

CHEMISTRY 308 SPRING 2008

Section 02 (12 pm MWF): Rogers 100

Instructor	Office	Phone	E-mail	Office Hrs.
Gary DeFotis	Rogers 220	1-2547	gxdefo@wm.edu	M:1-2:30; W: 1-2:30; Th: 1-2, F:1-2 <i>and by appointment</i>

Text: Steven Zumdahl, *Chemistry*, 7th ed., Houghton Mifflin (2007) [very OPTIONAL are Zumdahl and Kelter, *Study Guide for Chemistry*, Heath (2007) and Hummel, Zumdahl, and Zumdahl, *Solutions Guide for Chemistry*, Houghton Mifflin (2007)]

Objectives: Continuing study of the principles of chemistry, including acid-base chemistry, thermodynamics, electrochemistry, molecular orbitals, nuclear chemistry, chemical kinetics, descriptive inorganic chemistry, and transition metal chemistry, including examples of biological relevance.

Grading: Problem sets (10%); Three hour exams (18% each); Comprehensive final (36%)

Exam makeup policy: Only students with approved excuses for illness or college related activity may make up exams. The instructor should be informed as soon as possible regarding any unavoidable absence. The time frame expires at the next scheduled lecture; longer excused absences do not take an exam but instead are handled by increasing the weight of other graded material.

Problem Sets: There will be 9 problem sets throughout the semester. Each problem set will have 2-4 questions and/or problems for which complete and legible solutions are expected on the sheet(s) provided. The problem sets will only be given out during class time and will only be accepted at class time on the due dates with no exceptions. The two lowest scores will be automatically dropped at the end of the semester; no makeups are possible. You may use the textbook and class notes for solving the problems; however, you are bound by the honor code not to receive help from other individuals. The problem sets will be assessed on a "3, 2, 1, 0" scale. Answers to the problem sets will be posted on blackboard as for the "Exercises" discussed below.

Exercise Assignments: The tentative course schedule (over) lists "exercises" from the text. These are not to be handed in, but the successful completion of these problems should be regarded as an **absolute minimum** required to learn the material adequately. The completion of additional exercises is encouraged and recommended. Answers to the assigned exercises will be posted on blackboard.

Help Sessions: The instructor will be available every Wednesday at 5:00pm in Rogers 100 to answer questions related to course discussions and problem assignments. Additional help sessions will be scheduled near examination times.

Chemistry 308 Course Schedule Spring 2008

Date	Chapter	Topics	Pages	Review	Exercises
1/16-1/23	14	Acid-base equilibria	623-672	149-154	28, 29, 30, 31, 33, 34, 39, 41, 42, 47, 53, 59, 64, 79, 103, 111, 113, 119
1/25-2/6	15	Common ions, buffers, titrations, solubility, complex ions	681-734		3, 5, 37, 47, 48, 49, 57, 65, 75, 78, 81, 89, 103, 109
2/8-2/20	16	Thermodynamics	749-782	229-252	19, 21, 23, 29, 37, 45, 60, 61, 78
*2/13 (Wed)	Examination 1	(Chapters 14, 15)			
2/22-2/29	17	Electrochemistry	791-821	154-168	15, 25, 31, 35, 37, 43, 59, 60, 73, 83, 110
3/3-3/7	Spring Break				
*3/17 (Mon)	Examination 2	(Chapters 16, 17)			
3/10-3/21	9	Molecular Orbitals	391-417	329-377	27, 33, 35, 37, 47, 62, 67
3/24-4/2	19	Descriptive Inorganic Chemistry	875-895		19: 13, 16, 17, 22, 31, 33, 42, 44, 46, 53, 57, 62, 64
	20		901-935		20: 13, 26, 29, 33, 38, 39, 44, 54
4/4-4/9	18	Nuclear Chemistry	841-868	538-543	14, 23, 25, 27, 31, 35, 39, 44, 51
4/11-4/14	12	Enzyme Kinetics	562-563 hand out	527-561	75, 76 supplemental to be provided
*4/16 (Wed)	Examination 3	(Chapters 9, 19, 20, 18)			
4/11-4/25	21	Transition metals and complexes	943-977		16, 17, 19, 29, 33, 37, 43, 44, 47, 51, 65
FINAL EXAM:					
Comprehensive	Tu, May 6, 8:30am				

