



# LOYOLA UNIVERSITY CHICAGO

Department of Chemistry & Biochemistry  
1068 W. Sheridan Rd.  
Chicago, IL 60660  
<https://www.luc.edu/chemistry/>

- Course:** **General Chemistry**  
**CHEM 101**  
Semester: Spring 2019  
Lecture: Section 005 - MWF 8:15 – 9:05 AM, Cuneo 109  
Discussions: Section 006 – W 9:20 – 10:10 AM, FH 105  
Section 007 – W 10:25 – 11:15, FH 105  
*\*\*you must attend your assigned discussion section due to seating limitations*
- Professor:** **Dr. Caitlin G. Decker, PhD**  
**Adjunct Professor of Chemistry**  
Office Hours: FH 129, Tuesdays 3:30-4:30 PM  
FH 301, Thursdays 3:30-4:30 PM  
Email: [cdecker@luc.edu](mailto:cdecker@luc.edu)  
*\*\* No specific problem-solving questions will be answered via email. All such questions should be posted to the discussion board (sakaii) so that they are visible to all students or asked during discussion section / office hours.*
- Materials:** **Textbook**  
Brown, LeMay, et. al. (2018) Chemistry the Central Science, 14<sup>th</sup> edition.  
Print or electronic version is fine. MasteringChemistry material is optional (there are a lot of resources there). Earlier editions are acceptable.  
ISBNs:  
MyLab plus Etext: 9780134553108  
MyLab plus loose-leaf: 9780134557328  
MyLab plus Hardcopy: 9780134292816
- Sakaii:** All students are enrolled in the class Sakaii site. It is imperative that you check this site daily to keep informed of all activities and grades.
- Important Dates:** March 18<sup>th</sup> – drop deadline
- Exams:** **Exam 1 – Monday Feb 18<sup>th</sup>**  
**Exam 2 – Monday Mar 18<sup>th</sup>**  
**Exam 3 – Monday Apr 15<sup>th</sup>**  
**FINAL - Thursday May 2<sup>nd</sup>, 9-11 AM**  
*There will be NO regrades for this course on any exam. Grades are final.  
You must show your ID to the instructor and sign-in next to your name for each exam. All electronic devices must be turned off and inside bags that are to be left at the front of the classroom during the exam.*

**Grade:** Grades will be determined using one of the two methods below (whichever results in a *higher* overall grade):  
1) All three midterms + final are averaged. Thus, each exam will weigh 1/4.  
2) The top two mid-term exams weigh 1/4 each, and the final will weigh 1/2.  
This equates to the final exam score replacing the lowest midterm score.  
*\*\*due to this policy there will be NO make-up exams. If you miss an exam, it will count as the "dropped" exam, and method #2 will be used to calculate your grade.*

**Grading Scale:** 98-100% = A+    90-97% = A  
86-88% = B+    80-85% = B  
74-79% = C    70-73% = C-  
60-69% = D  
Below 60% = F  
*\*\*the professor reserves the right to implement a curve, as necessary*

**Course Description:** Lecture and discussion. The course deals with the development of basic chemical principles. Topics include atomic and molecular structures, states of matter, energetics and stoichiometry of reactions. For non chemistry majors and students in the B.A. Chemistry program.

**Prerequisite:** **Math 117 (C- or better) or passing the Loyola math proficiency exam**  
**Co-requisite:** **CHEM 111**

**Course Content:**

Ch 1. Matter, Energy, and Measurement.  
Ch 2. Atoms, Molecules, and Ions  
Ch 3. Chemical Reactions and Reaction Stoichiometry  
Ch 4. Reactions in Aqueous Solution  
Ch 5. Thermochemistry  
Ch 6. Electronic structure of atoms  
Ch 7. Periodic Properties of the Elements  
Ch 8. Basic Concepts of Chemical Bonding  
Ch 9. Molecular Geometry and Bonding Theories  
Ch 10. Gases  
Ch 21, 23, and 24. *Selected Topics* (Nuclear Chem., Transition Metals, Organic & Biological Chem.)

**Institutional Policies:**

Course Repeat Rule: 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!

Information regarding disability services: [www.luc.edu/sswd](http://www.luc.edu/sswd)

Loyola Official Academic Calendar: [www.luc.edu/academics/schedules](http://www.luc.edu/academics/schedules)

**Tentative Course Schedule/Outline:**

The instructor reserves the right to adjust the schedule and assignments as circumstances may warrant during the semester.

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	<i>Jan 14<sup>th</sup></i>	<i>Jan 15<sup>th</sup></i>	<i>Jan 16<sup>th</sup></i>	<i>Jan 17<sup>th</sup></i>	<i>Jan 18<sup>th</sup></i>
	Syllabus / Ch.1		Ch.1		Ch.1
2	<i>Jan 21<sup>st</sup></i>	<i>Jan 22<sup>nd</sup></i>	<i>Jan 23<sup>rd</sup></i>	<i>Jan 24<sup>th</sup></i>	<i>Jan 25<sup>th</sup></i>
	<b>MLK NO CLASS</b>		Ch. 2		Ch. 2
3	<i>Jan 28<sup>th</sup></i>	<i>Jan 29<sup>th</sup></i>	<i>Jan 30<sup>th</sup></i>	<i>Jan 31<sup>st</sup></i>	<i>Feb 1<sup>st</sup></i>
	Ch.2		Ch. 3		Ch. 3
4	<i>Feb 4<sup>th</sup></i>	<i>Feb 5<sup>th</sup></i>	<i>Feb 6<sup>th</sup></i>	<i>Feb 7<sup>th</sup></i>	<i>Feb 8<sup>th</sup></i>
	Ch. 3		Ch. 4		Ch. 4
5	<i>Feb 11<sup>th</sup></i>	<i>Feb 12<sup>th</sup></i>	<i>Feb 13<sup>th</sup></i>	<i>Feb 14<sup>th</sup></i>	<i>Feb 15<sup>th</sup></i>
	Ch. 4		Ch. 5		Ch. 5
6	<i>Feb 18<sup>th</sup></i>	<i>Feb 19<sup>th</sup></i>	<i>Feb 20<sup>th</sup></i>	<i>Feb 21<sup>st</sup></i>	<i>Feb 22<sup>nd</sup></i>
	<b>EXAM I</b>		Ch. 5		Ch. 5
7	<i>Feb 25<sup>th</sup></i>	<i>Feb 26<sup>th</sup></i>	<i>Feb 27<sup>th</sup></i>	<i>Feb 28<sup>th</sup></i>	<i>Mar 1<sup>st</sup></i>
	Ch. 6		Ch. 6		Ch. 6
8	<i>Mar 4<sup>th</sup></i>	<i>Mar 5<sup>th</sup></i>	<i>Mar 6<sup>th</sup></i>	<i>Mar 7<sup>th</sup></i>	<i>Mar 8<sup>th</sup></i>
	<b>Spring Break NO CLASS</b>				
9	<i>Mar 11<sup>th</sup></i>	<i>Mar 12<sup>th</sup></i>	<i>Mar 13<sup>th</sup></i>	<i>Mar 14<sup>th</sup></i>	<i>Mar 15<sup>th</sup></i>
	Ch. 7		Ch. 7		Ch. 7
10	<i>Mar 18<sup>th</sup></i>	<i>Mar 19<sup>th</sup></i>	<i>Mar 20<sup>th</sup></i>	<i>Mar 21<sup>st</sup></i>	<i>Mar 22<sup>nd</sup></i>
	<b>EXAM II</b>		Ch 8		Ch. 8
11	<i>Mar 25<sup>th</sup></i>	<i>Mar 26<sup>th</sup></i>	<i>Mar 27<sup>th</sup></i>	<i>Mar 28<sup>th</sup></i>	<i>Mar 29<sup>th</sup></i>
	Ch 8		Ch 9		Ch 9
12	<i>Apr 1<sup>st</sup></i>	<i>Apr 2<sup>nd</sup></i>	<i>Apr 3<sup>rd</sup></i>	<i>Apr 4<sup>th</sup></i>	<i>Apr 5<sup>th</sup></i>
	Ch 9		Ch 10		Ch 10
13	<i>Apr 8<sup>th</sup></i>	<i>Apr 9<sup>th</sup></i>	<i>Apr 10<sup>th</sup></i>	<i>Apr 11<sup>th</sup></i>	<i>Apr 12<sup>th</sup></i>
	Ch 10		Selected Topics		Selected Topics
14	<i>Apr 15<sup>th</sup></i>	<i>Apr 16<sup>th</sup></i>	<i>Apr 17<sup>th</sup></i>	<i>Apr 18<sup>th</sup></i>	<i>Apr 19<sup>th</sup></i>
	<b>EXAM III</b>		Selected Topics		<b>Good Friday NO CLASS</b>
15	<i>Apr 22<sup>nd</sup></i>	<i>Apr 23<sup>rd</sup></i>	<i>Apr 24<sup>th</sup></i>	<i>Apr 25<sup>th</sup></i>	<i>Apr 26<sup>th</sup></i>
	<b>Easter Break NO CLASS</b>		Selected Topics		
16	<i>Apr 29<sup>th</sup></i>	<i>Apr 30<sup>th</sup></i>	<i>May 1<sup>st</sup></i>	<i>May 2<sup>nd</sup></i>	<i>May 3<sup>rd</sup></i>
	<b>Final Exam Week</b>			<b>FINAL EXAM 9-11 AM</b>	