

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

*Time & Place:* Tu, Th 9:30 - 10:45 A.M., Room 116 Davis Hall

*Textbook:* Eubanks, Middlecamp, Heltzel and Keller, *Chemistry in Context*, 6<sup>th</sup> Edition, McGraw-Hill, © 2009.

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*Course webpage:* <http://webcourses.niu.edu/>

*Office hours:* T, Th 11:00AM-12:00 P.M. or by appointment

Lecture	Date	Tentative Topics	Reading
1	Jan. 12	Why the Spiderweb?	Chapter 0
2	Jan. 14	The Air We Breathe	Chapter 1
3	Jan. 19	The Air We Breathe	Chapter 1
4	Jan. 21	Protecting the Ozone Layer	Chapter 2
5	Jan. 26	Protecting the Ozone Layer	Chapter 2
6	Jan. 28	The Chemistry of Global Warming	Chapter 3
7	Feb. 2	The Chemistry of Global Warming	Chapter 3
	Feb. 4	<b>EXAM 1 (Ch. 1-3, 100 pts): Thursday, 9:30-10:45 P.M. in Davis 116</b>	Ch. 1-3
8	Feb. 9	Energy, Chemistry, and Society	Chapter 4
9	Feb. 11	Energy, Chemistry, and Society	Chapter 4
10	Feb. 16	The Water We Drink	Chapter 5
11	Feb. 18	The Water We Drink	Chapter 5
12	Feb. 23	Neutralizing the Threat of Acid Rain	Chapter 6
13	Feb. 25	Neutralizing the Threat of Acid Rain	Chapter 6
14	March 2	The Fires of Nuclear Fission	Chapter 7
	March 4	<b>EXAM 2 (Ch. 4-6, 100 pts): Thursday, 9:30-10:45 P.M. in Davis 116</b>	Ch. 4-6
		<b>March 6-14: Spring Break</b>	
15	March 16	The Fires of Nuclear Fission	Chapter 7
16	March 18	Energy from Electron Transfer	Chapter 8
17	March 23	Energy from Electron Transfer	Chapter 8
18	March 25	The World of Plastics and Polymers	Chapter 9
19	March 30	The World of Plastics and Polymers	Chapter 9
	April 1	<b>EXAM 3 (Ch. 7-9, 100 pts): Thursday, 9:30-10:45 P.M. in Davis 116</b>	Ch. 7-9
20	April 6	Manipulating Molecules and Designing Drugs	Chapter 10
21	April 8	Manipulating Molecules and Designing Drugs	Chapter 10
22	April 13	Nutrition: Food for Thought	Chapter 11
23	April 15	Nutrition: Food for Thought	Chapter 11
24	April 20	Genetic Engineering and the Molecules of Life	Chapter 12
25	April 22	Genetic Engineering and the Molecules of Life	Chapter 12
26	April 27	Genetic Engineering and the Molecules of Life	Chapter 12
27	April 29	Review	Ch. 10-12
	May 6	<b>EXAM 4 (Ch. 10-12, 100 pts): Thursday, 10:00-11:50 A.M. in Davis 116</b>	Ch. 10-12

Grading:

- There will be four exams each worth 100 points. **No make up exams will be given** as one chapter exam or the class participation part (see below) will be dropped, whichever has the fewest points. All exams will be multiple choices and graded by scantron. Original scantron sheets will not be returned to you.
- Total possible points for Chem 100: 400 (four exams) + 100 (class participation) = 500. When one exam or the class participation part is dropped, the maximum points are 400. The grades will be determined according to the percentage you finish out the total possible 400 points:

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

**There will be no curving.** The effective curving is the class participation points (see next page).

### Class participation:

Our class uses the clicker system. Your class participation is recorded from the responses you give to the system. Normally we have about 5 to 10 question in each lecture. If you answer a question correctly, you receive 2 points. If you answer the question incorrectly, you receive 1 point. If you do not answer the question (not participating in class), you receive no point. For instruction how to use the clicker, please refer to Blackboard.

### Calculators:

A calculator with scientific notation and logarithms should be brought to all exams.

### Optional studying materials:

For further help, the Chemistry help room (Faraday Hall Room 246) is open 8:30-11:15 AM and 11:45 AM-3:30 PM, Mondays, Tuesdays and Thursdays. On Wednesdays, the room is open 8:30-11:50 AM and 1:00-3:30 PM. After 10 AM of the Wednesday in the finals week, the room will be closed. It is strongly recommended that you visit the help rooms at times other than right before an exam. Names of personal tutors are 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 Accessibility 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.