

# Chemistry 102

## Spring 2013 Course Guidelines

Instructor: Dr. Conrad Naleway  
Flanner Hall Rooms 200C (office and voice-mail: 773 508-3115)  
Loyola Chemistry Office: (773) 508-3100  
FAX: (773) 508-3086;  
email: cnalewa@luc.edu

Class/Lecture Hours: Cuneo Hall Room 210 TTh 8:30-9:45am  
Office Hours: TTh 10:00-11:00 am and by appointment on MWF.  
Optional: **Weekly** Review Sessions: Time to be announced

**Text: Chemistry: The Central Science. 12th Edition: Theodore E Brown, H Eugene H LeMay, H Eugene LeMay, Bruce E Bursten, Catherine Murphy, Patrick Woodward** (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](http://conradnaleway/chem102) (also found on LUC blackboard)

**This course will cover essential material of Chapters 13-17 and 19-21. The topics will include:**

1. Solutions and their Behavior	(Chapter 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).
9. Nuclear chemistry	(Chapter 21) ( <i>selected topics</i> )

### Exams:

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](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** will be assigned according to the highest percentage computed by the two methods:

- 1) The average of the three 75 minute class exams, each weighing 1/3, plus completion of the final exam even though not included in grade. **Please note that attendance and completion of the final exam are mandatory AND a grade of at least 50% MUST be achieved! OR**
- 2) The average of the top two 75 minute class exams plus the cumulative final. Thus the exams will weigh 1/3 each and the final will weigh 1/3. This relates to dropping the lowest in-class exam.

**Preassignment MasteringChemistry Homework** will represent **at least 10%** of total grade

### **Discussions (5%) and Quizzes (EC 2% per quiz)**

Attendance and Active Participation at all Discussion Sections will warrant 5% of total grade. Multiple quizzes will be given during random discussion periods throughout the semester. Performance on each of these quizzes will warrant a **maximum of two point of extra credit applied to the next up-coming exam.**

### **Final Grade will be based upon:**

**75% Exam Grade (Above)**

**10% Homework (Largely Mastering Chemistry assignments)**

**5% Discussion Participation**

**AND a FLOATING 10% of GRADE** will be assigned to either **Exam grade (above) OR Homework** whichever has the highest-grade value.

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](http://www.luc.edu/tutoring)

### **Assignment of Final Grade**

<b>A</b>	<b>100% - 90%</b>
<b>B</b>	<b>89% - 78%</b>
<b>C</b>	<b>77% - 60%</b>
<b>D</b>	<b>59% - 50%</b>
<b>F</b>	<b>&lt;50 %</b>

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.

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