Chemistry 102 Spring 2017 Syllabus

Instructor: Dr. Conrad Naleway

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Class/Lecture Hours: Flanner Hall 133 TTh 4:15-5:30 pm Office Hours: TTh 2:30-3:30 pm plus by appointment Optional: Review Sessions: Time to be announced

Help/Review Sessions: Additional Weekly reviews session will be scheduled to help in preparation for exams.

Text: Chemistry: The Central Science. 14th Edition: Theodore E Brown, H Eugene H LeMay, Bruce E Bursten, Catherine Murphy, Patrick Woodward, Matthew E. Stoltzfus (Prentice Hall)

Please note that the text is a secondary source of information to help clarify concepts presented in lecture.

The primary information is presented in class and also appears on website and lecture handout materials.

Basic Calculators will be needed for homework assignments and exams but should have log/trig functions (typically under \$20). *Programmable calculators CAN NOT be used during exams,*

Website: conradnaleway/chem102 (also found on LUC blackboard)

This course will cover essential material of Chapters 13-17 and 19-20 and parts of 11 The topics will include:

1. Intermolecularr Forces and Solutions Chemistry	(Chapter 11 & 13).
2. Chemical kinetics, reaction rates, and reaction mechanisms	(Chapter 14).
3. Chemical equilibrium in gas and liquid phases	(Chapter 15).
4. Acids and bases, equilibrium in aqueous solutions	(Chapter 16).
5. Additional aspects of aqueous equilibria	(Chapters 17).
7. Chemical Thermodynamics: Entropy and Free Energy	(Chapter 19).
8. Electrochemistry and electron transfer reactions	(Chapter 20).

Exams: Dates: 2/8, 3/15, 4/19 Final: T 5/1 @4:15pm

There will be three exams scheduled during the lecture periods and a cumulative final exam. All exams will consist of questions and problems representative of the lecture and text material. All answers to test problems must contain detail information illustrating the steps and method of solution. Answers must contain correct units since this is an essential aspect of the course.

All exams must be signed in the front, upper right hand corner. This signature will be taken as a statement of honest and completely independent work. Instances of academic dishonesty will warrant **immediate failure** of the course plus referral to the Dean's office. For more information on university policy, please read: http://www.luc.edu/cas/pdfs/CAS_Academic_Integrity_Statement_December_07.pdf

Exams will be graded and returned as soon as possible, usually the next class period. ALL grading questions, points of clarification and grading errors must be brought to the instructor's attention during office hours no later than one week after exam is returned. There will be no exceptions to this rule! Each returned exam must be copied with original being returned to instructor with a hand written note stapled to exam addressing concern(s). Only exams completed in INK are eligible for possible regrading.

Exam Grade (70%)

Exam Grade will be assigned according to the highest percentage computed by the two methods:

- 1) All three midterms plus the cumulative final are averaged. Thus each exam will weigh 1/4.
- 2) The top two midterm exams weigh 1/4 each, and the final exam will weigh 1/2. This equates to the final exam score replacing the lowest midterm score.

Pre-assignment MasteringChemistry Homework (15%) ID= MCNALEWAYCHEM102SPRING2018

Grading settings for MasteringChemistry are visible within each assignment. Use each assignment to prepare for the upcoming lecture. Each assignment is weighted equally in the overall homework grade. Typically due twice per week online at masteringchemistry.com

Discussion Problem Sets (15%)

A problem set will be assigned and completed during discussion. Each problem set will cover material from the prior week of lectures. No make-up problem set will be allowed. Any missed problem set is scored as a zero. At the end of the semester, the lowest problem set score will be dropped.

Final Course Grade will be based upon:

70% Exam Grade (2 options, see above)

15% Homework (MasteringChemistry pre-assignments)

15% Discussion Problem Sets

NOTE: **Grade is NOT based upon a class curve**. Thus individual performance determines one's grade and is not influenced by other's performance. This should encourage each student to work collectively to help each other learn. Often discussing and working through a problem with someone else, helps one more than the other person, since it forces one to more critically see through a problem. Tutorial help is also available at the Tutoring Center, www.luc.edu/tutoring

Assignment of Final Grade

Α	100% - 90%	
В	89% - 78%	
С	77% - 60%	
D	59% - 50%	
F	<50 %	

NOTE: In order to get a straight grade such as an A or B, one must have **AT LEAST ONE exam grade with that straight grade value**. The cutoffs for plus and minus grades (for example, between A and A-) will fall within the percentage ranges listed above. These cutoffs will be determined at the end of the semester.

The aim of the grading policy is to allow time and incentive for improvement. Chemistry is not easy to learn, but the process can be rewarding if extensive, daily effort is made to master fundamentals as they appear. Students are urged to contact the instructor to discuss problems before they become serious.

Other Policies:

<u>Dropping Class</u>: Students wanting to drop lecture after midterm may stay in the co-req lab only if lecture midterm grade, posted in LOUCS, is a D or better. Students should continue to attend the lecture until the week of the drop date to gain as much background knowledge as possible. For Spring 2018 students wishing to drop lecture, and have a mid-term grade of D or better (in lecture), can seek assistance from the Department of Chemistry & Biochemistry office beginning Tuesday March 20 at 9:00am through Monday March 26th at 4:00pm. Students with a midterm grade of F must drop the co-req lab along with the lecture. No exceptions.

<u>Course Repeat Rule:</u> Effective with the Fall 2017 semester, students are allowed only THREE attempts to pass Chemistry courses with a C- or better grade. The three attempts include withdrawals (W). After the second attempt, the student must secure approval for a third attempt. Students must come to the Chemistry Department, fill out a permission to register form or print it from Depart of Chemistry & Biochemistry website: http://www.luc.edu/chemistry/forms/ and obtain a signature from the Undergraduate Program Director, Assistant Chairperson, or Chairperson in Chemistry. A copy of this form is then taken to your Academic Advisor in Sullivan to secure final permission for the attempt.

Students are encouraged to seek help with the course material early and often during the semester. Attend office hours regularly for assistance before any deficiencies become serious!