 9. See information below.

20%: Second Exam: Wednesday 2/14/18, covers Chapter 10.

50%: Final Exam: Monday, 3/19/18, 4-7pm, Chapters 11, 16, 17, 20.

Answer key for the final exam: keys.pdf

Download keys.pdf

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.

Lecture Webcasting

You can review the lectures here:

https://opencast-player-1.lt.ucsc.edu:8443/admin-ng/login.html

Links to an external site.

Username: chem-1c

Password: TsspOat

Piazza

We will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and the instructor. Rather than emailing questions to the teaching staff, we encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Find our class page at: https://piazza.com/ucsc/winter2018/chem1c01/home

(Links to an external site.)

Homework 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. No time extension can be given. Homework are available to work on at least 2 weeks before the due date.

Note that the numerical problems are personalized to each student.

The homework website is: www.webassign.net

(Links to an external site.)

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

The Class Key for Chem 1C Winter 2018 is: ucsc 21775953

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.

Additional helpful WebAssign hints:

Scientific Notation for a number like 5.63 x 10^{-6} is entered like this -- 5.63e-6

Use the chemPad within each problem for subscripts, superscripts and reaction arrows

Chemical reactions often require that you enter the state of matter, for example $O_2(g)$ or $H_2O(l)$.

Schedule of Lectures

Month				**Reading**	**Topics**
	Mon.	*Wed.*	*Fri*		
January	*8*	10	12	Chapter 9	1st law of thermodynamics
January	15 **Holiday**	17	19	Chapters 9, 10	2nd law of thermodynamics
January	22	24 **Exam 1**	26	Chapter 10	2nd law of thermodynamics
January, February	29	31	2	Chapter 10	Chemical Equilibrium
February	5	7	9	Chapter 11	Electrochemistry
February	12	14 **Exam 2**	16	Chapter 11	Electrochemistry
February	19 **Holiday**	21	23	Chapter 16	Liquid, Solids
February , March	26	28	2	Chapters 16,17	Liquid, Solids, Solutions
March	5	7	9	Chapter 17	Solutions
March	12	14	16	Chapter 20	Nuclear Chemistry
March	19 **Final Exam**				

Teaching Assistants and Office Hours

Daniel Bulmahn dbulmahn@ucsc.edu Office Hours: 9-10 am, Monday and Wednesday, PSB 198

Melissa Guarino-Hotz meguarin@ucsc.edu Office Hours: 2-3 pm, Tuesdays and Thursdays, PSB 431

The discussion sections listed below are optional. You do not need to enroll. You may drop in to the section of your choice to ask questions, get help with homework and discuss relevant topics with the TA. Sections begin in the first week of classes, starting Monday January 8th.

Days	Time	Instructor	Location
M	05:20PM-06:25PM	Staff	Kresge Clrm 325
M	06:40PM-07:45PM	Staff	Kresge Clrm 325
F	08:00AM-09:05AM	Staff	Kresge Clrm 325
Tu	09:50AM-10:55AM	Staff	Soc Sci 1 161
Tu	11:40AM-12:45PM	Staff	Soc Sci 1 161
F	04:00PM-05:05PM	Staff	Soc Sci 1 161

Academic Excellence Program (ACE Links to an external site.)

To increase the diversity of students graduating with degrees in science, technology, engineering, and math, ACE provides supplementary problem solving sessions for a wide range of classes, including Chemistry 1C. Students must apply to participate, and each applicant is reviewed based on a combination of factors, including academic history, academic goals, disadvantage, and a desire to work in groups.

Chem 1C Session Leader: Nick Demello ndemello@ucsc.edu

Chem 1C ACE sessions: Tuesdays, 9:50am - 11:20am and Thursdays, 11:40am - 1:10pm.

Modified Supplemental Instruction (MSI)

MSI is an optional program that gives students the opportunity to learn together in small groups led by advanced Student Learning Assistants. This is a wonderful opportunity and highly recommended for students who wish to engage in additional study. Please see their website for details. Once the session times are worked out the schedule will be published here.

The learning assistant assigned to our class is: Zupan Joshua jzupan@ucsc.edu

Limited Additional Tutoring Support: LSS is providing extra small group tutoring sessions (no more than 6 students) for our class. Small Group Tutoring is meant to provide students with smaller, collaborative spaces to learn with their peers and tutor. Many students also use Small Group Tutoring in conjunction with the larger MSI sessions as part of their weekly study time for the class. If you are interested in signing up for these sessions, stop by the LSS office, or giving the office a call at (831) 459-4333.

Small Group Tutor: Esther Dai jdai4@ucsc.edu