

## Chemistry and Society

CHE 112\_web

Spring 2009

Time: Web Class, No required class meetings  
Instructor: Dr. Bradley Sieve [sieveb1@nku.edu](mailto:sieveb1@nku.edu)  
SC 452, ext 6547 [www.nku.edu/~bradleys1](http://www.nku.edu/~bradleys1)

Office Hours: Online I will be monitoring email daily so please allow 24 hours during the work week for a response. On campus I do have an open door policy. Please feel free to stop by if you ever have questions, or contact me if you want to set up an appointment. I will also plan office hours M 11-12, W 1-2, R 11-12 where I will be in my office to receive phone calls if needed. Lastly I will be available to meet or discuss items outside normal business hours by appointment just let me know and we will work something out.

E-Mail is a vital communication tool in this class. Students are expected to check their e-mail at least once a day Monday thru Friday. Student e-mail boxes will hold only 5MB of storage; it is the student's responsibility to be sure that storage capacity is available to receive course e-mail. Unless students are notified otherwise, Dr. Sieve will be online for e-mail Monday thru Friday; there may not be able to have e-mail communication with Dr. Sieve on Saturdays or Sundays so plan accordingly. Students should expect an e-mail response from Dr. Sieve within a 48-hour time frame.

### Student Learning Outcomes:

- 1) Students will be able to summarize the interrelationship of chemistry and society in general
- 2) Students will demonstrate understanding in the creation and use of the periodic table of elements.
- 3) Students will appreciate unit analysis in the solving of chemical based story problems
- 4) Students will be able to describe basic types of chemical reactions and their products
- 5) Students will be able to illustrate the basic use of mathematics and the concepts such as moles to comprehend chemical interactions

In fulfilling these student learning outcomes the student will also fulfill the following departmental learning outcomes:

1. Explain the major concepts and experimental findings in the chemical sciences.
2. Evaluate the relationships between chemistry and mathematics, physics, biology, and other disciplines and between chemistry and society.
3. Apply computer technology and other technologies in the comprehension, interpretation, and presentation of the chemical sciences.

Prerequisite: None

Required Text: Chemistry for Changing Times (11th ed), J. W. Hill and D. K. Kolb  
(ISBN = 0132280841)

- NKU Bookstore Link [www.nku.edu/~bookstore/](http://www.nku.edu/~bookstore/)
- Amazon.Com [www.amazon.com](http://www.amazon.com)
- Barnes and Noble [www.barnesandnoble.com](http://www.barnesandnoble.com)

### Required Skills

- Ability to navigate the Web (use a browser) and handle multiple open windows
- Ability to browse web pages
- Knowledge of how to create, send, open, close, and save files and attachments
- Ability to attach documents to E-mail and send
- Basic word processing skills

### Software Requirements:

- [Adobe Acrobat Reader](#)
- [PowerPoint Viewer](#)
- Web Browser ([Firefox](#), [Explorer](#))
- Flashplayer ( [Flash 9](#) )

### Help Desk Information

- **Telephone:** (859) 572 – 6911 **Location:** AC 109
- Blackboard Student Help <http://it.nku.edu/index.asp?sectionid=96&id=316>
- E-mail Account <http://it.nku.edu/index.asp?id=261>

The course material is presented through 2 differing systems. These are the blackboard system most people should be familiar with and also a accompanying website. The breakdown of these systems is as follows:

#### Blackboard System (Largely the graded work)

- Announcements (Both systems)
- Graded Homeworks
- Unit Quizzes
- Discussion Boards
- Handouts
- Suggested Problems
- Research Paper Requirements
- Practice exams
- Answer keys

#### Website Interface

- Announcements (Both systems)
- Lecture Materials (movie, pdf of slides, mp3 of lectures)
- Additional Resource index
- Links to Online Tutorials
- List of Tutoring Opportunities on Campus
- Question Log (Question and Answer Log)

**Attendance:** Attendance is required for this course. Though since is an online course the exact times are flexible, you are expected to check into the blackboard site **every two days** to look for announcements, discussion topics or quizzes. Participation in the discussion boards will constitute a large portion of the attendance scores. You are also expected to also keep up with the assigned chapters and have them completed (including the chapter homework) before the chapter due date also detailed on blackboard.

**Suggested Problems:** Exercises, questions, and problems from the text will be suggested for each chapter. These will not be collected though working through them is to your great advantage. Students will be responsible for the material covered in the suggested problems whether covered directly in lecture or not.

**Homework:** Along with suggested problems homework problems will be assigned during the course. These problems are designed to help ensure your understanding of the material presented in the lecture and prepare you from the exams. The questions will be asked and graded through the blackboard system so you will be required to have access to this system. Expect a short homework set for each chapter covered. The reason for the homework given online is two fold, first this allows multiple attempts at the homework and feedback to the questions and second it stops students from simply copying from each other.

**Quizzes:** Throughout the semester several quizzes will be presented online through the blackboard system. These quizzes will remain available on blackboard for 3 days and then will become unavailable. If you miss a quiz during this time there will be no makeup given. These quizzes may be announced or unannounced to address student's progress and the understanding of the course material. **The quizzes are only allowed to be taken once and once a quiz is begun the student will have 30 minutes to complete the quiz.** Please be sure to allow for these 30 minutes to complete the quiz before beginning.

**Clipping Assignments:** Once every 3 weeks students will hand in a chemistry related article (referenced, scanned or web linked) from a current newspaper or magazine (last 2 week time period). Along with the article the student will hand in a one page typed summary of the article. This summary should include at least one paragraph in your own words describing the contents of the article and at least one paragraph describing your personal thoughts about the article particularly how the article can effect or shape society. Grading will be done 40% on content (theme summarized and presented correctly), 40% on opinion section (particularly is the opinion of the student presented clearly and supported), and finally 20% on completion (is it typed, long enough, grammatically correct). Finally, these clippings may be used to begin discussions on the discussion board (see below). These clipping will be submitted through the BB assignment system.

**Discussion Board:** The discussion board will be used to present topic related to society and chemistry's effects on it.

The first use will be topic for discussion posted once a week by me. I hope that you will take the time and put thought into the topics and have a meaningful discussion about the issue. Grading of this section will be based on your ability to put forth meaningful comments or arguments for or against each topic. These topics are going to be chosen to foster thought but may lead to disagreements between students and or the professor which is fine and expected. **To ensure that the discussion does not become attacks of a personal nature the professor will monitor the discussions.** If a student is found making personal attacks they will receive a warning the first time. The second time the student will be banned from the discussion boards and will receive a zero for that portion of the course score. Each discussion topic will be posted at least one week before grading will be completed on that topic.

**Term Paper:** During the term each student will be required to complete a topic paper ( 3-6 pages typed) highlighting the relationship between chemistry and society in everyday life. This could include but is not limited to your personal career goals, political aspects or environmental concerns. Students are encouraged to choose topics they care or are interested in. Grading will be completed in a manner similar to the clipping assignments described above but with a much

deeper scope. **Differing from the clippings assignment though the students will be required to present 3 reference sources that are print in nature.** Reference librarians are great for helping you with this. See blackboard for more information on this topic.

**Exams and Grading:** There will be 3 exams and a Final Exam during the semester. The final exam will be cumulative. **No make up exams will be given.** These exams are to be completed in the time period they are assigned (~3 days).

These exams will need to be proctored and taken during a three day window shown on this syllabus. For proctoring you have several options:

1) First I will be proctoring exams here on campus during the time periods. I want to have one or two sessions outside normal class hours meaning evenings or weekends. The specifics will be given as we approach each exam.

2) Also I will give the exams during the school day 9 am - 5 pm any time that I am not in a lecture teaching. My lecture periods are Tuesday and Thursday from 12-1:45. This will be arranged as needed by contacting me and setting up a time.

3) Off of campus options of course exist also. To take the exam away from campus all you have to do is find a proctor that will do it. Several options are below

A) The easiest way is to go to a college campus near you and they will likely have a testing services that will do it. The issue here is that these often cost you per hour. For example the testing services here cost \$40 per hour to proctor an exam, even if you are an NKU student.

B) If you are taking another course at another university maybe that professor will proctor if you ask them. Of course that in the end is up to each individual professor.

C) Finally I will allow you to have proctors away from the university setting. Here I ask that the proctor is someone in a authority position (high school instructor, fireman, clergy, librarian, civil servant etc..). Also the person should not be a relative or a close friend as it puts them in a bad situation if they suspect that cheating is occurring.

In this case the student will need to speak with the person and get the OK then I will speak directly with them to work out the details and such. So be sure to approach the person at least 1-2 weeks before the exam meaning for the first exam you should think immediately of who to ask. I know there is a chance of dishonesty here but I am asking you to be honest. I don't want to have to require university test proctoring and the costs that go along with that for you all. Also for the record if I suspect cheating I will follow up on it and petition to have the offender expelled from the school. I had to do it last year and will do it again if needed.

Percentages used in Final Grade:

Homework	10 %
Quizzes	10 %
Clippings	13 % (Both doing yours and commenting on others)
Term Paper	15 %
Exams	37.5% (12.5% * 3)
Final	14.5%

**Schedule:**

Date:	Item:
Jan. 22	Homework 1 Due
27	Clipping 1 Due
Feb 5	Homework 2 and 3 Due
17	Clipping 2 Due
19	Homework 4 Due
22-24	Exam 1 (Chapter 1-4)
March 3	Term Paper Idea Due
5	Homework 5 Due
17	Clipping 3 Due
19	Homework 6 Due
24	Term Paper Rough Draft Due
26-28	Exam 2 (Chapters 5 and 6)
31	Clipping 4 Due
April 7	Homework 7 Due
14	Term Paper Due
16	Homework 8 Due
23-25	Exam 3 (Chapters 7 and 8)
28	Clipping 5 Due
30- May 2	Final to be Completed

\*Also remember that most Wednesdays I will be posting Professor chosen topics on the blackboard site to discuss.

Other Notes:

Calculators: During the semester some calculations will be necessary for the exams, programmable calculators and cell phone calculators will not be allowed during exams. So please plan ahead and bring only non-programmable calculators to your exams.

Not all material in each chapter will be covered. Sections to be omitted will be announced through the blackboard system. Though a section is omitted it may help in your understanding and interest, so don't be afraid to read these sections also. Readings from other chapters in the text or other sources may also be required as seen fit.

**Policies of the Department of Chemistry at Northern Kentucky University:**

- All items on the syllabus are subject to change at the discretion of the instructor
- Students are responsible for reading and understanding the syllabus. Any items that are not understood need to be brought to the attention of the instructor within the first two weeks of the semester
- The work that you do in this course is subject to the Student Honor Code. The Honor Code is a commitment to the highest degree of ethical integrity in academic conduct, a commitment that, individually and collectively, the students of Northern Kentucky University will not lie, cheat, or plagiarize to gain an academic advantage over fellow students or avoid academic requirements.
- Cheating will not be tolerated. Faculty members have the right to determine actions to be taken when a student is caught cheating. Just to be absolutely clear I will petition to have you expelled if cheating is found to be intentional.
- Faculty members have the right to dismiss or have removed disruptive students from the class.

Students with disabilities who require accommodations (academic adjustments, auxiliary aids or services) for this course must register with the Disability Services Office. Please contact the Disability Service Office immediately in the University Center, Suite 320 or call 859-572-6373 for more information. Verification of your disability is required in the Disability Services Office for you to receive reasonable academic accommodations. Visit the Disability Services website at [www.nku.edu/~disability/](http://www.nku.edu/~disability/).