

Chemistry and Society
CHE100L-013
Spring 2005

W 11:00 a.m.– 12:40 p.m., SC 464

Instructor: Brad Sieve email: bradleys1@nku.edu

Office: SC 322, TBA

Office Hours: Monday-Wednesday 2-3, Thursday 11-12 noon

I 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.

Course Objective: To apply lessons learned in lecture to practical chemistry of everyday life.

Corequisite: Che 100 lecture **If you withdraw at any time from the lecture, you MUST also withdraw yourself from the lab**

Laboratory Manual: “Chemistry and Society Laboratory Manual”

Required supplies:

Safety Goggles with side shields; Paper towels, cloth rag or sponge; and a **nonprogrammable** scientific calculator (programmable calculators will not be allowed to be used during quizzes and exams)

<u>Week of</u>	<u>Experiment</u>	<u>Page #</u>	<u>Additional Pre-Lab Reading</u>
Jan 10	Check-in		
Jan 17	Measurements	1-1	p. 6-8ii, 10d, 17-19
Jan 24	Properties of a Substance	2-1	p. 14-16
Jan 31	Emission Spectra	5-1	p. 8b, 9 & 10c
Feb 7	Separation and Purification	3-1	p. 11-13
Feb 14	Nuclear Chemistry	11-1	appendix A-3 to A-6
Feb 21	Special Reactions	7-1	
Feb 28	Midterm Exam		
Mar 7	Spring Break		
Mar 14	Chemical Analysis of Cations	10-1	
Mar 21	Observations and Scientific Method	4-1	
Mar 28	Acids and Bases	6-1	
April 4	Synthesis and use of Dyes	12-1	
April 11	Prep of Aspirin and Wintergreen	8-1	
April 18	Synthesis of Macromolecules	9-1	
April 25	Checkout, Review		

Final Exam

Monday May 2, 10:10 A.M.

Grading Scale

Each Experiment is worth 50 pts.

$50 \times 12 = 600$ pts. 75% of grade

Each exam is worth 100 pts.

$100 \times 2 = 200$ pts. 25% of grade

Total = 800 pts.

A 90-100% 716-800 pts.

B 80-89% 636-715 pts.

C 70-79% 556-635 pts.

D 60-69% 476-555 pts.

F 59% > 475 pts.

Assignment of Laboratory Points: Each week you must come to class having thoroughly read and understood the experiment that you will perform. To ensure that you are prepared, a pre-lab quiz worth 10 points will be given at the start of most lab periods. This quiz is 10 of the 50 points that each lab report is worth, or 20% of each lab. Laboratory technique and following of safety procedures with also account for 5 of the 50 points per lab. So that is 35 pts on data collection and write-up, 10 on laboratory preparation exam, and 5 points on laboratory and safety techniques.

Data collection: Your report will also be graded on the accuracy with which you collect and record your data. This includes the appropriate units, eg. g for grams, °C for degrees Celsius, cm for centimeters etc., as well as the appropriate number of significant figures or decimal places. For instance, if you use a balance that gives a mass to two decimal places, you must record both decimal places and not leave one or more out.

Calculations: You must show the work for any calculations done in the lab report the means of conducting calculations is more important then the actual answer when learning. Points will be deducted if only the answer appears. There is not much space available on the supplement sheets so feel free to attach additional pages as needed with then properly labeled. Also again be sure to include the proper units here as well.

Discussion questions: These should be answered in complete sentence form in legible writing. Answers should show understanding of the concepts of that lab. Most often short one or two word answers will not be correct.

Lab Reports: All parts of the lab report are due at the START of the next lab period. That typically means one week after the experiment was completed. Reports turned in beyond the beginning of the next lab are considered late. Late reports will be penalized two points per academic day.

Attendance: Once during the semester a student will be allowed to makeup a lab by attending another section of the laboratory course. If the need arises please see the instructor for the needed information. Any labs not made up will receive a zero for that score. Any student unable to attend at least 9 of the 12 laboratory sessions will fail the course.

Additional Safety Rule: In addition to the safety rules that you read and sign, there are no shorts or open toed shoes allowed in lab for any reason. You may keep an old pair of pants in your labdrawer if you can't remember to wear pants during the warm weather. **If you arrive in shorts or sandals you will not be allowed in lab and will receive a zero for the experiment.**

Important Dates for Spring 2005

January 10	First Day of Classes
January 15	Last Day to Drop a Course Last Day to Change Grading
January 17	Martin Luther King Day (No Classes)
March 7-12	Spring Break (No Classes)
March 28	Last Day to Drop with a "W"
April 19-21	Celebration of Student Research and Creativity
April 29	Last Day of Spring Classes

Honor Code: Students are expected to conform to the Student Honor Code (<http://www.nku.edu/~deanstudents/HonorCode.htm>). Academic dishonesty in this class will result in dismissal from the class and an F in the course.

This syllabus is subject to change though any change will be announced.