

CHEMISTRY 1P PREPATORY CHEMISTRY COURSE SYLLABUS AND SCHEDULE

Introduction:

Chemistry 1P is an introductory course for students who have had a little/no background in high school chemistry or who feel that they did not do sufficiently well on the chemistry placement exam. No prior knowledge of chemistry is assumed. However, enrolled students are responsible for knowing the basics of high school algebra including solving for unknown variables, manipulating exponents and logarithms, operating a calculator, etc. Math concepts will be reviewed as needed. Be prepared to take responsibility for getting the help you need as needed. This course is designed to ready you for the 3-part sequence of introductory general chemistry. A range of topics will be covered including the atomic nature of matter, molecules, chemical reactions; stoichiometry (i.e., the combining laws of chemistry); acids and bases; and, oxidation-reduction. Upon completion of this course you should be prepared to enter Chemistry 1A. We also hope that you will develop insight into the chemical workings of our lives

Instructor:

Dr. Randa Roland Thimann 317 roland@chemistry.ucsc.edu (831)459-5486
course website is available through UCSC chemistry page: chemistry.ucsc.edu

Text/Required Materials:

Chemical Principles, 5th Edition, by Steven S. Zumdahl; scientific calculator, green scantrons/#2 pencil.
Study Guide and *Partial Solutions Manual* to accompany *Chemical Principles* are optional.

Lectures and Reading Assignments:

The class schedule includes reading assignments and homework problems from the textbook. Reading of this material BEFORE the lectures is greatly encouraged. Homework will be collected in lecture.

Exams and Grading:

Three exams will be given. Course credit will be assigned approximately as follows: 10% for participation (attendance, scholarship, quizzes, etc.) and 90% for the exams. Students must be present at the exams at the appointed times.

If you miss an exam because of illness or other extenuating circumstance (travel for family matters is not considered to be an emergency circumstance), prior to the absence you must contact the instructor to discuss your situation. Make-up exams will not be offered but other mitigating measures may be taken to compensate for a properly justified absence. To pass this course you must score at least 50% of the total available points (note 50% is not a guarantee of a passing grade). Late work will not be accepted.

You are expected to be full participants in Chem 1P. I am dedicated to doing everything that is reasonable to help you learn the material. Please show respect for your classmates and instructor by:

- showing up on time and prepared;
- not talking or in any way causing unnecessary disruptions (please turn off cell phones);
- staying in your seat during lecture unless it is absolutely necessary to leave; and,
- turning in all assignments on time.

Following these simple requests will enable all of us to focus on the endeavor that brought us together: learning chemistry.

Office Hours:

The instructor will hold office hours once weekly for 1 hour and by appointment (time will be announced in class). Please use this time to clarify course material rather than to solve personal problems or grievances on grading. If any such situation arises it should be handled as follows: please write a concise note or email explaining your problem or point of view regarding any grading in which you believe there is a problem. Deliver your grievance to the instructor who will review the material and attempt to resolve your difficulties (re-grade if appropriate). If this is not sufficient, the TA will set a special appointment with the instructor so that you may discuss the situation further.

Disability Resources:

If you have a disability (visible or invisible), you are encouraged to talk with the instructor and your TA about it on a confidential basis so that we might collectively devise a strategy to overcome any barriers to ensure your success. You should also consult with the Disability Resource Center, 459-5635.

CHEM 1P Fall 2007 LECTURE SCHEDULE (*Subject to Change*)*Please see the complete course syllabus on the web through chemistry.ucsc.edu*

Date	Topic	Ch	HW#	HW Problems	Week Due
9/27	Course Outline; Introduction to Chemistry Math Review	1		You are responsible for all Ch 1 and Appendix 1&2 content	
10/2	Exponentials & Logarithms Graphing & Graphical Analysis Uncertainties & Significant Figures	App 1&2	1	Ch 1/App 1&2 – see practice problems	10/9
10/4	Measurements & Conversions	App 1&2			
10/9	Atomic Theory & Structure	2	2	Ch 2: 29, 32, 33, 34, 35, 38, 40, 42, 52, 54	
10/11	Atomic Theory & Structure Isotopes & Masses Molecules & Ions	2			10/15
10/16	Periodic Table Naming Compounds	2			
10/18	Naming Compounds	2			
10/23	Exam 1			Ch 1 – 2	
10/25	Atomic & Molecular Masses Moles & Molar Mass Percent Composition of a Compound	3		Ch 3: 26, 30, 32, 34, 38, 44, 46, 48, 55, 59, 64, 68	11/13
10/30	Determining a Chemical Formula	3			
11/1	Chemical Equations	3			
11/6	Stoichiometric Calculations	3			
11/8	Stoichiometric Calculations	3			
11/13	Exam 2			Ch 3	
11/15	Properties of Water Aqueous Solutions Composition of Solutions	4		Ch 4: 12, 16, 17, 25, 27, 28, 30, 38, 42, 48, 52, 54, 56 (any method), 57b, 58b, 64	12/4
11/20	Chemical Reactions in Solution Precipitation Reactions	4			
11/22	Holiday				
11/27	Precipitation Reactions Acids & Bases	4			
11/29	Acid-Base Reactions & Titration	4			
12/4	Oxidation States Redox Reactions	4			
12/6	Exam 3			Ch 4	
12/10– 12/13	Final (as per schedule of classes) Tues, 12/11 7:30 – 10:30 pm			Ch 1 – 4 material	

Exams are 90% of your grade and participation is 10%.

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