

## Chemistry 102-001 – Spring 2012 Lecture Syllabus

- Course:** Chemistry 102, General Chemistry B  
3 Credits: Lecture and discussion
- Prerequisites:** Chemistry 101 and 111, or 105 and completion of Math 118 with a grade of C- or better.  
A student may be withdrawn from the course at any time if the prerequisites have not been satisfied.
- Lecture:** MWF 11:30am-12:20pm Flanner Hall 133  
You must also be registered in one of the accompanying discussion sections:
- Discussion:** T 11:30am-12:30pm Dumbach 118 Section 002  
T 2:30-3:30pm Flanner 105 Section 003
- Instructor:** Dr. Sandra Helquist  
**Email:** shelquist@luc.edu – put “Chem 102-001” in subject line to receive a response  
**Office:** Flanner Hall 200B  
**Office Hours:** MT 1-2pm, WTh 10-11am, and by appointment.  
You are encouraged to drop by my office during open times (see the schedule posted outside my door) if you cannot attend regular office hours.
- Textbook:** Chemistry The Central Science, Brown/LeMay/Bursten/Murphy/Woodward, 12<sup>th</sup> edition  
MasteringChemistry online access code for the above text (Required)

### Course Content & Objectives

This lecture and discussion course is a continuation of Chemistry 101 and includes topics on solutions, kinetics, equilibrium systems, chemical thermodynamics, electrochemistry, and nuclear chemistry. Using the basic principles learned in the 101 course, students will deepen their conceptual understanding of specific complex topics in chemistry, and further develop their skills in scientific problem solving.

### Course Materials

There is a required textbook for class and it is your option to purchase a student guide or solutions manual to accompany the text. Additionally, you must register for the MasteringChemistry online homework system ([www.masteringchemistry.com](http://www.masteringchemistry.com) & additional information/links posted on Blackboard). You will need the use of a scientific calculator for problem solving: your calculator does not need to graph, but the use of phone/computer calculators will not be permitted during exams and quizzes. Students cannot share calculators during exams, and calculators will never be provided by the instructor. Lectures will be presented as a combination of “chalk talks” and overhead or PowerPoint slides. All handouts from the lecture will be available on Blackboard ([blackboard.luc.edu](http://blackboard.luc.edu)) and scores will be recorded (each student should check these regularly to ensure accuracy) in the Blackboard grade center. The Announcements section of the course page on Blackboard will be used regularly to communicate useful information.

### Class Attendance

Vital for your learning: you are responsible for all material presented or handed out, as well as reading and problems recommended in lecture and discussion even if you are not in attendance for a course meeting. Attendance and Attention is important and required. Prepare for lecture by scanning the new material to be covered. Come prepared to engage in discussion, ready to ask questions on homework or yet unassimilated lecture material -- especially bring questions to discussion classes. If you miss a class for any reason, contact a classmate promptly to get the notes!

### Academic Integrity

Research and learning in chemistry relies heavily on collaborative efforts. You are encouraged to study with other students in and out of class, however, anything submitted for an individual grade (homework, quiz, exam) must represent your own knowledge and understanding of the material. Any student caught cheating will receive, at a minimum, a “zero” on the item and penalty up to automatic failure of the course, as well as referral to the Dean’s Office. For the full College of Arts and Sciences statement on academic integrity, visit: [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)

## Disability Accommodations

At times, students with disabilities may wish to avail themselves of the University's ancillary services. Students requiring accommodations at the University need to contact the Coordinator of Services for Students with Disabilities, then provide documents and schedule arrangements with the instructor at the beginning of the term. Information is available at: <http://www.luc.edu/sswd/>

## Grading

Your grade for Chemistry 102 will depend on the following factors:

Homework	15%
Group Quizzes	10%
<u>Exams</u>	<u>75%</u>
Total	100%

Generally, 88.0% is the lowest A-, 75.0% the lowest B-, 60.0% the lowest C-, 50.0% the lowest D. Chemistry is not easy to learn, thus the grading policy rewards students for keeping up with the material via completion of homework and group quizzes, as well as two grading options for the exams (see details below). Each student will be assigned an estimated midterm grade following the 2<sup>nd</sup> midterm exam.

## Homework

Online, at <http://www.MasteringChemistry.com>, can be accessed anywhere, on or off campus. MC questions include problems over a range from easy to moderate to difficult-level questions and are meant to: (1) Help you learn the material by practicing it yourself; (2) Serve as an aid to your overall course grade as you make the effort to learn. Additional information on getting started with MC is posted on Blackboard. If you struggle with a homework problem, come to office hours promptly for help. Students expecting the highest exam scores will further develop their understanding of the material and problem-solving skills by working end-of-chapter problems from the textbook on a daily basis.

## Group Quizzes

No early quizzes, no make-ups! Quizzes include moderate-to-difficult exam-representative long-answer problems and are given in discussion, in small groups to be announced by the instructor. Expected completion time for each quiz is 30-40 minutes, and each group will turn in one quiz copy in each discussion. Work must reflect efforts of ALL group members, and is meant to foster cooperation and communication between students for better understanding of material. Your overall quiz score is the average of your best scores, with the lowest two scores dropped. *Any missed quiz is scored as a zero.*

## Exams

No early exams, no make-ups! Exams will consist of multiple-choice and long-answer questions. Exams comprise 75% of your overall course grade, and will be automatically calculated by the instructor as the higher score between these two options:

Option 1: All 3 midterms, 15% each; final exam, 30%; Total exam score = 75%

Option 2: Best 2 midterms, 15% each; final exam, 45%; Total exam score = 75%

Midterms: 50 minutes, Wednesday February 8, Friday March 2, Wednesday April 4. If you miss a midterm *for any reason*, Option 2 will automatically be used to determine your grade. A second missed midterm will result in a score of *zero*. It is in each student's best interest to prepare for and take all exams.

Final: 2 hours, Monday April 30, 1-3pm, **MANDATORY**. The final exam must be taken on the date scheduled or a grade of **F** will automatically result. Comprehensive, with emphasis on selected topics TBA. Exam Procedures: Phones, computers, mp3 players, etc are not permitted. If seen or heard, device will be confiscated along with exam copy and student will be asked to leave. Come to the exam with your Loyola ID, and leave visible on desk during exam to be checked. All purses, bags, jackets, etc must be left at front of room. Once the exam is distributed, if you exit the room (quietly, please), for any reason before time is up, your exam is considered complete and will be collected. I will return your midterm exams *during the discussion periods or in office hours* (copies will be kept). Scoring errors must be brought to my attention in person no later than one week after the exams are returned. The final exam cannot be returned.

## Study Suggestions, End-Of-Chapter Problems & Tentative Lecture Schedule

Available online on Blackboard (<http://blackboard.luc.edu>) on the "Course Documents" page. Read through these documents thoroughly at the beginning of the semester, and refer to them as often as needed.