

Office Hours: Wed. 2:30-3:30 PM (Widt 241); other times by appointment.

Course Content: This course is the second half of the year-long general chemistry sequence. The course will cover topics in chapters 14-25 in the course textbook.

Text: *Chemistry: The Central Science*; 10th ed; Brown, Lemay, Bursten. An earlier edition will work fine.

Prerequisites: Math 1050 or equivalent; Chem 1210 or equivalent.

Suppl. Instruct: A supplemental instructor (SI) is available for this class. The course TAs will also hold regular office hours. Meeting times for these resources will be posted on the class Blackboard page after the first week of class.

Lecture Material: Powerpoints used in class will be posted on Blackboard before each lecture. Some of the lecture material will be presented at the whiteboard and will not be posted to Blackboard, so come prepared to take notes. Audio recordings of each lecture will be posted on Blackboard after each lecture.

Blackboard: Information important to this class (e.g., practice exams, exam keys, grade sheet, etc.) will be administered through Blackboard at USU. This site is found at bb.usu.edu. Your username is your BANNER login and your password is your BANNER password.

Review Sessions: Review sessions before each exam will be held as follows: Thurs Sept 18 - 5:30 PM in ESLC 130; Tues Oct 14 - 5:30 PM in Main 115; Thurs Nov 13 - 5:30 PM in ESLC 130; Tues Dec 9 - 5:30 PM, in TBA. This is an hour long open question and answer review of material covered in class.

Recitations: All Chemistry 1220 students must register for a recitation section. Recitation sections meet once a week and are run by a course TA. The first part of each session will be for presentation of testable information. The second part of each session will be for review and answering questions. Recitations begin the second week of class. Recitations will occur each week unless otherwise noted on the calendar (next page).

Quizzes: There will be 12 quizzes offered throughout the semester. Each quiz will have 5 questions with each question worth 2 points. Quizzes will be taken online through Blackboard. You can take the quiz only during the open period for each quiz (Monday 8 AM to Saturday 10 PM). Once the quiz has closed, there will be no make-up. Each quiz can be taken up to three times, with the best grade earned being recorded. Questions will change for each try on the quiz. The grades for the top 10 quizzes will be recorded.

Exams: There will be three in-class (50 min) midterm exams and a final (110 min) exam in this course. The three in-class midterm exams are worth 100 points each and will cover material presented in lecture, in recitation, and from the quizzes. The three midterm exams will have 25 multiple choice questions worth 4 points each. The final will have 50 multiple choice questions worth 4 points each. Approximately 25 questions on the final will cover new material since the third midterm exam, with the remaining 25 questions covering the material from the three midterm exams. All exams are closed book.

Extra credit: You may earn up to 10 extra credit points based on correct responses to select questions asked and responded to in class using the iclicker system (register at www.iclicker.com/registration). Questions will be posed to the class throughout the semester and you will have the opportunity to register an answer. Ten of these questions will be randomly selected and one point will be given for a correct answer on each for a maximum of 10 bonus points.

Grading: Grades will be based on a total of 600 points. You are guaranteed the following grading scale. The brackets might be lowered; they will not be raised. (A/A- 100-88%, B+/B/B- 87-77%, C+/C/C- 76-60%, D+/D 59-50%)

1st Hour Exam.....	100 pts.
2nd Hour Exam	100 pts.
3rd Hour Exam.....	100 pts.
Ten quizzes worth 10 points each	100 pts.
Comprehensive Final Exam	200 pts.

Total	600 pts.

Missed Exams: Anyone missing one of the midterm exams for legitimate reasons as specified in the USU General Catalog will be eligible to take the make-up exam offered on **11/21/08** by appointment only. This makeup exam will be comprehensive through the material covered to that date in the course. This is the only make-up exam that will be offered. Make up exams will only be given by approval of the instructor. You must contact me either before or within a week of the missed exam to schedule the make-up exam. Missed exams that are not made-up will be scored as zero.

Assessment: Assessment of the course will include a Course Evaluation (the blue forms administered by USU) at the end of the course and a mid-term Survey (administered by the Professor) seeking input on course direction and suggestions for improvement. Information from the Course Evaluation and Survey will be used to improve the course this year and in subsequent years.

Provisions: This course will adhere to the USU Academic Policies and Procedures Manual found at the web site <http://www.usu.edu/policies/> and in the student code <http://www.usu.edu/studentservices/studentcode/>. Any student with a disability who requires accommodation must contact the instructor. The disability must be documented by the Disability Resource Center. Course materials may be requested in alternative formats.

Chemistry 1220 Class Schedule Fall 2008

Day	Date	Lecture	Topic	Chapt	Notes
M	8/25	1	Reaction rates	14	No recitation week
W	8/27	2	Concentration and rates	14	
F	8/29	3	Temperature and rates	14	
M	9/1		Holiday		Recitation starts 9/2, Quiz 1
W	9/3	4	Reaction mechanism	14	
F	9/5	5	Equilibrium	15	
M	9/8	6	Equilibrium constants	15	Quiz 2
W	9/10	7	Le Chatelier's Principle	15	
F	9/12	8	Water, Acid/Base	16	
M	9/15	9	pH scale, strong acids/bases	16	Quiz 3
W	9/17	10	Weak acids/bases, K_a , K_b	16	
F	9/19	Exam 1	Chapt 14-16		
M	9/22	11	Common ions	17	Quiz 4
W	9/24	12	Buffers, acid-base	17	
F	9/26	13	Titrations	17	
M	9/29	14	Solubility	17	Quiz 5
W	10/1	15	Atmospheric chemistry	18	
F	10/3	16	Oceans/water	18	
M	10/6	17	Spontaneous processes	19	Quiz 6
W	10/8	18	Entropy and the 2 nd law	19	
F	10/10	19	Entropy in reactions	19	
M	10/13	20	Gibb's free energy	19	No recitation week
W	10/15	Exam 2	Chapt 17-19		
R	10/16		Fall break		
F	10/17		Fall break		
M	10/20	21	Redox reactions	20	Quiz 7
W	10/22	22	Voltaic cells	20	
F	10/24	23	EMF	20	
M	10/27	24	Batteries	20	Quiz 8
W	10/29	25	Electrolysis	20	
F	10/31	26	Radioactivity	21	
M	11/3	27	Nuclear decay	21	Quiz 9
W	11/5	28	Energy considerations	21	
F	11/7	29	Periodic concepts	22	
M	11/10	30	Noble gases/halogens/oxygen groups	22	Quiz 10
W	11/12	31	Nitrogen, carbon, boron groups	22	
F	11/14	Exam 3	Chapt 20-22		
M	11/17	32	Metals	23	Quiz 11
W	11/19	33	Metal bonding	23	
F	11/21	34	Coordination complexes	24	Make up exam by appointment only
M	11/24	35	Isomers, colors, magnets	24	No recitation week
W	11/26		Holiday		
F	11/28		Holiday		
M	12/1	36	Organics- functional groups	25	Quiz 12
W	12/3	37	Alkanes, alkenes, alkynes, aromatics	25	
F	12/5	38	Peptides/sugars/nucleic acids	25	
W	12/10	Final	11:30 AM-1:20 PM, W007		