

CHEMISTRY 100 – Chemistry in Everyday Life (Fall 2010)
Section 1

Time & Place: Tu, Th 12:30 - 1:45 PM, Room 116 Davis Hall
 Textbook: Chemistry in Context, 6th Edition, 2009, Eubanks, Middlecamp, Heltzel and Keller, McGraw-Hill.
 Instructor: Jon W. Carnahan
 Office: Faraday West (La Tourette Hall) 411
 Contact info: Phone: 753-1181 or e-mail: carnahan@niu.edu
 Office hours: Tuesday 1:45-2:45; Wednesday 1:00-1:50 PM; or, by appointment (call 815-753-1181 to make appt.)

Lecture	Date	Tentative Topics	Reading
1	August 24	Look at All the Pretty Colors !!! - Why the Spiderweb?	Chapter 0
2	August 26	The Air We Breathe	Chapter 1
3	August 31	The Air We Breathe	Chapter 1
4	September 2	Protecting the Ozone Layer	Chapter 2
5	September 7	Protecting the Ozone Layer	Chapter 2
6	September 9	The Chemistry of Global Warming	Chapter 3
7	September 14	The Chemistry of Global Warming	Chapter 3
	September 16	EXAM 1 (Ch. 1-3, 100 pts)	Ch. 1-3
8	September 21	Energy, Chemistry, and Society	Chapter 4
9	September 23	Energy, Chemistry, and Society	Chapter 4
10	September 28	The Water We Drink	Chapter 5
11	September 30	The Water We Drink	Chapter 5
12	October 5	Neutralizing the Threat of Acid Rain	Chapter 6
13	October 7	Neutralizing the Threat of Acid Rain	Chapter 6
14	October 12	The Fires of Nuclear Fission	Chapter 7
	October 14	EXAM 2 (Ch. 4-6, 100 pts)	Ch. 4-6
		March 6-14: Spring Break	
15	October 19	The Fires of Nuclear Fission	Chapter 7
16	October 21	Energy from Electron Transfer	Chapter 8
17	October 26	Energy from Electron Transfer	Chapter 8
18	October 28	The World of Plastics and Polymers	Chapter 9
19	November 2	The World of Plastics and Polymers	Chapter 9
	November 4	EXAM 3 (Ch. 7-9, 100 pts)	Ch. 7-9
20	November 9	Manipulating Molecules and Designing Drugs	Chapter 10
21	November 11	Manipulating Molecules and Designing Drugs	Chapter 10
22	November 16	Nutrition: Food for Thought	Chapter 11
23	November 18	Nutrition: Food for Thought	Chapter 11
24	November 23	Genetic Engineering and the Molecules of Life	Chapter 12
	November 25	No Class – Thanksgiving Holiday	
25	November 30	Genetic Engineering and the Molecules of Life	Chapter 12
26	December 2	Review	Chapter 12
	December 7	EXAM 4 (Ch. 10-12, 100 pts) and 5 (Comprehensive Final, 100 pts) Tuesday, December 7 - Noon-1:50 PM in Davis 116	Ch. 10-12 Comprehensive

Grading:

There will be five exams: four chapter exams and a comprehensive final exam. Each exam will be worth 100 points. Exams will be multiple choices and graded by scantron. Original scantron sheets will not be returned to you. However, if there is a grading concern, a copy of the scan-tron may be requested.

The total possible number of points in the course is 500. The best four exams (400 points) will be counted. The lowest will be dropped. If a chapter exam is missed, that exam will count as the dropped exam. If a student takes all four chapter exam, the final will be counted as optional and, if applicable, used to replace the exam with the lowest score. **There will be no make-up exams.** The remaining 100 points will be based upon a combination of class attendance, and announced and pop-quizzes given in class. The tentative grading scale is listed below:

90% or greater = A; 80-89% = B; 70-79% = C; 60-69% = D; and 59% or less = F

Calculators:

A calculator with scientific notation and logarithms should be brought to exams and all class meetings. You may be asked to do calculations on pop-quizzes, etc. Loaning of calculators in class and on exams will be monitored and limited.

Optional studying materials:

For further help, the Chemistry help room (Faraday Hall Room 246) is open from approximately 8:30 AM to 3:30 PM with a short lunch break on Mondays through Thursdays. On Fridays, hours may be somewhat shorter. Exact hours will be posted on the wall outside Room 246. It is strongly recommended that you visit the help rooms at times other than right before an exam. Names of personal tutors may be available from our secretary in FR 319 (the departmental office).

NIU abides by Section 504 of the Rehabilitation Act of 1973 regarding provision of reasonable accommodations for students with documented disabilities. Moreover, your academic success is of importance to me. If you have a disability that may have a negative impact on your performance in this course and you may require some type of instructional and/or examination accommodation, please contact me early in the semester so that I can provide or facilitate in providing accommodations you may need. If you have not already done so, you will need to register with the Center for Access-Ability Resources (CAAR), the designated office on campus to provide services and administer exams with accommodations for students with disabilities. CAAR is located on the 4th floor of the University Health Services building (753-1303). I look forward to talking with you to learn how I may be helpful in enhancing your academic success in this course.

General Education Course Objectives

- Improve ability to think critically and logically;
- Improve ability to reason quantitatively and to perform basic chemical computations;
- 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; and
- Develop an understanding of the historical development of the field of chemistry.

Content Objectives of This Course

- Understand the importance of chemistry in our society
- Learn basic chemical formulas, reactions and applications.
- Become knowledgeable about the connection between chemistry and pollution, health care, energy, nutrition and life at the molecular level.