

Chemistry 210 Fall 2006

Time & Place: MWF 1:00 - 1:50 pm @ NKRS 240

Instructor: Dr. Lichang Wang

Dr. Wang's Information: NKRS 142C (Office), 453-6476 (Phone), lwang@chem.siu.edu (E-mail)

Chem210 web page: <http://www.science.siu.edu/chemistry/chem210/wang>

Dr. Wang's research web page: <http://www.science.siu.edu/chemistry/wang>

Textbook: "Chemistry, The Molecular Nature of Matter and Change", Martin S. Silberberg (4th Edition, 2006).

Prerequisites: C or better in Chem200 and Chem201, and the math background equivalent to that obtained in college algebra, precalculus, or an advanced high school algebra course.

Concurrent: Chemistry 211

Calculator: A scientific calculator is needed, but NO programmable calculators are allowed in exams.

Course Description: This is a second semester freshman level chemistry course for science, engineering, and pre-professional majors. The topics to be discussed include those listed in the attached course outline.

Course Objectives: The objectives for this course are:

- 1) to develop an understanding and appreciation for the fundamental concepts in chemistry. The subjects to be discussed are listed in the attached course outline. The material is presented at a level suitable for those students who will be majoring in one of the sciences.
- 2) to develop an understanding and appreciation for how these fundamental concepts in chemistry can be applied to everyday life and to current problems of relevance in the world.
- 3) to develop problem-solving skills and to practice these skills.
- 4) to develop an understanding of what professional chemists do.

<u>Grading:</u>	Quiz Total	200
	Midterm Exam #1*	200
	Midterm Exam #2*	200
	Midterm Exam #3*	200
	Midterm Exam #4*	200
	Final Exam	200
	COURSE TOTAL	1000

*The lowest Midterm Exams #1, 2, 3 or 4 will be dropped, and the remaining four scores will be added to the Final Exam score to obtain the Course Total. The grade will be assigned as follows:

GRADES: 900-1000, A; 800-899, B; 700-799, C; 600-699, D; 0-599, F.

This grading policy will be strictly enforced. **Changes in the grading policy are NOT negotiable.** Please note the university regarding incompletes which states: An INC is assigned when, for reasons beyond their control, students *engaged in passing work* are unable to complete all class assignments. In other words, under no circumstances, will an INC be given to a failing student to prevent them from getting an F. Please be advised that the deadline for dropping this course is Friday, September 1, 2006 (full refund) or Monday, October 16, 2006.

Homework: Homework will be assigned regularly but will not be graded. Doing assigned problems is often the best way to determine how well you understand the material, and is left up to the responsibility of the student. The homework assignments are designed to provide the practice necessary to do well on quizzes and exams.

Quizzes: Quizzes will be given in class as indicated on the schedule. There will be no chance to make up quizzes that are missed due to being absent. However, there are a total of 12 quizzes scheduled (@20 points each), so you can afford to miss two and still obtain a perfect quiz score.

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Midterm Exams: The midterm exams will be given during class time as designated tentatively on the schedule. Please note that this schedule is tentative and may be changed by the instructor at any time. **There will be no make-up exams, regardless of reason for absence, no exceptions.** However, the lowest of the grades earned will be dropped. Therefore, if one exam is missed for any reason, the zero obtained will be discarded. Any information discussed in lectures or in textbook may show up on an exam. However, the most important concepts, as stressed primarily in the lectures and in the homework, will most likely predominate in the exam material. You will NOT be allowed to bring any notes into the examination with you. Relevant equations and constants will be provided. Any information brought into the exam through crib notes or through programmable calculators constitutes academic dishonesty. Any form of cheating will result in judicial proceedings in accordance with Southern Illinois University's policy on academic dishonesty.

Final Exam: The final exam is comprehensive. Any student who does not take final exam will receive a zero for the final exam grade. The final exam date and time is scheduled by the university. If a student cannot take the exam on this date, he or she must obtain permission from the dean to take the exam during the final exam make-up period.

Course Website: The course website (<http://www.science.siu.edu/chemistry/chem210/wang>) will contain the following features: syllabus, the answer keys for the exams, and exam scores.

Office Hours: Mondays: 2:00 – 4:00 pm, Wednesdays: 2:00 – 3:00 pm and by appointment.

Study Tips: -- *Important!! -- Please Read!!* -- An understanding of chemistry is obtained one step at a time, by building on concepts and skills that were previously learned. Therefore, it's very important to keep up with the material presented in the course. This is most easily done by staying up-to-date with reading the textbook, attending lectures regularly, working the homework problems diligently, and studying the material every day. You will NOT do well in this course if you wait till the night before an exam to study.

It is the goal of this course for you to gain understanding of particular concepts and to develop problem-solving skills. Keep this in mind when studying. Memorizing facts will not help you very much. Developing an understanding of the concepts by working the problems will. *Enjoy and Good Luck!!*

Chemistry 210 - Fall 2006 Course Outline (Tentative Schedule)

<u>Week of</u>	<u>Monday</u>	<u>Wednesday</u>	<u>Friday</u>
8/21	Introduction	Organic Chemistry	Organic Chemistry
8/28	Organic Chem(Quiz1)	Kinetics	Kinetics (Quiz2)
9/4	Holiday	Kinetics	Kinetics (Quiz3)
9/11	Review*	Exam 1	Equilibrium
9/18	Equilibrium	Equilibrium (Quiz4)	Equilibrium
9/25	Acids/Bases	Acids/Bases (Quiz5)	Acids/Bases
10/2	Acids/Bases(Quiz6)	Review*	Exam 2
10/9	Ionic Equilibria	Ionic Equilibria	Ionic Equilibria(Quiz7)
10/16	Ionic Equilibria	Ionic Equilibria	Thermodynamics
10/23	Thermodyn.(Quiz8)	Thermodynamics	Thermodyn.(Quiz9)
10/30	Review*	Exam 3	Electrochemistry
11/6	Electrochemistry	Electrochem.(Quiz10)	Electrochemistry
11/13	Transition Metals	Trans. Metals(Quiz11)	Transition Metals
11/20	----- Thanksgiving Vacation -----		
11/27	Trans. Metals(Quiz12)	Review*	Exam 4
12/4	Review*	Review*	Review*
Final Exam – Dec 12 (Tuesday) 12:50–2:50pm			

* Prior to each exam, there is a lecture period labeled as Review*. The review will consist of the instructor answering students' questions about homework problems.