GENERAL CHEMISTRY
CHEM 1010-1
AUTUMN, 2009

Instructor: Dr. Scott D. Pegan
Rm: SGM 251
Phone: 303-871-4135
Email: spegan@du.edu

Text: Chemistry, 5th Edition, Silberberg

Lectures: 9-9:50 am, MWF, Olin 105
Discussion: 9-9:50 am, T, Olin 105
Help Sessions: 9-9:50 am, R, Olin 105

Exams: There are 3 X 1 h midterm exams during the quarter, plus a 2 h cumulative final exam. Each exam is worth 100 points. Exam questions will be similar to the problems assigned as homework and problems worked in class.

If you miss a 1 h midterm exam, then your final exam will be counted twice and replace the missed midterm exam. With one exception, **THERE WILL BE NO MAKEUP EXAMS**. The only exceptions to the no-makeup policy will be for members of a university team or group, e.g. athletic team or music group scheduled to be away from campus at the time of the exam, and members of the U.S. Armed Forces with conflicting obligations. You must inform your instructor of this prior to the exam and make arrangements at that time for a makeup exam.

If you take all 3 midterm exams and your grade on the final exam is better than one of your midterm exam grades, then your final exam will be counted twice and replace your lowest midterm exam grade.

There are 9 quizzes that will be administered during discussion periods. Your top 8 scores will count towards your grade, i.e. your 1 lowest quiz grades will be dropped. Homework problems will be assigned during lecture and will be collected. Points will be given for completing the assignment on time without grading the homework problems.

Grading:			
	Midterm Exams	300 points	
	Final Exam	100 points	
	Quizzes	120 points	(15 pts per Quiz)
	Clicker	80 points	(This is a Clicker Enabled Course) http://portfolio.du.edu/click

The assignment of a letter grade to a given numerical grade will depend on the overall class performance. However, if everybody does well, grades will not be curved down. **Also, note that points will be deducted from your final grade for disruptive behavior**.

DATE	TOPIC	READING
WEEK 1		
Sep 14	Intro. into class	Ch1-3
15	Discussion, Quiz	
16	Nature of light	Ch7.1-7.2
17	Help Session	
18	Wave-Particle/Quantum-Mechanical	Ch7.3-7.4
WEEK 2		
Sep 21	Periodic table	Ch8.1-8.2
22	Discussion, Quiz	
23	Atomic properties	Ch8.3-8.4
24	Help Session	
25	Chemical reactivity	Ch8.5
WEEK 3		
Sep 28	Chemical Bonds	Ch9.1-9.2
29	Discussion, Quiz	
30	Covalent bond	Ch9.3-9.6
Oct 1	Help Session	
2	**EXAM 1**	
WEEK 4		
Oct 5	Lewis structures	Ch10.1
6	Discussion, Quiz	
7	VSEPR	Ch10.2
8	Help Session	
9	Shape & polarity	Ch10.3
WEEK 5		
Oct 12	Valence bond theory	Ch11.1-11.2
13	Discussion, Quiz	
14	Molecular orbital theory	Ch11.3
15	Help Session	
16	Water as a solvent	Ch4.1-4.2

WEEK 6

Oct	19	Precipitation reactions — Ch4.3-4.4
	20	Discussion, Quiz
	21	**EXAM 2**
	22	Help Session
	23	Oxidation-reduction reactions — Ch4.5-4.6

WEEK 7

Oct	26	Acids and bases in water — Ch18.1-18.2
	27	Discussion, Quiz
	28	Bronsted-Lowry — Ch18.3-18.4
	29	Help Session
	30	Weak bases/weak acids — Ch18.5

WEEK 8

Nov	2	Redox Reactions — Ch21.1
	3	Discussion, Quiz
	4	Voltaic cells — Ch21.2-21.3
	5	Help Session
	6	Forms of energy — Ch6.1-6.2

WEEK 9

Nov	9	Calorimetry — Ch6.3-6.4
	10	Discussion, Quiz
	11	Hess's Law — Ch6.5-6.6
	12	Help Session
	13	**EXAM 3**

WEEK 10

Nov	16	Entropy — Ch20.1-20.2
	17	Discussion, Quiz
	18	Calculating entropy change — Ch2-20.3
	19	Help Session

WEEK 11

Nov 22 **FINAL EXAM** (comprehensive), 10-11:50 am, Olin 105