CHEMISTRY 210 – Section 02

General Chemistry I

Co-requisite: CHEM 212 – General Chemistry Laboratory I

Lecture: MWF; 14:00-14:50 p.m.; Faraday West 200 (LaT 200). **Spring 2014**
Recitation: **R005,** 10:00-10:50 a.m., W, FR. 205; **R006,** 11:00-11:50 p.m., W, FR205;
R007, 12:00-12:50 p.m., W, FR. 205; **R008,** 13:00-13:50 p.m., W, FR205
Textbook: **"Principles of General Chemistry"**, 3rd Edition, by Silberberg, McGraw Hill (2013).
***Instructor*:** Dr. Chhiu-Tsu (C.T.) Lin, Office: La Tourette Hall 323, Phone: 753-6861, e-mail: ctlin@niu.edu
***Office hours*:** MWF, 3:00-3:50 p.m. (LaT 323), or drop-ins by availability.

TENTATIVE LECTURE SCHEDULE

Week	Chapter/Topics	Quiz/Exam*
Jan. 13-17	Introduction and Ch. 1: Keys to the Study of Chemistry	
Jan. 20-24	Ch. 2: The Components of Matter	Quiz 1 (1/22)
	January 20 (Martin Luther King, Jr. Birthday)	
Jan. 27-31	Ch. 2/3: Stoichiometry of Formulas and Equations	
Feb. 3-7	Ch. 3: Stoichiometry of Formulas and Equations	Exam #1 (2/7)
Feb. 10-14	Ch. 3/4: Major Classes of Chemical Reactions	
Feb. 17-21	Ch. 4: Major Classes of Chemical Reactions	Quiz 2 (2/19)
Feb. 24-28	Ch. 5: Gases and the Kinetic-Molecular Theory	
Mar. 3-7	Ch. 5/6: Thermochemistry – Energy Flow and Chemical Change	Exam #2 (3/7)
	Mar. 9-16 (Spring Recess)	
Mar. 17-21	Ch. 6: Thermochemistry – Energy Flow and Chemical Change	
Mar. 24-28	Ch. 7: Quantum Theory and Atomic Structure	Quiz 3 (3/26)
Mar. 31-Apr. 4	Ch. 7: Quantum Theory and Atomic Structure	
Apr. 7-11	Ch. 8: Electron Configuration and Chemical Periodicity	Exam #3 (4/11)
Apr. 14-18	Ch. 9: Models of Chemical Bonding	
Apr. 21-25	Ch. 9/10: The Shape of Molecules	Quiz 4 (4/23)
Apr. 28-May 2	Ch. 10/11: Theories of Covalent Bonding	Reading Day (5/2)

Final Exam (200 points): Monday, May 5, 2:00-3:50 p.m. (Final is comprehensive and mandatory)

Exam* - Tentative dates for the three 100 point hour exams are indicated in the lecture schedule above. The lowest exam grade will be dropped. There will be no make-up exams. A missed exam will count as the dropped exam.

Grading:	Hour Exams	200 pts
	Final Exam	200 pts
	Recitation	100 pts (**Recitation is mandatory,** See revise side for the recitation schedule)
	Total	500 pts

***Grading scale*:** 85% (>425 pts) = A, 80-84.9% (400-424 pts) = A-, 77-79.9% (385-399 pts) = B+, 73-76.9% (365-384 pts) = B, 70-72.9% (350-364 pts) = B-, 67-69.9% (335-349 pts) = C+, 60-66.9% (300-334 pts) = C, 50-59.9% (250-299 pts) = D, <50% (249 and less pts) = F.

Note: Any student who may need an accommodation due to a disability, please make an appointment to see me during my office hours, or when convenient. A letter from Disability Resource Center authorizing your accommodation is usually needed before accommodation can be granted.

RECITATION SCHEDULE

Recitation TA: To be announced
Office Hours: To be announced

The recitation grade will be based on the following factors:

Attendance	2 pts./class x 14 classes	= 28 pts.
Homeworks	3 pts. each x 10 assignments	= 30 pts.
Quizzes#	11 pts. each x 4 quizzes	= 44 pts.
	Total	= 102 pts.

Quizzes will be administered during recitation in the weeks as specified in the lecture schedule. There will be no make-up quizzes.

Supplemental Instructor (SI): To be announced
SI Office Hours and Location: To be announced
SI Review Session and Location: To be announced

Tutors and Lab TA Office Hours: The Department of Chemistry and Biochemistry maintains a free Tutor Room and General Chemistry Laboratory Tutor Office for general chemistry students. The location is Faraday Hall 246 and, subject to TA availability, is staffed Monday through Thursday from approximately 8:30 AM to 3:30 PM with a lunch break. On Fridays, the Tutor room closes at 2:30 PM. The exact schedule will be posted on the door outside FR 246.

Paid Tutors - Tutors for hire are available; see Linda Davis in Faraday 319 (department office).

■ Chemistry 210 General Education Objectives

- Improve ability to think critically and logically
- Improve ability to reason quantitatively and to perform basic chemical computations
- Improve ability to interpret mathematical models
- Learn how to use the scientific method and theories to understand chemical phenomena
- Develop an appreciation for the importance of the role of chemistry in everyday life
- Develop an understanding of the historical development of the field of chemistry

■ Chemistry 210 Content Objectives

- Understand the components of atoms and ions
- Learn how to write chemical formulas, and how to name compounds
- Learn how to balance chemical equations and how to perform simple stoichiometry calculations
- Understand the behavior of gases, liquids, and solids
- Become familiar with the electronic structure of atoms and understand how chemical reactivity depends on electronic structure
- Correctly predict the shapes of complex molecules and ions, and become familiar with the theories of chemical bonding