

**GENERAL CHEMISTRY
CHEMISTRY 102 SECTION 7
SPRING 2012**

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Office Hours: 9:30 to 11:30 AM Mondays and Wednesdays or by appointment.

Purpose of Course: To acquaint the student with the basic concepts of chemistry, with a particular emphasis on solution chemistry.

Textbooks: "Chemistry, The Central Science" by Brown, LeMay, Burston, Murphy, and Woodward (Pearson) ISBN 0-13-038168-3 is required. The Student Guide and Solutions to Exercises are recommended. Mastering Chemistry (online homework) is optional.

Lecture Notes: Lecture notes for this course will be distributed in class. Students are expected to "fill in the blanks" in the handouts as the lectures proceed.

Other Materials: You will need an inexpensive calculator having logarithmic (base 10 and base e), exponential, and trigonometric functions. Be sure you are familiar with your calculator and that it is in user-ready condition for quizzes and exams. **Calculators cannot be shared during exams and the covers must be removed while taking the exam. You are not allowed to have a cell phone during the exam.**

Class Procedures: All sections of this class will meet for lecture from 8:15 to 9:05 AM on Monday, Wednesdays, and Fridays in Flanner 133. All discussion sections will be held on Tuesdays from 8:30 to 9:45 AM and 10:00 to 11:15 AM. During discussion periods students will be assigned worksheets to be completed during the discussion section. If the student completes the worksheet during the period and hands it in to the discussion leader at the end of the period he/she will be given two extra credit points on the upcoming exam. Students may work in groups and need not hand in perfect worksheets but must make a good faith effort (in the judgment of the instructor) to complete the assignment to get the extra credit.

Homework Problems: Students who expect to do well on the quizzes and exams should be able to do most or all the red problems in Brown LeMay, and Burston at the end of the chapters. Representative problems will be demonstrated in lecture and worked out in the discussion sections. Students who can do the indicated problems at the end of the chapters should have no problem with the tests. Students who expect to do well must understand the concepts behind the problems.

Exams, Quizzes, and Grading: Four exams will be administered during the semester in addition to the final. Each exam (including the final) will count as 25% of your class grade. Your lowest score on the first four hour exams will be dropped. The grade on the final exam cannot be dropped. If you miss one exam for any reason it will count as your dropped grade. Missing a second exam due to illness or other catastrophes will require verification (from a doctor) to schedule a make-up. Lecture and laboratory are graded independently for students in Chemistry 102.

Grading Scale: The following scale will be used to determine letter grades **A** 100-93; **A-** 92-89; **B+** 88-85; **B** 84-81; **B-** 80-77; **C+** 76-73; **C** 72-69; **C-** 68-65;; **D** 64-53; **F** <52.

Exams and Academic Honesty: Students are expected to present their IDs upon taking exams and quizzes. Academic dishonesty of any sort will not be tolerated. Students caught cheating on an exam or who have someone else take it for them will receive an F grade for that test.

TENTATIVE CLASS SCHEDULE

Date	Day	Topic	Chapter
1/18	W	Introduction;Solution Properties	13
1/20	F	Solution Properties	13
1/23	M	Soln Prop	13
1/24	T	Discussion I: Solution Properties	
1/25	W	Chemical Kinetics	14
1/27	F	Chemical Kinetics	14
1/30	M	Chemical Kinetics	14
1/31	T	Discussion II: Chemical Kinetics	14
2/1	W	Gas Phase Equilibria	15
2/3	F	Exam 1:Solution Properties and Chem Kinetics	
2/6	M	Gas Phase Equilibria	15
2/7	T	Discussion III: Gas Phase Equilibria	15

2/8	W	Gas Phase Equilibria	15
2/10	F	Gas Phase Eq. and Acids and Bases	15,16
2/13	M	Acids and Bases	16
2/14	T	Discussion IV: Acids and Bases	16
2/15	W	Acids and Bases	16
2/17	F	Acids and Bases	17
2/20	M	Titrations	17
2/21	T	Discussion V: Titrations	17
2/22	W	Titrations	17
2/24	F	Solubility Equilibria	17
2/27	M	Solubility Equilibria	17
2/28	T	Discussion VI: Solubility Equilibria	
2/29	W	Solubility Equilibria	17
3/2	F	Exam 2: Gas phase, solubility, and acid/base equilibria	
3/5-3/10		Midterm Break	
3/12	M	Chemical Thermodynamics	19
3/13	T	Discussion VII: Thermochemistry review	
3/14	W	Thermodynamics	19
3/16	F	Thermodynamics	19
3/19	M	Thermodynamics	19
3/20	T	Discussion VIII: Thermodynamics	
3/21	W	Thermodynamics	19

3/23	F	Exam 3: Thermodynamics	20
3/26	M	Electrochemistry	20
3/27	T	Discussion IX: Electrochemical equations	
3/28	W	Electrochemistry	20
3/30	F	Electrochemistry	20
4/2	M	Electrochemistry	20
4/3	T	Discussion X: Electrochemistry	20
4/4	W	Electrochemistry	20
4/6	F	No class; Easter Break	
4/9	M	No class; Easter Break	
4/10	T	Discussion XI: Electrochemistry	
4/11	W	Electrochemistry	20
4/13	F	Exam 4: Electrochemistry	20
4/16	M	Coordination Chemistry	23
4/17	T	Discussion XII: Coordination Chemistry	
4/18	W	Coordination Chemistry	23
4/20	F	Coordination Chemistry	23
4/23	M	Radiochemistry	21
4/24	T	Discussion XIII: Radiochemistry	21
4/25	W	Radiochemistry	21
4/27	F	Radiochemistry	21
5/7	M	Final Exam 9-11 AM	21,23